



Policy Paper for the Health Pillar

Overview of Gaps, Challenges, and
Way Forward in Kuwait National
Development Plan 2015-2020

2019





*Empowered lives.
Resilient nations.*

Authored by Sungsoo Chun for KPPC.

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Executive Summary



Rationale

The current system: Kuwait has achieved international recognition for its success in providing universal health coverage (UHC) to its citizens through its National Health Service system, which includes coverage of overseas medical treatments.

Major issues: Kuwait's current health system faces challenges. Rapidly growing expenditures raise questions about the financial sustainability of the current system. The prevalence of non-communicable diseases is increasing as the result of a number of factors, including rapid changes in lifestyles that include the growth of unhealthy diets, sedentary lifestyles, risky behaviors (such as smoking), and exposure to many types of pollution.

Responses of the State of Kuwait: Since 2011, the State of Kuwait and United Nations agencies have undertaken analyses to offer recommendations to strengthen the health system of Kuwait. Nevertheless, many challenges remain.

Purpose and scope of this investigation: This investigation aims to pinpoint and examine policy gaps that are the causes of or contributing factors to the challenges facing the health system in Kuwait. It seeks to offer recommendations for further studies that can be undertaken to ensure the effective use of evidence-based policy making, which is needed to improve the system. The scope of this investigation covers the entire health system. The investigation takes a broad, holistic view of health and the components of health care. The investigation is based on information and data assembled from: desk research, a systematic review of relevant literatures, face-to-face interviews of key stakeholders and specialists in Kuwait, focus group discussions with key stakeholders, and a survey of a policy panel assembled for the purposes of this report.

Challenges and gaps between health aims and health outcomes

Key performance indicators of health that were included in the health pillar of the Kuwait National Development Plan (KNDP) have declined or have not significantly improved in recent years. *Life expectancy at birth has decreased in recent years. The prevalence of diabetes is one of the world's highest, despite slight improvements in the most recent assessment.* Largely because of the growth of non-communicable diseases, clear gaps have emerged between the aims of the health system and the health status of the residents of Kuwait.

Issue 1.1: The gap between treatment-oriented health policies and the need for prevention-oriented approaches.

Issue 1.2: A lack of a robust regulatory system for the private health sector.

Challenges and gaps in health governance

Governance structures contribute to the challenges and gaps facing the Kuwait health system. Issues include: inefficient organizational structures; the lack of an overarching national plan, targeted action plans, implementation mechanisms, and communication among service entities; weak monitoring and evaluation; and barriers that prevent civil society from effectively participating in decision making.

Issue 2.1: Lack of evidence-based policy making.

Issue 2.2: Lack of health leadership.

Issue 2.3: Lack of health plans and implementation mechanisms.

Issue 2.4: Lack of communication and participation mechanisms.

Issue 2.5: Lack of key role descriptions.

Issue 2.6: Lack of motivation mechanisms.

Challenges and gaps in organization

The organizational structure of the Ministry of Health (MOH) and the management of talent within it face enormous challenges. The current structure does not facilitate efficient vertical or horizontal communication. The structure of MOH is not designed to meet needed standards.

Issue 3.1: Inefficient structure of administrative organizations.

Issue 3.2: Insufficiency of community service organizations.

Challenges and gaps in implementation of needed measures and services

Implementation challenges result in part from attitudes of administrators. Issues include resistance to new tasks, conflicts among similar departments, competition between departments, dependence on foreign experts, a lack of needed creativity, and a reliance on and a preference for routine tasks.

Issue 4.1: Lack of health promotion laws, policies, and programs.

Issue 4.2: Insufficient service quality.

Challenges and gaps in financing

A key challenge facing Kuwait concerns the financial sustainability of the National Health Service (NHS) system.

Issue 5.1: Dual systems: NHS and private insurance.

Issue 5.2: Absence of a health promotion fund.

Issue 5.3: Lack of analysis of the cost effectiveness of existing and proposed programs and orientations.

Challenges and gaps in needed technologies and expertise

Technological and expertise challenges: Kuwait lacks cutting-edge medicines, technologies, and the medical personnel expertise to use such new tools and treatments. As a result, Kuwaiti patients shop the globe for medical treatment. This has led to a surge in medical expenditures, which are borne by the Kuwait government.

Issue 6.1: Lack of a national health industry development plan.

Issue 6.2: Lack of a translational research complex hospital.

Challenges and gaps in data collection and information technologies

The health data-generating system is not designed to link with informational technologies that would make such data available for use throughout the system when and where needed. As a result, the availability, reliability, and accuracy of data are issues that raise concerns.

Issue 7.1: Lack of a unified, consistent system for generating needed health data.

Issue 7.2: Lack of information technologies to automate data, and to make such data available for use throughout the system.

Challenges and gaps for the health workforce

Numerous issues affect the caliber and size of the health care workforce in Kuwait. Issues include a heavy reliance on foreign labor in the health care system; undertrained health administrators; and a lack of a wide variety of needed specialists, including personnel with expertise in health education, school health, public health, and health data collection and use.

Issue 8.1: Lack of a national health workforce development plan.

Issue 8.2: Lack of a health personnel management system.

Challenges and gaps in the Kuwait National Development Plan

The current system emphasizes a treatment-oriented approach, and puts a focus on infrastructure, such as hospitals. The plan does not take a holistic view of the health system, and knowledge is lacking about measures that can be taken to promote good health. As a result, there is a gap between the goal of improving the health and well-being of the residents of Kuwait, and the outcomes resulting from the current system. This is evidenced by outcomes of two key performance indicators: 1) Life expectancy in Kuwait has decreased in recent years. 2) The country has failed to make meaningful progress in reducing the very high prevalence of diabetes, which is rampant; Kuwait reportedly has the ninth-highest level of diabetes in the world.

Issue 9.1: Lack of a holistic view of the health system.

Issue 9.2: Lack of cooperation among Kuwait health administrations.

Recommendations to ADVANCE the health care system in Kuwait

This investigation incorporates information from policy analysis, literature reviews, interviews and discussions with key stakeholders, and observation of services within the health system. It offers the following seven recommendations to ADVANCE the health care system of Kuwait and to improve the health and well-being of its residents.

Recommendation 1: Adopt good governance and planning.

Recommendation 2: Design efficient organizations.

Recommendation 3: Validate policies with evidence-based measures of progress.

Recommendation 4: Adopt a sustainable financial framework.

Recommendation 5: Nurture new technologies and knowledge industries.

Recommendation 6: Create a modern and comprehensive information system.

Recommendation 7: Enhance the health workforce.

Make the system holistic to transform health care

To make the Kuwait health system work effectively, the guiding paradigm needs to shift from an orientation focused on treatment to one that promotes preventive measures, and addresses health and well-being in a holistic way through myriad policy dimensions. To create such a system, this investigation puts forward nine actions intended to achieve these goals.

The nine-point checklist for policy action is as follows:

1. Consider all dimensions of health determinants.
2. Consider setting targets for ensuring improved quality-of-life outcomes.
3. Choose indicators that are relevant to these targets.
4. Enforce essential planning and management components.
5. Establish a feedback system to periodically monitor progress and to links inputs and outcomes.
6. Establish financial mechanisms that ensure sustainability of the system.
7. Embrace all service areas, measures, and interventions that go beyond a traditional health care orientation, and offer the opportunity to make health services truly holistic in nature.
8. Use organizational structures that allow for the efficient use of resources.
9. Develop the human and technical resources needed to develop the workforce, facilities, equipment, expertise and technologies that are essential to an effective, modern health care system.

Abbreviations

DALYs	Disability-Adjusted Life Years
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GSSCPD	General Secretariat of the Supreme Council for Planning and Development
IHME	Institute for Health Metrics and Evaluation
KNDP	Kuwait National Development Plan
KPIs	Key Performance Indicators
MOH	Ministry of Health
NCD	Non-Communicable Disease
NHS	National Health Service
PHC	Primary Healthcare Centers
RBM	Results-Based Management
UHC	Universal Health Coverage
UNCAC	United Nations Convention Against Corruption
UNDG	United Nations Development Group
UNDP	United Nations Development Programme
UNIATF	United Nations Interagency Task Force

I. Rationale



I. Overview

- Kuwait is a well-developed and high-income country, with a stable economy and a per capita gross domestic product (GDP) of USD 28,975 in 2015 (World Bank, 2017). The population is young, with 25 percent Kuwaitis younger than 15 years of age (Al-sabah, 2016). The literacy rate is very high (95 percent) (World Bank, 2017). Access to sanitation facilities and water sources is also high (99 percent) (WHO, 2014).
- The Kuwait National Development Plan 2015-2020 signals high socioeconomic ambitions. It envisages that Kuwait will take steps to diversify its economy; leverage public-private partnerships to invest in infrastructure; and become a regional trade and financial hub by 2035. A key part of the plan is the aim to transform Kuwait's health system to ensure its sustainability, provide quality assurance, and to improve the system from good to excellent (UNIATF, 2017).
- The State of Kuwait provides all citizens with health care, education, retirement income, marriage grants, housing loans, guaranteed employment, and subsidies for food and commodities (WHO, 2014). The Ministry of Health (MOH) is the service provider, financing agency, regulator, and manager of the public health system (MOH, 2013). Kuwait provides universal health coverage through its National Health Service (NHS) system, which also provides citizens with the ability to seek medical treatment abroad. Universal health care consists of primary, secondary and tertiary care, provided through a network of 102 primary healthcare centers (PHCs), six general hospitals, and 11 special hospitals (WHO, 2017). In addition, many of private clinics and hospitals provide qualified and competitive health care to its people. The Government of Kuwait is strongly committed to improving the health and well-being of its people (WHO, 2017) by providing every citizen of Kuwait with access to universal health care.

- Public health protection services are well organized and systematic. The system includes: health screenings and medical check-ups, vaccinations, public health measures (such as border quarantines) to prevent the spread of communicable diseases, emergency health care services, provision of health services for students from kindergarten to university level, needed medical infrastructure, and publicly subsidized bakeries to enhance nutrition levels and reduce costs for people with limited incomes (GSS-CPD, 2015). Death rates and the prevalence of infectious and communicable diseases are low (WHO, 2014).

2. Major issues

- Kuwait is confronting a crisis in terms of the health and well-being of its people and the sustainability of its health care system, which is under strain from increased spending.
- Despite improvements in the control of communicable diseases and in maternal and child health, the health and well-being of Kuwaitis is by some key measures declining, due to the growing prevalence of non-communicable diseases (UNIATF, 2017). Life expectancy has decreased from 77.7 years in 2011 to 74.6 years in 2015 (WHO, 2012; 2016). The prevalence of diabetes, another key health indicator, also raises concerns. Kuwait has the world's ninth-highest rate of diabetes (Awad and Alsaleh, 2015). The prevalence of age-adjusted diabetes in Kuwait reached 20 percent in 2015, down slightly from 23.1 percent in 2013, and from 21.1 percent in 2011 (IDF, 2015, 2013, 2011).
- The current health system as structured cannot be financially sustained. Rapid increases in expenditures have occurred as the system has grown and as the growing Kuwait population seeks medical treatment abroad. Concerns include questions about the quality of health services; the ability of the health system to respond to sociodemographic trends, including the growing prevalence of non-communicable diseases, and the growing population; the provision of health care for low-income, non-Kuwaiti-born residents; and the overall financial viability of the health care system.

Financial issues

- *Financial burdens and uncertainties:* In recent years, spending by the Ministry of Health has sharply increased – growing by 67 percent from 2010 to 2014, and almost tripling from 2008 to 2014 (MOH, 2015). Government expenditures to cover the cost of sending patients abroad for treatment dramatically increased, more than doubling from 2012 to 2014 (MOH, 2015). A variety of government entities (the Royal Court, Ministry of Defense, Ministry of Interior, and the Kuwait Petroleum Company) send patients abroad for treatment; as a result, the Ministry of Health alone is unable to manage all related expenditures. Reforms are urgently needed for efficient and prudent fiscal management. Kuwait has traditionally focused on providing treatment-oriented health care services; in light of current disease trends, treatment-oriented services now account for over 85 percent of health expenditures (MOH, 2014). Additional expenditures stem from the Ministry of Health's decision to initiate health insurance for retirees. This insurance covers health services provided by private hospitals and clinics supported by government funds. The total annual expenditure is expected to be USD 272 million (Middle East Insurance Review, 2016). Analysis shows that 82.5 percent of total health expenditures in Kuwait come from the public sector, while 15.8 percent of expenditures constitute out-of-pocket payments by individuals (World Bank, 2017).

Issues related to non-communicable diseases

- Non-communicable diseases (NCDs) accounted for 73 percent of total deaths in Kuwait in 2014 (WHO, 2014). According to the Institute for Health Metrics and Evaluation (IHME), the causes of deaths in Kuwait in 2015 were (in descending order, beginning with the most common causes): ischemic heart disease, road injuries, cerebrovascular disease, congenital defects, lower respiratory infections, Alzheimer's disease, diabetes, chronic kidney disease, hypertensive heart disease, and neonatal preterm births (IHME, 2017). The prevalence of metabolic syndrome (a cluster of conditions that raises the likelihood of heart disease, stroke and type 2 diabetes) is between 10 percent and 15 percent, rates that exceed those in most developed countries (Mabry et al., 2010; Alrashdan and Alnesef, 2010).
- Most of the risk factors that underlie NCDs and drive many of deaths and disabilities are preventable and, caused by unhealthy lifestyles. Disability-Adjusted Life Years (DALYs) provide a measure of years of potential life lost due to premature mortality and the years of productive life lost due to disability (WHO, 2017 c). In Kuwait in 2015, the top 10 causes of DALYs, which can be thought of as reflecting lost years of "healthy" life, were (in descending order, beginning with the most common causes): high body mass index, dietary risks, high systolic blood pressure, high fasting plasma glucose, high total cholesterol, smoking, air pollution, child and maternal malnutrition, occupational risks, and low levels of physical activity (IHME, 2017). These unhealthy lifestyles and environmental risk factors are driving the epidemic of NCDs in Kuwait. The results are sobering. In Kuwait, 40 percent of the population is obese, and 25 percent of the population has hypertension (UNIATF, 2017). Nearly three-quarters (73 percent) of deaths are caused by NCDs such as cardiovascular diseases, cancer, diabetes, chronic respiratory disease, and injuries (UNIATF, 2017).
- NCDs require extensive and expensive treatment. Diabetes, in particular, requires extensive, ongoing care. In Kuwait, 40.6 percent of hospitalized patients were diabetic (Aladsani and Abdulla, 2011). Diabetics were hospitalized two to three times more frequently than non-diabetics (Aladsani and Abdulla, 2011). Diabetes and other NCDs represent the major health issues facing Kuwait, and they take a toll on Kuwait's national development (UNIATF, 2017).

Globalization's effect on culture and lifestyle

- Globalization is causing profound and complex changes in the very nature of the Kuwaiti society, bringing new opportunities and new risks (Huynen et al., 2005). Globalization's effects are also emerging in terms of health, as nations throughout the world grapple with the effects of obesity and sedentary lifestyles. Issues regarding intergenerational equity and sustainable development raise matters about the right of future generations to a healthy environment and healthy lives (Huynen et al., 2005). A global health perspective emphasizes transnational health issues, determinants, and solutions. Such an approach involves many disciplines within and beyond the health sciences; promotes interdisciplinary collaboration; and combines population-based prevention efforts with individual-level clinical care (Koplan et al., 2009). While definitions of global health vary, in general, global health focuses on how economic, environmental, political, and social processes on a worldwide scale affect people's health (Rowson et al., 2012).

- Kuwait faces health challenges from globalization, including health risks that stem from rapidly changing diets, more sedentary lifestyles, increasingly risky behaviors and practices, and growing exposure to many types of pollution. Most of burden of disease comes from lifestyle changes linked to rapid globalization. In this new era, Kuwait needs to have a new health system that can address the profound changes that have taken place in terms of health issues that demand attention, financial realities, and quality-of-service issues.

3. Responses from the State of Kuwait and UN agencies

- The current health care system in Kuwait faces challenges related to quality of services, the growth of non-communicable diseases, and public health services that are insufficient to needs. These challenges remain even as Kuwait, with the backing of the Kuwait national Development Plan, pursues efforts to improve the caliber of the system from good to excellent. As a result, the urgent need to employ evidence-based policy making has been noted (WHO, 2017; UNIATF, 2017).
- United Nations Development Programme (UNDP) and the General Secretariat of the Supreme Council for Planning and Development (GSSCPD) have focused on developing the institutional capacities, especially in strategic planning, of Kuwait government entities since 2011. The project provides technical experts who contribute to the development of the KNDP and the indicators that underpin the plan.
- Although the project achieved strong results in many areas (UNDG, 2015), research is still needed to achieve the aims of ensuring universal health coverage, creating a healthy living environment, and expanding high-quality health services. UNDP and GSSCPD are thus in the process of determining health policy needs and gaps, and devising ways to strengthen the overall health system.
- The State of Kuwait endorses implementation of its National Development Plan of 2015/2016-2019/2020, which includes a health pillar among seven pillars of focus (GSSCPD, 2015). The plan establishes a clear vision and sets out an ambition to transform the health system from good to excellent. Two main targets were chosen (see Box 1).

BOX 1: HEALTH VISION AND TARGETS

- The Kuwait National Development Plan pillar on health: Health care institutions in Kuwait will play a vital role in achieving the desired quality of life for the people of Kuwait. This involves improving service quality in the existing public health care system and developing a national healthcare system capable of resolving growing public health issues at reasonable cost (Kuwait National Development Plan, GSSCPD, May 2015).
 - Diabetes and life expectancy at birth will serve as representative indicators to provide a health quality index.
- As of this writing, the World Health Organization (WHO) has conducted two brief observational analyses to underpin strengthening of the health system (WHO, 2014; 2017). The United Nations Interagency Task Force on NCDs (UNIATF) undertook two studies that focused on prevention and control of non-communicable diseases

(UNIATF, 2016; 2017). The first of these reports addressed NCD integration into primary health care centers; the second provided a rapid health system situational analysis. These analyses generated a set of strategic health priorities, including health governance, financing, services, information, and related workforce issues.

- Despite these efforts, many challenges remain. The sharp reduction in global oil prices has pushed the country to consider an overhaul of health system in line with a new National Health Sector Strategy (2018-2022).
- The UN agencies that are resident in Kuwait are committed to working together and to supporting the government to respond NCDs. These agencies include: the International Labour Organization, International Organization for Migration, United Nations Development Programme, the United Nations Human Settlement Programme, the United Nations Office for the Coordination of Humanitarian Affairs, the World Food Programme, the World Bank, and the World Health Organization. A United Nations Country Team agreed that there are clear linkages (win-win situations) between health care and non-health care-specific sectors that impact the prevalence of NCDs. This provides a powerful force for future actions in support of efforts by Kuwait to tackle NCDs and to strengthen its overall health system (UNIATF, 2017).

4. Purpose

- Consultants and government authorities have produced reports that make recommendations for the advancement of the Kuwait National Development Plan (TICG, 2016; GSSCPD, 2014). Such reports have tended to cover all seven policy pillars addressed in the KNDP. As a result, these recommendations did not delve deeply into the specific issues affecting the health system as a whole and NCD prevention, specifically. Two international organization reports addressed targeted issues facing the health care system. The United Nations Interagency Task Force on NCDs (UNIATF) report focused on the prevention of NCDs, and health promotion activities. By contrast, the World Health Organization (WHO) report focused largely on strengthening the health system. Though each reports offered excellent insight on these issues, certain limitations remain because of the limited focus. For example, policy priorities, timelines, and implementation suggestions for reform were not detailed.
- Most recommendations of UN agencies and the WHO address issues related to the current Kuwait health care system. These entities understand the health issues and healthcare system in Kuwait very well. Nevertheless, additional factors that have received little consideration or publicity merit attention. Some latent factors are very critical to the overall health picture, and these factors must be carefully considered to address health care burdens.

- Examples include:
 - Long working hours and the welfare system for non-national women employed in Kuwait.
 - Higher rates of maternal deaths and infant mortality among non-nationals than among nationals (MOH, 2014). This disparity exists despite the shorter life expectancies of nationals than non-nationals (MOH, 2014).
 - Unhealthy diets and lifestyles (MOH, 2014). Kuwait lacks effective measures to address issues related to unhealthy eating and physical inactivity. For example, the country has very few community public health education and mobilization campaigns. Kuwait lacks sufficient health education and counseling services, nutritional policies, accessible exercise destinations (such as private or community gyms or other work-out facilities). Related school and occupational health campaigns are also lacking.
- Relying on screening and treatment will not be enough to prevent current health concerns from growing, or to guarantee the financial sustainability of Kuwait's existing health care system. The entire system must reinvent itself to cover current and future health issues, and to enhance the health and well-being of people living in Kuwait. New thinking and new health policies and programs are needed to address the many issues that the current system ignores or does not recognize. Attention to the details concerning the effective use of key health indicators and outcomes will be of critical importance for the system to make such a transition, and for the system to be effective and efficient.
- The current situation offers Kuwait an opportunity to embrace a holistic approach in its health system; to provide its residents with better, more equitable care and health outcomes; and to address concerns about financial sustainability. Kuwait has the opportunity to improve its health care from good to excellent; to provide health care for all residents; and to see that health is addressed through policy avenues that take advantage of new understanding about the influence of diet, lifestyles and behaviors on individual health. These matters – often viewed as outside the traditional health care systems – have heretofore have not been brought to bear in seeking to improve the health status and quality of life of the people of Kuwait.
- This investigation provides analysis of the broad issues affecting health in Kuwait, and it provides a nine-step plan for action. The report defines the health issues, challenges, and policy gaps facing Kuwait in its efforts to improve the health and well-being of its residents. It offers recommendations for using evidence-based policy making to enhance understanding of the steps that need to be taken to advance a new philosophy and system of health. This report embraces a holistic approach. It advocates the use of goals, targets, and indicators to achieve and measure progress; governance and management restructuring to provide leadership; and needed development of human resources to improve health expertise among the workforce and in needed technologies and procedures for effective use and management of data. It also addresses financial shortcomings in the current system. It advocates policies that can promote good health and well-being. It provides an overview of the global best practices in the health arena, but at the same time it recognizes the challenges that are specific to the situation in the State of Kuwait. The report aims to contribute to building a holistic health system and to fostering the socioeconomic development (via interconnected social development plans) to increase the health and well-being of the residents of Kuwait, and to promote economic prosperity.

II. Methods



I. Theoretical approaches and analytical tools

- A policy gap refers to the disparity between a present state of affairs and the desired or target condition. Policy gap analysis seeks to determine what steps need to be taken in order to move from the present state to the target state (Business Dictionary, 2017). (These analyses may also be referred to as need-gap analysis, needs analysis, and needs assessment (Business Dictionary, 2017)). Gap and compliance analysis is a phrase that has been used by a number of countries to describe a voluntary process that compares the United Nations Convention Against Corruption (UNCAC) with individual countries' domestic legal frameworks (Hasan, 2010). The process has evolved as different countries have conducted similar gap analyses on various other issues (Hasan, 2010). Gap analysis consists of listing the current status of a given issue, determining the factors needed to achieve targets, and highlighting the gaps and needs to be filled (Business Dictionary, 2017). Recommendations are then made for actions and research agendas that can fill these gaps. The health policy gap analysis conducted for the KNDP serves as a tool for the State of Kuwait to reflect on its current situation, and to reflect on its target aims.
- Policy analysis is a technique used in public administrations to enable to civil servants to evaluate available options. The process is designed to help to determine which of various policies will achieve a given set of goals (Nagel and Stuart, 2016). This report combines analysis of both existing policies and new (proposed) policies.
- Because health policy is determined by a range of related institutions, which give policy legitimacy to policy measures, **evidence-based models**, **rational models**, and **process models** were applied to analyze current health policies and the current health system. The **process model** used follows a sequence of stages: identification of problems, agenda setting, policy options, implementation, and evaluation

(Young et al., 2009). The **evidence-based model** used analyzes six dimensions of the effects of implementing a given policy. These are: effectiveness, unintended effects, equity, cost, feasibility, and acceptability. (For greater detail, see the questionnaire, which is provided in the appendix.) The **rational model** used consisted of gathering intelligence, identifying problems, assessing consequences, rating consequences, and choosing options. The **result-based management model** used consisted of practical results-based analysis of planning, managing, monitoring, evaluation, and reporting methods. It was applied to planning and management assessments, and the development of new options (UNDG, 2011).

- Although evidence-based models and process models are helpful tools for analyzing health policy, they have been criticized for being overly lean (Young et al., 2009). Therefore, to provide thorough assessments (including measurement of the health status of the residents of Kuwait, and evaluation of public health policies), applying diverse planning and research methods at each level and stage is imperative. Therefore, this report combines analytical models and survey methods.
- The following models and methods were applied in this report:
 - *Scope of contents*: including health system and health promotion frameworks.
 - *Policy analysis*: including evidence-based, process, and rational models; and evidence-based policy-making approaches (Urahn, Caudel-Feagan, 2014).
 - *Priority and strategy development*: including a basic priority rating system, and two other approaches. .
 - *Program evaluation and documentation*: including precede-proceed planning model (Green et al., 2005); and result-based management (UNDG, 2011).

2. Research process

Survey objectives

Generally, policy gap analysis takes an interactive approach, including discussions with relevant government officials and specialists in various sectors. The analysis uses individual interviews and focus group discussions to:

- Diagnose social, epidemiological, behavioral and environmental status.
- Assess existing programs, budget developments, implementation oversight, and outcome monitoring.
- Conduct result-based evaluation of new and proposed measures. Analysis examines inputs, outputs, outcomes, and impacts; and incorporates targeted, rigorous evaluations of new and proposed programs to ensure that they warrant funding.
- Determine the best practices suitable for Kuwait.

Research process

- **Planning**
 - Clarification, diagnosis and assessment of existing policies.
 - Engagement of stakeholders.
 - Determination of research design and evaluation questions.
 - Determination of procedures.

- *Implementation*
 - Gathering information through data collection, a systematic literature review, diagnosis and assessment of policies, surveys, face-to face interviews, and discussions with focus groups and panels.
 - Generating data and conducting analysis.
- *Utilization*
 - Interpretation of the results.

Survey methods and process

- *Methods:* desk research and systematic literature review; face-to-face interviews with key stakeholders and specialists; focus group discussions; and policy panel surveys.
- *Process*
 - *Desk review:* data gathering; identification of issues, challenges, and gaps; analysis of health policies in the KNDP, the current health system, and ongoing and planned reform efforts; review of global best practices in health policies and health systems; and review of relevant literature including national data, white papers, and reports by the Kuwait government, international organizations, and related agencies.
 - *Analysis of desk review:* identification of particularly weak policy areas and focal points for procedural review, interviews, and discussions.
 - *Face-to-face interviews* (with 20 key people) and *focus group discussions* (four rounds) with representatives of key institutions and stakeholder groups (composed of government and non-government representatives) to identify focal points for policy panel surveys.
 - *Policy panel surveys* (of 25 key government and non-government stakeholders) with a semi-structured questionnaire. (See the appendix for the questionnaire.)
 - *Reporting:* results of policy analysis and assessment, narrative report focusing on major gaps, loopholes and challenges; and identification of recommendations.

Individual interviews, group discussions, and the health policy panel

- Issues related to the current health system and to a proposed health promotion framework were discussed with key stakeholders, service providers, and health professionals.
- *Face-to face interviews* were conducted with 20 key stakeholders representing government, the private sector, and academia. Stakeholders included representatives involved with government planning, school health, public health, health insurance (public and private), hospitals (the Jaber Al Ahmad Al Sabah Hospital, private hospitals), and the NCD unit.
- *Four rounds of focus group discussions* were conducted with government stakeholders, public health professionals, health care service providers, and representatives of the private sector.
- *Policy panel committee members* were chosen from among those who participated in face-face interviews and focus group discussions.

Questions

- *Face-to face interview and focus group discussion questions*
 - The questionnaire was composed of open questions, and guided by simple directions. It followed the rational model (intelligence gathering, identifying problems and issues, assessing consequences, rating consequences, and recommending options). It covered a wide range of dimensions of health care, including traditional health care systems, health promotion-oriented health care systems, and issues addressed by the KNDR.
- *Policy panel questionnaire*
 - The policy panel questionnaire (see appendix) was created following the series of individual and group interviews and discussion, and the completion of the literature review. The questionnaire addressed major health issues, challenges, and gaps in the health system. The questionnaire consisted of both structured and open questions designed to evaluate Kuwait's current health policies and system, develop a new health system, and choose policy priorities.
 - Questions addressed the following issues: delivery of services and interventions; organized arrangement of resources (including the role of service organizations); resource development; and health issues facing Kuwait. Questions also addressed the evaluation of policy outcomes, including evaluations of the following components: health services; health protection; health promotion; healthy environment and society; planning and management; and economic support. Further, the questionnaire addressed the development of policy options, including health indicators and financing measures, and the evaluation of recommended policies and programs.

FIGURE 1

Research process



III. Challenges and gaps



I. Health challenges and gaps

Health challenges

Key performance targets: The key performance indicators (KPIs) in the health pillar in of the KNDP are life expectancy at birth, and the prevalence of diabetes. Clear gaps emerge between the plan and current health status. Life expectancy at birth has been decreasing since 2011 (WHO 2012; 2016). The prevalence of age-adjusted diabetes, while varying in recent years (21.1 percent in 2011, 23.1 percent in 2013, and 20.0 percent in 2015), remains at a level that is among the world's highest (with the world's ninth-highest rate) (IDF, 2100; 2013; 2015).

- *Decline in communicable diseases:* The prevalence of communicable diseases in Kuwait has drastically decreased as the result of socioeconomic and health development, and rapid changes in lifestyles (WHO, 2014). The department of public health in the Ministry of Health (MOH) is largely responsible for prevention of diseases. The department's main focuses are: prevention and control of communicable and non-communicable diseases and epidemics; environmental sanitation; food handling regulations; enforcement of international health regulations; screening of expatriates for communicable diseases, HIV/AIDS, tuberculosis and hepatitis; the operation of a public health laboratory with sections on microbiology, chemistry, virology, and malaria control; and control of rodents and insects (WHO, 2014).
- *Rise in non-communicable diseases:* The prevalence of non-communicable diseases in Kuwait has increased. Issues of concern include: metabolic syndromes (hypertension, diabetes, overweight, high cholesterol), road injuries, genetic disorders, anemia, diet (food industry policy), geriatric health, mental health, smoking (including hookah), and

air pollution.

- The goals of the national program for prevention and treatment of overweight and obesity are to: 1) reduce the prevalence of obesity and overweight in children, adolescents, and adults by 10 percent; 2) increase the consumption of fruits and vegetables among children, adolescents, and adults by 10 percent; and 3) reduce the consumption of sugars and saturated fats among children, adolescents and adults by 10 percent (UNFIATF, 2017). Although a national program is in place, and some non-health ministries and non-state actors are involved (UNFIATF, 2017), implementation of NCD prevention activities is lacking.
- The widespread and growing prevalence of non-communicable diseases is due to a variety of causes. These include unhealthy diets; and a lack of physical exercise and the growth of sedentary lifestyles. The proliferation of fast food restaurants in Kuwait has led to increased consumption of high-fat and high-energy foods, particularly among adolescents, with adverse health impacts (WHO, 2017). Overweight and obesity are significant health risk factors in Kuwait. The prevalence of overweight and obesity is particularly high among Kuwaiti nationals (WHO, 2017).
- The Ministry of Health also oversees healthy diets programs for the general population. However, in light of the high levels of obesity, including among children and youth, such activities need to undergo evaluation, and they should be strengthened to fulfill public health goals. Research on nutritional issues among the population at large and for people with special needs should also be given more attention (WHO, 2017).
- Areas in particular need of attention are: prevention and control of cardiovascular diseases, cancer, and chronic respiratory disease; and addressing physical inactivity. Mental health conditions are a significant health burden, especially among non-Kuwaitis (WHO, 2014). Though mental health has been integrated into primary health care, and psychiatric hospitals provide treatment, addressing mental health remains a health challenge in Kuwait. Air pollution also presents an environmental health challenge that needs to be addressed (UNFIATF, 2017).

Issue 1.1: Treatment-oriented health policies

- The overriding source of the gap between the current health plan and the status of the health of the Kuwait population is the focus on treatment rather than on prevention. This focus makes responding to NCDs difficult. In the current era, effective health systems are moving toward a focus on health promotion. Social and behavioral interventions are imperative to address the rise in NCDs. The current Kuwait health system and Kuwait National Development Plan do not include the tools to respond to health trends and the disease patterns that are now emerging in Kuwait. To deal with emerging and major risk factors, Kuwait will need to shift its emphasis from curative to preventive medicine (WHO, 2017).

Issue 1.2: Lack of robust control system for private health sectors

- Although privatization may prove effective in some sectors; in the field of health care, however, privatization has been adopted without effective regulatory measures. This has led to policy gaps. The privatization policy for hospitals and health insurance has merit in terms of increasing health care accessibility, providing consumers with choice, assuring good quality through competitiveness, and developing medical technology. Nevertheless, weak regulation has resulted in huge information gaps between

providers and consumers, setting the stage for the potential physical and financial maltreatment of patients. An underlying assumption is that cases are emerging largely because of the emphasis on profits by private hospitals, clinics, and insurance companies. The United States offers an example of the trade-offs that emerge in a largely privately operated health care system. In 2015, the United States was ranked 48th in the world for life expectancy at birth, even though its health expenditures were the world's highest (World Bank, 2017). The U.S. health system does not provide universal health coverage. The absence of universal coverage has led to huge inequities in health outcomes among the U.S. population, and, in comparison to other developed countries, a relatively low health status. Many developed countries, including Japan and South Korea, have strong privatization policies in health care, but they operate under regulatory systems designed to prevent rising costs and the potential abuse of patients. In Kuwait, the regulatory system over the private health sector is too weak to effectively address issues of costs and patient rights.

2. Governance challenges and gaps

Governance challenges

- Governance determines how governments and social organizations interact, how they relate to citizens, and how decisions are made in a complex society. Thus, governance is a process whereby societies or organizations make their important decisions, determine whom they involve in the process, and decide how to render accountability (Graham et al., 2003).
- Analysis shows that health care governance in Kuwait faces numerous challenges. Among these are: inefficient organization structures; the absence of a national health plan, action plans, and implementation mechanisms; weak monitoring and evaluation; a lack of communication among service bodies; and barriers to the participation of civil societies in decision making (WHO, 2014; 2017; UNIATF, 2017).

Issue 2.1: Lack of evidence-based policy making

- The research conducted for this investigation revealed a number of policy issues and gaps facing the health sector in Kuwait. Key among these are: the lack of a long-term health plan and policy action plans; the absence of an evidence base needed to underpin the policy-making process; limited use of data for decision making; and a reliance on planning that is input driven, rather than based on needs or outcomes.
- The vision, mission, and strategies emanating from the national health authority are unclear. The Ministry of Health lacks needed political will to take on the task of reforming the national health system. This is evidenced by the absence of plans to address needs regarding community health centers, the health care workforce, and the health industry overall.

Issue 2.2: Lack of health leadership

- The Ministry of Health, which serves as Kuwait's health authority, seems to lack the practical vision, sense of mission, needed strategies, and leadership skills to chart a course for the Kuwait health system to respond to current health issues. The absence of strategic leadership has resulted in inefficient implementation, monitoring, and evaluation. At present, the ministry is unable to motivate individuals, teams, and entire organizations as needed to work together in a new direction.

Issue 2.3: Lack of health plans and implementation mechanisms

- Most current health policies address hospital-based care. Lower priority is given to measures that are preventive in nature, or those steps that offer guidance for the promotion of good health and well-being. A national health plan, along with an action plan outlining clear steps to take, would provide initial direction on how to respond to current and future health issues. The absence of periodic planning has rendered Kuwait unable to respond properly, and in a timely fashion, to the health issues that are surfacing.
- The lack of periodic reviews as part of a broader action plan is perhaps the most serious gap that Kuwait faces because it renders the country unable to respond effectively to emerging health challenges. An effective national plan needs to embrace a wide definition of health services that include all policy dimensions and activities that relate to the health and well-being of people. These include: an overall vision of good health for all residents of Kuwait; the strategic use of targets and indicators of progress; expanding the definition of health care services to include health protection and health promotion; embarking on efforts to create and promote healthy environments and healthy societies; addressing issues related to the delivery of services and needed interventions; providing for efficient use of resources; addressing the need to develop the skills and capacity of the health care workforce; and providing the governance, management, and economic support as needed.
- The most important element of policy implementation is ensuring that measures lead to effective development and positive changes in people's lives (UNDG, 2011). The lack of vision and clear targets makes it difficult to determine the most effective implementation mechanisms. Results-based decision making depends on setting goals, implementing policies intended to reach these goals, and monitoring the outcomes that result. The health authority has not yet demonstrated an ability to properly manage, plan, deliver, monitor, and assess outcomes; as a result, people, resources, relationships, the leadership and the overall culture do not work together to achieve improvements in health and well-being. The gap effectively means that the health authority does not apply foundational theoretical models that could provide more professional and more effective approaches to improving the health system.

Issue 2.4: Lack of communication and participation mechanisms

- Inclusiveness is an important management principle. A strong results-based management process aims to engage diverse stakeholders – including representatives from national and local government institutions, civil society organizations, and various communities. Such engagement of diverse actors is important in seeking to explore, as openly and creatively as possible, what various stakeholders want to achieve, and what processes should be used to monitor and evaluate progress, and to improve performance. Engagement of all relevant stakeholders in all stages of the processes maximizes their contributions (UNDG, 2011).
- The absence of adequate policy and planning dialogue between health members of the Supreme Council for Planning and Development and the Ministry of Health at decision-making stages of planning presents a key impediment to progress. Communication is also lacking, even at implementation stages, between departments and programs within the Ministry of Health, and between hospitals and other health care facilities. The absence of such needed communication has led to inefficiencies within the health care system.

- Participation of the private sector and civil society in health decisions is lacking. Mechanisms to involve private sectors have not been put in place. Though there are several channels for citizens to express opinions, the system has not set up to analyze and incorporate their opinions. No mechanism has been established to allow the participation of NGOs. The private health sector makes limited contributions to the system; at the same time, no measures have been set up to provide oversight of private insurance and clinics, and, as a result, the private sector is not incentivized to contribute to public health goals and discussions. Opportunities to participate at various policy-making stages are few. For example, the use of public hearings and panel discussions are lacking.

Issue 2.5: Lack of clear description of roles at each level

- Kuwait has a unique health system and a unified governance model. Its health authority plays three roles: as the provider, financier, and regulator of health care. Though this structure has merit, these three roles are ambiguous. Within the system, descriptions of the roles played by various organizations and individual workers are either absent or lack needed detail.
- The absence of clearly defined roles between national government and local administrations causes inefficiency. There are many opportunities for the national health authority to work with local administrations in terms of planning for use of existing facilities and for future developments. City planning departments are under increasing pressure to make more effective use of space and resources. In terms of health promotion, in particular, departments of planning, education, transportation, sports, and commerce should be engaged to develop local solutions (UNIATF, 2017). Existing multilayered governance structure involving different entities and organizations can confuse roles and responsibilities and lead to suboptimal coordination (WHO, 2017). For example, on occasion, different heads of units seek to influence other units' decisions through informal means rather than through formal channels; on such occasions, the availability of resources for non-health ministries and other partners is often unclear.
- Without mechanisms to encourage the participation of civil society and the private sector, Kuwait is losing out on opportunities to bring more resources to the task of improving public health. Civil society and the private sector can be engaged, for example, in developing and implementing NCD action plans. Local businesses will often support school and community health efforts in their areas. Support can come from focused campaigns through the tracking of NCDs among employees to create positive feedback loops (UNIATF, 2017).

Issue 2.6: Lack of a motivation mechanism

- Motivation provides incentives that lead people to act in certain ways (Elliot and Covington, 2001). A leadership and performance challenge facing Kuwait is the absence of motivational devices that lead workers to contribute and devote themselves to the tasks needed to carry out good governance. There is little to incentivize workers. For example, the current system has a weak evaluation system that allows for appointments through favoritism, and seniority, rather than on academic achievements and job performance.

3. Organizational challenges and gaps

- Organizational effectiveness examines how well an organization performs in achieving the outputs that it intends to produce (Etzioni, 1964). An organization's effectiveness is measured by assessing the degree to which it can use the least possible inputs to produce the great possible outputs. Key areas of organizational effectiveness are leadership development, talent management, organizational design and structure, and design of measurements (such as KPIs).
- Many challenges and issues surfaced regarding the organizational structure and the management of talent within the Ministry of Health. Issues include: an inefficient structure for vertical and horizontal communication; a structure that is not well designed to respond to risks and safety issues; emergency service structures that are not designed to effectively facilitate preparedness in the event of catastrophes; and a lack of integrated services.

Issue 3.1: Inefficient structure of administrative organizations

- The Ministry of Health's inefficient organizational and administrative structures have left it ill prepared to respond in a timely fashion to the changing health care needs of the residents of Kuwait. The organizational and administrative challenges are particularly evident now, as sociodemographic change and the growth of non-communicable diseases expose the gaps between existing policy and new health care needs. Specific gaps include the absence of the following: a health promotion foundation (or institute); a health industry development institute; a center for disease control and prevention; a health information center; a national institute of health; and a center focused on NCDs. The organization is hampered by inefficiency, redundancies among some roles, ambiguous roles for some departments, and an ineffective communications structure.

Issue 3.2: Insufficiency of community service organizations

- Kuwait provides good primary health care through 102 primary health care centers (PHCs), which focus on providing traditional health care services. However, the PHCs do not serve as centers to promote community health. Budget constraints contribute to the situation. PHC budgets are based on the patient base, which are set at levels that are too low to provide support for the provision of community health promotion programs and activities. As a result, Kuwait does not have community service centers to promote community health.
- The prevention of NCDs and promotion of lifestyle changes start within communities. PHCs need to extend their roles and provision of services by offering community health programs, bringing together civil society health networks, collaborating with schools and workplaces, utilizing community facilities, and advocating lifestyle changes with local media and NGOs.

4. Challenges and gaps in the implementation of needed measures and services

The scope of services provided is too narrow to resolve growing public health needs. Most challenges in implementing new approaches result from the prevailing attitudes of administrators. Issues include: resistance to taking on new tasks and a preference for the routine; conflict and competition between departments; a deficiency of creativity; and heavy reliance on foreign expertise.

Issue 4.1: Lack of health promotion laws, policies, and programs

- Health promotion is the process of enabling people to increase control over, and to improve, their health. Such promotion moves beyond a focus on individual behavior toward a wide range of social and environmental interventions (WHO, 2017b). To increase the health status of individuals in Kuwait, health promotion-related acts, policies, and programs should be strengthened. Health issues that are facing the Kuwaiti people could be effectively addressed through the suitable provisions of laws, policies, and programs that target the promotion of good health and the prevention of NCDs.
- A 2017 report by UNIATF emphasized: "...the two key areas highlighted under health service delivery are: 1) greater focus for health promotion and prevention, early detection and control of NCDs, multi morbidity and associated risk factors (e.g., pre-conceptual screening, smoking cessation, dietetics), and 2) expanding the breadth and quality of primary health care provision such that it consistently provides world-class preventive and responsive care, particularly in relation to the prevention and management of NCDs." A report by WHO in 2014 also stressed "underdeveloped health promotion programs" as an issue.
- Despite these recommendations, Kuwait still lacks health promotion-related regulations and programs (UNIATF, 2017; WHO, 2017a). Kuwait lacks the following: health promotion policies and acts; a mental health act and policy (stalled in parliament at the time of this writing); a nutrition policy and fast food regulations; environmental and occupational health policies; healthy buildings and environment regulations; a workplace health program; school health policies (with junk food restrictions and health promotion programs); health promotion activities; community participation mechanisms for health promotion programs; and national programs for physical activities. Existing breast feeding and nutrition education programs are insufficient to needs.
- Though existing initiatives, including school-based programs, encourage physical activity, these have not proved to be effective in turning the tide in increasing physical activity.
- Pollution is an under-addressed problem. As a result, it is important that the planning of new cities includes a focus on minimizing environmental hazards as part of providing a healthy environment in which to live, work and play (UNIATF, 2017).

Issue 4.2: Insufficient service quality

- Improved quality assurance is needed for Kuwait to keep up with international quality standards of services including those for patient safety, and waiting times and periods. The Ministry of Health has largely focused on how many patients doctors see per day, rather than on the quality of care provided. Health care delivery gaps include: a weak referral system; overloaded secondary and tertiary hospitals; high expectations of people for the quality of services; the high number of people seeking medical treatment abroad; a lack of management skills needed to respond rapid growths of the health infrastructure; a health workforce that is heavily dependent on workers from different culture and systems; language barriers for treatment (especially for non-Kuwaiti-born residents); and underdeveloped emergency preparedness plans for chemical and radiation emergencies.

5. Financial challenges and gaps

- In recent years, the growing financial uncertainty surrounding the National Health Service system has become a major concern. The budget of the Ministry of Health increased 67 percent from 2010 to 2014 (MOH, 2015). Expenditures for treatment abroad have also grown rapidly. The Ministry of Health budget pays for an estimated 86 percent of all health expenditures in Kuwait. At the same time, 10 hospitals have been built or are under construction, according to the KNDP. The financial burden associated with operating these hospitals will be high. Investments in such medical facilities are a source of the growing expenditures by the health ministry.
- The rapid transition of disease patterns from acute diseases to chronic diseases is putting financial strains upon the NHS system and threatening its sustainability. The precarious financial situation threatens both the quality and availability of care. In 2016, the government embarked on a plan to support private health insurance for retirees. The plan covers 107,000 eligible beneficiaries at an estimated annual cost of USD 272 million, which poses an additional financial burden on the government. In light of the precarious financial situation, no additional funds have been targeted to urgently needed NCD prevention efforts and health promotion programs.
- A major challenge is ensuring the sustainability of national health accounts without curtailing the quality and availability of first-class health care to all people. The government needs to respond in a timely fashion to the rising health and financial burdens posed by the growth of NCDs; otherwise it may not have the funds to provide universal health coverage to both nationals and non-national residents.
- The factors contributing to growing health expenditures include: the growth of NCDs and the continued reliance on an approach that has not adjusted to the changing health care needs of the Kuwait population; the enormous increase in the numbers of patients seeking medical treatment abroad; and hospital construction.

Issue 5.1: Dual system: NHS and private insurance

- The existing NHS system generally moderates medical costs, and it provides universal health coverage to Kuwaiti nationals. Cost controls, however, affect the use of advanced medical technologies. As provided, NHS coverage lowers individual responsibility for one's own health, and increases reliance on medical services. Although the NHS focuses on primary health care, it does little to actively address the changing lifestyles of individuals.

- Privatization must be carefully managed in medical markets. Privatization of health care promotes enhancement of medical techniques, skills, and quality. However, because of information imbalances between physicians and patients, privatization can lead to moral hazard risks, patient abuse, high medical costs, and increased health inequalities. Government is responsible for overseeing the price charged, but the system of oversight is not robust. It is commonplace for private healthcare providers to reject medical insurance coverage, which leads to high costs and health inequities. Collecting accurate statistics from private hospitals is difficult without adequate regulations. The pros and cons of utilizing open market insurance companies should be considered carefully because the use of such companies may carry the risk of escalating health costs (WHO, 2014). At the same time, the private health care market appears to be growing. For example, forecasts predict that the private hospital market will be one of the fastest growing economic markets in Kuwait (MARMORE, 2017).
- Attention is needed regarding the rights of all population groups in relation to access to health. Analysis by international organizations has underscored that without a more effective private health care regulatory system, universal health coverage in Kuwait will be challenged. Rising expenditures are not leading to better health for the people of Kuwait, as evidenced by declining life expectancies, stubbornly high levels of diabetes, and the growth of NCDs. Now is the time to reform the health financing system to effectively bring together the potential merits of both the NHS and the private system.

Issue 5.2: Absence of a health promotion fund

- The Kuwait government funded 85.9 percent of total health expenditures in 2014. Curative care accounted for 86.9 percent of these expenditures (MOH, 2014). If the MOH does not make health promotion and disease prevention a focus, the rising burden of disease treatment will lead to a rapid increase in medical treatment costs, without leading to commensurate improvements in the health of the residents of Kuwait. The State of Kuwait urgently needs to assign funds to health promotion policies and NCD prevention programs.
- Many countries facing similar circumstances have found reasonable financing resources to address health and health care needs. Reports by international organizations recommend levying earmarked public health taxes (so-called “sin taxes”) on alcohol, tobacco, and sugar as a way to improve public health and to generate funds for health promotion (WHO, 2014; UNIATF, 2017).

Issue 5.3: Lack of analysis of the cost effectiveness of health services and health promotion

- The financing structure that underpins the Kuwait health system faces challenges for a number of reasons. Despite huge and rapidly growing financial outlays, the system lacks a way to assess the cost effectiveness of services, and a way to contain costs in the private health sector (WHO, 2014).
- One reason that government has been unable to designate a budget for health promotion programs and disease prevention efforts is that it lacks cost-effectiveness studies about their value. Absent such research, the government struggles to make disease prevention and health promotion programs first-order priorities.

6. Knowledge and technological challenges and gaps

- Frontier medical technologies, medicines, and procedures are rapidly growing world-wide. The absence the use of such cutting-edge medical technologies has led many Kuwaiti patients to shop for medical treatment abroad. The lack of investment in such medical technologies within Kuwait has thus resulted in the government paying increased costs for these services for Kuwaiti patients who go abroad for treatment.
- The Kuwait University Faculty of Medicine does not have its own teaching and research hospital. This limits clinical research competencies, and results in lower-quality educational outcomes than would be possible with an integrated teaching hospital.
- The Kuwait health system does not make use of clear job descriptions. This serves as a disincentive for highly qualified the professionals, in particular.
- The government has not capitalized on opportunities to spark innovation through integration among related medical sciences (e.g., bioscience, information technology, and communications and clinical technologies).

Issue 6.1: Lack of a national health industry development plan

- Kuwait lacks a National Development Plan for the health care industry, as well as national drug and health technology policies. It does not have a vision for research-oriented knowledge creation in health care. Its health care industry largely relies on workers and technologies from abroad.

Issue 6.2: Lack of a translational research complex hospital

- Translational research is an interdisciplinary branch of the biomedical field supported by three main pillars (“benchside, bedside and community” pillars). “Its goal is to combine disciplines, resources, expertise, and techniques...to promote enhancements in prevention, diagnosis, and therapies” (Cohrs et al., 2014).
- Kuwait lacks a research-based medical university, and Kuwait University does not have its own teaching hospital. This hinders the development of health care knowledge and technologies, and undercuts the quality of medical education in Kuwait. In general, medical schools need their own tertiary general hospitals to provide a quality education. .
- The Kuwait government has invested in health infrastructure, including the construction of the Jaber Al Ahmad Al Sabah Hospital, which was designed and built as a potential research complex. However, the Ministry of Health does not have clear vision for its operation.

7. Challenges and gaps in data collection and information technology

- Kuwait has robust data collection systems, and reports cite the excellent quality of the data (WHO, 2014). Data on a wide variety of diseases and risk factors are disaggregated by age and gender, and spatially referenced (UNIATF, 2017). However, these data are collected through separate systems that lack consistency and integration. Many aspects of the health data-generation system are not linked by informational technology. Thus, the reliability and accuracy of data are sometimes in question. To facilitate utilization of the information collected, these data need to be interconnected and supplied in a timely fashion to allow for monitoring, evaluation, and ev-

idence-based decision making. The information collection system is largely focused on hospital matters. A system to provide public health-related information has not been well developed. For example, national health and nutrition assessment surveys are lacking.

Issue 7.1: Lack of a unified, consistent system for generating needed health data

- Major concerns regarding data generation are: the absence of data unification and consistency; a decentralized health data survey and collection system; the absence of National Health and Nutrition Examination Survey (NHANES); and a failure to generate environmental health risk data.

Issue 7.2: Lack of information technology to automate data for system-wide use

- Major gaps in informational technology are: a lack of technologies to automatically generate needed data; the absence of an electronic medical coding system; a lack of expertise in health information and data.

8. Health workforce challenges and gaps

- Many challenges concern the health workforce in Kuwait. Kuwait relies heavily on an immigrant workforce. Workers from overseas account for 62 percent of doctors and 94 percent of nurses. Wages for nurses are low. Wage rates are sufficient to attract immigrant nurses, but they are too low to attract Kuwaiti-born workers to the profession. Kuwait lacks trained specialists to take on administrative positions, and, instead, relies on doctors, who assume such roles without specialized training. The medical student population in Kuwait shows a gender imbalance. An estimated 85 percent of medical students are female. Kuwait lacks key specialists in a number of fields, including: health education, school health, public health, and health information technologies and data collection. There is a lack of well-trained social workers and psychologists.

Issue 8.1: Lack of a national health workforce development plan

- Kuwait does not have a long-term vision to address its health care workforce needs. This is a critical issue. The lack of a long-term vision has led to problems in the quality of the workforce. Mismatch is a problem in the health labor market, with knowledge and skills of candidates not in line with the knowledge and skills needed in the marketplace. Job descriptions are not used to the degree needed to make clear the education, training and skills needed for certain positions.
- Despite the high demand for nursing in Kuwait, salaries remain too low to attract more Kuwaitis to enter the profession.
- The situation concerning pharmacists is especially problematic. There are substantial needs for clinical and other pharmacists, and for related professional work. However, Civil Service Commission job descriptions are too limited to adequately describe the variety of positions needed, or the related education, training, and skills these positions demand. A new, targeted pharmacy education program has begun in Kuwait, but more coordination is needed between this and other educational programs and

the understanding of the education, training, and skills various types of pharmacist positions require.

Issue 8.2: Lack of a health personnel management system

- Human resource development and management systems are lacking within the Kuwait health care system. There is a lack of health management and leadership training (WHO, 2014). Human resource activities are fragmented and lack coordination and assessment mechanisms. Recruitment and managements system are needed to guide various programs, and to address workloads of medical staff.
- Because most of nurses and doctors came from other countries where Arabic is not spoken, a language barrier exists for Arabic-speaking patients. Kuwait has been unable to hire enough doctors to keep pace with its growing population, and the caliber of doctors hired is below desired standards. Medical training and teaching standards are low. Salaries are fixed, and, in many cases, set at unreasonably low levels when workloads and responsibilities are taken into consideration. In general, administration is of poor quality, with an absence of guidelines, policies, and procedures for personnel management.

9. Challenges and gaps in the Kuwait National Development Plan (KNDP)

- Measures of health (life expectancy and diabetes rates) have deteriorated or failed to show significant improvement, despite considerable efforts to advance and implement the KNDP (GSSCPD, January 2015; May 2015; TICG, 2016; GSSCPD, 2017).
- The draft of development plan (2015/2016 – 2019/2020) published in January 2015 set three guidelines (“excellent medical service,” “capacities of the health system,” and “privatization”), but links are lacking between the overall vision, and specific targets and indicators. (GSSCPD, January 2015).
- The Kuwait mid-range development plan (2015/2016-2019/2020) published in May 2015 established needed links, but health promotion and NCD prevention-oriented projects lacked clarity (GSSCPD, May 2015).
- A 2016 report proposed interlinking goals, objectives projects, laws, and institutions across the seven pillars in KNDP (TICG, 2016). This analysis underscored that well-targeted indicators of physical infrastructure had been established. However, no indicators were established related to quality of service or the health status of citizens.
- The use of KPIs was suggested in the reports of UNDP, the State Audit Bureau, and GSSCPD (July 2017). Outcome-based KPIs were suggested to target areas including: system capacity, quality of service, operational efficiency, finance, research and development, disease prevention, and emergency response and preparedness (GSSCPD, 2017). The suggested indicators and focus areas provide excellent, well-linked measures in line with the overall vision, and specific objectives, particularly in health promotion. However, KPIs need to be set that go beyond those that measure outputs within hospitals and other medical centers to encompass a more holistic view of health and health care.
- Reviews the KNDP found several challenges, including: the emphasis on a traditional health care system focused on disease treatment rather than disease prevention; an emphasis on infrastructure-oriented plans; and taking a narrow (rather than holistic)

view of the health system. As a result, adequate progress on the two main health targets is not being achieved; life expectancy is decreasing, and diabetes rates, which dropped slightly in most recent assessments, remain among the world's highest.

Issue 9.1: Lack of a holistic view of the health system

- Health policies in the Kuwait National Development Plan generally focus on issues related to infrastructure and per capita availability of key health care workers, such as nurses and dentists (GSSCPD, January 2015). Thus, its quantitative objectives largely focus on related issues, as shown in Table I).

TABLE I

Quantitative Objectives for the Kuwait National Development Plan (2015/2016 – 2019/ 2020)

Data	2011/2012	2019/2020
Primary health care clinics	94	125
Number of dental practices at primary healthcare clinics	300	440
Total Ministry of Health dentists	1,445	2,145
Number of medical laboratories	133	190
Ministry of Health nursing coverage (nurses per doctor)	2.5	2.99
Hospital beds per 1,000 persons	2.34	3.61

- The Kuwait mid-range development plan (2015/2016 – 2019/2020) to a great degree expanded the number of health issues to be addressed to include health promotion and NCD prevention. These were to be addressed through new institutional approaches, laws and local plans (GSSCPD, May 2015).

The health vision for Kuwait, as articulated by the GSSCPD, states, "Healthcare institutions in Kuwait will play a vital role in achieving the desired quality of life for the people of Kuwait. This involves improving service quality in the existing public healthcare system and developing a national healthcare system capable of resolving growing public health issues at reasonable cost." Increasing life expectancy and reducing diabetes prevalence were put forward as key health targets (GSSCPD, May 2015). To reach the targets, 27 projects were planned. The scope of projects put forward covered many of the steps needed to create a more holistic health system.

These projects addressed: healthy cities (E12); health promotion (E13); development of health services for schools (O46); prevention and response to chronic non-communicable diseases (O47); support for the role of the private sector (O49); development of occupational health services (O50); development of primary healthcare services (O51);

construction of public sports centers and facilities (four projects): the development of sports facilities to allow Kuwait to host international and Olympic tournaments; encouraging participation in sports in society (O53); and supporting sports in schools, colleges and universities (O54).

The proposals also advocated new laws addressing: mental health and patients' rights. It proposed amending existing laws to address smoking, the use of ionizing radiation, pharmacies and medicines trade, and the establishment of therapeutic institutions.

Other projects proposed focused on construction of health infrastructure. Implementation mechanisms for health promotion and disease prevention projects were not provided. The consistency of targets and indicators throughout the reports that underlie the KNDP leaves much to be desired. Definitions remain unclear, and the use of indicators varies. At the same time, the management report moved in a positive direction by providing clear definitions of output-based performance indicators (GSSCPD, 2017).

- The GSSCPD states, "...healthcare indicators will focus on two major aspects of healthcare in Kuwait: the status of health of people living in Kuwait; and the availability and quality of right healthcare at right time" (GSSCPD, 2017). The report recommends the use of output-based indicators that: reflect the capacity and quality of healthcare system available to its residents; are based on specific processes and attributes of healthcare system of the country; are aligned closely with country's healthcare strategy; and are developed with the objective of influencing the sector in the short term (GSSCPD, 2017). The report recommended increasing the number of KPIs to include four indicators addressing life expectancy, cancer rates, diabetes rates, and public health expenditures; this list also included 26 more detailed, related indicators (GSSCPD, 2017).
- However, the indicators selected do not cover all areas that need to be addressed to establish a holistic health system. Many indicators are largely focused on the efficiency of hospital performance. Although substantial progress has been made in terms of clarity and comprehensiveness, measures needed for effective implementation are lacking.

Issue 9.2: Lack of cooperation of Kuwait health administrations

- Preventing and dealing with chronic diseases are development priorities for Kuwait (GSSCPD, January 2015). To address the issues related to chronic diseases, the Ministry of Health adopted the following approaches: promoting health life styles, with participation from all sectors of society; developing a health system focused on preventive health and the promotion of the private sector's role in achieving greater health; expanding health services to match the population growth and urban development; and improving the quality of health services, especially the quality of administration (GSSCPD, January 2015). The Ministry of Health is tasked with preparing a performance summary log covering all performance indicators of the sectors (GSSCPD, 2017).
- Leadership and cooperation of from the Ministry of Health are key factors in success of the KNDP and in bringing about greater health for the people of Kuwait. Action and positive participation on health promotion and disease prevention are essential so that both national and local levels of government work together to address the health care issues faced by Kuwait. Mechanisms are needed to elicit cooperation and coordination of national and local health authorities in reaching national health goals.

VI. Recommendations to **ADVANCE** Kuwait's health system



This report puts forward recommendations based on policy analysis that incorporates a review of the related literatures, interviews and discussions with key actors, and direct observation of services provided through the current health system in Kuwait. The recommendations provide goals that can be incorporated into the next Kuwait National Development Plan (KNDP) and can help Kuwait in its quest to create a sustainable health system of excellence.

The seven recommendations, organized by the acronym, **ADVANCE**, are: **A**dopt good governance and planning practices; **D**esign efficient organizations; **V**alidate policies with evidence-based measures of progress; **A**dopt a sustainable financial framework; **N**urture new technologies and knowledge industries; **C**reate a modern and comprehensive information system; and **E**nhance the health care workforce.

Recommendation 1: Adopt good governance and planning practices

Formulating a national health plan

- A long-term plan can provide clear direction about future aims of the health system in Kuwait. Such a plan should be based on assessments of the current system, the health status of the residents of Kuwait, existing policies, plans, and strategies. A long-term plan should move Kuwait's health system from "good" to "excellent." In general, a 10-year time frame is desirable for long-term plans. ("Healthy People 2025" and "Health Vision 2025" offer examples from developed countries.) The long-term plan should, thus, aim to draw a complete picture of Kuwait's future health system over the next decade. The scope should be wide, including: an overall vision, with related targets and indicators; and analysis of health system policies and activities; governance, organization and management of health care; provision of economic resources needed to ensure the financial sustainability of the system; healthcare service delivery; health protection and promotion programs and healthy environment and society projects aimed at addressing the prevalence of NCDs; and development of the health care workforce and health care industry. The plan should be monitored and evaluated every year and modified every five years to adapt to global and domestic socio-economic and demographic changes.
- Vision and targets. Health care targets should aim to: ensure a high quality of life for residents of Kuwait; provide needed capacity building to improve residents' health and well-being; aim to increase healthy life expectancy; and achieve equality of health and health care.
- Key performance indicators (KPIs) should be used to measure progress. These include:
 - Health indicators: healthy life expectancy at birth and life expectancy at birth.
 - Mortality indicators: rates of under-five mortality and maternal mortality; mortality rates from cardiovascular diseases, cancer, chronic respiratory disease, road injuries, diabetes, Alzheimer's disease, and self-harm.
 - Risk indicators: the prevalence of high blood pressure, obesity, anemia, and depression. Smoking rates, levels of physical inactivity, and the extent of high sodium intake.
 - Health system capacity indicators: health expenditure, health care workforce monitoring, and hospital bed counts.

Adopting a results-based management (RBM) system

- A results-based management (RBM) system is "a management strategy by which all sectors and actors, contributing directly or indirectly to achieving a set of results, ensure that their processes, products and services contribute to achieving of desired results" (UNDG, 2011). RBM takes a life-cycle approach, including planning, implementation, monitoring and evaluation. Using such an approach in the context of the Kuwait health system makes establishing a clear annual action plan as part of a national health plan a top priority. Subsequent recommended steps should include: creating a results map and RBM framework; planning for monitoring and evaluation; implementing and using monitoring systems; and managing and using evaluation tools. Adopting an RBM system will ensure the alignment of the KPIs. This should help Kuwait to address health trends stemming from the growth of NCDs, achieve related targets under the UN's Sustainable Development Goals, and address related issues

and sectoral project within the Kuwait National Development Plan.

- The RBM system envisioned includes both national and regional annual action plans; an NCD action plan; procedures for the implementation of policies and programs; decision-making processes; and systems for monitoring, evaluating and learning.

Establishing health leadership and ownership

- Central government is the primary owner of Kuwait's health care system. As such, it is accountable to its people for delivering on national health development objectives. Strong and strategic leadership is essential for successful leadership of Kuwait's health system. Key results-based management principles for successful leadership address accountability, national ownership, and inclusiveness (UNDG, 2011). Strengthening health governance, implementation, and the service delivery structure is an important to establish and maintain leadership and ownership of the system. To maximize national ownership and sovereignty, health policies and programs must be based on national priorities and strategies, and local needs. At the same time, increased decentralization and greater decision making needs to be put in place at regional levels. The Central government must work with governorates to ensure that future cities are healthy cities, for example (UNIATF, 2017). As a result, strengthening guidance, communication, action and accountability is needed for other ministries. A stronger and fully functional coordination mechanism across levels and departments of government, with high-level participation and a mechanisms for bringing non-state actors together, is needed.
- The creation of a high-level inter-ministerial committee is needed. Such a committee, most likely led by the Supreme Council for Planning and Development, would provide a forum to provide representation of all key actors. Such a committee would guide health policy development, inter-sectoral collaboration, and the incorporation of health care into all relevant policies (UNIATF, 2017).

Recommendation 2: Design efficient organizations

Establishing a new health system that covers all relevant dimensions

- The inefficiency of the decision-making structure of the Ministry of Health and health care service delivery entities is a long-standing issue that frequently has surfaced as a cause for concern (WHO, 2014, 2017; UNIATF, 2017). When it was established, the National Health Service system in Kuwait was popular. The system largely adhered to concepts put forward under the paradigm of a traditional, treatment-focused health system, as had been introduced in 1984 (Kleczkowski, 1984). However, in the wake of the Ottawa Charter for Health Promotion in 1986, the health paradigm shifted from health protection to health promotion, and from treatment to prevention. To keep pace, the Kuwait health care system needs to undergo a transformation that aligns with this health promotion paradigm. Making such a shift has the potential to transform the effectiveness of the system from good to excellent.

Good governance structure

- Governance involves making decisions about direction and roles that must be played to steer and implement policies. The act of governing involves the application of laws and regulations, but also customs, ethical standards, and norms. That is, governance is not only about where to go, but also about who should be involved in making decisions, and in what capacities. Good governance means that affairs are managed

well (Graham et al., 2003). To provide good management in terms of the health care system in Kuwait, the overall system structure and the Ministry of Health need to be reorganized to set the stage for providing both the efficiency and leadership needed to address contemporary, preventive and holistic health aims (see Figure 2), and to address new and growing demands on the system.

Restructuring organizations

- For efficient resource use and strong governance, fundamental restructuring is under consideration. Reforming the health system and reorganizing the structure of the Ministry of Health are essential to make preventive health care the emphasis, to promote healthy living, and to align with the National Health Service network and its aims (WHO, 2014). Reconfiguring of the country's primary care network is needed to improve early detection of disease, to better manage and reduce the prevalence of NCDs, and to complement related inter-sectoral efforts undertaken to address health of the residents of Kuwait (UNIATF, 2017).
- Among the suggested steps are the following:
 - Restructuring of the Ministry of Health.
 - Establishing the following entities: a health promotion foundation (or institute), a health industry development institute, a center for disease control and prevention, a national institute of health, community health centers, and community exercise centers.
 - Strengthening the following existing entities: the health information center; NCD control unit; community health promotion programs, and primary health care centers for self-care, home health care and community-based care.

Recommendation 3: Validate policies with evidence-based measures of progress

Focusing on evidence-based health promotion and NCD prevention

- A greater focus on health promotion will require considering, establishing and reviewing many related laws, acts, policies and programs. These include the formulation of the following: a health promotion policy and act; a national nutrition policy; fast food regulations; a mental health policy and act; environment and occupational health policies; healthy building and environment policies; community health programs; and breast feeding programs.
- Population-based measures are needed to prevent and reduce risk factors. Steps include efforts to reduce salt intake, and to eliminate trans-fats in domestic and imported foods. Public health measures would include media campaigns to highlight the risks underlying NCDs, and the need for strong NCD-related policies.
- WHO recommends: adopting a more systematic cardiovascular risk stratification for early detection of cardiovascular disease using the WHO Global HEARTS technical package that is part of its Global Hearts Initiative and aligning national efforts on cancer with new emerging global and regional WHO guidance on cancer prevention and control (WHO, 2017).
- UNIATF recommends that the planning of new cities includes a focus on minimizing environmental hazards. This recommendation stems from growing recognition of the effects of pollution on human health, and it recognizes that the reduction of such hazards plays a key part in providing a healthy environment in which to live, work and play (UNIATF, 2017).

Improved legislation

- Legislation is needed to strengthen health governance and to address the responsibilities of the Ministry of Health. Legislation should address the following: the promotion of good physical and mental health; NCD-related issues; nutrition and diet; environmental and occupational health; patient safety and rights; and health equity. A strong emphasis should be made on the prevention of NCDs and capacity building needed to lead to greater health among members of civil society. Emphasis must also be given to strengthening the program for the prevention of genetic abnormalities, and to establishing definitions of safe and unsafe marriage (for the prevention of genetic abnormalities) under existing laws (WHO, 2014).

Service quality assurance

- Attention should be given to quality assurance regarding the delivery of services. Recommended steps include: implementing and maintaining continuous quality improvement and accreditation programs; encouraging the development of a national program of accreditation for hospitals and primary health care centers; focusing on national capacity building in the area of service delivery, including quality and safety of health care; upgrading the referral system through the strengthening of referral criteria, computerized information, and a follow-up system; and strengthening and expanding dental health care at primary health care centers and at secondary- and tertiary-care levels (WHO, 2014).

Recommendation 4: Adopt a sustainable financial framework

Considerable effort will be required to ensure the financial sustainability of the Kuwait health system, and to transform the underlying financial support framework from the existing National Health Service system to the proposed National Health Insurance system. The proposed system aims to improve financial sustainability in part by putting greater responsibility on individuals to take steps to address their own health by leading healthier lifestyles; this should result in lower health care expenditures. Financial support is needed to provide health care for low-income workers.

Earmarked taxes on tobacco and sugar (“sin taxes”)

- Action is urgently needed to implement the WHO Framework Convention on Tobacco Control. Kuwait should adopt the recommended set of feasible, evidence-based, and cost-effective interventions, which include significantly increasing tobacco taxes. Such an increase has the support of the Ministry of Finance.
- The government should adopt a sugar tax. This, too, has the support of the Ministry of Finance (UNIATF, 2017).

Undertaking cost-effectiveness studies and evaluations

- To better understand the economic impact of NCDs on the national economy, the UNIATF recommends undertaking a case study focused on addressing NCDs in Kuwait. The results can provide needed evidence to demonstrate the advantages of greater investment in the prevention and control of NCDs.

Building innovative international medical hubs

- Establishing hospitals that make use of frontier research and offer high-quality services would encourage patients to seek treatment within Kuwait, and would thus allow the government to reduce the costs incurred in sending patient abroad. Such facilities could also help Kuwait to develop to become an international destination for medical care. In many developing countries, hospitals affiliated with national universities lead innovation.

Recommendation 5: Nurture new technologies and knowledge industries*Strengthening the national health industry development plan*

- A health industry development plan is essential to building creative knowledge and technology in Kuwait. The health field is one of the most promising economic growth areas, as evidenced by trends in numerous countries (e.g., Germany, Japan, India, Singapore, South Korea, the United Kingdom and the United States). A creative national health industry plan that addresses health technologies and medical research can thus provide an engine for growth while helping Kuwait to improve the health and well-being of its residents.

Building a global translational research complex hospital

- A number of countries (e.g., Japan, South Korea, the United Kingdom and the United States) have invested in medical translational research complexes over long periods of time. Such complexes foster interdisciplinary knowledge, enhance expertise, and advance the use of frontier technologies and medicines for diagnosis and treatment. The Jaber Al Ahmad Al Sabah Hospital offers an ideal facility to serve as a translational research complex hub in the Middle East.

Recommendation 6: Create a modern and comprehensive information system*Integrating all health information and establishing a data collection system*

- Integration of all health data is urgently needed. Data collection and generation needs to be organized into a coherent, linked system to ensure the accuracy and consistency of data that support evidence-based policies. All surveys related to health issues should be on one linked platform. Such a platform would link the following: all surveys addressing health, nutrition, NCDs, patient satisfaction, vital statistics, hospital data, and data on industrial and environment pollution.
- The existing health information center in Kuwait should be upgraded to become an independent national health information institute with the expertise needed to generate and manage accurate and consistent data throughout the health system. Such an institute can collect data and provide analytical skills and systems needed to generate evidence to underpin decision making for creation, implementation and monitoring of health care policies. Such an institute can develop a consolidated health information strategy to build a fully integrated health information system, enhance capacity building, and form the basis of an operational research unit. Such steps are needed for Kuwait to use make use of real-time information technologies for monitoring and improving individuals' health.

Building a ubiquitous health data platform

- A ubiquitous health data platform would allow access to needed medical records and health information throughout the Kuwait health system. Establishing such a platform requires a complete transition from paper-based records to an electronic medical recording (EMR) system. Needed steps include: installing a full primary health care information service; establishing a flexible computerized information system with sufficient connectivity between different modular sub-systems to allow retrieval and input at all levels through an authorization procedure; and ensuring that the system connects all relevant departments, such as civil registration (WHO, 2017).

Recommendation 7: Enhance the health workforce

Developing a national health workforce plan

- A long-term plan is needed to improve the efficiency and quality of the health workforce, including doctors, nurses, and other health professionals. Developing such a plan would allow Kuwait to capitalize on its human resources, and to help to lead to better use and creation of health technologies.

Establishing health professional schools

- Health professional schools are needed to educate and train doctors, nurses, and pharmacists, and specialists in a variety of fields (e.g., health policy and management, health education, and community health). More doctors and nurses are needed in primary health care centers, and training is needed for general practitioners and for doctors and nurses with training targeted toward diabetes care, maternity and women's health, children's health and health of the elderly.
- Specific recommendations include: establishing a school of public health and a school of nursing; improving medical education by creating a university teaching and research hospital; and improving pharmaceutical education. Additional steps that are needed include: strengthening medical laboratory services to conform to internationally recognized accreditation requirements, and clarifying job descriptions.
- Kuwait should establish training for specialized certificate courses to expand the ranks of medical staff workers. Needed steps included: mapping and assessing the current human resources development activities undertaken by different programs and facilities; establishing a technical advisory group (including key national and external partners) with a focus on developing human resources in health care; developing training programs and career incentives for health workers; and undertaking applied research and studies on competency skills for preventive and curative care.

V. Conclusion: Shift the health paradigm



Kuwait needs to shift the paradigm of its health policy from an orientation that emphasizes treatment to one that aims to emphasize prevention and takes a holistic view of measures that can bring about better, more equitable, and financially sustainable means to improve the health and well-being of the residents of Kuwait. The recommendations of this report are based on reviews of relevant academic and policy literatures; individual interviews and group discussions with key stakeholders; related surveys and analysis. Table 2 provides a concise summary of the issues, challenges, gaps, and recommendations put forward in this report. Figure 2 shows the holistic view of the Kuwait National Health System, the design of which was based on the information presented in this report. The recommendations advocated in this report are intended to create a virtuous cycle composed of:

- **Inputs:** planning and management; financial support; provision of services; tailored resources.
- **Outputs:** improved health, as evidenced by meeting targets and indicators.
- **Feedback:** assessment of results; monitoring, evaluation and learning; dissemination of information needed to improve inputs and achieve the desired outputs.

This cycle will allow Kuwait to embrace a healthcare system that protects, promotes, and provides the services needed for good health and well-being of its people, and incorporates environmental and societal issues into the health care landscape. An action model to achieve the goals of improving the health and well-being of the people of Kuwait includes the following nine steps:

1. Consider all dimensions of health determinants:

- Broad social, economic, cultural, health, and environmental conditions and trends.
- Global, national, and local policies and policy interactions.
- Living and working conditions.
- Social, family, and community networks.
- Individual behaviors and relevant characteristics (e.g., age, sex, race).

2. Consider establishing targets for achieving improved quality of life outcomes:

- Building capacity needed for provision of health care.
- Improving healthy life expectancy.
- Achieving equity in access to and provision of health care of all residents.

3. Choosing indicators relevant to targets:

- *Health outcome indicators*: healthy life expectancy at birth, and life expectancy at birth.
- *Mortality indicators*: under-five mortality and maternal mortality; mortality from cardiovascular disease, cancer, chronic respiratory disease, diabetes, Alzheimer's disease, road injuries, and self-harm.
- *Risk indicators*: incidence of high blood pressure, obesity, anemia, depression; rates of smoking, physical inactivity, and sodium intake.
- *Health system indicators*: health expenditures, health workforce levels, number of hospital beds.

4. Enforce essential planning and management components:

- Provision of good governance and leadership.
- Use of evidence-based decision making in health policies, health reforms, and the national health plan, annual action plans, and the Kuwait National Development Plan.
- Use of quality management techniques, such as monitoring, evaluation, feedback, and information support.
- Implementation and revision of relevant laws and regulations.

5. Establish a regular feedback system linked with outputs and inputs:

- Incorporate assessment into all related policies and services.
- Monitor progress on related indicators.
- Evaluate action plans.
- Disseminate information about outcomes.

6. Establishing stable financial mechanisms to ensure sustainability:

- Provide appropriate government and public support.
- Refine the National Health Insurance system.
- Establish a national health care system for the low-income population.
- Establish earmarked taxes on tobacco and sugar.
- Make use of foreign aid and organized voluntary agencies.

- Establish public-private partnerships.

7. Embrace measures and interventions that go beyond traditional notions of health services; incorporate steps that take a wider view of the scope of actions that can be brought to bear to increase health and well-being.

- Provide healthcare services for primary, secondary, and tertiary care.
- Provide health protection services through a public health system that addresses vaccinations, community sanitation and hygiene, emergency care, screening of genetic disorder, promotion of disease prevention, and prevention of epidemic diseases.
- Promote good health by undertaking needed capacity building; addressing the needs of vulnerable populations; promoting, promoting health in communities, schools and workplaces; establishing nutrition policies and education program; emphasizing the prevention of non-communicable diseases; and encouraging the participation of civil society in health policy making.
- Promote healthy environments and a healthy society by taking steps to promote healthy cities, schools, workplaces, and environments; addressing road safety; addressing environmental issues; and promoting opportunities to influence public health through all available avenues.

8. Organize resources efficiently:

- Healthcare services provided by a network of national and local health authorities, a National Health Insurance system and service entities, other government agencies, and relevant independent private-sector entities.
- Health protection provided by a network of national and local health authorities, primary care centers, and community health centers.
- Health promotion provided through a network of national and local health authorities, community health centers, cities, workplaces, schools; NGOs, civil society, media outlets and other networks.
- Healthy environment and society promoted by a network of national and local health authorities, communities, cities, workplaces, schools; and by the building of infrastructure (improved roads, parks and community health and work-out centers).

9. Develop resources for manpower needed to bring, knowledge, technology, facilities, equipment, and supplies to improve health:

- Health service provision: personnel (doctors, nurses, pharmacists, and technicians); infrastructure (hospitals; sanitariums, rehabilitation centers); technology (ICT equipment ICT, health information data-generating system).
- Health protection: personnel (trained government health workers); training (for development of knowledge and regulatory skills); information systems (for disease and public health data).
- Health promotion: personnel (health education specialists); infrastructure (centers for sports, and community education, services and health); technology (ICT technology for related data collection and research).
- Healthy environment and society: personnel (trained personnel with environmental management and regulatory skills); technology (for collection and analysis of environmental and socioeconomic data).

TABLE 2

Summary of issues, challenges, and recommendations

Major Issues	Challenges	Issues	Recommendations (ADVANCE)
1. Financial sustainability 2. Growth of NCDs issues 3. Changes in culture and lifestyles	1. Health challenges	Issue 1.1: Treatment-oriented health policies Issue 1.2: Lack of a robust control system for private health sectors	Health system paradigm shift
	2. Governance challenges	Issue 2.1: Lack of evidence-based policy making Issue 2.2: Lack of health leadership Issue 2.3: Lack of health plans and implementation mechanisms Issue 2.4: Lack of communication and participation mechanisms Issue 2.5: Lack of role descriptions of each level Issue 2.6: Lack of motivation mechanisms	Recommendation 1: Adopt good governance and planning practices - Formulating National Health Plan - Adopting Results-Based Management (RBM) System - Establishing health leadership and ownership
	3. Organizational challenges	Issue 3.1: Inefficient structure of administrative organizations Issue 3.2: Insufficiency of community service organizations	Recommendation : Design efficient organizations - New health system covering all dimensions - Good governance structure - Restructuring organizations
	4. Service implementation challenges	Issue 4.1: Lack of health promoting laws, policies, and programs Issue 4.2: Insufficient service quality	Recommendation 3: Validate policies with evidence-based measures - Focusing on evidence-based health promotion and NCD prevention - Strengthening legislation - Service quality assurance
	5. Financial challenges	Issue 5.1: Dual systems: NHS and Private Insurance Issue 5.2: Absence of a health promotion fund Issue 5.3: Lack of cost-effective evaluations for health services and health promotion	Recommendation 4: Adopt a sustainable financial framework - Transforming financing system from NHS to NHI - Earmarked taxes on tobacco and sugar ("sin taxes") - Undertaking cost-effectiveness studies and evaluations - Building innovative international medical hubs

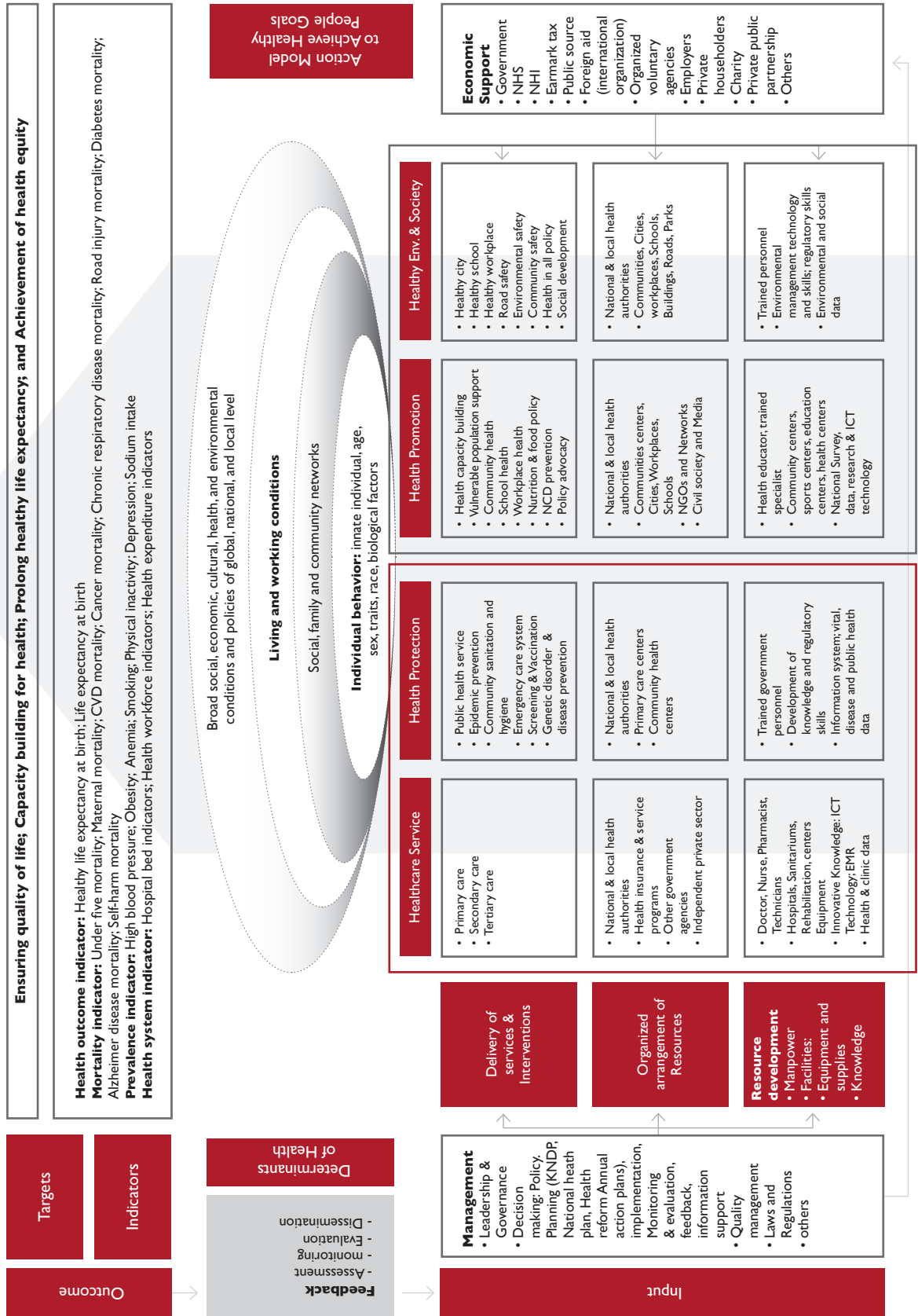
TABLE 2

Summary of issues, challenges, and recommendations

Major Issues	Challenges	Issues	Recommendations (ADVANCE)
1. Financial sustainability 2. Growth of NCDs issues 3. Changes in culture and lifestyles	6. Knowledge and technological challenges	Issue 6.1: Lack of a national health industry development plan Issue 6.2: Lack of a translational research complex hospital	Recommendation 5: Nurture new technologies and knowledge industries - Strengthening national health industry development plan - Building a global translational research complex hospital
	7. Information and data challenges	Issue 7.1: Lack of consistency of data generation Issue 7.2: Lack of information technology	Recommendation 6: Create a modern and comprehensive information system - Integrating all information and data collection system - Building ubiquitous platform
	8. Health workforce challenges	Issue 8.1: Lack of a national health workforce development plan Issue 8.2: Lack of health personnel recruitment and management system	Recommendation 7: Enhance the health workforce - Developing national health workforce plan - Establishing health professional schools - Establishing a human resources recruitment and management system
	9. KNDP challenges	Issue 9.1: Lack of a holistic view of health system Issue 9.2: Lack of cooperation among Kuwait health administrations	Shift the health paradigm

FIGURE 2

Holistic View of Kuwait National Health System



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Appendix

Appendix 1. Health policy panel survey questionnaire

Appendix 2. List of health policy panel members

APPENDIX I

Health policy panel survey questionnaire

Dear Panel Professionals and Stakeholders:

Kuwait has faced with challenges on health service quality issues, insufficient health system, increase of non-communicable diseases, and unbalances of public health services. Therefore UNDP and the Supreme Council of Planning and Development (GSSCPD) are trying to figure out the health policy gaps and lacks, and the ways to strengthen health system.

As UNDP policy advisors in health, since July of this year, our team has taken series of individual and group interviews and discussions, and reviewed all types of literatures, white papers and reports from Kuwait government as well as international organizations and related agencies. We summarized major challenges and recommendations so that we could draw a holistic approach new Kuwait health system structure (see the appendix 1 and 2).

This questionnaire aims to evaluate the current Kuwait health policy and system; develop a new Kuwait health system; and decide policy priority. This questionnaire is consisted of both structured and open questions. Please download the attached questionnaire and fill your answers in the file, **and return it back to these two emails (sungsoo.chun@undp.org) (or) (tasleem_siddiqui@gs-scpd.gov.kw) by Wednesday, October 11, 2017.** We hope to hear from you at your earliest convenience.

As professionals and key stakeholders of Kuwait health system, your answers are most important to strengthen Kuwait health system, promising that every single answers will be seriously reflected in our final report and assuring that all information and privacy will be analyzed anonymously and safely. Before we finalize our report, we will send you brief results of this survey.

Please feel free to contact us. Thank you very much for your time and consideration.

All the best,

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A. HEALTH ISSUES IN KUWAIT

Please give scores on health issues in each cell from 1 to 10. (If you consider any other more health issues, please write them in the blank below and give scores)

Health issues	Size of health issue	Severity on health		Prevention effectiveness
		Urgency	Size of health cost	
	Scale starting from 1 for narrow to 10 for wider issue	Scale starting from 1 for not at all urgency to 10 most urgent	Scale starting from 1 for little health cost to 10 the costly	Scale starting from 1 for ineffective to 10 most effective
Diabetes				
Cancer				
Cardiovascular disease				
Genetic disorder				
Chronic respiratory disease				
Alzheimer				
Mental health problems				
Maternal child health issues				
Geriatric issues				
Self-harm				
Road injuries				
Workplace injuries				
Air pollution				
Anemia				
Hyperlipidemia				
Overweight				
Hypertension				
Smoking				
Physical inactivity				
Unhealthy diet				

B. HEALTH OUTCOME AND POLICY EVALUATION

HEALTH VISION, INDICATORS, AND HEALTH STATUS

- *Kuwait Vision in Health Pillar*: Healthcare institutions in Kuwait will play a vital role in achieving the desired quality of life for the people of Kuwait. This involves improving service quality in the existing public healthcare system and developing a national healthcare system capable of resolving growing public health issues at reasonable cost (in Kuwait National Development Plan, GSSCPD, May 2015).
- Indices: Diabetes and life expectancy at birth are representative indicators as health quality index
- *Life expectancy at birth*: decreased from 77.7 years in 2011 to 74.6 years in 2015 (WHO EMRO, 2012; 2016).
- *Age adjusted diabetes prevalence*: going up and down from 21.1% in 2011 to 23.1% in 2013 and 20.0% in 2015 (IDF atlas, 2011; 2013; 2015). Kuwait is still staying on the top 10 highest countries of diabetes (IDF atlas, 2015)

In your opinion, why, even though Kuwait government has set up health vision and key indicators to reach the goals since 2011, has not current health status based on key indicators been improved? (Please give scores in each cell from 1 to 10. And if you have any other reasons, please write them in the blank below, and give them scores)

		Policy issues and challenges	Scale starting from 1 for disagree to 10 mostly agree
Target and indicator		Wrong direction of vision	
		Wrong choice of main indicators	
Health plan		Weakness of health plan in National Development Plan	
		Treatment oriented health plan	
		Privatization plan for clinic and health insurance	
		Absence of national health plan and action plan	
Governance & management		Lack of leadership in health field	
		Inefficient structure of Ministry of Health	
		Lack of health policy implementation mechanism	
Service delivery and intervention		Lack of health promotion programs	
		Lack of fast food regulation programs	
		Lack of mental health programs	
		Lack of community health programs	
		Lack of environmental control policy	
		Lack of NGO and civil society participation programs	
Organized arrangement of resources		Lack of community health centers	
		Lack of local exercise centers (gyms)	
Financial support		Government financial support system (NHI)	
		Private health insurance system	
		Insufficient financial support for primary health care center	
Resource development	Workforce development	Unbalanced health workers	
		Lack of trained experts on public health and technology	
	Information development	Weakness of electronic medical record system	
		Inefficient health and survey data collection system	
	Knowledge development	Insufficient health & medical knowledge investment	
	Other		

C. EVALUATION ON HEALTHCARE SERVICE PART

Please give scores in each cell from 1 to 10 (If you consider any other opinion, please write them in the blank below and give scores).

Healthcare service part		Scale starting from 1 for not enough to 10 well enough. Scale starting from 1 for unsatisfied to 10 to well satisfied. Scale starting from 1 for under developed to 10 well developed.	If you have any opinion, please describe here
Delivery of service & intervention (quality, waiting time, charge, etc.)	Primary care services		
	Secondary care services		
	Tertiary care services		
Organized arrangement of resources (Role of service organizations)	National health authorities roles		
	Local health authorities roles		
	National health service (NHS) role		
	Other government authorities' role (ex, ministry of environment...)		
	Independent private sector's role (ex, private hospital, insurance company...)		
Resource development	Health workforce		
	Public hospitals and primary care centers		
	Private hospitals and clinics		
	Health and medical knowledge & technology		
	Information and data system		

D. EVALUATION ON HEALTH PROTECTION PART

Please give scores in each cell from 1 to 10 (If you consider any other opinion, please write them in the blank below and give scores).

Healthcare service part		Scale starting from 1 for not enough to 10 well enough. Scale starting from 1 for unsatisfied to 10 to well satisfied. Scale starting from 1 for under developed to 10 well developed.	If you have any opinion, please describe here
Delivery of service & intervention	Epidemic prevention		
	Community sanitation & hygiene		
	Emergency care response		
	Screening & vaccination		
	Genetic disorder prevention		
Organized arrangement of resources (Role of service organizations)	National health authorities roles		
	Local health authorities roles		
	Primary care centers roles		
	Other government authorities' role		
Resource development	Trained government personnel		
	Related knowledge and skills		
	Information system (vital statistics, disease and public health data)		

E. EVALUATION ON HEALTH PROMOTION PART

Please give scores in each cell from 1 to 10 (If you consider any other opinion, please write them in the blank below and give scores).

Healthcare service part		Scale starting from 1 for not enough to 10 well enough.	Scale starting from 1 for unsatisfied to 10 to well satisfied.	Scale starting from 1 for under developed to 10 well developed.	If you have any opinion, please describe here
Delivery of service & intervention	Health capacity building				
	Vulnerable population support				
	Community health promotion program				
	School health promotion program				
	Workplace health promotion program				
	Nutrition & food policy				
	NCD risk factors control				
Organized arrangement of resources (Role of service organizations)	National health authorities roles				
	Local health authorities roles				
	Community health centers roles				
	Workplaces role				
	Schools role				
	NGOs and civil societies role				
	Media's role				
	Other government authorities' role				
Resource development	Trained health educators and health promotion specialist				
	Community centers (education and social activities)				
	Sports and exercise centers				
	Information system (National health survey, research & IT)				

F. EVALUATION ON HEALTHY ENVIRONMENT AND SOCIETY PART

Please give scores in each cell from 1 to 10 (If you consider any other opinion, please write them in the blank below and give scores)

Healthcare service part		Scale starting from 1 for not enough to 10 well enough. Scale starting from 1 for unsatisfied to 10 to well satisfied. Scale starting from 1 for under developed to 10 well developed.	If you have any opinion, please describe here
Delivery of service & intervention	Healthy city projects		
	Healthy school projects		
	Healthy workplace projects		
	Road safety activities		
	Environmental safety activities		
	Community safety activities		
	Health public policy		
Social development			
Organized arrangement of resources (Role of service organizations)	National health authorities roles		
	Local health authorities roles		
	Community health centers roles		
	Workplaces role		
	Schools role		
	Buildings status		
	Roads status		
Seashore and parks status			
Resource development	Trained personnel		
	Safe community development		
	Safe workplace development		
	Safe school development		
	Safe building development		
	Safe road development		
	Safe park development		
	Environmental management technology and skills; and regulatory skills		
Environmental and social data			

G. EVALUATION ON PLANNING & MANAGEMENT PART

Please give scores in each cell from 1 to 10 (If you consider any other opinion, please write them in the blank below and give scores).

Management and planning part	Scale starting from 1 for not enough to 10 well enough. Scale starting from 1 for unsatisfied to 10 well satisfied.	If you have any opinion, please describe here
National development plan (in health pillar) Link http://www.newkuwait.gov.kw/en/		
Kuwait National programme for healthy living: first 5-year plan (2013-2017) Link https://www.karger.com/Article/FullText/358884		
Health governance		
Health policy implementation		
Monitoring and evaluation of health plan and policy		
Civil society participation mechanism in healthcare programs and projects		

H. EVALUATION ON ECONOMIC SUPPORT PART

Please give scores in each cell from 1 to 10 (If you consider any other opinion, please write them in the blank below and give scores).

Economic support part	Scale starting from 1 for not enough to 10 well enough. Scale starting from 1 for unsatisfied to 10 well satisfied.	If you have any opinion, please describe here
Government support expenditure		
National health service system		
Health insurance for retired Kuwaiti		
Oversea treatment support for Kuwaiti		
Private health insurance		

I. RECOMMENDATIONS FOR HEALTH POLICY

I. Suppose you choose health indicators to respond to Kuwait's health challenges, and please give scores in each cell from 1 to 10 (If you have other health issues, please write them in the blank below, and give them scores).

Health outcome		Mortality		Prevalence		Health system	
Indicators	Scale starting from 1 for improper to 10 proper	Indicator	Scale starting from 1 for improper to 10 proper	Indicators	Scale starting from 1 for improper to 10 proper	Indicators	Scale starting from 1 for improper to 10 proper
Life expectancy		Under five		Obesity		Health expenditure indicators	
Healthy life expectancy		Maternal		High blood pressure		Hospital bed indicators	
		CVD		Anemia		Health workforce indicators	
		Cancer		Smoking			
		Chronic respiratory disease		Physical inactivity			
		Road injury		Depression			
		Diabetes		Sodium intake amount			
		Alzheimer					
		Self-harm					

I. RECOMMENDATIONS FOR HEALTH POLICY

2. One of the biggest challenge in Kuwait health system is uncertainty of financial sustainability. It is crucial to reform health financial support system for the future generation. Suppose you are a health decision maker of Kuwait, then what scores do you want to give to alternatives? Give scores in each cell from 1 to 10.

Alternative		Scale starting 1 for disagree to 10 well agree
Financial retrenchment models	Transforming National Health Service system to National Health Insurance system (for both Kuwaiti and non-Kuwaiti)	
	Transforming National Health Service system to National Health Insurance system (for only and non-Kuwaiti)	
	Cutting off oversea treatment supports	
	Cutting off retired health insurance service	
Economic models:	Creating the mass international medical hub (leading center: Jaber Al-Ahmad Hospital)	
	Foster health industry innovatively	
Disease reduction models	Expanding health promotion programs	
	Strengthening prevention and management system on NCDs	
	Extending safe environment and health city projects	
Others		

J. EVALUATION ON RECOMMENDED POLICIES AND PROGRAMS

Evaluate recommended policies and programs focusing on health vision (achieving the desired quality of life for the people of Kuwait), and give scores in each cells.

Recommended policies and programs	Effective-ness	Health Equity	Cost	Feasibility	Acceptability	Unwanted effects (if any, please describe)
	Scale starting from 1 for ineffectiveness to 10 most effectiveness	Scale starting from 1 for causing inequity to 10 achieving equity	Scale starting from 1 for Big expenditure to 10 high expenditure	Scale starting from 1 for hard to 10 easy	Scale starting from 1 for Unacceptable to 10 Acceptable	
Development of national health plan and action plan						
Development of healthy workplace plan						
Development of health industry plan						
Restructuring organization of MoH (including Position and role: NCD office; Nutrition; Public health)						
Development of a new governance model, including Development of health policy implementation mechanism and Provision of clear guideline of evaluation and promotion						
Creation of NGOs participation mechanism						
Development of national health insurance model						
Formulation of health promotion policy and act						

J. EVALUATION ON RECOMMENDED POLICIES AND PROGRAMS

Evaluate recommended policies and programs focusing on health vision (achieving the desired quality of life for the people of Kuwait), and give scores in each cells.

Recommended policies and programs	Effective-ness	Health Equity	Cost	Feasibility	Acceptability	Unwanted effects (if any, please describe)
	Scale starting from 1 for ineffectiveness to 10 most effectiveness	Scale starting from 1 for causing inequity to 10 achieving equity	Scale starting from 1 for Big expenditure to 10 high expenditure	Scale starting from 1 for hard to 10 easy	Scale starting from 1 for Unacceptable to 10 Acceptable	
Formulation of national nutrition policy & Fast food regulation						
Formulation of mental health policy and act						
Formulation of environment and occupational health policy						
Formulation of healthy building and environment policy						
Development of healthy diet education and advertisement programs						
Development of occupational health activities and programs						
Development of community health programs						
Development of breast feeding and nutrition education programs						
Establishment of health promotion foundation (or institute)						

J. EVALUATION ON RECOMMENDED POLICIES AND PROGRAMS

Evaluate recommended policies and programs focusing on health vision (achieving the desired quality of life for the people of Kuwait), and give scores in each cells.

Recommended policies and programs	Effective-ness	Health Equity	Cost	Feasibility	Acceptability	Unwanted effects (if any, please describe)
	Scale starting from 1 for ineffectiveness to 10 most effectiveness	Scale starting from 1 for causing inequity to 10 achieving equity	Scale starting from 1 for Big expenditure to 10 high expenditure	Scale starting from 1 for hard to 10 easy	Scale starting from 1 for Unacceptable to 10 Acceptable	
Establishment of health industry development institute						
Establishment of center for disease control and prevention						
Establishment of national institute of health						
Establishment of community health centers						
Establishment of local exercise centers						
Plan for health workforce: information and health education specialist; well trained personnel						
Establishment of School of Public Health						
Electric record and centralized health information system: hospital; community; health data; patient satisfaction survey; vital data; and nutrition data						

J. EVALUATION ON RECOMMENDED POLICIES AND PROGRAMS

Evaluate recommended policies and programs focusing on health vision (achieving the desired quality of life for the people of Kuwait), and give scores in each cells.

Recommended policies and programs	Effective-ness	Health Equity	Cost	Feasibility	Acceptability	Unwanted effects (if any, please describe)
	Scale starting from 1 for ineffectiveness to 10 most effectiveness	Scale starting from 1 for causing inequity to 10 achieving equity	Scale starting from 1 for Big expenditure to 10 high expenditure	Scale starting from 1 for hard to 10 easy	Scale starting from 1 for Unacceptable to 10 Acceptable	
Privatization and translational research complex (international hub, Jaber Al-Ahmad Hospital)						
Creation of friendly environment for investment						

K. OTHERS

(If you have any opinion for improving health status and strengthening health system, please feel free to describe them here)

APPENDIX 2

List of health policy panel members

Field	Name	Title	
MOH	Dr. Dr. Khalid Abdullah Al-Anezi	Director of The Technical Office of H.E (Heath Reform)	
	Dr. Ahmad Al Oman	Department of International Health Relations	
	Dr. Abdulla Al Ajeel	Head , Department of Vital and Health Statistics	
	Dr. Yasmin Abdulghafour	Director of International Health Relations (health plan)	
	Dr. Abdulrazak Alanjari	Head of NCD	
	Dr. Nawal M. Al-Qaoud	Head of Nutrition	
	Dr. Fahad Al-Khalifa	Director of National Center for Health Information	
	Dr. A.L. Abdulrahman	in Communicable Disease Control (D of Public Health)	
	Dr. Shakil Anwar	Department of Community Health	
	Dr. Sami E. Alnasser	Charge in Public Health (Deputy)	
	Dr. Adnan Alrasheed	Charge in retirement insurance	
	Dr. Haneen Bultain	Deputy director of School Health	
	PHC	Dr. Amani Al-Saqabi	Head of PHC clinics in capital area
		Dr. Homoud F. Al-Zuzbi	Director of Farwaniya Health Rigion
Dr. Sanaa Al Mansour		Director of Abdulla Al Alem PHC	
Dr. Jamila Al-Faraj		Director of Al Nuzha PHC	
Dr. Heyan		Department of local PHC	
Academia	Dr. Harri Vainio	Dean, school of public health	
	Dr. Syed M. Alijunid	Professor, Health Economics Policy & Management	
	Prof. Marawan Al-Sharbati	Prof. Social & Behavioral Sciences (Mental health)	
	Prof. Keith Cash	Prof. Public Health Practice	
	Dr. Nasra Shah	Professor, Demography at the Department of Community Medicine and Behavioral Sciences	
	Dr. Naser Alenezi	Vice-Dean, Faculty of Allied Health Sciences at the Kuwait University.	
	Prof. Iqbal Siddiue	Assisstant Vice President, Health Science Center, Kuwait University	
	Prof. Saud Al Obaidi	Acting Dean, Faculty of Allied Health	
	Prof. Pierre Moreau	Dean, Faculty of Pharmacy	
	Dr. Mohsen Hedaya	Vice Dean, Faculty of Pharmacy	
	Dr. Adel Al-Asfour	Dean, Faculty of Dentistry	
	Prof. Adel Ayed	Dean, Faculty of Medicine	
	Prof. Basil Al-Nakib	Ex Vice President, Health Sciences Center	
Prof. Adel Al-Awadhi	Acting Vice President, Health Sciences Center		
Dasman	Dr. Ahmad M. AlSaleh	CEO and Board Member, DHAMAN - Health Assurance Hospitals Co.	

SUMMARY OF CHALLENGES AND RECOMENDATIONS FROM INTERVIEWS AND LITERATURE ANALYSIS

		Challenges	
Targets & indicators & health issues		<ul style="list-style-type: none"> • NCD • Metabolic syndromes: hypertension, diabetes, overweight, high cholesterol • Road injuries • Genetic disorder issues • Anemia 	<ul style="list-style-type: none"> • Diet (food industry) • Geriatric issues • Mental health issue • Smoking rate (including hookah) • Air pollution
Management and governance		<ul style="list-style-type: none"> • No national healthplan: no health action plan • No plan for community health center • Lack of health workforce plan • Unified governance model: provider, financial supporter, regulator • Scattered structure of MOH • No mechanism to control private insurance and clinics • Lack of health policy implementation mechanism • Lack of evidence base policy processing • Lack of NGO's participation mechanism 	<ul style="list-style-type: none"> • Leadership and performance challenges: lack of competitiveness, weak evaluation system, seniority • No job description (PHC)
Economic support		<ul style="list-style-type: none"> • Budget limitation for PHS; patient based budget • Dual system: NHS and Private health insurance 	<ul style="list-style-type: none"> • Reliability issue on health expenditure • Inactive private insurance investment • Prescription issues: brand name
Service delivery and Intervention (policy)		<ul style="list-style-type: none"> • No health promotion act • No mental health act • Medical & treatment oriented policy • Lack of health promotion policy • Lack of nutrition policy • Lack of mental health policy • Lack of environmental and occupational health policy • No health building and environment • No regulation on fast food 	<ul style="list-style-type: none"> • Lack of workplace health program • School health issues: Clean zone policy, food policy, health activities • Low activities for NCD • Lack of health promotion activities • Focused on traditional public health activities • Language barriers for treatment (especially for non-Kuwaiti) • Lack of community participation mechanism
Organized arrangement of resources		<ul style="list-style-type: none"> • No community health centers • Accessibility issues to the local exercise centers 	<ul style="list-style-type: none"> • Inefficient governance organization • Inefficient service providing system • Unbalanced health insurance system
Resource development	Workforce	<ul style="list-style-type: none"> • Unbalanced health workforce • Many doctors are involved in administration • No health education specialist & school health educators 	<ul style="list-style-type: none"> • Lack of expert on public health • Lack of information and data experts
	Information & data	<ul style="list-style-type: none"> • Weak EMR system of public hospitals • Decentralized health data survey and collection system 	<ul style="list-style-type: none"> • Data reliability issue
	Innovative knowledge development	<ul style="list-style-type: none"> • Jaber Al-Ahmad Hospital: lack of clear vision and programs (budget limitation) 	<ul style="list-style-type: none"> • Sustainability issue on private hospitals investments

Recommendations

- Hosting FCTC

- Development of national health plan and action plan
- Development of healthy workplace plan
- Development of health industry plan
- Restructuring organization of MoH
- Position and role: NCD office; Nutrition; Public health
- Development of a health policy implementation mechanism
- Provision of clear guideline and evaluation and promotion
- Creation of NGOs participation mechanism

- Development of national health insurance model

- Formulation of health promotion policy and act
- Formulation of national nutrition policy & Fast food regulation
- Formulation of mental health policy and act
- Formulation of environment and occupational health policy
- Development of healthy building and environment policy
- Development of healthy diet education and advertisement programs
- Development of community health programs
- Development of breast feeding and nutrition education programs

- Establishment of health promotion foundation (or insitute)
- Establishment of health industry development institute
- Establishment of center for disease control and prevention
- Establishment of national institute of health
- Establishment of community health centers
- Establishment of local exercise centers

- Plan for health workforce: information and health education specialist; well trained personnel,
- Establishment of School of Public Health

- Electric record and centralized health information system: hospital; comunity; health data; patient satisfaction survey; vital data; and nutrition data
- Enhacing data usage

- Privatization and translational research complex (international hub, Jaber Al-Ahmad Hospital)
- Creation of friendly environment for investment



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