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2011-2016

Department of Health
Republic of the Philippines

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FOREWORD

Inequity is a pervasive problem in our country and it is more pronounced in the health sector. Latest data show that access to skilled providers and health facilities for birth deliveries is directly proportional to the family income. The number of children dying is significantly higher in rural areas, among women who have no education, and among the poorest of the poor. Previous health reforms have resulted to significant improvements in the health system. However, we need to work more so that the most vulnerable Filipinos will experience the benefits of these reforms.

We are now pursuing the goal of *Kalusugan Pangkalahatan* (KP) or universal health care to overcome inequities in our health system and deliver better health outcomes. KP represents our government's efforts to address the health needs of the Filipinos, and particularly favors the most vulnerable segments of our population. It is built on three strategic thrusts, namely (1) financial risk protection through expansion of the National Health Insurance Program enrollment and benefit delivery, (2) improved hospitals, health facilities and services and (3) scaling up public health interventions to attain our health-related Millennium Development Goals, and to control the rise of non-communicable diseases.

Through KP, around 5.2 million poorest families identified by the DSWD's National Household Targeting System were enrolled through a full subsidy from the National Government to make them rise above the financial barriers to health care access.

On the other hand, middle-class families that are not covered by PhilHealth may run the risk of being impoverished when they get sick of chronic illnesses such as cancer, acute cardiac events, end-stage renal diseases and other debilitating non-communicable diseases. The tremendous costs of these illnesses are financially and emotionally burdensome to any family, hence the need to expand the PhilHealth coverage and benefit package to cover these groups.

There is an ongoing nationwide effort to rehabilitate and upgrade rural health units, hospitals, and all other government health facilities, in line with KP's second strategic thrust. Our goal is to rationalize the distribution and capacities of different health facilities to provide appropriate health services, so that the poorest families would be able to access quality and affordable healthcare. Most of our poor go to government-run health facilities in their time of need and they deserve no less than the best care from these public facilities.

To meet MDGs on health, we have rolled out Community Health Teams or CHTs whose primary task is to work directly with the poorest families, assist them in determining their health needs, health services available and help them avail of PhilHealth benefits. We are also deploying nurses to the areas with great need of their services through our RNheals program.

The National Objectives for Health 2011-2016 sets all the health program goals, strategies, performance indicators and targets that can lead the health sector to achieve *Kalusugan Pangkalahatan* by 2016. Unqualified and unwavering commitment is critical for us to truly achieve *Kalusugan Pangkalahatan*, the universal health care program of the Aquino administration. Let us all work together in realizing this common dream for all Filipinos.

ENRIQUE T. ONA, MD
Secretary of Health

PREFACE

The 2011-2016 National Objectives for Health provides guidance to all stakeholders and advocates in attaining the three strategic goals of the Department of Health for the health sector: ensuring financial risk protection, access to quality health facilities and attainment of the health-related Millennium Development Goals – most significant of which is the reduction in Infant and Maternal Mortality Rates and incidence of infectious diseases such as TB, HIV-AIDS, Malaria. We also note of other emerging and reemerging diseases that call for equal attention and investment. As illnesses and diseases are multifactorial in nature, the solutions and strategies outlined in this document go beyond clinical interventions. All key players in the field, especially Public Health implementers and managers, should take to heart the goals, targets and strategies outlined in this document in order to attain *Kalusugan Pangkahalatan* or Universal Health Care in this country. I appeal to all heads and managers of the health system, office, or unit to take the initiative to disseminate and educate all their constituents on the importance of achieving these health goals and targets.

Periodic review and reporting of the accomplishment of the set goals and targets shall be initiated by the Health Policy, Finance and Research Development Cluster and shall further be cascaded to the level of the regions, provinces and municipalities using available monitoring and evaluation tools. Our Community Health Teams should also be able to include this vital document in their information portfolio so that all families and individuals are informed of their important responsibility towards their health in the community. The Department of Health will continue to lead in formulating strategic solutions to concerns identified in this document. Close collaboration with other government, non-government, donor institutions, including the private sector shall primarily govern the actions of the Department of Health in bringing forward the 2011-2016 National Objectives for Health.

Allow me to extend the Department of Health's recognition and great appreciation to all who in their individual and institutional capacity have made valuable contribution in terms of their technical and expert assistance in the final publication of this document.

MADELEINE DE ROSAS-VALERA, MD, MSCIH
Assistant Secretary
Health Policy Finance and Research Development Cluster
Department of Health

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Health Emergency Management Staff
Health Human Resources Development Bureau
Health Policy Development and Planning Bureau
Information Management Service
Integrity Development Committee
Internal Audit Service
Legal Service
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National Center for Disease Prevention and Control
National Center for Pharmaceutical Access and Management
National Center for Health Promotion
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DOH EDITORIAL AND PUBLICATION TEAM

Lead Editors	Dr. Lilibeth C. David Director IV Health Policy Development & Planning Bureau Dr. Ma. Virginia G. Ala Director IV National Pharmaceutical Access and Management
Technical Editors / Writers	Dr. Ma. Rosario Clarissa S. Vergeire Ms. Rosa G. Gonzales Dr. Elizabeth Matibag Dr. Mar Wynn C. Bello Ms. Frances Rose T. Elgo
Publication Assistants	Ms. Madelaine Teresa T. Casimiro Engr. Laurita R. Mendoza Ms. Clarissa Reyes Mr. Victor Vidal
Cover design and Lay-out	Ms. Marysol Astrea Balane Ms. Cherie May Mendoza

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ABD	Acute Bloody Diarrhea
ADR	Adverse Drug Reaction
AHA	Aquino Health Agenda
ALRTI	Acute Lower Respiratory Tract Infection
AO	Administrative Order
AOP	Annual Operational Plan
API	Annual Parasite Incidence
APIS	Annual Poverty Incidence Survey
ARIs	Acute Respiratory Infections
ART	Anti-Retroviral Therapy
ARMM	Autonomous Region for Muslim Mindanao
ASEAN	Association of Southeast Asian Nations
ATM	Automated Teller Machine
BCG	Bacille Calmette Guerine
BDR	Benefit Delivery Rate
BLES	Bureau of Labor and Employment Statistics
BLHD	Bureau of Local Health Development
BHFS	Bureau of Health Facilities and Services
BHS	*Barangay* Health Station
BHW	*Barangay* Health Workers
BIHC	Bureau of International Health Cooperation
BnB	Botikang*Barangay*
BNB	Botikang Bayan
BNS	*Barangay* Nutrition Scholar
BMI	Body Mass Index
BSNOH	Baseline Studies for the National Objectives for Health
CALABARZON	Cavite, Laguna, Batangas, Rizal, Quezon
CAR	Cordillera Administrative Region
CBR	Crude Birth Rate
CCT	Conditional Cash Transfer
cGMP	certified Good Manufacturing Product
CDR	Crude Death Rate
CEO	Chief Executive Officer
CHD	Center for Health Development
CHED	Commission on Higher Education
CHO	City Health Office
CHT	Community Health Team
CIPH	City-wide Investment Plan for Health
COBAC	Central Office Bids and Awards Committee
COPD	Chronic Obstructive Pulmonary Diseases
COP	Community of Practice
CR	Cure Rate
CVD	Cerebrovascular diseases
CS	Child Survival
DBM	Department of Budget and Management
DDAPTP	Dangerous Drug Abuse Prevention and Treatment Program
DDB	Dangerous Drugs Board
DepED	Department of Education
DHF	Dengue Hemorrhagic Fever
DILG	Department of the Interior and Local Government
DM	Diabetes Mellitus
DMFP	Decayed Missing and Filled Teeth – Permanent
DMFT	Decayed Missing and Filled Teeth – Temporary
DOF	Department of Finance
DOH	Department of Health
DOLE	Department of Labor and Employment
DOTS	Directly Observed Treatment Short-Course
DPs	Development Partners
DPT	Diphtheria, Pertussis, Tetanus
DSS	Dengue Shock Syndrome
DSWD	Department of Social Welfare and Development
DTR	Drug Treatment and Rehabilitation
DTTB	Doctors to the *Barrios*
EA	Enterprise Architecture

ENGAS Electronic New Government Accounting System

EIS Executive Information System

EO Executive Order

EPI Expanded Program on Immunization

ESRD End-Stage Renal Disease

ETS Expenditure Tracking System

F1 FOURmula One for Health

FBS Fasting Blood Sugar

FDA Food and Drug Administration

FIES Family Income and Expenditure Survey

FHSIS Field Health Service Information System

FNRI Food and Nutrition Research Institute

FP Family Planning

FPS Family Planning Survey

4Ps Pantawid Pamilyang Pilipino Program

FWBD Food and Water Born Diseases

GAA General Appropriations Act

GATS Global Adult Tobacco Survey

GDP Gross Domestic Product

GIDA Geographically Isolated and Disadvantaged Area

GOs Government Organizations

GPPB-APCPI Government Procurement Policy Board's- Agency Procurement Compliance and Performance Indicators

GSHS Global School Health Survey

GSIS Government Service Insurance System

GYTS Global Youth Tobacco Survey

HEPRRP Hospital Emergency Preparedness, Response and Rehabilitation Plan

HH Household

HIM Hospital Information Management

HIS Health Information System

HIV-AIDS Human Immunodeficiency Virus / Acquired Immune Deficiency Syndrome

HMO Health Maintenance Organization

HPM Health Partners Meeting

HRH Human Resources for Health

HSEF Health Sector Expenditure Framework

HSRA Health Sector Reform Agenda

HUC Highly Urbanized Cities

IAPB International Agency for the Prevention of Blindness

ICC Independent Chartered Cities

ICT Information and Communication Technology

IDA Iron Deficiency Anemia

IDTOMIS Integrated Drug Testing Operations and Management of Information System

IEC Information Education and Communication

IHBSS Integrated Health Behavioural Surveillance System

ILHZ Inter-Local Health Zones

IMCI Integrated Management of Childhood Illnesses

IMR Infant Mortality Rate

IP Indigenous Population

IP-NBB Inpatient Benefit Package with No Balance Billing

IPP Individually Paying Program

IRR Implementing Rules and Regulations

IS Information System

ISSP Information System Strategic Plan

JAC Joint Appraisal Committee

JAPI Joint Assessment and Planning Initiative

KAP Knowledge, Attitude and Practices

KASAPI Kalusugan Sigurado at Abot Kaya sa PhilHealth Insurance

KM4HEALTH Knowledge Management for Health

KP Kalusugan Pangkalahatan

LF Lymphatic Filariasis

LGC Local Government Code

LGU Local Government Unit

LHP Leaders for Health Program

LHS Local Health System

LRD Lifestyle Related Diseases

LRIC Local Reform Implementers Course

LRNCD Lifestyle related Non-Communicable Diseases

MARP Most At-Risk Population

MCH Maternal and Child Health

MCP Maternal and Child Package

MDA Mass Drug Administration

MDG Millennium Development Goal

MDR Multi-drug Resistant

MDT Multiple Drug Therapy

MeTA Medicines Transparency Alliance

ME3 Monitoring and Evaluation for Equity and Effectiveness

MFP Modern Family Planning

MFR Microfilaria Rate

MMDS Mortality Medical Data Systems

MMR Maternal Mortality Rate

MOA Memorandum of Agreement

MTCT Mother-To-Child Transmission

MTEF Medium-Term Expenditure Framework

NBB No Balance Billing

NCDPC National Center for Disease Prevention and Control

NCDs Non-Communicable Diseases

NCR National Capital Region

NCHFD National Center for Health Facility Development

NCPAM National Center for Pharmaceutical Access and Management

NDHS National Demographic and Health Survey

NDHRHIS National Database on Selected Human Resources for Health Information System

NEC National Epidemiology Center

NEDA National Economic and Development Authority

NG National Government

NGAs National Government Agencies

NGI non – Gonoccocal Infection

NGICS National Guidelines on Internal Control System

NGOs Non-Government Organizations

NHIP National Health Insurance Program

NHTS-PR National Household Targeting System – Poverty Reduction

NIH National Institutes of Health

NIH-NSRC National Institute for Health - Newborn Screening Reference Center

NMEDS National Monitoring and Evaluation Dental Survey

NMR Neonatal Mortality Rate

NOH National Objectives for Health

NOHS National Oral Health Survey

NNS National Nutrition Survey

NSRC-NIP New Born Screening Reference Center National Institute for Health

NSCB National Statistical Coordination Board

NTP National Tuberculosis Program

NTPS National TB Prevalence Survey

NSO National Statistics Office

OFC Orally Fit Children

OP Outpatient

OPB Out-Patient Benefits

OPB-NBB Outpatient Benefit Package with No Balance Billing

OPIF Organizational Performance Indicator Framework

OPV Oral Polio Vaccine

ORS Oral Rehydration Salt

PAGASA Philippine Atmospheric, Geophysical and Astronomical Services Administration

PCSO Philippine Charity Sweepstakes Office

PEM Protein Energy Malnutrition

PEP Post Exposure Prophylaxis

PHAP Pharmaceutical and HealthCare Association of the Philippines

PHC Primary Health Care

PHIC Philippine Health Insurance Corporation or PhilHealth

PHIS Philippine Health Information System

PhilCAT Philippine Coalition Against TB

PhilPACT Philippine Plan of Action for the Control of Tuberculosis

PHS Philippine Health Statistics

PIPH Province-wide Investment Plan for Health

PIDS Philippine Institute for Development Studies

PIDSR Philippine Integrated Disease Surveillance and Response

PITC Philippine International Trading Corporation

PNAC Philippine National AIDS Council

POMIS Procurement Operations and Management Information System

PNDF Philippine National Drug Formulary

PNHA Philippine National Health Accounts

PO People's Organization

PPA Program Project Activity

PPBDC Program Planning and Budget Development Committee

PPP Public Private Partnership

PPAN Philippine Plan of Action for Nutrition

PSS Philippines Statistical System

PSY Philippine Statistical Yearbook

PWHS Province-wide Health System

QAS Quality Assurance System

RA Republic Act

RH Reproductive Health

RHTTP Rural Health Team Placement Program

RHUs Rural Health Units

RIG Rabies Immunoglobulin

RNheals Registered Nurse for Health Enhancement and Local Service

RPO Responsible Pet Ownership

RPOID Rehabilitation and Prevention of Impairments and Disabilities

RTIs Respiratory Tract Infections

SCUHE Short Course for Urban Health Equity

SDAH Sector Development Approach for Health

SLA Service Level Agreement

SSESS Sentinel STI Etiologic Surveillance System

SSS Social Security System

STI Sexually Transmitted Infections

STH Soil Transmitted Helminthiasis

STTP Specialist to the Provinces

SWS Social Weather Station

SWSS Social Weather Station Survey

TACT Technical Assistance Coordination Team

TB Tuberculosis

TB CDR TB Case Detection Rate

TBD To be Determined

TCM Technical Coordination Meeting

TFR Total Fertility Rate

TRC Treatment and Rehabilitation Center

TT Tetanus Toxoid

UHC Universal Health Care

USAID United States Agency for International Development

USGAO US Government Accountability Office

VAD Vitamin A Deficiency

WER Weekly Epidemiological Record

WHO World Health Organization

WHO-WPR World Health Organization- Western Pacific Region

WOMB Watching Over Mothers and Babies

INTRODUCTION

The Philippines is a low middle-income country located in Southeast Asia (GDP per capita: USD 2,370). It is one of the most populous countries in the world with a population of 92.3 million as of 2010. With an annual growth rate of 1.9 percent, the number of Filipinos is expected to reach 112 million by 2020 (National Statistics Office). Like most emerging economies in Asia, the Philippines exhibited considerably high economic growth with an annual average growth rate of 5 percent in the last decade (The Bangko Sentral ng Pilipinas). The economy is expected to display strong economic performance in the medium term given the sound macroeconomic fundamentals and robust domestic demand. Despite the significant improvements in the domestic economy, inclusive growth remains very elusive. In 2009, 20.6 percent of the families are below the poverty threshold which is similar to the level a decade ago (National Statistical Coordination Board, 2009). **Table 1** summarizes the demographic and economic profile of the Philippines.

TABLE 1. PHILIPPINES AT A GLANCE

Indicators	
Land area	300,000 sq. km.
Population (2010) (National Statistics Office)	92.3 Million
Population projection by 2020 (National Statistics Office)	111.7 Million
Population growth rate (2010) (National Statistics Office)	1.9%
Population density (2010)	796.9 per square miles
GDP per capita (2011) (The World Bank , 2011)	USD 2,370
Average income (2009) (National Statistics Office, Various Years)	Php206,000
Poverty incidence (2009) (The National Statistical Coordination Board)	20.6 %
Gini coefficient (National Statistical Coordination Board, 2009)	0.4881

*measures income inequality

Behind the high poverty incidence at the national level is the disparity across geographical regions and socio-economic classes. In the National Capital Region (NCR), the poverty incidence is 2.9 percent compared to 38.1 percent of the Autonomous Region for Muslim Mindanao (ARMM) (National Statistical Coordination Board, 2009). The disparity of resources also reflects the high inequality in many health outcomes. In 2008, the disparity between the poorest and richest quintiles with 40 and 15 infant deaths per 1,000 live births, respectively, is masked by the national average of 25 infant deaths per 1,000 live births. This picture of disparity is very common in many outcome indicators in health (National Statistics Office, 2008).

Inequalities in health outcomes can be attributed to geographical, demographic, political and socio-economic factors. With regard to geography, the Philippines is composed of distinct geographical landscape. Hence, delivery of health services is complex, difficult and entails innovative programs to address this gap. Many

localities are considered as geographically isolated and disadvantaged areas (GIDA) like remote islands and mountainous topographies which often limit the institutionalization of sustainable health programs. The country is also included in the Pacific ring of fire and typhoon belt which makes it susceptible to natural calamities like earthquakes and typhoons. The Philippines experiences more than 20 typhoons annually.

The demographic feature of the country also affects the inequitable distribution of social services. Though the country has relatively young population which increases the pool of labor force, the size is not parallel to the available resources. Despite the slight decline in the population growth rate over the last decade, it is still one of the highest in the Asian region. The high total fertility rate among the poor compared to the affluent population has serious implications in health service financing and allocation.

Urbanization is also very rapid in the Philippines. More than 60 percent of the Filipinos are now living in urban areas compared to around 30 percent 50 years ago (The World Bank , 2011). Unsurprisingly, given the low inclusive growth and high urbanization rate, the number of urban poor especially in highly urbanized cities is increasing. Migration from the rural parts of the country to the cities has largely contributed to overcrowding. Moreover, there is also a high rate of migration in and out of the country (Ulep, 2012).

The delivery of health services experienced some degree of complication with the changes in the political structure. The initial impact of devolution resulted to service fragmentation and gave challenging opportunities for the local leadership to perform. Some local government units (LGUs) were more successful than others because they gave priority attention to health concerns and programs.

The constraints in health and development are not purely economic or political in nature. There are parameters that are culturally innate such as the "*bahala na*" or complacent attitude of some Filipinos which might explain the low adherence to beneficial health practices such as health seeking behavior (Yap and Balboa, 2008).

Outcomes in health are therefore affected by multiple social factors. Addressing inequity in health will require looking at these underlying factors. Most of the indicators in the succeeding chapters are disaggregated by region, income quintile, gender and area of residence to illustrate the extent of the health inequity problem. On the other hand, this should also guide the decision-makers and health providers in reforming the way the health services and programs are financed, packaged and delivered.

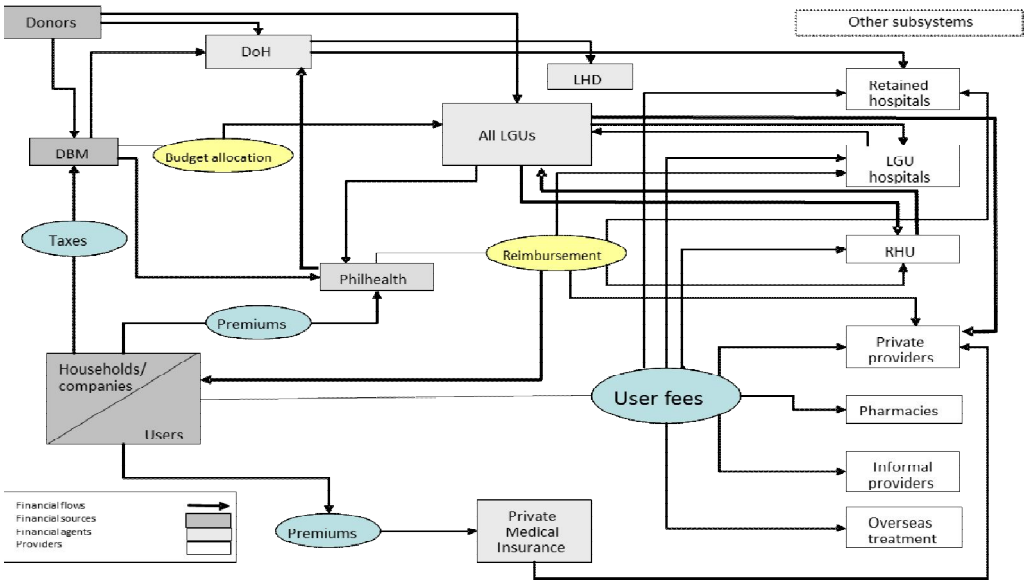
CHAPTER 1

THE PHILIPPINE HEALTH SYSTEM AT A GLANCE

1.1. HEALTH FINANCING

The health financing system in the country is complex as it involves different layers of financial sources, regulatory bodies and health service providers. **Figure 1** shows the financing flows for health as to sources and uses. In general, there are four main sources of financing: (1) national and local government, (2) insurance (government and private), (3) user fees/out of pocket and (4) donors.

FIGURE 1. HEALTH FINANCING FLOW, PHILIPPINES



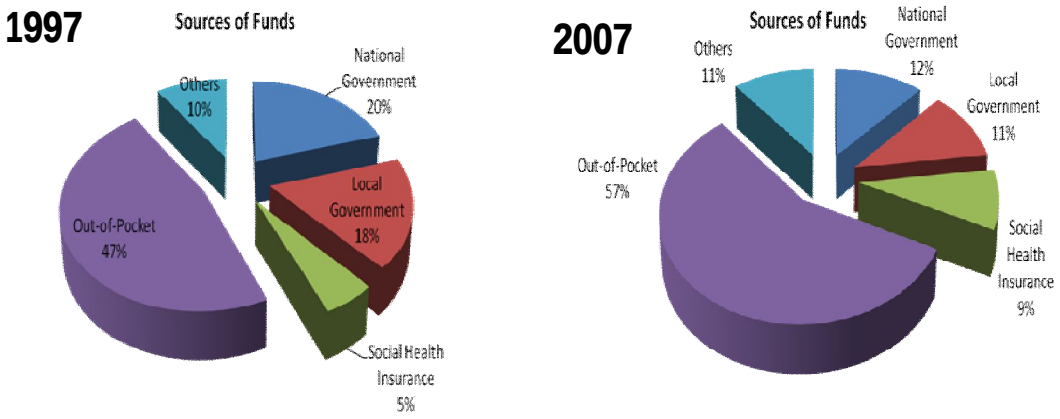
Source: HSRA Monograph on Health Care Financing, Department of Health

In 1995, the National Health Insurance Program (NHIP) managed by Philippine Health Insurance Corporation (PHIC or PhilHealth) was institutionalized and signaled the movement towards a single-payer premium-based financing or insurance system. However, the current system continues to maintain a dual financing system existing parallel to each other.

The total health expenditure increased from Php 87 Billion in 1995 to almost Php 225 Billion in 2007 (National Statistical Coordination Board, 2007). Although there is an increase in the total health expenditure in nominal terms, its share on the GDP is still at 3.5 to 3.6 percent (National Statistical Coordination Board, 2007). **Figure 2** shows the share of different health financial sources. Out of pocket has the largest share of

the total health expenditure. Despite the safety nets like NHIP, the share of out of pocket expenditure increased from 47 percent in 1997 to 57 percent in 2007 (National Statistical Coordination Board, 2007). The share of local and national government subsidy also decreased on the same period.

FIGURE 2. TOTAL HEALTH EXPENDITURE BY SOURCE, PHILIPPINES, 1997 AND 2007



Source: Philippine National Health Accounts, NSCB

The high level of out of pocket may lead to financial catastrophe and impoverishment. **Table 2** validates the large contribution of out of pocket during healthcare seeking episodes. Majority of patients from both public and private utilize out of pocket during confinement but it is significantly higher among patients confined in public facilities. Despite the presence of safety nets, donations (from philanthropists and charity organizations) would still count as one of the major sources of financing (Lavado and Ulep, 2011).

TABLE 2. SOURCE OF FINANCING DURING INPATIENT VISITS, PHILIPPINES, 2008

Sources of Payment	Confined in Private Hospitals (%)	Confined in Public Facilities (%)
Salary / Income	48	51
Loan	17	23
Savings	37	32
Donation	17	23
PhilHealth	51	24
SSS / GSIS	4	2
HMO	6	1
Others	0.82	0.32

Source: Raw data from National Demographic and Health Survey, NSO 2008

Looking at the components of out-of-pocket by quintile, more than half of the medical expenditure was spent on medicine. However, share of medicine on the total medical expenditure was consistently higher among the poor compared to their richer counterparts. Expenditure on contraceptives was also higher among the poor household (Lavado and Ulep, 2011).

TABLE 3.DISTRIBUTION OF OUT-OF–POCKET EXPENDITURE BY COMPONENTS AND BY SOCIO-ECONOMIC STATUS, IN PERCENT, PHILIPPINES. 2000-2009

Components	Poorest				Richest				Philippines			
	2000	2003	2006	2009	2000	2003	2006	2009	2000	2003	2006	2009
Medicines	74.2	75.0	73.5	74.7	59.5	59.7	59.1	57.2	67.6	66.6	66.6	65.7
Hospital Charges	1.8	2.1	2.2	2.1	7.2	6.7	6.9	7.0	4.4	4.4	4.6	4.7
Medical and Dental	6.0	5.3	5.6	6.2	19.8	18.6	18.0	16.7	12.5	12.6	11.6	11.5
Other Medical Goods	9.0	8.4	8.7	8.9	11.7	13.7	10.3	10.9	10.8	11.6	10.1	10.6
Other Medical Services	8.8	1.1	1.7	2.0	1.3	0.4	0.8	0.9	4.4	1.0	1.6	1.7
Contraceptive	0.3	8.0	7.4	5.0	0.5	0.8	1.4	2.0	0.5	3.9	3.6	3.1
Food Supplement			0.9	1.1			3.6	5.4			1.9	2.7

Source: Raw data Family Income and Expenditure Surveys, 2000-2009

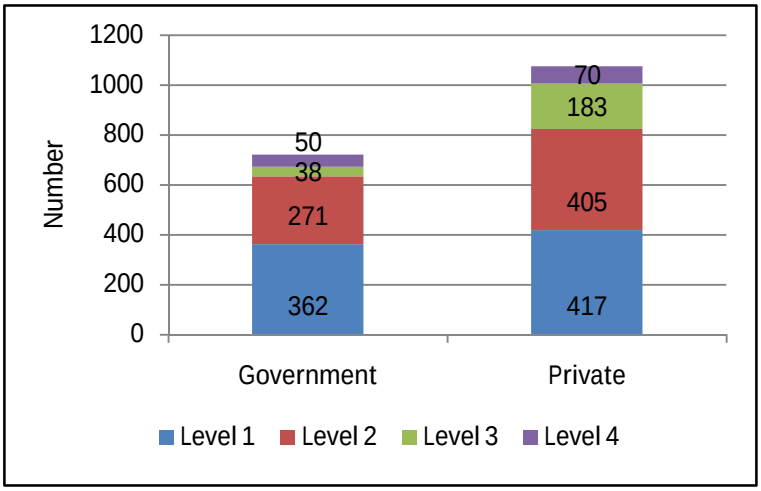
1.2. HEALTH CARE DELIVERY SYSTEM

The Philippine health care system has rapidly evolved with many challenges through time. Health service delivery was devolved to the Local Government Units (LGUs) in 1991, and for many reasons, it has not completely surmounted the fragmentation issue. Health human resource struggles with the problems of underemployment, scarcity and skewed distribution. There is a strong involvement of the private sector comprising 50% of the health system but regulatory functions of the government have yet to be fully maximized.

1.2.1. Health Facilities

Health facilities in the Philippines include government hospitals, private hospitals and primary health care facilities. Hospitals are classified based on ownership as public or private hospitals. In the Philippines, around 40 percent of hospitals are public (Department of Health, 2009). Out of 721 public hospitals, 70 are managed by the DOH while the remaining hospitals are managed by LGUs and other national government agencies (Department of Health, 2009). Both public and private hospitals can also be classified by the service capability (see DOH AO 2005-0029). A new classification and licensing system will soon be adopted to respond to the capacity gaps of existing health facilities in all levels. At present, Level-1 hospitals account for almost 56 percent of the total number of hospitals (Department of Health, 2009; Lavado, 2010) which have very limited capacity, comparable only to infirmaries.

FIGURE 3. NUMBER OF HOSPITALS BY CLASSIFICATION AND OWNERSHIP, PHILIPPINES, 2009

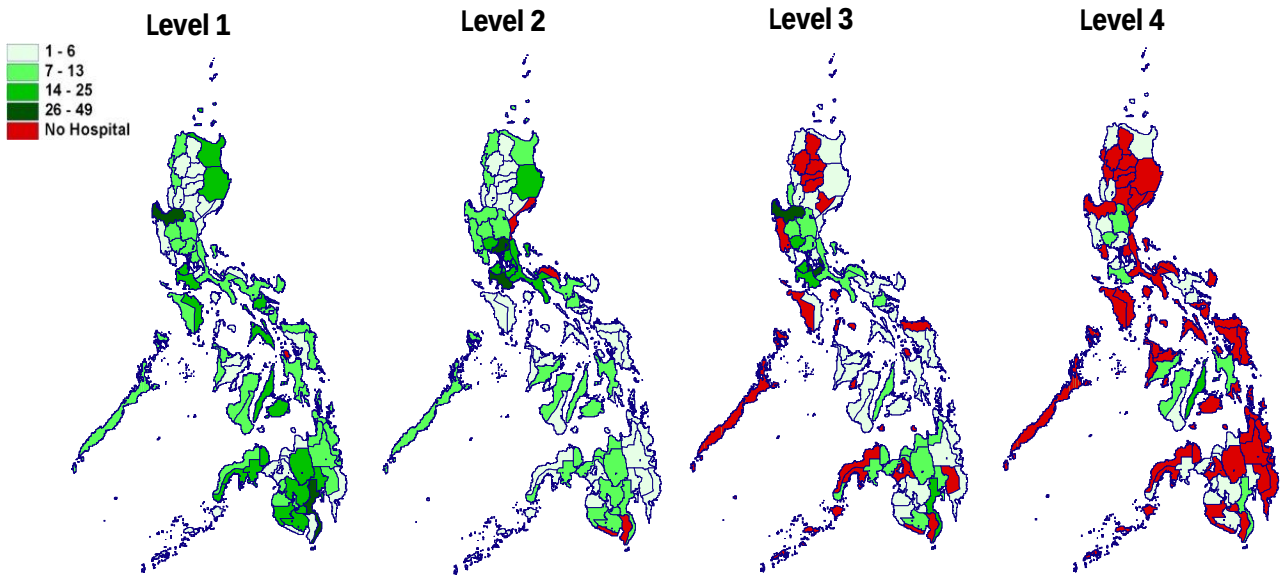


Source of Raw Data: List of Hospitals and Other Facilities, BHFS-DOH

Figure 3 shows that the private hospitals outnumbered the government hospitals in all categories. The disparity is more noticeable in tertiary hospitals where the number of private hospitals is four times that of the government hospitals.

Figure 4 shows the distribution of hospitals by level. Levels 1 and 2 hospitals are relatively well-distributed across the country (though there are few provinces with limited level 2). However, hospitals with higher service capabilities are highly concentrated in Region 3 and National Capital Region (NCR) (Lavado, 2010)

FIGURE 4. DISTRIBUTION OF HOSPITALS BY LEVEL AND GEOGRAPHICAL DISTRIBUTION, PHILIPPINES, 2009



Source of Raw Data: List of Hospitals and Other Facilities, BHFS-DOH

The number of hospital beds is also a good indicator of health service availability. Per WHO recommendation, there should be 20 hospital beds per 10,000 population. **Table 4** describes the

distribution of private and public hospital beds by region. Almost all regions have insufficient beds relative to the population except for NCR, Northern Mindanao, Southern Mindanao and CAR. Among the seventeen regions, Autonomous Region for Muslim Mindanao (ARMM) has the lowest bed to population ratio (0.17 beds per 1000 population), far lower than the national average.

TABLE 4. NUMBER OF BEDS AND RATE PER 1000 POPULATION BY REGION, PHILIPPINES, 2008

Region	Number of beds	Rate per 1000 population
Ilocos Region	4163	0.84
Cagayan Valley	2779	0.86
Central Luzon	8218	0.84
Region IV-A (CALABARZON)	9459	0.83
Region IV-B (MIMAROPA)	2093	0.73
Bicol Region	4156	0.76
Western Visayas	5714	0.78
Central Visayas	6190	0.92
Eastern Visayas	2845	0.67
Zamboanga Peninsula	2909	0.87
Northern Mindanao	4858	1.16
Southern Mindanao	4580	1.08
Central Mindanao	3680	0.94
NCR	27779	2.47
CAR	2472	1.52
ARMM	586	0.17
CARAGA	1718	0.70
Philippines	**94199**	**1.04**

Source: Department of Health

1.2.2. Health Human Resource

The health human resources are the main drivers of the health care system and are essential for the efficient management and operation of the public health system. They are the health educators and providers of health services. The Philippines has a huge human reservoir for health (see **Table 5**). However, they are unevenly distributed in the country. Most are concentrated in urban areas such as Metro Manila and other cities.

TABLE 5. NUMBER OF GOVERNMENT HEALTH WORKERS, PHILIPPINES, 2008

Area	Number of Government Health Workers			
	Doctors	Dentists	Nurses	Midwives
Philippines	2838	1891	4576	17437
NCR	590	498	723	1135
CAR	89	40	131	637
I	159	105	259	1014
II	97	65	196	839
III	278	176	441	1662
IVA	238	189	472	1818
IVB	83	68	142	555
V	157	85	273	1072
VI	234	123	401	1775
VII	177	117	328	1534
VIII	155	94	201	904
IX	100	44	203	697
X	138	74	241	1052
XI	75	69	127	743
XII	113	56	194	878
ARMM	76	30	130	507
CARAGA	79	58	114	615

Source: Department of Health

1.2.3. Utilization of Health Facilities

In the 2008 National Demographic and Health Survey (NDHS), 50 percent of the clients who sought medical advice or treatment consulted public health facilities, 42 percent went to private health facilities, and almost 7 percent sought alternative or traditional health care. Rural Health Units (RHUs) and *Barangay* Health Centers (33 percent) were the most visited health facilities in almost all the regions except for NCR and CAR, where most of the clients visited private hospital/clinic for medical advice or treatment. The most common reasons for seeking health care were illness or injury (68 percent), medical checkup (28 percent), dental care (2 percent), and medical requirement (1 percent) (NSO, 2008). With regard to child delivery, more than thirty-six percent of infants are still delivered by *hilots* despite aggressive efforts of the Department of Health to promote facility-based delivery (National Statistics Office, 2008).

The hospital sector in the Philippines is highly segmented in nature. Utilization of hospitals may be driven by PhilHealth insurance coverage and socio-economic determinants as shown in **Table 6**. People with PhilHealth insurance are more likely to be confined in a private hospital (56 percent), than those without Philhealth insurance (28 percent). Similarly, patients living in urban area (52 percent) and belonging to the richest quintile (74 percent) are also more likely to be confined in private hospitals (Lavado et al., 2010).

TABLE 6. PROPORTION OF POPULATION WHO SOUGHT INPATIENT CARE BY FACILITY AND SELECTED VARIABLES, PHILIPPINES, 2008

Characteristics	Category	Type of facility confined		
		Private hospitals (%)	Public Hospitals (%)	Clinics (%)
PhilHealth coverage	Covered	56.0	39.6	4.4
	Not covered	28.2	66.0	5.8
Type of residence	Urban	52.2	42.9	4.8
	Rural	35.7	59.1	5.2
Wealth Quintile	Poorest	18.9	77.3	3.7
	Poorer	26.3	68.6	5.0
	Middle	36.8	57.3	5.8
	Richer	51.5	41.2	7.2
	Richest	74.1	22.9	2.8

Source: Calculated based on the National Demographic and Health Survey, 2008

Available data shows that on the average, travel time to a health facility is 39 minutes; where travel time is longest in ARMM (83 minutes) and shortest in NCR and Northern Mindanao, (28 minutes). Travel time is relatively longer in rural areas (45 minutes) than in urban areas (32 minutes); and longest for persons in the lowest wealth quintile (47 minutes) and shortest for those in the highest wealth quintile (35 minutes). Older persons seeking care (60+ years old) have longer average travel times than younger persons (National Statistics Office, 2008)

1.2.4. Satisfaction with Health Facilities

Based on a survey by the Social Weather Station in 2006, majority of Filipinos specifically the low income households prefer to seek treatment in a government hospital if a family member needs confinement. Affordability is the main reason for going to a government medical facility, while excellent service is the main reason for going to a private medical facility (Department of Health, 2010).

The net satisfaction with services given by government hospitals has slightly improved from +30 in 2005 to +37 in 2006. Excellent service and affordability are the main reasons for being satisfied whereas poor service is the main reason for being dissatisfied with the services given by government hospitals (Social Weather Stations, 2006).

1.3. HEALTH OUTCOMES

1.3.1. Life Expectancy

The projected average life expectancy of Filipinos in 2005 to 2010 is 68.8 years, with males having an average life expectancy of 66.11 years and females with 71.64 years (National Statistics Office, 2010). It is projected that the average life expectancy of Filipinos will increase to 70.38 years from 2010 to 2015 and 71.59 years from 2015 to 2020 (National Statistics Office).**Table 7** provides the data on projected life expectancy at birth.

TABLE 7.PROJECTED LIFE EXPECTANCY AT BIRTH BY SEX AT FIVE CALENDAR-YEAR INTERVALS, PHILIPPINES, 2000 TO 2040 (MEDIUM ASSUMPTION)

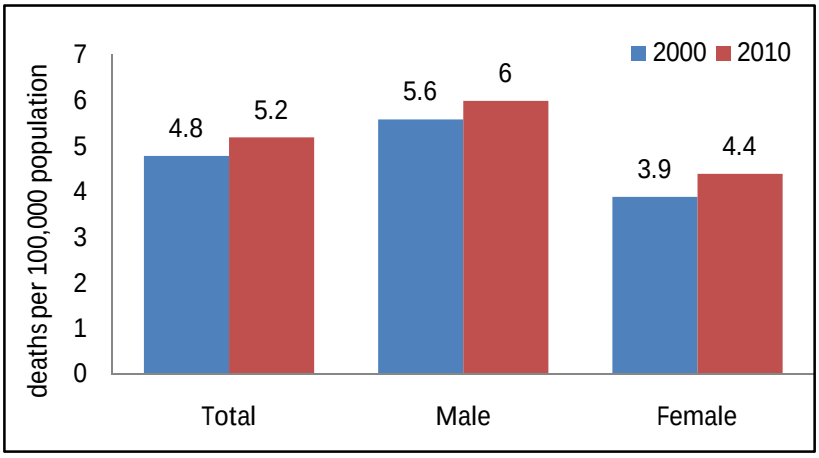
Year	Male	Female	Mean life expectancy*
2000-2005	64.11	70.14	67.62
2005-2010	66.11	71.64	68.88
2010-2015	67.61	73.14	70.38
2015-2020	68.81	74.34	71.59
2020-2025	70.01	75.54	72.77
2025-2030	71.01	76.54	73.77
2030-2035	72.01	77.54	74.77
2035-2040	73.01	78.34	75.68

Source: 2000 Census-based Population Projection
*Calculated using National Statistics Office data

1.3.2. Deaths and Births

Deaths and births are commonly measured to determine the status of health and fertility dynamics of an area. The crude death rate (CDR) has been declining since the 1960s. However, no significant change has been noted since 2000-2009. The number of deaths in a particular population is influenced by various environmental factors. Global experience suggests that decreasing CDR is a result of decreasing cases of infectious diseases, improvement of perinatal practices and innovative health interventions (National Statistics Office, 2009).

FIGURE 5. CRUDE DEATH RATE, PHILIPPINES, 2000 AND 2010



Source: National Statistics Office, 2010

Seven of the ten leading causes of death are non-communicable in etiology as shown in **Table 8**. Cardio-vascular diseases (i.e. diseases of the heart, and cerebrovascular diseases), cancers, chronic obstructive pulmonary disease and diabetes are the leading non-communicable diseases. The lingering problems on infectious diseases like pneumonia and tuberculosis are still evident as they ranked 4th and 5th leading causes of death (National Statistics Office, 2009).

TABLE 8. TOP TEN CAUSES OF DEATHS, PHILIPPINES, 2009

Diseases	Number of deaths	Percentage share
Diseases of the heart	100,908	21.0
Cerebro-vascular diseases	56,670	11.8
Malignant neoplasm	47,732	9.9
Pneumonia	42,642	8.9
Tuberculosis	25,470	5.3
COPD	22,755	4.7
Diabetes	22,345	4.6
Nephritis, Nephrotic syndrome	13,799	2.9
Assault	12,227	2.5
Certain conditions arising from perinatal period	11,514	2.4

Source: National Statistics Office, 2009

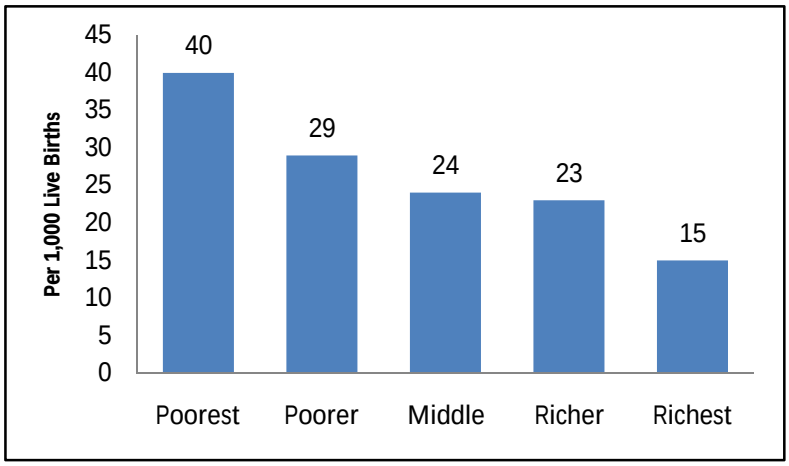
Infant and maternal mortality are the most useful indicators since they reflect the general condition of the health system. **Table 9** shows the decreasing trend in Infant Mortality Rate (IMR) over the last decade. It dropped from 57 infant deaths per 1000 live births in 1990 to 25 infant deaths per 1000 live births in 2008 (National Statistics Office, 2008). However, disaggregating IMR by socio-economic quintiles and regions reveals performance disparities. **Figure 6** shows that the IMR of the poorest quintile in 2008 is similar to the national IMR two decades ago. Regional comparison also depicts wide variations which can be consistently observed since early 1990s.

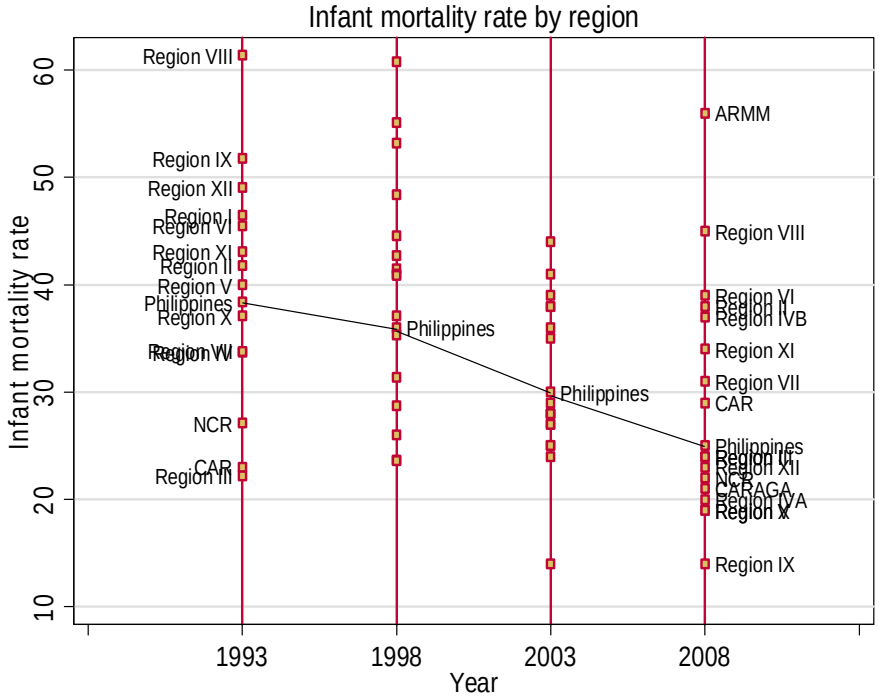
TABLE 9. CHILD MORTALITY RATE, PHILIPPINES, 1990-2008

Year	Neonatal Mortality	Infant Mortality	Under-Five Mortality
1990		57.0	80.0
1993	17.7	33.6	54.2
1998	17.8	35.1	48.4
2003	17.0	29.0	40.0
2008	16.0	25.0	34.0

Source: National Demographic and Health Surveys, NSO

FIGURE 6. INFANT MORTALITY RATE BY SOCIO-ECONOMIC STATUSAND REGION, PHILIPPINES, 2008





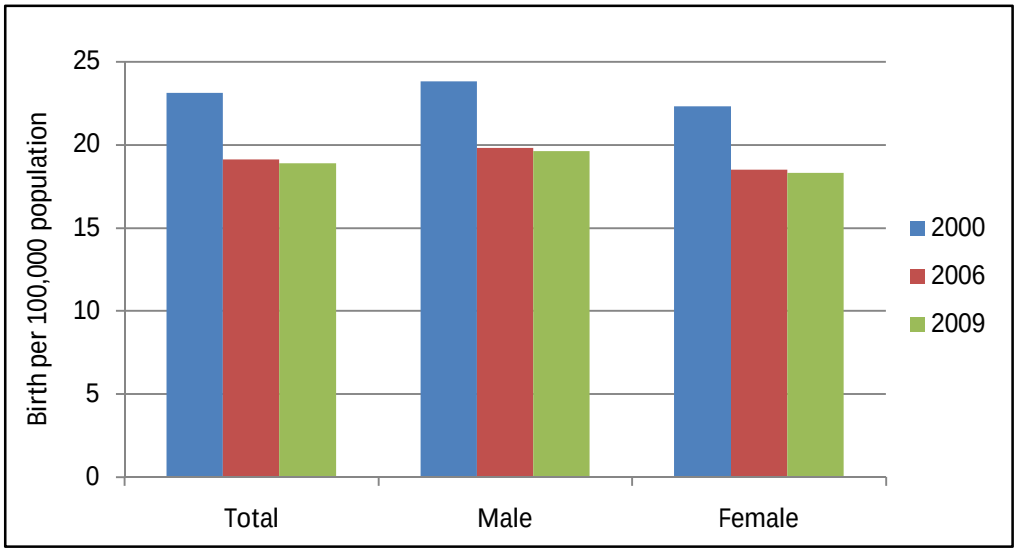
Source: National Demographic and Health Surveys, NSO

WHO defines maternal mortality as death of a mother while pregnant or within 42 days after delivery. Risks attributable to pregnancy and childbirth as well as from poor quality health care services make this a strong indicator for health care status. In developing countries, hemorrhage and hypertensive disorder are the major causes of maternal death. Over the past decade, the decline in the number of maternal deaths per 100,000 live births has slowed down. Stretching as far back as 1993, the National Demographic Survey (NDHS) estimated 209 maternal deaths per 100,000 live births which significantly decreased to 162 in 2006 in the Family Planning Survey (FPS). In 2010, the MMR is estimated to be at 163 per 100,000 live births and the estimate from the Family Health Survey is still to be determined.

Birth rate is a common measure of fertility for a given population. Crude birth rate (CBR) indicates the number of live births occurring during the year, per 1,000 population. Over the last decade, there is a noticeable decline in crude birth rate for both genders (**Figure 7**). Crude birth rate should be analyzed in parallel with more pertinent indictors like total fertility rate. Total fertility rate (TFR) is interpreted as the number of births a woman would have, on average, at the end of her reproductive years (National Statistics Office, 2008). In the Philippines, a woman is expected to have 3 births (National Statistics Office, 2008). However, when disaggregated by socio-economic status, negative correlation is observed such that as socio-

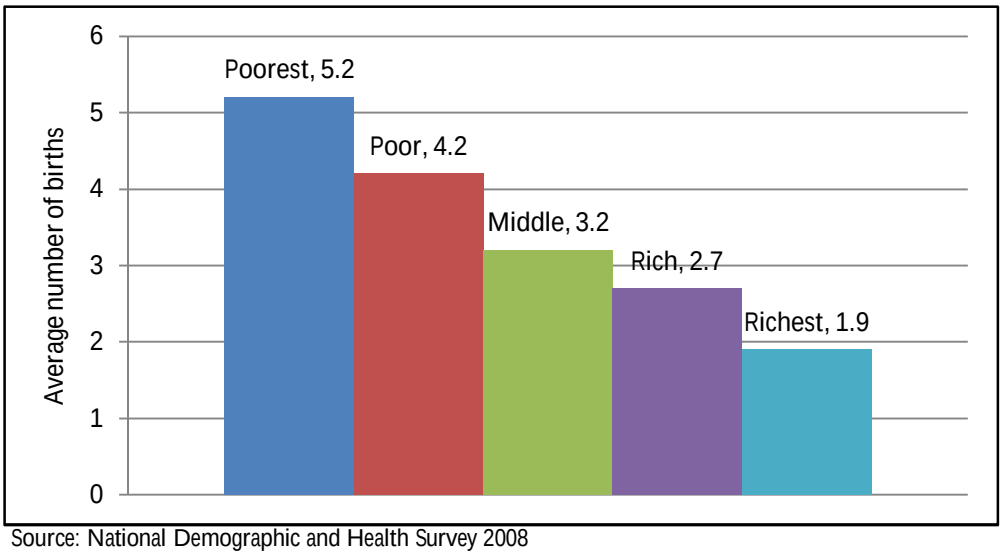
economic status increases, the TFR decreases (**Figure 8**). On average, a woman under the poorest quintile is likely to have 5 births while the richest quintile is only likely to have 2 births (National Statistics Office, 2008).

FIGURE 7. CRUDE BIRTH RATE BY GENDER, PHILIPPINES, 2000, 2006 AND 2009



Source: National Statistics Office

FIGURE 8. TOTAL FERTILITY RATE BY INCOME QUINTILE, PHILIPPINES, 2008



Source: National Demographic and Health Survey 2008

1.3.3. Disease Trends in the Philippines

The country's health profile depicts a distinct epidemiologic and demographic transition characterized by double burden of diseases consisting of communicable diseases (which require major public health intervention) and non-communicable diseases (which need expensive curative and chronic-care intervention). This scenario makes the country's health profile a "hybrid" or combination of health situations found in both developed and developing countries. Similar to Sub-Saharan Africa, many regions in the Philippines are still struggling to eliminate hunger and infectious diseases while continually battling on non-communicable diseases (NCDs) as experienced in developed countries. The health status of the country therefore can be best described to be at the crossroads of infectious and non-communicable diseases.

1.3.3.1. Communicable diseases

In the Philippines, eight out of the ten leading causes of morbidity or illness can be attributed to infectious diseases. Illnesses related to the respiratory system such as acute respiratory infection, pneumonia and bronchitis are the top 3 leading cause of illness as shown in **Table 10**.

TABLE 10.TOP TEN CAUSES OF MORBIDITY, PHILIPPINES, 2010

Rank	Disease	Number	Rate per 100,000 population
1	Acute Respiratory Infection	1,095,328	1203.0
2	ALRTI and Pneumonia	557,786	612.6
3	Bronchitis/Bronchiolitis	346,627	380.7
4	Hypertension	333,497	366.3
5	Acute Watery Diarrhea	322,799	354.5
6	Influenza	271,011	297.7
7	Urinary Tract Infection	82,867	91.0
8	TB Respiratory	73,614	80.9
9	Accidents	50,004	54.9
10	Injuries	35,396	38.9

Source: Field Health Services Information System, DOH

The country commits to control tuberculosis in response to the Millennium Development Goals (MDGs). Despite the aggressive campaigns initiated by the Department of Health (DOH) in collaboration with donor agencies, tuberculosis remains among the leading causes of morbidity and mortality in the country. HIV control is also one of the country's commitments to the MDGs. Though HIV prevalence of the country is less than 1 percent, HIV cases are increasing exponentially. Endemic diseases like malaria, schistosomiasis and filariasis are still prevalent in several regions. The country has also experienced cases of re-emerging infectious diseases, including new and emerging diseases because of various demographic and environmental factors.

1.3.3.2. Non-communicable diseases

Non-communicable diseases (NCDs) are increasing rapidly in the Philippines. In 2009, seven of the ten leading causes of death are non-communicable in etiology. Majority of the NCDs mortality cases (i.e cardio-vascular diseases, cancer, chronic obstructive pulmonary disease and diabetes) as shown in **Table 11** are considered lifestyle-related. Around 75 percent of the total deaths can be attributed to NCDs which is similar to the estimates in most developing countries, and 30-50 percent occurred pre-maturely (below 60 years old) (Ulep, 2012). It is noteworthy that over-nutrition is increasing in the country while under-nutrition remains a problem especially in rural and poor areas. **Table 11** further provides data on deaths attributed to NCDs by gender without much difference except for accidents and injuries.

TABLE 11. DISTRIBUTION OF DEATHS BY CAUSE AND BY GENDER, 2008

Disease classification	Total		Male		Female	
	Number	%	Number	%	Number	%
Infectious diseases	81,821	17.73	46,465	17.29	35,356	18.34
Maternal and child health related	14,296	3.10	7,537	2.80	6,759	3.51
Ill-defined	16,010	3.47	8,048	2.99	7,962	4.13
Non-infectious in nature	349,454	75.70	206,714	76.92	142,740	74.02
CVDs	152,964	43.77	86,042	41.62	66,922	46.88
Cancer	49,047	14.04	25,341	12.26	23,706	16.61
Accidents and injuries	35,522	10.17	28,915	13.99	6,607	4.63
Diabetes	22,778	6.52	11,034	5.34	11,744	8.23
Chronic lower respiratory diseases	21,870	6.26	15,188	7.35	6,682	4.68
Chronic liver diseases and cirrhosis	6,774	1.94	5,293	2.56	1,481	1.04
Malnutrition	2,453	0.70	1,094	0.53	1,359	0.95
Mental disorder	762	0.22	579	0.28	183	0.13
Other diseases that cannot be classified as infectious	57,284	16.39	33,228	16.07	24,056	16.85

Source: PIDS Study on NCDs, 2011, Source of data: NSO 2008

Vulnerability factors associatied with lifestyle-related diseases are also now prevalent in the country. Around 5 percent of the population are now considered to be obese, 10 percent are diagnosed with hypercholesterolemia and 24 percent are considered hypertensive. Moreover, most of these lifestyle related diseases share common risk factors (i.e. unhealthy diet, smoking, sedentary lifestyle and alcohol consumption). Over the years, there was an observable increase in the consumption of NCD implicated food items (i.e. saturated oil, sugar and fast food), and decrease in the consumption of complex carbohydrates like root crops and vegetables(Ulep, 2012).

Tobacco use is considered as one of the commonly shared risk factors of major NCDs like cardio-vascular disease, certain cancers and diabetes mellitus. Smoking is also a strong risk factor of chronic obstructive pulmonary disease and asthma. In a recent study using the 2008 NNS data, almost 31 percent

of the adult population are current smokers and 14 percent used tobacco in the past (Ulep, 2012). Comparing with the GATS in 2009, the prevalence rate is almost close at 28.3%. The prevalence of smoking is significantly higher among the poor adults. Alcohol is causally linked in varying degrees to cancers, cardio-vascular diseases, liver disease and pancreatitis. In the country, about a quarter of the adult populations are alcohol drinkers in 2008 (Ulep, 2012). Another study in 2009 indicates that almost half of the alcohol drinkers are adults (Department of Health, 2009).

Health Reform Initiatives in the Philippines

Health reforms in the Philippines build upon the lessons and experiences from the past major health reform initiatives undertaken in the last 30 years. The adoption of primary health care (PHC) approach in 1979 promoted participatory management of the local health care system. The goal was to achieve health for all Filipinos by the year 2000. It emphasized the delivery of eight essential elements of health care, including the prevention and control of prevalent health problems; the promotion of adequate food supply and proper nutrition; basic sanitation and adequate supply of water; maternal and child care; immunization; prevention and control of endemic diseases; appropriate treatment and control of common diseases; and provision of essential drugs. To implement PHC, EO 851 was issued in 1983 integrating public health and hospital services (World Health Organization, 2011).

The People Power Revolution strengthened the call for legitimate local representation. In early 1990s, RA 7160 or the Local Government Code (LGC) transferred the responsibility of health service provision to the local government units. The intention of LGC was to establish a more responsive and accountable local government structure. However, this has resulted to fragmentation of administrative control of health services between the rural health units and hospitals and between the different levels of political structure (World Health Organization, 2011). Prior to that, the Generics Act was adopted in 1988 to ensure adequate supply, distribution and use of generics thereby improving access to affordable drugs and medicines.

During that time, more than half of the population had no coverage, especially the poor, the self-employed and informal sector workers (World Health Organization, 2011). This led to the enactment of the National Health Insurance Act of 1995 or RA 9875 which aims to provide all citizens a mechanism for financial protection with priority given to the poor. It created the National Health Insurance Program "which shall provide health insurance coverage and ensure affordable, acceptable, available and accessible health services for all citizens of the Philippines."

In 1999, the health sector reform agenda was launched as a major policy framework and strategy to improve the way health care is delivered, regulated and financed. With a battle cry of *"Kalusugan Para sa Masa",* it was

designed to implement the reform package in the convergence sites. The five reform areas are: 1. public health; 2. hospital; 3. local health systems; 4. health regulations and 5. health financing (Department of Health, 2004). It was during this time that the DOH underwent a major organizational reform to pursue its new role as a result of the devolution. At the local level, the municipalities were joined together to form inter-local health zones (ILHZs) to optimize sharing of resources and maximize joint benefits from local health initiatives.

The operational framework of health sector reforms was adopted in 2005 and was called *FOUR*mula One for Health (F1). The objective was to undertake critical reforms with speed, precision and effective coordination directed at improving the efficiency, effectiveness and equity of the Philippine health system in a manner that is felt by the Filipinos especially the poor. The F1 organized health reform initiatives into four implementation components, namely: financing, regulation, service delivery and governance (DOHAO 2005-0023). This time also marked the enactment of two pieces of legislation: the Universally Accessible Cheaper and Quality Medicines Act of 2008 and the Food and Drug Administration Act of 2009.

However, despite the important progress made, successive reforms have not succeeded in adequately addressing the persistent problem of inequity.

CHAPTER 2

UNIVERSAL HEALTH CARE
KALUSUGAN PANGKALAHATAN

To address the remaining gaps and challenges on inequity in health, the Aquino Health Agenda (AHA), through Administrative Order No. 2010-0036 was launched. It contains the operational strategy called *Kalusugan Pangkalahatan* (KP) which aims to achieve universal health care for all Filipinos. KP seeks to ensure equitable access to quality health care by all Filipinos beginning with those in the lowest income quintiles. KP further fulfills President Aquino's "social contract" with the Filipino people, as stated in Section 7 of Executive Order 43 series 2011:

1. Investing in our people, reducing poverty and building national competitiveness;
2. Advancing and protecting public health;
3. Building of capacities and creation of opportunities among the poor; and
4. Increasing social protection.

2.1. GOALS

The implementation of KP/Universal Health Care shall be directed towards the achievement of the health system goals of financial risk protection, better health outcomes and responsive health system.

2.1.1. Financial Risk Protection

To protect all Filipinos, especially the poor, against the catastrophic cost of ill health, KP shall strengthen the National Health Insurance Program (NHIP) as the prime mover in improving financial risk protection, generating resources to modernize and sustain health facilities, and improve the provision of public health services to achieve the Millennium Development Goals (MDGs).

2.1.2. Responsive health system

KP aims to enhance the responsiveness of the health system and client satisfaction by improving the quality hospitals and health care facilities. Government owned and operated hospitals and health facilities will be upgraded to expand capacity and provide quality services to help attain MDGs, attend to traumatic injuries and other types of emergencies, and manage non-communicable diseases and their complications.

2.1.3. Better health outcomes

KP aims for the attainment of health-related MDGs by focusing on the reduction of maternal and child mortality, morbidity and mortality from TB and malaria, and the prevalence of HIV/AIDS, in addition to being prepared for emerging disease trends, and prevention and control of non-communicable diseases.

2.2. STRATEGIC THRUSTS

KP shall be attained by pursuing the three strategic thrusts:

2.2.1. Financial risk protection through expansion in NHIP enrollment and benefit delivery -The poor shall be protected from the financial impacts of health care use by:

a. Redirecting PhilHealth operations towards the improvement of the national and regional benefit delivery;
b. Expanding enrolment of the poor in the NHIP to improve population coverage;
c. Promoting the availment of quality outpatient and inpatient services at accredited facilities through reformed capitation and no balance billing arrangements for sponsored members, respectively,
d. Increasing the support value of health insurance for the poor through the use of information technology upgrades to accelerate PhilHealth claims processing, among others, and
e. A continuing study to determine the segments of the population to be covered for specific range of services and the proportion of the total cost to be covered/ supported.

2.2.2. Improved access to quality hospitals and health care facilities – It shall be achieved through:

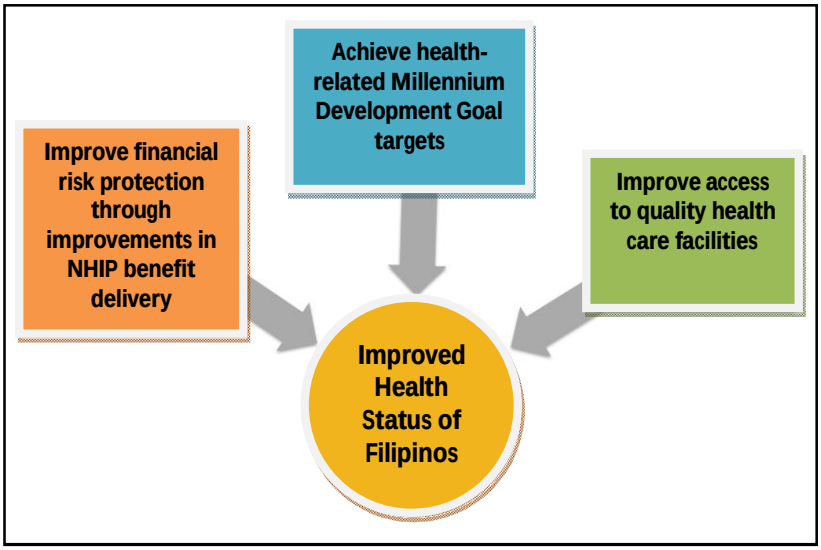
a. A targeted health facility enhancement program that shall leverage funds for improved facility preparedness to adequately manage the most common causes of mortality and morbidity, including trauma;
b. Provision of financial mechanisms drawing from public-private partnerships to support the immediate repair, rehabilitation and construction of selected priority facilities;
c. Fiscal autonomy and income retention schemes for government hospitals and health facilities;
d. Unified and streamlined DOH licensure and PhilHealth accreditation for hospitals and facilities;
e. Regional clustering and referral networks of health facilities based on catchment areas to address the fragmentation of services;
f. Access to quality drugs; and
g. Deployment of health professionals

2.2.3. Attainment of the health-related MDGs - This will be attained by:

a. Deploying Community Health Teams (CHTs) that shall actively assist families in assessing and acting on their health needs;
b. Utilizing the life cycle approach in providing needed services, namely family planning; ante-natal care; delivery in health facilities; essential newborn and immediate postpartum care; and the *Garantisadong Pambata* package for children 0-14 years of age;

c. Aggressively promoting healthy lifestyle changes to reduce non-communicable diseases;
d. Ensuring public health measures to prevent and control communicable diseases, and adequate surveillance and preparedness for emerging and re-emerging diseases; and
e. Harnessing the strengths of inter-agency and inter-sectoral approaches to health especially with the Department of Education and Department of Social Welfare and the Department of Interior and Local Government.

FIGURE 9. *KALUSUGAN PANGKALAHATAN* STRATEGIC THRUSTS



To implement the KP thrusts and interventions, the DOH will adopt the following general strategies:

1. Focus and engage vulnerable families, starting with provinces where most are found;
2. Partner with poverty alleviation programs like the National Household Targeting System-Poverty Reduction (NHTS-PR) and Conditional Cash Transfer (CCT);
3. Leverage LGU participation and performance through province-wide agreements; and
4. Harness private sector participation

Focusing interventions on vulnerable families will be done by prioritizing provinces where the largest number of families who are poor as identified by NHTS-PR and have unmet needs are located. Twelve (12) areas in the country have been prioritized for having the most number of families who are poor and have unmet needs. These areas are the following: Metro Manila, Negros Occidental, Quezon, Cebu, Pangasinan, Iloilo, Cavite, Maguindanao, Zamboanga del Sur, Leyte, Davao del Sur and Pampanga. Together, these areas account for 33 percent of NHTS-PR families and about 40 percent of unmet needs for public health services in the country.

The concentration of the target population in these areas provides the opportunity for implementing public health interventions at a scale that can significantly impact on national indicators. The main intervention in reaching the families especially the CCT is through the organization and mobilization of CHTs.

To reach the priority and target population, the DOH will partner with the poverty alleviation programs like the NHTS-PR and CCT for NHIP enrolment and for availing quality health services.

The DOH shall facilitate the implementation of the KP by influencing the manner by which Provinces and component LGUs, and Cities govern local health systems. The DOH recognizes that LGUs have the primary mandate to finance and regulate local health systems, including the provision of the right information to families and health providers. Leveraging for LGU participation and performance will be accomplished by entering into ARMM-wide, province-wide or city-wide agreements with LGUs. The agreements shall define annual performance targets and resource commitments by DOH, LGUs, PHIC, development partners and private sector. The province-wide agreements will also serve as basis for the development of CHD support plans for LGUs that will be consolidated into the annual budget proposal of DOH.

Harnessing the private sector participation in the upgrading of public clinics and hospitals will be undertaken by upgrading DOH retained hospitals into modern medical centers through public private partnerships (PPP). DOH will also explore other PPP arrangements, including the outsourcing of some hospital management services. In addition, hospital governing boards will also be organized to increase accountability of DOH hospitals to the communities they serve. Furthermore, the private sector with the stewardship of the public sector will be mobilized to support the public health programs that will facilitate the achievement of the MDGs.

To facilitate the implementation of these strategies, the DOH adopted a functional management structure that assigned accountability to CHDs and operations cluster heads in achieving health outcome targets. Supporting the operations cluster will be the technical clusters on health financing and policy and support to service delivery as well as the administrative and financial management clusters among others. The DOH will relate with the DOH-ARMM directly through the Office of the Secretary, especially in the execution of the ARMM-wide investment plan.

The success of the KP shall be measured by the progress made in preventing premature deaths, reducing maternal and newborn deaths, controlling both communicable and non-communicable diseases, improvements in access to quality health facilities and services and increasing NHIP coverage, benefit utilization and support value, prioritizing the poor and the marginalized (such as the Geographically Isolated and Disadvantaged Area (GIDA) population, indigenous population, older persons, differently-abled persons, internally- displaced population, and people in conflict-affected areas). These performance measures are the results of effective interaction between families and health care providers (both public and private) in local health systems.

CHAPTER 3

FINANCIAL RISK PROTECTION THROUGH THE NATIONAL HEALTH INSURANCE PROGRAM

As discussed in chapter 1, the total health spending is increasing in nominal terms. However, its share in the total Gross Domestic Product (GDP) is unchanging at 3.5 to 3.6 percent which is below the ideal 5 to 6 percent set by the WHO. In the Philippines, health spending can be accounted by different sources, namely: national and local government subsidies, social insurance, private insurance and private out-of–pocket of households. However, of all the different sources, out-of-pocket expenditure continues to be the main source, accounting for 57 percent of the total health expenditure in 2007 (National Statistical Coordination Board, 2007). Despite the presence of safety nets like social health insurance, out-of-pocket expenditure is increasing rapidly. The share of social insurance is at 9-10 percent in the last ten years, while the shares of national and local governments are noted to be decreasing (National Statistical Coordination Board, 2007). Consequently, high level of out-of-pocket expenditure pushed many families into impoverishment from catastrophic payments during health care episodes (Lavado and Ulep, 2011).

The institutionalization of social health insurance in the country through the National Health Insurance Program (NHIP) was envisioned to reduce out-of-pocket spending, as well as the inequities in health financing. However, growth in social health insurance expenditure relative to total health expenditure is not enough. Though there is a noticeable increase in NHIP members over the years, effective coverage rate remains to be low. A study revealed that there is a wide variation of NHIP coverage estimates. Household surveys revealed that only one third of the population was covered by NHIP in 2008. Though this estimate is contentiously low, it unmasked the existing problems on recall and membership awareness. On the other hand, a study commissioned by USAID suggests that the coverage rate was 53 percent in 2008 (Health Policy Development Program, 2010). In addition to problems in coverage, awareness and low benefit packages which impact utilization, and deficiencies in health facilities, are some of the pressing issues in the Philippine health insurance system.

The NHIP was not able maximize its role as a safety net. As a result, the duality of health financing system of the country continues existing parallel with other funding sources which make the system inefficient for the government. The creation of NHIP should have signaled the country to move from tax-based financing to premium-based insurance system. The political landscape of the country may have also hampered the expansion of the social insurance as some political leaders have the incentive not to enroll their constituents,

and to patronize them through dole-outs. Unsurprisingly, donations remain to be the main source of financing (see chapter 1). Previous disposition on the conservative use of Philhealth reserves, failed to support the proposed benefit increase.

Given these gaps in the health insurance system, the new administration is pushing for sustainable programmatic and policy reforms to increase the efficiency of PhilHealth as the main source of financing for health.

3.1. Increasing the coverage

PhilHealth strategies to expand the coverage of the NHIP include mass media and advocacy programs for LGUs to institutionalize the implementation of the Sponsored Program.

One of the main thrusts of *Kalusugan Pangkalahatan* is increasing financial protection and targets the NHIP as the main source of financing. The overall goal is to maximize government and PhilHealth spending in order to minimize out-of-pocket spending, thereby lessening the financial burden shouldered by the people. The poorest Filipinos, as identified by the National Household Targeting System-Poverty Reduction (NHTS-PR) list of the Department of Social Welfare and Development (DSWD), shall be targeted to gain intensified returns for health financing. The identified poor Filipinos shall be enrolled to the NHIP and are expected to effectively utilize health services through this projected gain of financial risk protection.

The Individually Paying Program (IPP) such as the KASAPI (*Kalusugan Sigurado at Abot Kaya sa* PhilHealth Insurance) taps organized groups, such as microfinance institutions, cooperatives, non-government and civic organizations, and various associations, to encourage bulk or group membership enrollment. By working more seriously with informal sector organizations, PhilHealth can further augment its informal sector membership.

3.2. Increasing utilization

Low NHIP utilization can be attributed to several factors like low benefits, lack of knowledge on healthcare benefits, tedious administrative requirements, among others. However, one of the most important reasons is the lack of accredited health facilities. In 2010, PhilHealth accredited 91% of private hospitals, 88% of government hospitals and 59% of RHUs (calculated from the Philippine Health Insurance Corporation data, 2010). Decentralizing accreditation processes contributed to increased health provider accreditation, and also as a result of new benefit packages – such as the Outpatient Benefit Package, Maternity Care Package, Newborn Care Package, and Tuberculosis Directly Observed Treatment Short course (TB DOTS).

However, inadequate health facilities remain in many rural areas. Even if they do exist, there are not enough health personnel and appropriate drugs and medicines available. The provision of health centers to regions

with dismal health and socioeconomic indicators continues to be a challenge for the national government and LGUs. Accredited hospitals remain concentrated in major regions like NCR and Region 10, and are found scarcer in regions like CARAGA and ARMM. A similar distribution applies for accredited RHUs, TB DOTS clinics, and other outpatient facilities. Other issues stem from deficient administrative and information systems. There is a need to improve administrative efficiency, since claims processing still take an average of three months.

3.3. Increasing the support value

In the Benefit Delivery Ratio study by the DOH and PhilHealth, the average support value of NHIP benefits is only 35 percent. As one of the efforts to increase the financial protection, PhilHealth just recently implemented the "No balance billing policy" for all sponsored program members who are hospitalized in government facilities.

PhilHealth is now also shifting from fee for service to case rate system. Almost 23 case rate packages which comprise 50 percent of the benefits are now available in institutional health care facilities accredited by PhilHealth (Philippine Health Insurance Corporation, Various years). Among the medical cases and the corresponding package rates are for Dengue, Pneumonia, Essential, Cerebral Infarction, Cerebro-vascular Accident with Hemorrhage, Acute Gastroenteritis, Asthma, Typhoid Fever, and Newborn Care Package in Hospitals and Lying-in clinics.

The following table summarizes the country's objectives in reducing financial risk especially the poor families, and increasing the capacity of PhilHealth to deliver healthcare benefits.

NATIONAL OBJECTIVES FOR HEALTH 2011-2016

OVERALL GOAL: To strengthen the NHIP as the prime mover in improving financial risk protection, generating resources to modernize and sustain health facilities, and improve the provision of public health services to achieve the Millennium Development Goals (MDGs).

Strategic Objective	Indicator	Data Source	Latest Baseline	2016 Targets
NHIP universal coverage is achieved	% National Health Insurance Program (NHIP) enrollment rate	PhilHealth	62 (2010)	>90
Utilization of NHIP benefits in an accredited facilities increased	% Accredited health facilities	PhilHealth	89 (2010)	95
Out-of-pocket expenditure is reduced	% Out of pocket payment from total health care expenditure	NSCB-PNHA	54.3 (2007)	<50
	PhilHealth spending as % of THE	NSCB-PNHA	9 (2007)	19
	% Hospitals with NBB for CCT/ NHTS families	PhilHealth	To Be Determined	100 in government hospitals

STRATEGIES FOR 2011-2016

- Universal NHIP coverage with priorities for the CCT families and the poor.
- Communication and social marketing strategies to ensure that its members, especially those from the indigent sector, are utilizing PhilHealth benefits.
- Total market mobilization of all health facilities both from the public and private sector to be NHIP accredited and providers of quality care.
- Shift of payment to case payments and no balance billing especially for the indigent sector.
- Improving efficiency of the PhilHealth operations to include creation of local insurance offices and e-claims.

CHAPTER 4

IMPROVING ACCESS TO QUALITY HOSPITALS AND HEALTH SERVICES

4.1. HEALTH FACILITIES

The Local Government Code of 1991 resulted in the devolution of health services to local government units (LGUs) that included among others the provision, management and maintenance of government health facilities (district hospitals, provincial hospitals, RHUs, BHS) at different levels of LGUs. Though most of health facilities are devolved, 70 hospitals scattered all over the country are retained by the central government (DOH retained hospitals).

Private sector plays a crucial role in the Philippine hospital system. As noted in the earlier chapter, they account for more than 50 percent of the total number of hospitals. Almost half of the population goes to private facilities for their health care needs. However, private hospitals cater more to the upper socio-economic quintiles and those covered by health insurance.

In 2009, the country licensed a total of 721 public and 1,075 private hospitals. In 2010, the total hospital beds are 98,155 (Department of Health, 2009). Of these, around half (50 percent or 49,372 beds) are in government hospitals (National Statistics Office, 2010). To ensure provision of quality services, 10,530 facilities have been accredited (n=1835) and issued with licenses (n= 8,695) to start their operations in 2008 (Philippine Health Insurance Corporation, Various years). Issuing documents and accreditation are vital processes in quality assurance and monitoring compliance to standards.

RHUs and BHS act as providers of public health services at the municipal and *barangay* levels. From 1996 to 2005, the number of RHUs was declining, and the number of BHS was stagnating. Thus, the number of government primary care facilities cannot cope up with the increasing population.

Data has shown that the poorest of the population are the main users of government health facilities, yet these health facilities have suffered neglect due to the inadequacy of health budgets. Lower levels of care were bypassed even for simple primary cases because of deteriorating quality,

TABLE 12. NUMBER OF RHU AND BHS, PHILIPPINES, 2005

Year	Number of RHU	Number of BHS
1996	2856	1709
1997	2405	13096
1998	1791	14267
1999	2121	14416
2000	2218	15204
2001	1773	15107
2002	1974	15283
2003	2257	14490
2004	2258	15099
2005	2374	15436

Source: Department of Health

lack of human resources, medical equipment and medicines (Department of Health, 2010). This is particularly disadvantageous to the poor who need the services the most.

KP shall reform the health care delivery systems by focusing on health facility enhancement and rationalization and development of integrated health service delivery network. A functional and complementary network between the different components of local health systems should be formulated and implemented to properly maximize the health resources of each health facility. The DOH budget shall allocate resources in health facility upgrading coupled with improving the systems for health facility operation and management. Health facility enhancement increase hospital revenue from NHIP benefits and other medical and non-medical revenue and sustain the health facilities in providing quality services especially to the poor.

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOAL: Improved access to quality hospitals and health facilities by all Filipinos, especially the poor

Strategic Objective	Indicator	Data Source	Latest Baseline	2016 Targets
Access to quality health facilities and services, especially those commonly used by the poor is improved	% DOH retained hospitals upgraded/rehabilitated/constructed	DOH Report	10 (Upgraded 2010)	95
	% Provincial Hospitals upgraded/rehabilitated/constructed	DOH Report	25 (Upgraded 2010)	95
	% District Hospitals upgraded/rehabilitated/constructed	DOH Report	30 (Upgraded 2010)	95
	% RHUs upgraded/rehabilitated/constructed	DOH Report	30 (Upgraded 2010)	100
Quality of inpatient and outpatient care is improved	% DOH-retained hospitals with Center of Quality or Excellence Accreditation status or equivalent	PhilHealth Report	17 (May 2011)	100

	Number of provinces and large cities with at least one LGU-managed hospital with Center of Quality Accreditation	PhilHealth Report	10 (2010)	70
	% RHU/CHO with PhilHealth Accreditation	PhilHealth Report	59 (2010)	80
	% Government hospitals with PhilHealth Accreditation	PhilHealth Report	88 (2010)	95
	% DOH licensed private hospital with PhilHealth Accreditation	PhilHealth Report	91 (2010)	93
Availability of essential drugs and medicines in all levels of government health facilities is ensured	% Availability of essential drugs in health facilities at all levels according to the National Drug Formulary	Special Facility Survey	25.3 (2010)	80
Access to specialized services in sub-national health facilities is enhanced	No. of Subnational Facilities with specialized services for heart, lung and kidney	DOH Report	3 (Upgraded/established in 2010)	5
	No. of regional blood centers	DOH Report	3 (Upgraded/established in 2010)	9
	No. of Cancer centers	DOH Report	1 (Upgraded/established in 2010)	3
Governance, sustainability and fiscal autonomy of government hospitals are improved	Number of DOH hospital transformed into corporate hospital	DOH Report	4 (2010)	6
	Number of LGU hospitals with fiscal autonomy or with scheme for economic enterprise	DOH Report	1 (2010)	16
Client responsiveness of health facilities is improved	% Client Satisfaction Rate	Special Survey	83.2 (2010)	90

STRATEGIES FOR 2011-2016

- A targeted health facility enhancement program that shall leverage funds for improved facility capacity to adequately manage the most common causes of mortality and morbidity, including trauma;
- Provision of financial mechanisms drawing from public-private partnerships to support the immediate repair, rehabilitation and construction of selected priority health facilities;
- Fiscal autonomy and income retention schemes for government hospitals and health facilities;
- Unified and streamlined DOH licensure and PhilHealth accreditation for hospitals and health facilities; and
- Regional clustering and referral networks of health facilities based on their catchment areas to address the current fragmentation of health services in some regions.

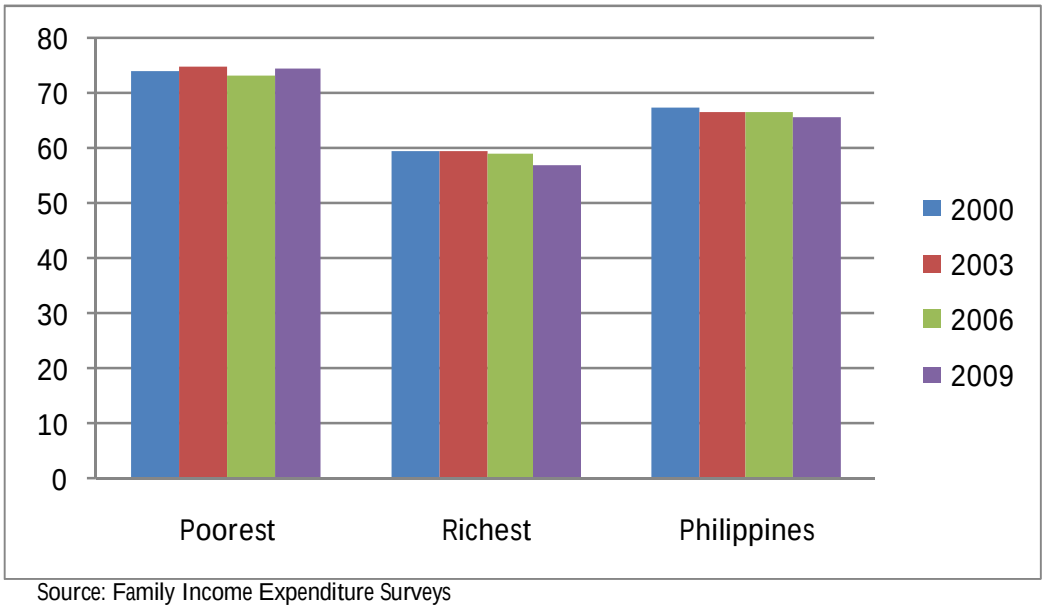
4.2. PHARMACEUTICALS

The purpose of the regulation of essential medicines is to ensure that no Filipino dies due to problems related to medicines. According to the World Medicines Situation, only 66% of the world population has access to essential medicines (World Health Organization, 2004). Lack of access to medicines as well as other problems like poor quality and irrational use, has impeded the achievement of the desired health status of the population. Access to or effective availability of essential medicines is influenced by the kind, price, and location of certain drugs, and also by the financing, payment, and organization of systemic actors who define what is offered and at what terms (Roberts, 2004).

The Philippines is one of the biggest pharmaceutical markets in the ASEAN region, next to Indonesia and Thailand. Sales of pharmaceuticals in the Philippines are estimated at Php100 billion annually, with 70 percent being accounted for by multinational firms (Reyes, 2010). Out of total sales, 63 percent comes from a major pharmaceutical chain, 17 percent comes from the combined sales of all other small independent pharmacies, 7 percent comes from private hospitals, 2.5 percent comes from public hospitals, 10 percent comes from other private outlets, and 0.5 percent comes from other public outlets (Picazo, 2012).

Drugs in the Philippines are more expensive than in other countries in Asia, and it is the major source of out-of pocket health expenditures. Analyses of various rounds of Family Income and Expenditure Surveys reveal that almost 66 percent of total health out-of-pocket can be accounted for pharmaceutical expenditure. **Figure 10** shows that the share of medicine expenditure is higher among the poorer quintiles (National Statistics Office, Various Years).

FIGURE 10: SHARE OF MEDICINES IN THE TOTAL OUT-OF-POCKET IN PERCENT, PHILIPPINES, 2000-2009



Source: Family Income Expenditure Surveys

The catastrophic and impoverishing effects of high cost of medicines led the national government to mitigate the drug prices. In the recent decade, different laws were enacted which aim to promote generics and increase supply of cheaper medicines. The Generics Act (RA 6675), the Cheaper Medicines Act (RA 9502) and the executive order requiring maximum retail prices for a number of drugs intend to improve accessibility to affordable quality medicine.

Another landmark law is Republic Act 9711 or the Food and Drug Administration Act of 2009 which strengthens the regulatory capacity of the DOH to ensure the quality of medicines and other health products.

The government made efforts to make drugs accessible especially in local communities by building drug outlets known as *Botika ng Baranggay* and *Botika ng Bayan* (**Table 13 and 14**).

TABLE 13: NUMBER OF *BOTIKA NG BARANGAY*, PHILIPPINES, 2005-2010

Year	Cumulative number of *Botika ng Barangays* (BnBs)
2005	2977
2006	7392
2008	10996
2009	13498
2010	16350

Source: PIDS study on Cheaper Medicine

TABLE 14: NUMBER OF *BOTIKA NG BAYAN*, PHILIPPINES, 2006-2010

Year	Cumulative number of *Botika ng Bayan* (BNBs)
2006	1,258
2007	1,605
2008	1,923
2009	2,195
2010	2,256

Source: *Botikang Bayan* Secretariat, PITC. www.botikangbayan.com.ph

In addition to *Botika ng Barangay, Botika ng Bayan* (BNB), the flagship outlets of the Cheaper Medicine Program were also established. BNB uses franchising as way to diffuse the drug stores in municipalities. The eligible applicants are NGOs and cooperatives; trade and labor unions or employees' associations; corporate foundations and religious groups; senior citizens and women's groups; and sole proprietorships, partnerships and corporations (Picazo, 2012). Treatment packs for selected NCDs shall be procured and distributed at RHUs for the use of the 4Ps beneficiaries (DOH DO 2011-0188).

The irrational use of medicines is another factor that affects access to medicines. The problem stems from medicines that are inappropriately prescribed, dispensed or sold, and from patients who fail to take their medicines properly. Overutilization, misuse, or underutilization of medicines poses health hazards and results to wastage of limited resources.

The DOH therefore aims to improve the safety and quality, access and availability, and rational use of medicines and to ensure accountability and health systems support by concerned agencies.

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOAL: Improve the safety and quality, access and availability, and rational use of medicines and ensure accountability and health systems support by concerned

Strategic Objectives	Indicator	Data Source	Latest Baseline	2016 Targets
Access and availability of medicines is improved	% Population with access to affordable essential drugs	DOH Program Report	73 (2009)	95
	% market share of generics	PHAP	40% (2009)	>65%
Safety and quality is improved	% Incidence of counterfeit medicines	FDA	45* (Jan to Nov 2009)	24**
	% Drug manufacturing facilities with quality seal	FDA	20 for cGMP (2009)	100
	Number of ADRs reported per 1 million population	FDA	3,866 reported ADRs (Jan-Nov 2009)	To be determined

*30 out of 67 drugs tested are counterfeit medicines
** computed at 10% reduction annually

STRATEGIES FOR 2011-2016

- Strengthen education and advocacy campaigns to increase local acceptability of generic medicines.
- Enhance the monitoring and regulatory functions of the NCPAM.
- Improve the efficiency of existing institutions such as the FDA, the BNBs and BnBs and their coordination with other stakeholders such as MeTA.
- Gather relevant data for the formulation of evidence-based solutions in addressing the problem of irrational drug use and other barrier to drug access
- Sustain and manage the implementation of the law in the LGUs particularly the exercise of regulation by FDA representatives in provinces and cities, as well as the investments for the management, drug procurement, and construction of new BnBs.

4.3. HEALTH HUMAN RESOURCES

Human resources for health (HRH) is defined as the group of individuals in the formal and informal health sector that seek to protect, promote, and improve population health, equitable distribution and mobilization, and strategic utilization in order to meet the health system's goals (World Health Organization, 2006).

The Philippines produces human resources for professional and non-professional fields, and is at the forefront of global human resource exchange, especially in the health sector. The country is known as "the leading exporter of nurses and the second major exporter of physicians" (WHO 2009).Human resources include the following: doctors, nurses, midwives, nutritionist and other health professionals. **Table 15** shows the type of health human resources available and their corresponding employment category. For most part of the decade, the country experienced increasing migration of its health professionals, with a consequent shortage of HRH in the country.

TABLE 15. DISTRIBUTION OF SELECTED HEALTH PROVIDERS ACCORDING TO EMPLOYMENT CATEGORY OF AFFILIATION

Category	Doctor	Nurse	Midwife	Dentist	Nutritionist / Dietitian	Pharmacist	Occupational Therapist	Med Tech	Physical Therapist	Total
No Information	5,953	9,936	7,953	902	403	1,931	67	2,438	181	**29,764**
Permanent Full-Time	2,963	13,114	4,881	580	428	812	22	1,813	196	**24,809**
Permanent Part-Time	861	188	20	20	14	15	1	29	10	**1,158**
Contractual	1,305	1,965	535	31	20	53	1	144	27	**4,081**
Visiting Consultant	2,041	4	4	25	0	0	0	0	2	**2,076**
Casual	24	646	363	11	5	29	4	46	18	**1,146**
Volunteer	10	998	57	0	0	1	0	5	2	**1,073**
Multiple Affiliations	3,622	498	272	96	37	107	1	215	12	**4,860**
TOTAL	**16,779**	**27,349**	**14,085**	**1,665**	**907**	**2,948**	**96**	**4,690**	**448**	**68,967**

However, even with the increasing migration of health professionals, the most recent WHO report on the country concludes that there is still a high unemployment rate for health professionals despite the large number of vacancies in rural areas. Factors suspected in this deficiency include emigration of Filipino health workers, a weak HRH information system, and the existing condition wherein health workers flock to already crowded urban areas, leaving rural areas unmanaged by physicians (Lorenzo, 2007).

Data on health workers in the public sector show that the concentration of health workers is highly variable across regions (**Table 16**). The number of health professionals in the public sector per 100,000 population is high in regions like NCR and CAR, while there is a noticeable scarcity of health professionals relative to the population size in regions like ARMM.

TABLE 16. NUMBER OF HEALTH PROFESSIONALS IN THE PUBLIC SECTOR, BY REGION, PHILIPPINES, 2008

Area	Frequency			Per 100,000		
	Doctors	Nurses	Midwives	Doctors	Nurses	Midwives
Philippines	2,838	4,576	17,473	3.2	5.2	19.7
NCR	590	723	1,135	5.1	6.3	9.8
CAR	89	131	637	5.9	8.6	41.9
Region 1	159	259	1,014	3.5	5.7	22.3
Region II	97	196	839	3.2	6.4	27.5
Region III	278	441	1,662	3.1	4.9	18.3
Region IV-A	238	472	1,818	2.0	4.0	15.5
Region IV-B	83	142	555	3.2	5.5	21.7
Region V	157	273	1,072	3.0	5.3	20.6
Region VI	234	401	1,775	3.4	5.9	26.0
Region VII	177	328	1,534	2.8	5.1	24.0
Region VIII	155	201	904	4.0	5.1	23.1
Region IX	100	203	697	3.1	6.3	21.6
Region X	138	241		3.5	6.1	
Region XI	75	127	743	1.8	3.1	17.9
Region XII	113	114	615	3.0	3.0	16.1
Region XIII	79	114	615	3.4	5.0	26.8
ARMM	76	130	507	1.8	3.2	12.3

*Calculated using Philippines Statistical Yearbook 2010

To address the inadequate distribution of HRH in the country, the CHTs together with the registered nurses, through the RNheals program, will be deployed to provide families with health information and guide them to the assigned health facilities and preferred referral facility. The range of information can include health risks, the needed services to address the risks, the available providers (including their location, services, costs, operating hours and level of quality) and their benefits or entitlements. Furthermore, families will also be guided on how to access services and how to finance the cost of care, particularly in terms of availing of NHIP benefits. The CHTs will be recruited from among community health volunteers such as *barangay* health workers, *barangay* nutrition scholars and *barangay* officials.

In addition, deployment programs such as Doctors to the Barrios (DTTB), DTTB-Leaders for Health (DTTB-LHP), Rural Health Team Placement Programs (RHTPP), and Specialist to the Provinces (STTP) will be enhanced.

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOAL: Guarantee adequate supply and equitable distribution of human resources for health in the country.

Strategic Objectives	Indicator	Data Source	Latest Baseline	2016 Targets
HRH supply is adequate and distribution of HRH is equitable	Number of CHTs and RNheals deployed to achieve the MDGs	DOH Program Report	0 CHTs 0 RNheals (2010)	100,000 CHTs 22,500 RNheals
	Number of doctors, other allied health professionals and midwives deployed in the areas of need	DOH Program Report	80 DTTBs 50 each (Dentists, Med Techs and Nutritionist-dietitian) 175 Rural Health Midwives (RHMs) (2010)	300 DTTBs 1,000 other allied HRH 3,000 RHMs
	% Filled-up positions based on approved staffing	DOH Program Report	80% authorized (2010)	100%
Capacity of health work force to support national and local health systems is enhanced	Number of certificate courses leading to post-graduate program	DOH Program Report	1 (2010)	2
	Number of HRH systems and programs institutionalized	DOH Program Report	4 (2010)	6

STRATEGIES FOR 2011-2016

- Deploy CHTs and RNheals to the communities and enhance existing deployment programs such as the Doctors to the Barrios (DTTB), DTTB-Leaders for Health (DTTB-LHP), Rural Health Team Placement Programs (RHTPP), and Specialist to the Provinces (STTP) aligning them to KP objectives
- Through the HRH network, make health science education more community-oriented through a unified community-based curriculum that produces a broad range of health workers with competencies that are relevant to the country's needs
- Prioritize the reduction of the percentage of vacancies of HRH in rural health facilities and other areas and also strengthen the capability of human resources to support national and local health systems
- Constantly update and utilize the National Database on Selected Human Resources for Health Information System (NDHRHIS) as a tool to address the inequitable HRH distribution
- Enhance personnel administration systems and processes to effect improvement of health workforce outcomes through incentive mechanisms

CHAPTER 5

ATTAINING BETTER HEALTH OUTCOMES

5.1. HEALTH-RELATED MDGs

The attainment of the health-related Millennium Development Goals (MDGs) is one of the strategic thrusts of the *"Kalusugan Pangkalatan"*. MDGs are a set of social objectives that need to be accomplished by 2015 as part of the country's global commitment. Based on the National Statistical Coordination Board MDG watch, some indicators seem to be on the right track while others show limited progress. This section describes the country's objectives that are contributory to reaching health-related MDGs by 2015.

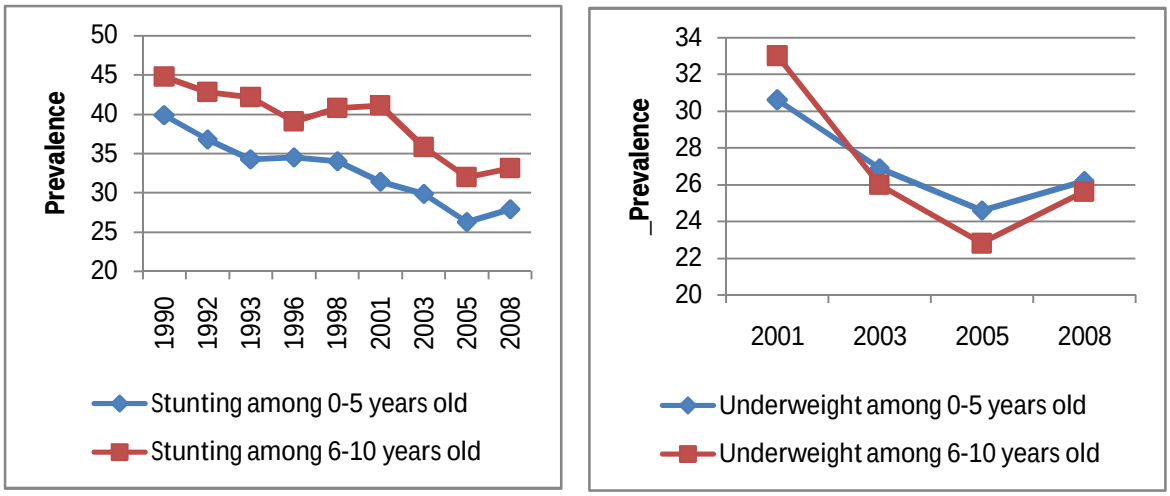
5.1.1. MDG 1: ERADICATE EXTREME POVERTY AND HUNGER

Halve, between 1990 and 2015, the proportion of people who suffer from hunger (Target 1.C)

Many are still suffering from extreme hunger especially in regions with high poverty incidence despite programmatic and policy efforts to contain the gaps in food security. Consequently, a significant proportion of the country's population especially children are malnourished and underweight.

In different rounds of National Nutrition Survey of FNRI, there is a noticeable improvement in the nutritional status of children aged 0-10 years old from 2001 to 2005. However, there was a noted increase in the prevalence of underweight and stunting in 2008 **(see Figure 11)**. This may be due to the lack of interventions among under-five children after 6 months of age.

FIGURE 11.TRENDS IN MALNUTRITION AMONG CHILDREN, PHILIPPINES, 2001, 2003 AND 2008.



Source: National Nutrition Surveys

Iron Deficiency Anemia (IDA) is the most common form of anemia. In the Philippines, half of infants aged 6 months-12 months have IDA (see **Table 17**). The prevalence significantly declined from 66 percent in 2003 to 58 percent in 2008(Food and Nutrition Research Institute, 2008). Like infants, pregnant mothers are also at risk for IDA. In 2008, 43 percent of pregnant mothers were diagnosed with IDA, which is a decrease from 44 percent in 2003(Food and Nutrition Research Institute, 2008). For lactating mothers, the prevalence also decreased from 42 percent in 2003 to 31 percent in 2008(Food and Nutrition Research Institute, 2008). With regard to Vitamin A Deficiency (VAD), the prevalence of VAD among under-5 children increased from 35 percent to 40 percent in 2003(Food and Nutrition Research Institute, 2008). However, a significant improvement was observed in the year 2008 (see **Table 18**).

TABLE 17. PREVALENCE OF IRON DEFICIENCY ANEMIA AMONG DIFFERENT DEMOGRAPHIC GROUPS, PHILIPPINES, 1993-2008

Age Group	1993	1998	2003	2008
6- ≤ 1year	49.2	56.6	66.2	**55.7**
1-5 years old	25.1	29.6	29.6	**20.8**
6-12 years	42	35.6	37.4	**19.8**
Pregnant women	43.6	50.7	43.9	**42.5**
Lactating women	43.0	45.7	42.2	**31.4**

Source: National Nutrition Surveys

TABLE 18. PREVALENCE OF VITAMIN A DEFICIENCY AMONG DIFFERENT DEMOGRAPHIC GROUPS, PHILIPPINES, 1993-2008

Age Group	1993	1998	2003	2008
6 months-5 years	35.3	38.0	40.1	**15.2**
Pregnant women	16.4	22.2	17.5	**9.5**
Lactating women	16.4	16.5	20.1	**6.4**

Source: National Nutrition Surveys

There are recommended public health practices that would ensure infant and child nutrition. Exclusive breastfeeding is the most effective and economic way of nourishing infants. Many studies have shown the positive health outcomes of optimal breastfeeding on infant nutrition and survival. In the Philippines, the prevalence of exclusive breastfeeding in 2008 is as it was similar to the prevalence in 2003 (33.5 percent and 34 percent, respectively) (National Statistics Office, 2008). No significant improvement was observed.

The country has made significant improvements in reducing the prevalence of micro-nutrient deficiencies. However, other nutrition indicators like stunting and underweight have worsened. The following table summarizes the country's objective in reducing hunger and malnutrition.

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOALS:

Protein energy malnutrition and iron deficiency anemia are reduced.
Vitamin A and iodine deficiencies are eliminated as public health problems.
Nutritional risk factors and their health-related effects are managed.

Strategic Objective	Indicator	Data Source	Baseline	2016 Targets
The proportion of people who suffer from hunger and malnutrition are reduced	% Households with per capita intake below 100% dietary energy requirement	FNRI-NNS	66.9 (2008)	32.8
	% Low birth weight infants	NSO-NDHS	19.6 (2008)	<19.6
	% Underweight children under five years old	FNRI-NNS	20.6 (2008)	12.7
	% of Iron Deficiency Anemia (IDA)	FNRI-NNS	Infants: 55.7 (2008) Pregnant: 42.5 (2008)	<40 <40
	% Under-five children with Vitamin A Deficiency (VAD)	FNRI-NNS	15.2 (2008)	<15
	% Children exclusively breastfed until 6 months	NSO-NDHS	34 (2008)	54.75*

* Computed at a rate of 10 percent increase per year

STRATEGIES FOR 2011-2016

- Target the nutritionally at-risk and vulnerable. Priority will be given to areas with high prevalence of under-nutrition and micronutrient deficiencies and to children 0-5 years old, pregnant, and lactating mothers using the CHTs.
- Promote optimum infant and young child feeding practices in various settings to reduce the prevalence of underweight and stunted under-five children
- Adopt and implement appropriate guidelines for the community-based management of acute malnutrition
- Integrate and strengthen nutrition services in the maternal continuum of care (ante-natal, delivery, post-partum care)
- Deliver an integrated package of nutrition services in the school and alternative school system Increasing the supply and consumption of micronutrients to reduce or maintain the prevalence of vitamin A deficiency and iodine deficiency disorders to levels below public health significance

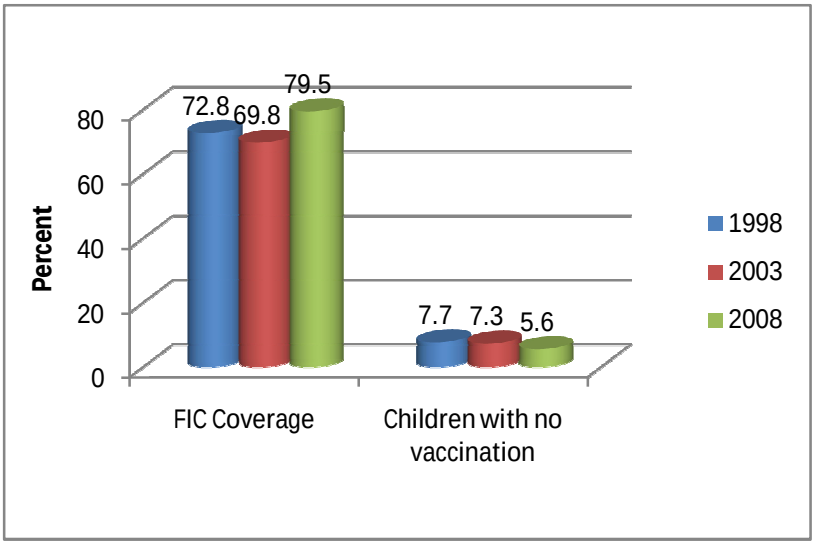
5.1.2. MDG 4: REDUCE CHILD MORTALITY

Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate (Target 4.A)

Many studies suggest that child mortality indicators are the most sensitive markers of the general health care status of a country. According to NSCB, the country's progress in reducing the infant mortality rate is on track, and there is a high chance of meeting the target by 2015.The infant mortality rate decreased from 57 per 1000 livebirths in 1990 to 25 livebirths in 2008 (see table in chapter 1 on child mortality data). However, other components of child mortality like perinatal and neonatal mortality should also be highlighted as they are reflective of the other specific gaps in public health interventions during prenatal care and maternal delivery.

Optimal health practices like breastfeeding, Vitamin A administration, and newborn screening can dramatically decrease infant mortality. In the Philippines, only half of infants are breastfed within the first hour of life despite the promotion of optimal breastfeeding practices in health facilities. The prevalence of early breastfeeding in the years 2003 and 2008 were relatively the same, suggesting no improvement (54 percent vs. 53.5 percent).

FIGURE 12. TREND OF FULLY-IMMUNIZED CHILDREN AND CHILDREN WITH NO VACCINATION, 1998, 2003 and 2008



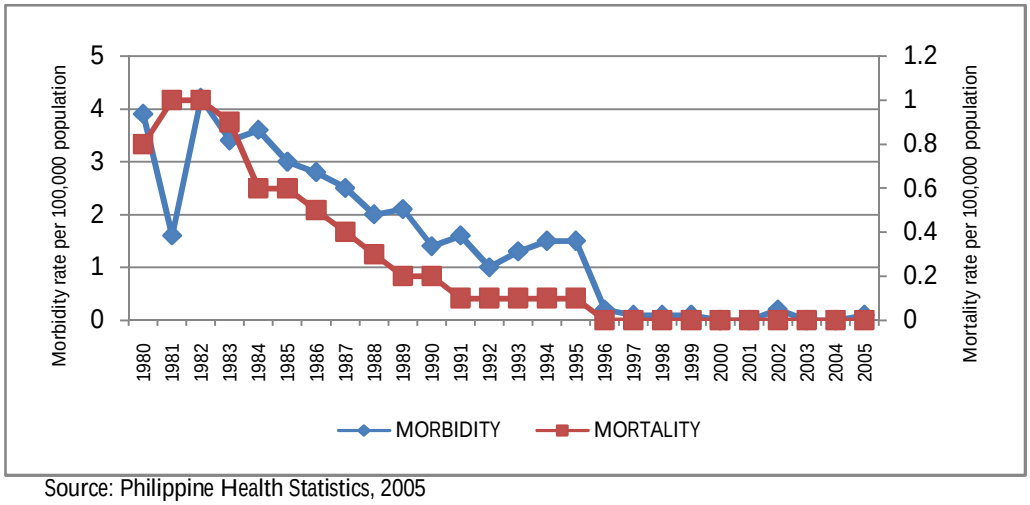
Source: National Demographic and Health Survey, 1998, 2003 and 2008

Vaccination is one of the essential public health interventions. **Figure 12** shows that in the Philippines, 79 percent of children are fully immunized (National Statistics Office, 2008). However, there are 5.6 percent children not administered with any form of vaccination in 2008(National Statistics Office, 2008). The rate of fully immunized children is low in ARMM, MIMAROPA and Bicol (National Statistics Office, 2008).

Tuberculosis, caused by *Mycobacterium tuberculosis,* is one of the top causes of morbidity and mortality in the country. The risk of developing the disease is highest in children under three years old, but the true scope of the disease among children is unknown. BCG vaccine, given immediately upon birth, provides the greatest possible protection from tuberculosis. BCG coverage among infants is 90.3 percent as reported in the NDHS 2008.

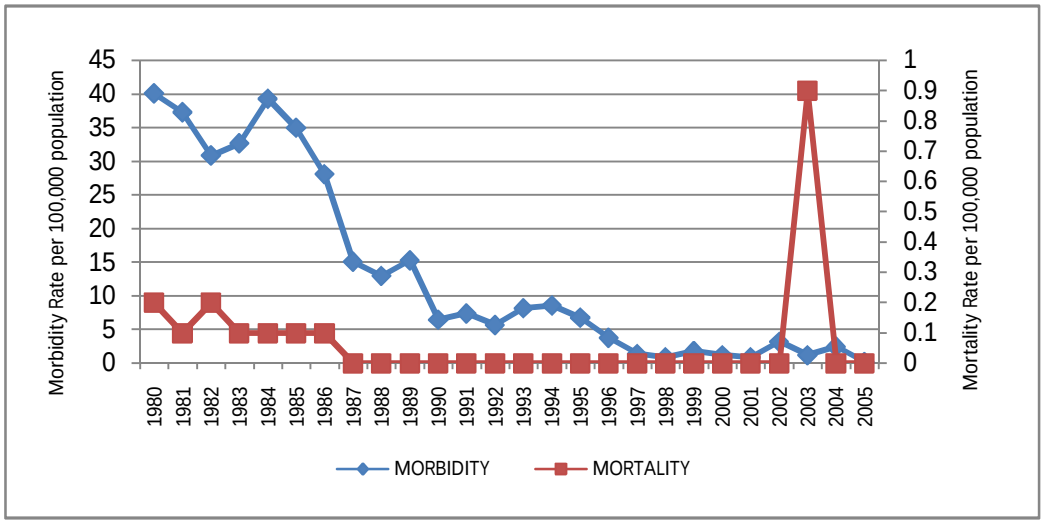
DPT is one of the vaccines that prevent three important diseases: Diphtheria (caused by C. *diphtheria),* Pertussis (caused by *B. pertussis)* and tetanus infection (caused *C. tetani)*. The morbidity and mortality rates of these diseases are declining (see **Figures 13-15**). The coverage for the three doses as reported in the NDHS 2008 is 92.5 percent for DPT 1, 89.6 percent for DPT 2 and 85.6 percent for DPT 3 (National Statistics Office, 2008).

FIGURE 13. TRENDS IN DIPTHERIA MORBIDITY AND MORTALITY, PHILIPPINES, 1980-2005



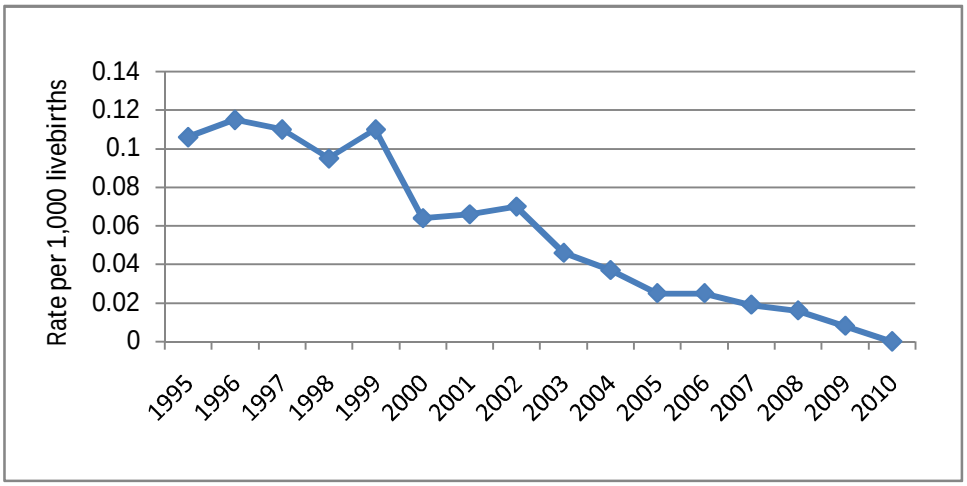
Source: Philippine Health Statistics, 2005

FIGURE 14. TRENDS IN PERTUSSIS MORBIDITY AND MORTALITY, PHILIPPINES, 1980-2005



Source: Philippine Health Statistics, 2005

FIGURE 15. TRENDS IN TETANUS NEONATORUM, PHILIPPINES, 1995-2010

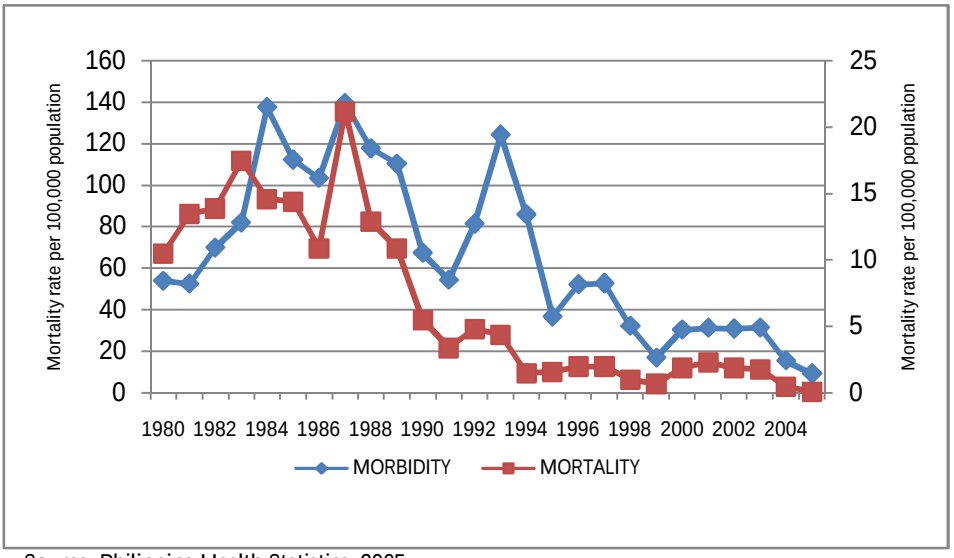


Source: Field Health Service Information System, 1995-2010

OPV vaccination coverage has improved slightly over the three censal periods. However, coverage decreases across the immunization schedule. Given the high coverage rate for polio vaccine, reported cases of acute flaccid paralysis has been limited to the Bicol region with 48 cases reported in 2009. The coverage rates of the three dose periods of OPV vaccine are 92.6 percent, 90 percent and 85 percent, respectively (National Statistics Office, 2008).

Measles or *rubeola* is caused by the measles virus; a single stranded RNA virus of the genus *Morbillivirus*. A decreasing trend for morbidity and mortality rates were also noted but there are periods of resurgence of cases every two to three years due to the build-up of un-immunized children (see **Figure 16**).

FIGURE 16. TRENDS IN MEASLES MORBIDITY AND MORTALITY, PHILIPPINES, 1980-2005



Source: Philippine Health Statistics, 2005

Though the country made significant strides in reducing infant mortality, other child indicators signal policy makers to push for more program and targeted policy efforts to facilitate the decline of child mortality in the country. The table below summarizes the country's objectives in decreasing infant and child mortality.

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOAL: Reduction of under-five mortality rate by two-thirds.

Strategic Objective	Indicator	Data Source	Latest Baseline	2016 Targets
Child mortality is reduced	Perinatal mortality rate per 1,000 live births	NSO-NDHS	28 (2008)	18.7*
	Neonatal mortality rate per 1,000 live births	NSO-NDHS	16 (2008)	10
	Infant Mortality Rate per 1,000 live births	NSO-NDHS	25 (2008)	17
	Under-five mortality rate per 1,000 live births	NSO-NDHS	34 (2008)	25.5
Provision of quality services for children is increased	% Newborn initiated breastfeeding immediately after birth	NSO-NDHS	53.5 (2008)	86**
	% Infants initiated complementary feeding at 6 months of age	NSO-NDHS	36.54 (2008)	58**
	% Under 6 years old given Vitamin A	NSO-NDHS	74.8 (2008)	90
	% Newborns screened for metabolic disorders	NIH-NSRC	30 (2010)	100***
Routine immunization coverage is increased	% FIC	NSO-NDHS	81 (2008)	95
	% Measles coverage	NSO-NDHS	79 (2008)	95
	% TT2+	NSO-NDHS	47.7 (2008)	80

*computed based on 2/3 reduction from the baseline
** computed at a rate of 10 percent increase per year
*** computed at a rate of 30percent increase per year

STRATEGIES FOR 2011-2016

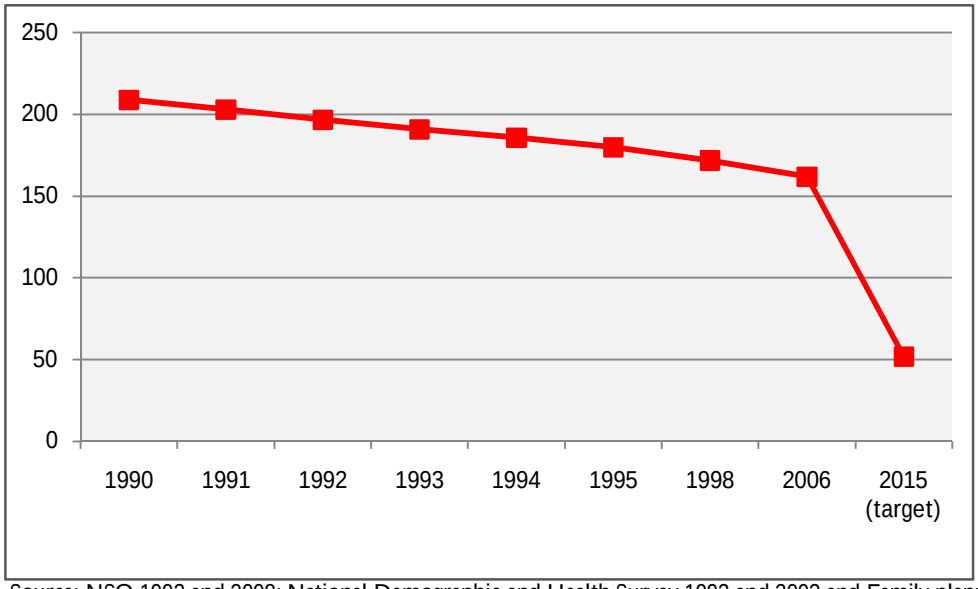
- Promote universal access to the standard child survival package of interventions. Priority will be given to areas with high prevalence of under-five mortality rate using the CHTs.
- Routine vaccination of all infants ages 0-11 months adopting the Reaching Every Barangay strategy
- Supplemental immunization activity either as small scale or large scale immunization
- Enhance the capacity and coordination of the service delivery networks as channels of child survival interventions.
- Create opportunities for communities to overcome barriers to utilization of child survival (CS) services.
- Build the LGU's resolve to adopt and implement the CS Strategy.
- Harmonize efforts of DOH, allied agencies and partners in supporting local delivery of CS services.

5.1.3. MDG 5: IMPROVE MATERNAL HEALTH

Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio (Target 5.A)

Maternal mortality is defined as the death of a woman while pregnant or within 42 days after pregnancy termination. Since this arises from the risks attributable to pregnancy and childbirth as well as from poor quality health care services, this is a strong indicator for health care status. By cautiously examining the trend as shown in **Figure 17**, there was a noticeable decline in maternal mortality ratio from 209 maternal deaths per 100,000 livebirths to 162 maternal deaths per 100,000 livebirths (National Statistics Office, 2007). The MMR is estimated to be at 163 per 100,000 live births as of 2010 (NSCB, 2010).

FIGURE 17: TRENDS IN MATERNAL MORTALITY RATIO, PHILIPPINES, 1990-2006 AND 2015 MDG TARGET



Source: NSO 1993 and 2008; National Demographic and Health Survey 1993 and 2003 and Family planning Survey 2007

The underlying causes of maternal deaths are: delay in taking critical actions, delay in seeking care, delay in making referral and delay in providing appropriate medical management. Other factors that contribute to maternal deaths are: unplanned, mistimed and unwanted pregnancies, poor detection and management of high-risk pregnancies, poor access to health facilities brought about by geographic distance and cost of transportation, and lack of staff competent in handling obstetrical emergencies. Analysis of the causes of maternal deaths shows hypertension and postpartum hemorrhage as the leading causes **(Table 19)**.

TABLE 19: PERCENT DISTRIBUTION OF THE MAIN CAUSES OF MATERNAL MORTALITY, PHILIPPINES, 2000 AND 2005

Causes of Maternal Mortality	2000	2005
Hypertension complicating pregnancy, childbirth and puerperium	25.4	29.4
Postpartum hemorrhage	20.3	15.2
Pregnancy with abortive outcome	9.0	8.0
Hemorrhages related to pregnancy	0.1	0.1
Other complications related to pregnancy occurring in the course of labor, delivery and puerperium	45.3	47.3
Total	**100.0**	**100.0**

Source: Philippine Health Statistics 2005

In the Philippines, 73 percent of mothers do not want additional children or want to delay pregnancy. However, the mean number of children ever born to a Filipino woman upon reaching the age of 40-49 is four with an average fertility rate of 3.3 in the year 2008 (National Statistics Office, 2008).

The high fertility rate coincides with the low contraceptive prevalence rate of 51 percent among all Filipino women of reproductive age and 70.6 percent among married women. **Figure 18** shows that the highest percentage of contraceptive use belongs to the 35-39 age group while the 15-19 years old group have the lowest percentage of ever using any contraceptive method (National Statistics Office, 2008). **Figure 19** shows the distribution by age according to the type of contraceptive method used.

FIGURE 18: PERCENTAGE OF WOMEN AGE 15-49 WHO HAVE EVER USED ANY CONTRACEPTIVE METHOD, PHILIPPINES, 2008

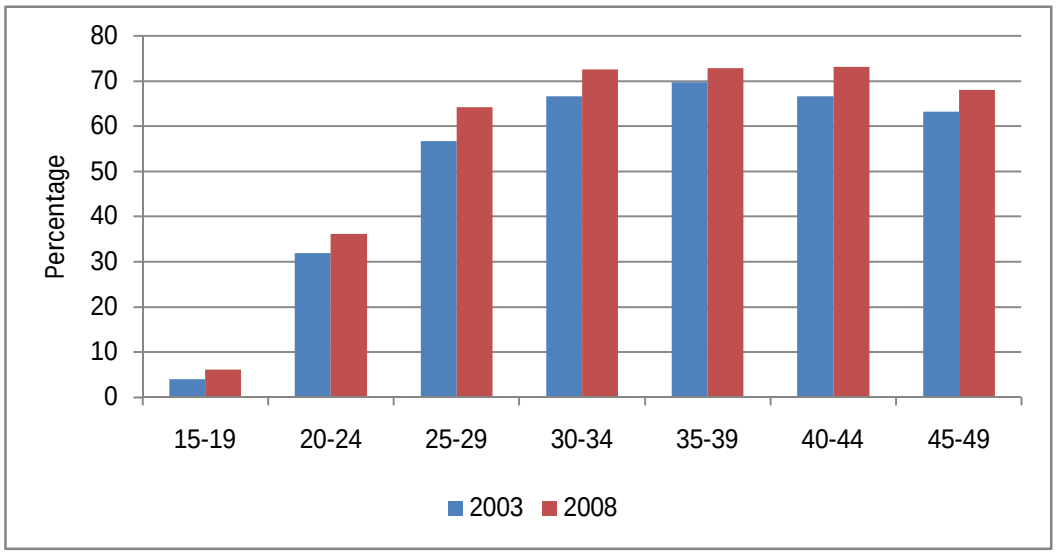
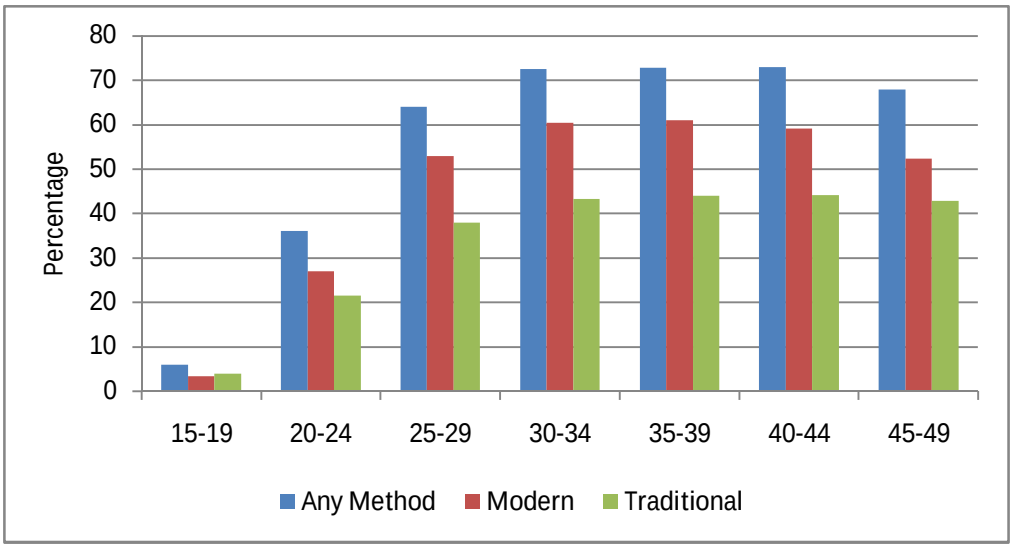


FIGURE 19: PERCENTAGE OF WOMEN AGE 15-49 WHO HAVE EVER USED MODERN AND TRADITIONAL METHOD, PHILIPPINES, 2008



Pregnancy is a physiologic process that has risks to both the mother and the unborn. At greater risk are women below 18 years old and those who are more than 35 years old. Chronic illnesses such as iron deficiency anemia, tuberculosis, hypertension, cardiovascular disorders, and diabetes in pregnancy are risks that could harm both the mother and the unborn.

Table 20 shows that the percentage of pregnant women with at least four prenatal visits increased from 70.4 percent in 2003 to 78 percent in 2008 (National Statistics Office, 2008). In addition, pregnant women who received at least two doses of tetanus toxoid also increased from 37 percent in 2003 to 48 percent in 2008 (National Statistics Office, 2008). The proportion of births attended by health professionals increased from 60 percent in 2003 to 62 percent in 2008 (National Statistics Office, 2008). Still, a significant portion of pregnant women do not have access to prenatal care and professional births attendants, which increase the occurrence of pregnancy-related complications.

TABLE 20. HEALTH-RELATED PRACTICES AFFECTING MATERNAL HEALTH, PHILIPPINES, 1998, 2003 AND 2008

Indicators	1998	2003	2008
% of pregnant women with at least 4 prenatal visits	77	70.4	**77.8**
% of pregnant women with at least 2 doses of tetanus toxoid	38	37.3	**47.7**
% of births attended by professional, health providers	56	59.8	**62.2**
% of women with at least 1 postnatal visit within one week of delivery up to 41 days	43	51.1	**90.4***

Source: National Demographic and Health Surveys, NSO
*Postnatal visit in 2008 includes visit up to 41 days

The Philippines needs to fast-track efforts in reducing the maternal mortality (National Economic and Development Authority, 2011). For the country to reduce the MMR from 163 to 52 by 2015 and achieve the MDG 5, wider and more concerted efforts of the government and different stakeholders to implement MCH programs is needed. The following table summarizes the country's objectives in reducing maternal deaths, and improving the well-being of the unborn.

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOAL: Improve maternal health and ensure the survival, health and well-being of mothers and their unborn.

Strategic Objective	Indicator	Data Source	Latest Baseline	2016 Targets
Maternal Mortality is reduced	Maternal Mortality Ratio (MMR) per 100,000 live births	NSCB	163 (2010)	50
Provision of quality services for mothers is increased	% Pregnant women with 4 or more prenatal visits	DOH-FHSIS	52 (2010)	90
	% Pregnant women who are nutritionally-at-risk	FNRI-NNS	26.3 (2008)	22.4
	% Deliveries assisted by skilled birth attendants	NSO-NDHS	62 (2008)	90
	% Deliveries in a health facility	NSO-NDHS	44 (2008)	90
	% Contraceptive prevalence rate	NSO-NDHS	51 (2008)	65

STRATEGIES FOR 2011-2016

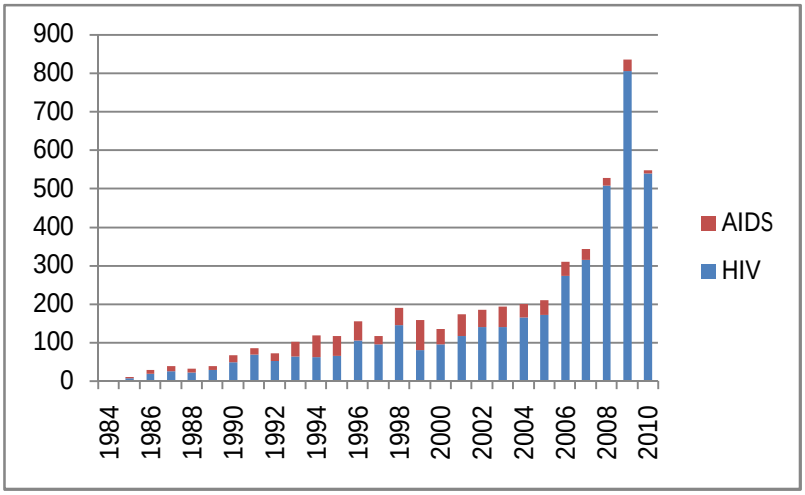
- Provide information on FP-MCH through the CHTs and other organized local efforts
- Ensure availability of reproductive health and other pre-pregnancy services including adolescent health and control of sexually-transmitted infections and HIV prevention services through local public health authorities.
- Increase competencies of health providers in providing comprehensive reproductive health and maternal and child health services.
- Promote facility-based births attended by skilled health professionals catering to the specific needs of the mother and the newborn (Essential Newborn Care).
- Immediate postpartum and postnatal care by skilled health professionals to include immediate and thorough drying, skin-to-skin contact, properly-timed cord clamping, sustained contact for initiation of breastfeeding within the first hour.
- Presence of local capacities for securing reliable, updated and complete information about the use of health services on maternal and child health.

5.1.4. MDG 6: REVERSE THE SPREAD OF HIV/AIDS, MALARIA AND OTHER INFECTIOUS DISEASES

The Millennium Development Goal (MDG) 6 aims to control the most common infectious diseases particularly, tuberculosis, malaria and HIV. These diseases have been hampering social progress in many parts of the world especially in Africa and Asia. In the Philippines, tuberculosis and malaria are still major public health problems especially in certain segments or areas in the country.

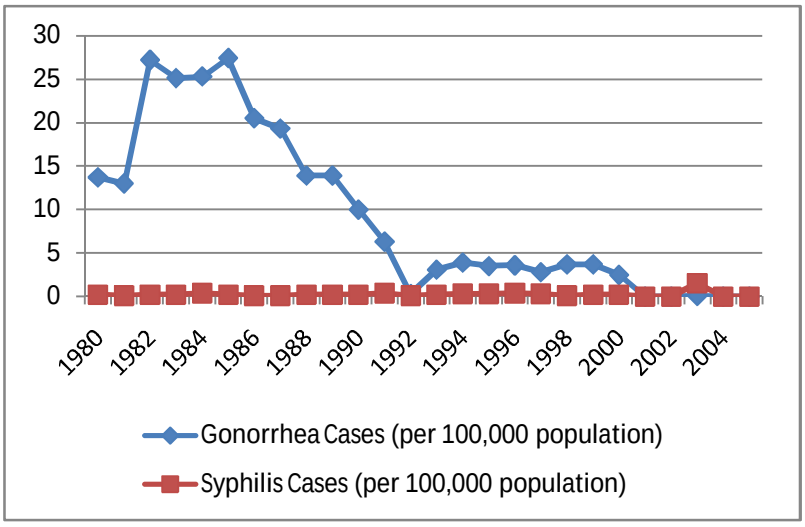
5.1.4.1. Have halted by 2015 and reversed the spread of HIV/AIDS (Target 6.A)

FIGURE 20. NUMBER OF HIV AND AIDS CASES, PHILIPPINES, 1984-2010



Source: STI/HIV/AIDS Surveillance Technical Report, PNAC

FIGURE 21. TRENDS IN GONORRHEA AND SYPHILIS MORBIDITY, PHILIPPINES, 1980-2005



The prevalence of HIV in the Philippines is less than 1 percent (Department of Health, 2010). However, noticeable and exponential rise of HIV and AIDS cases in the country for the past years have raised alarming concerns (see **Figure 20**). Over the last two decades, there has been a constant increase of patients diagnosed with HIV and AIDS. In 2010, 539 patients were diagnosed with HIV (Department of Health, 2010). However, given the limitations of the AIDS surveillance and reporting system which upholds voluntary testing and confidentiality, this number may underestimate the real number of HIV and AIDS cases. The growing cases of HIV can be attributed to risky behaviors which include unprotected sex, switching from one partner to another and needle sharing among drug users (Farr & Wilson, 2010).

HIV/AIDS is known to have co-morbidity with other STIs such as gonorrhea, syphilis and herpes. Based on the Philippine Health Statistics 2005, the reported cases of gonoccoccal infection caused by *Neisseria Gonorrhea* has significantly decreased from 27.4 cases per 100,000 population in 1985 to 0.0 cases per 100,000 population in 2005 (see **Figure 21**). In the case of syphilis, which is caused by *T. pallidum*, the reported cases have constantly remained low (Department of Health, Various years).

The prevalence of HIV is low at the present. Given the continuous trend of increase in the number of HIV cases, it is likely that the HIV prevalence will increase. The country's objective is to maintain the level of cases to less than 1 percent HIV prevalence rate, and to reduce the transmission of HIV virus. The next table summarizes the country's objective in the next 5 years with regard to HIV/AIDS prevention and control.

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOAL: Reduce new STI and HIV infections by 50 percent among the most-at-risk and vulnerable population by 2016

Strategic Objective	Indicator	Data Source	Latest Baseline	2016 Targets
HIV prevalence of less than 1% is maintained	% Prevalence of HIV	DOH-IHBSS	0.57 (2009)	<1.0
STI among MARP is reduced	% Incidence of gonococcal infection among at risk males	DOH-SSESS	11.3 (2009)	5.65*
	% Incidence of NGI among at risk females	DOH-SSESS	12.6 (2009)	6.3*
The transmission of RTIs in the general population and among the vulnerable groups is reduced	Condom use rate	NSO-NDHS	2.3 (2008)	5

* Computed based on 50 percent reduction from the baseline

STRATEGIES FOR 2011-2016

- Expand HIV counseling and testing and enabling people at risk to know their HIV status.
- Maximize prevention in a wide range of activities involving health and other sectors, complemented with the availability and access to essential prophylactic commodities like condoms and ART to prevent mother to child transmission of HIV.
- Scale-up treatment, care and support. For infants, children or adults living with HIV, a comprehensive package of prevention, treatment and care interventions should be made available. Early referral after HIV diagnosis is essential especially pregnant women to prevent MTCT.
- Invest in strategic information. This includes surveillance of HIV and sexually transmitted infections, monitoring and evaluation and continuing research for vulnerabilities and operations researches.

- Strengthen health systems.HIV and AIDS shall be integrated at all possible entry points in the health system. Other activities include the advocacy for the institutionalization of local AIDS councils and training of regional assistance team to provide assistance to LGUs in setting-up/ sustaining local AIDS councils.

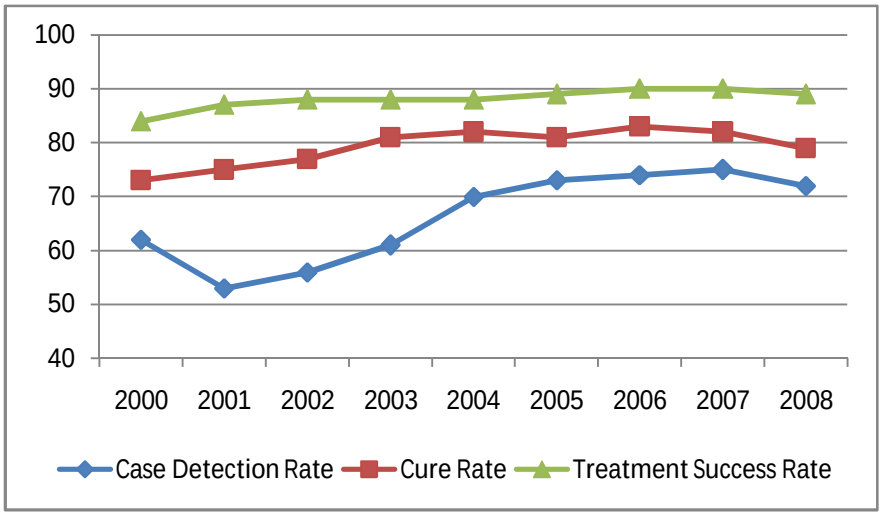
5.1.4.2. Have halted by 2015 and reversed the spread of Tuberculosis (Target 6B)

Tuberculosis is one of the leading causes of mortality and morbidity in the country. In the Philippines, majority of the indicators for TB has decreased through the years with smear positive and culture positive registering the most marked decrease in prevalence as shown in **Table 21.**

TABLE 21. PREVALENCE OF TUBERCULOSIS, PHILIPPINES, 1982, 1997 AND 2007

Indicator	1981-1982	1997	2007
Smear positive TB cases/1,000	6.6	3.1	2.0
Culture positive TB cases/1,000	8.6	8.1	4.7
Radiographic findings suggestive of TB (%)	4.2	4.2	6.3
Multi-drug resistant TB among new case (%)		1.5	2.1
TB symptomatic (%)	17	18.4	13.5
Annual risk of infection (%)	2.5	2.4	2.1

FIGURE 22. TRENDS IN TB CASE DETECTION RATE (CDR) AND CURE RATE (CR), PHILIPPINES, 2000-2008



.MDR TB among new cases has increased slightly after a decade. The noticeable improvement of TB prevalence over the last decade can be attributed to program efforts, particularly the TB DOTS Program. From 2000 to 2008, the case detection rate and treatment success rate increased (see **Figure 22**).

Despite the decline in TB prevalence, this curable and preventable disease is still one of the top causes of morbidity and mortality. The next table summarizes the country's objective in reducing TB morbidity and mortality in the next five years.

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOAL: Morbidity and mortality from tuberculosis are reduced.

Strategic Objective	Indicator	Data Source	Latest Baseline	2016 Targets
Mortality rate from TB is reduced	Mortality rate from TB per 100,000 population	DOH-PHS	41 (2007)	33
TB Prevalence rate is reduced	TB Prevalence rate per 100,000	DOH-NTPS	486 (2008)	387
Case detection rate for all forms of TB is increased	% Case detection rate of sputum positive cases	DOH Program Report	73 (2008)	85
Cure rate of new smear positive TB is increased	% Cure rate of sputum positive cases	DOH Program Report	79 (2008)	85
TB treatment success rate is improved	% Treatment success rate	DOH Program Report	89 (2010)	90

STRATEGIES FOR 2011-2016[1]

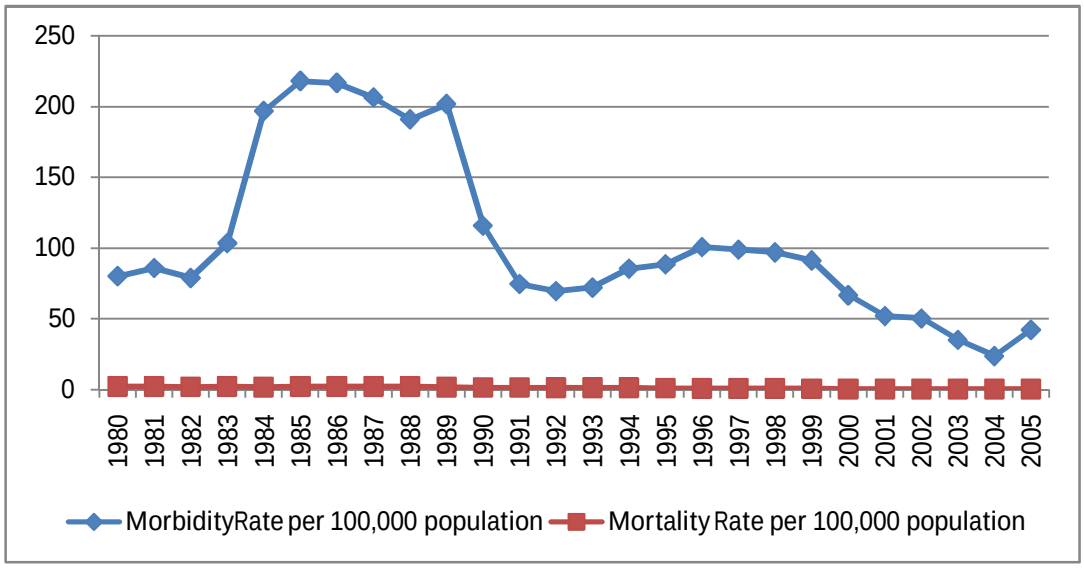
- Localize TB control program implementation. LGUs manage and implement the TB control program within the decentralized health system in support of the health sector reform initiatives.
- Monitor health system performance. Regularly determine the progress in TB control efforts as influenced by the initiatives of public and private institutions and by actions in health system strengthening.
- Engage both public and private TB care providers to adopt DOTS. The development and maintenance of competent workforce for TB control is a key activity of the national TB control program.
- Promote and strengthen positive behavior of communities. The utilization of DOTS services, especially by the poor and marginalized, can still be improved through interventions that facilitate care seeking at DOTS facilities, compliance with diagnostic procedures, and adherence to treatment.
- Address MDR-TB co-infection and needs of vulnerable populations. There is a need to detect most of the MDR-TB cases and ensure that they receive quality-assured second-line anti-TB drugs. It shall target vulnerable populations such as the poor, children, elderly, refugees, inmates and those living in geographically isolated and depressed areas.
- Regulate and make available quality TB diagnostic tests and anti-TB drugs. Availability of quality-assured diagnostic tests and standardized treatment are keys to prompt diagnosis and treatment of TB cases.
- Certify and accredit TB care providers. Seventy (70) percent of DOTS facilities must be DOH/PhilCAT-certified and PhilHealth accredited.
- Secure adequate funding and improve efficiency of fund utilization. Ensure adequate financing for PhilPACT key strategies, particularly in strengthening local implementation of TB prevention and control and efficiency in fund utilization by proper and timely disbursement of funds with tracking mechanism.

[1] Philippine Plan of Action to Control Tuberculosis 2010-2016

5.1.4.3. Have halted by 2015 and begun to reverse the incidence of malaria and other diseases (Target 6C)

Malaria is the most common and most persistent mosquito-borne infection in the Philippines although cases and deaths have gone down. Endemic areas are usually rural, hilly or mountainous, and hard to reach. High-risk groups consist of upland subsistence farmers, forest-related workers, indigenous people, settlers in frontier areas, and migrant agricultural workers. Disease transmission is perennial and generally higher during the rainy season.

FIGURE 23. MORBIDITY AND MORTALITY RATE OF MALARIA, PHILIPPINES, 1980-2005



Source: Philippine Health Statistics, 2005

Over the last decades, the morbidity and mortality rates of malaria have been declining as shown in **Figure 23**. The morbidity rate of 80 per 100,000 in 1980 dropped to 42 per 100,000 in 2005, while the mortality rate declined from 2.2. per 100,000 in 1980 to 0.2 per 100, 000 in 2005 (Department of Health, 2005).

In 2010, the Malaria Control Program (MCP) introduced the micro-stratification in classifying malaria endemic areas in the country according to the rate of malaria transmission for better tracking of malaria cases, prioritization of endemic areas to be assisted and to ensure more focused interventions.

Definition of Strata

Stable Risk

With at least 1 *barangay* that has a continuous presence of at least one indigenous malaria case in a month for 6 months or more at any time during the past three years

a. high

With≥ 1000 average malaria cases from 2007-2009

b. moderate

With 100 to <1000 average malaria cases from 2007-2009

c. low

With <100 average malaria cases from 2007-2009

Unstable Risk

With at least 1 *barangay* that has a continuous presence of at least one indigenous malaria case in a month for less than 6 months at any time during the past three years

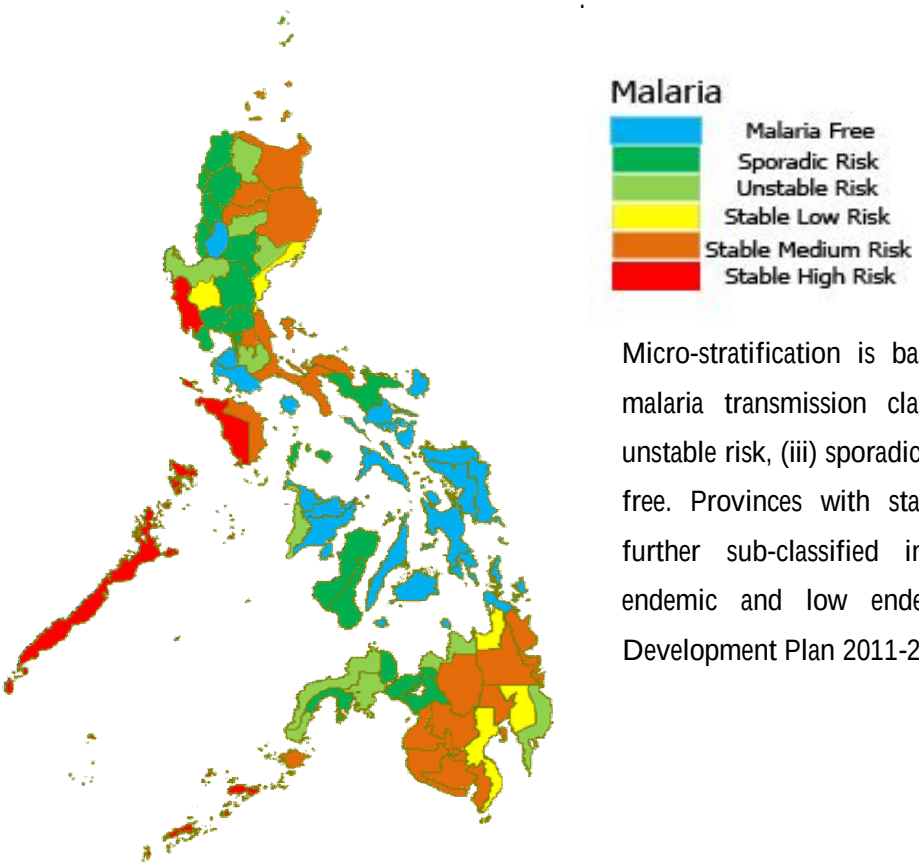
Epidemic Risk or Sporadic Risk

With at least 1 *barangay* that has a presence of at least one indigenous malaria case at any time in the past 5 years

Malaria Free

Absence of indigenous malaria case for 5 past years even in the presence of malaria vector

FIGURE 24. MALARIA ENDEMIC PROVINCES PHILIPPINES, 2010



Micro-stratification is based on the rate or degree of malaria transmission classified as: (i) stable risk, (ii) unstable risk, (iii) sporadic/epidemic risk; and (iv) malaria-free. Provinces with stable malaria transmission were further sub-classified into high endemic, moderate endemic and low endemic (Malaria Medium Term Development Plan 2011-2016)

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOAL: To accelerate the transition from control to sustained elimination of the disease.

Strategic Objective	Indicator	Data Source	Latest Baseline	2016 Targets
Malaria cases are reduced	Malaria morbidity rate per 100,000 population	DOH Program Report	22 (2009)	6.6
Malaria deaths are reduced	Malaria mortality rate per 100,000 population	DOH Program Report	0.03 (2009)	<0.03
Annual parasite incidence is reduced	Annual parasite incidence (API) per 1,000 endemic population	DOH Program Report	1.7 (2010)	0.8
The number of malaria-free provinces is increased	Number of malaria-free provinces	DOH Program Report	23 (2009)	40

STRATEGIES FOR 2011-2016[2]

- Ensure universal access to reliable diagnosis, highly effective and appropriate treatment and preventive measures by levelling up focal anti-malaria interventions in stable and unstable risk areas and sustaining provision of anti-malaria diagnostic, treatment and preventive measures in epidemic risk and malaria-free areas, among others.
- Capacitate LGUs to own, manage and sustain the Malaria Control Program in their respective localities which include stratification, zoning and planning; malaria surveillance and response and monitoring and evaluation
- Sustain financing of anti-malaria efforts at all levels of operations by securing government and non-government financial assistance in support to malaria elimination.
- Ensure a functioning quality assurance system for malaria operations by strengthening Quality Assurance System (QAS) for anti-malaria diagnostic and treatment facilities and improve quality of vector control measures.

[2](Malaria Medium Term Development Plan 2011-2016)

5.1.5. MDG 7: ENSURE ENVIRONMENTAL SUSTAINABILITY

All through time, water has been held as a life-sustaining element of the earth. Unfortunately, water has also become the source of illness in our country. Recent reports indicate that only 14 million of over 17 million households in the country (82.3 percent) have access to safe water supplies, and only about 13 million (76.8 percent) have sanitary toilets (Department of Health, 2008). However, the World Health Organization (WHO) reports that most of these supplies consist of protected wells, tube wells, communal standpipes, and rainwater harvesting. Only 45 percent of Filipino households (58 percent urban, 23 percent rural) are actually connected to a piped-in distribution system. In an assessment done by the Department of Health (DOH), water samples from improved wells were generally free of fecal contaminations at the source, but most were contaminated at the point of consumption. In fact, 50 percent of them were heavily contaminated (Clasen, 2007).

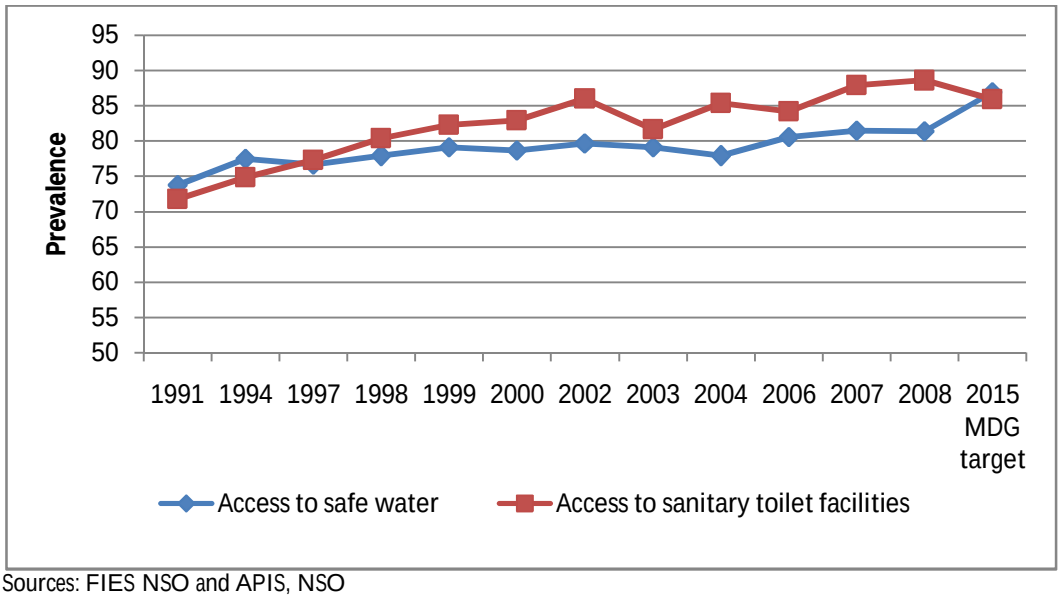
Water and sanitation problems are major environmental health risks. They pose a threat to the entire population causing diarrhea, cholera, typhoid fever, hepatitis A, skin diseases, and dengue fever, among others (Department of Health, 2005)

Recent outbreaks of infectious diseases and disasters such as flooding and droughts impose a heavy burden on the country's health and health and economic resources (Clasen, 2007). Water and sanitation facilities that were destroyed during the typhoons "Ondoy" and "Pepeng" now require rehabilitation.

The proportion of households within 30 minutes from water supply facilities is 95 percent in 2008 and the proportion of households with water supply coming from improved sources is 69.8 percent in the same year (National Statistics Office, 2008). In urban areas, piped water supply is at 38 percent in 2008 while it is just 22 percent in rural areas (National Statistics Office, 2008).

The rate of utilization of toilet facilities with septic tank is still the highest among types of toilet used in the country. In 2008, the percent coverage of households with toilet facilities that flush into septic tanks in urban areas is 66.9 percent, as compared to 40 percent in rural areas (National Statistics Office, 2008).

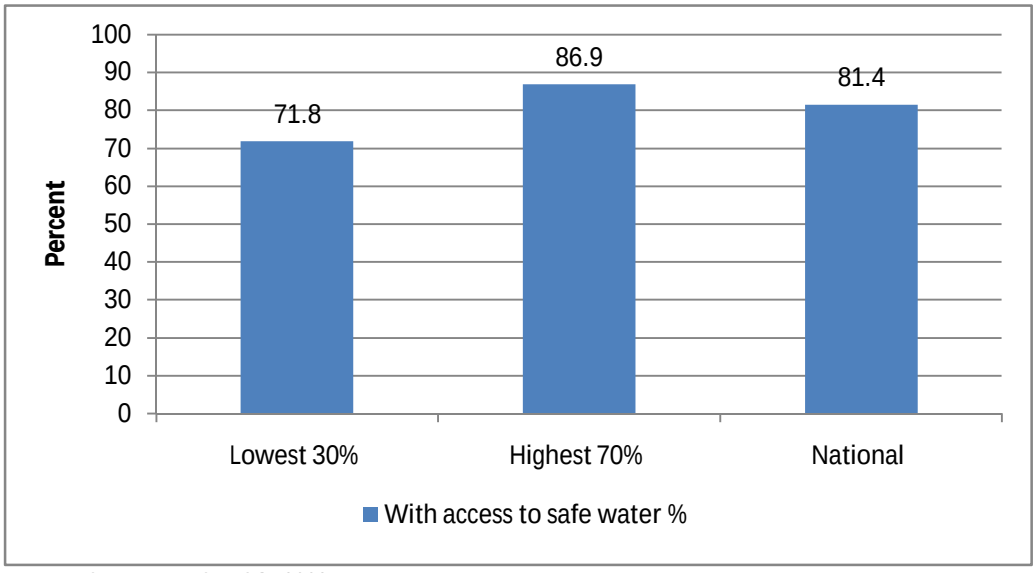
FIGURE 25. TREND IN THE PROPORTION OF THE POPULATION WITH ACCESS TO SAFE DRINKING WATER AND SANITARY TOILET FACILITIES IN PERCENT, PHILIPPINES, 1991-2008



Sources: FIES NSO and APIS, NSO

The trend in the proportion of the population with access to safe drinking water in the country has been improving through the years as shown in **Figure 25**, reaching the levels of 81.4 percent in 2008 which is close to the MDG target of 86.9 percent by 2015. The level of access to sanitary toilet facilities in 2008 of 88.6 percent has already exceeded the MDG target of 85.9 percent by 2015.

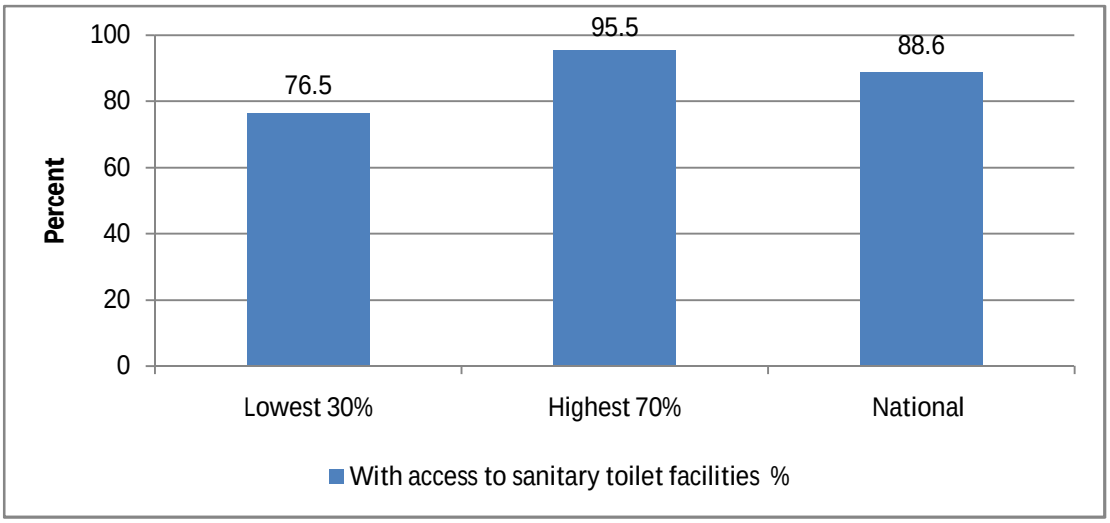
FIGURE 26. ACCESS TO SAFE DRINKING WATER AMONG THE LOWEST 30 PERCENT AND HIGHEST 70 PERCENT INCOME CLASS OF THE POPULATION, PHILIPPINES, 2008



Source: APIS, NSO, 2008

The access to safe drinking water among the 70 percent highest income class (86.9 percent) is notably higher by 15.1 percentage as compared to the lowest 30 percent income class of the population (71.8 percent) (see **Figure 26**). This is also true with access to sanitary toilet facilities which is 95.5 percent among the 70 percent highest income class as compared to 76.5 percent among the lowest 30 percent income class of the population (see **Figure 27**).

FIGURE 27. ACCESS TO SANITARY TOILET FACILITIES AMONG THE LOWEST 30 PERCENT AND HIGHEST 70 PERCENT INCOME CLASS OF THE POPULATION, PHILIPPINES, 2008

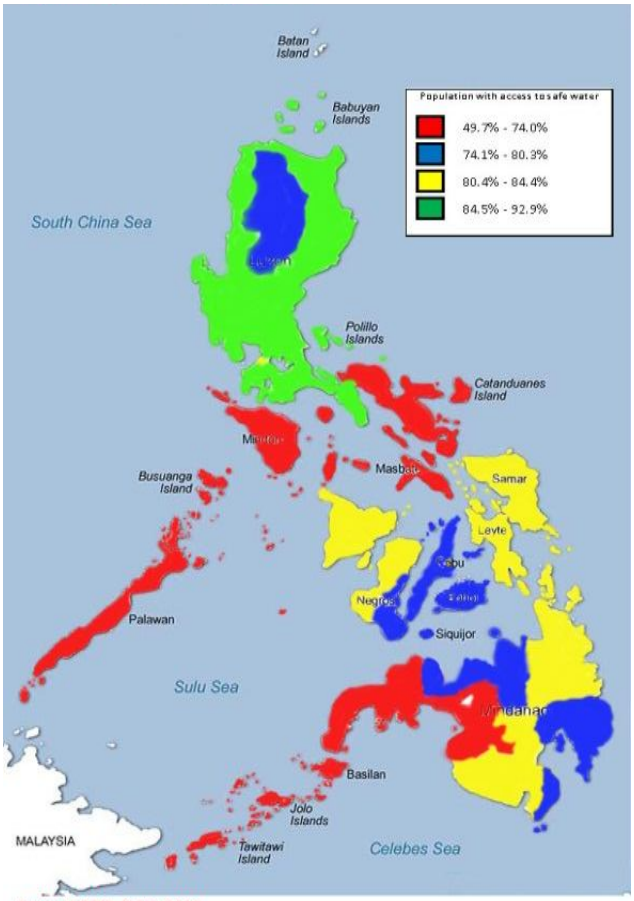


Source: APIS, NSO, 2008

The population with the highest access to safe drinking water is found in Cagayan Valley (92.9 percent) followed by Central Luzon (91.9 percent) and CALABARZON (87.7 percent). In terms of access to sanitary toilet facilities, the population with the highest access is in NCR at 98.7 percent followed by Ilocos Region at 98.4 percent and CALABARZON at 98.2 percent (National Statistics Office, 2008). The ARMM lags behind all regions in access to safe water and sanitary toilet facilities (**Figure 28**).

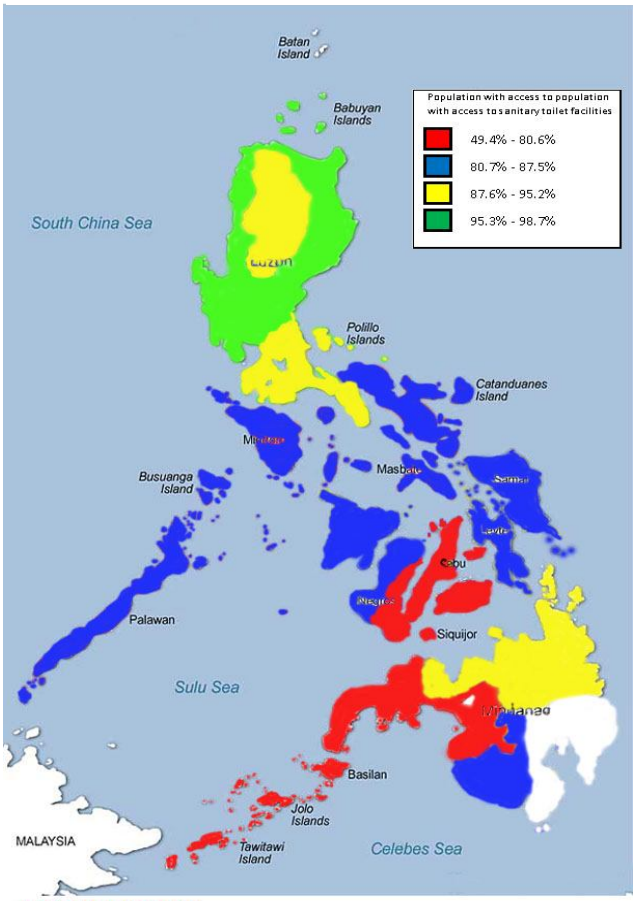
FIGURE 28. PROPORTION OF POPULATION WITH ACCESS TO SAFE WATER AND SANITARY TOILET BY REGION, PHILIPPINES, 2008

Proportion of population with access to safe water in percent by region, Philippines, 2008



Source: APIS, NSO, 2008

Proportion of population with access to sanitary toilet facilities in percent by region, Philippines, 2008



Source: APIS, NSO, 2008

Over the years, around 80 percent of households have continued to have access to safe water and sanitary toilet facilities. The country's objective is to further increase this proportion to 90 percent of households. The following table summarizes the country objectives in increasing access to safe water and sanitary toilet facilities.

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOALS:

Environmental health conditions in the country are improved.
Morbidity and mortality from environmental health hazards are reduced.

Strategic Objective	Indicator	Data Source	Latest Baseline	2016 Targets
Households with access to safe water is increased	% Householdswith access to safe water	NSO-APIS	81.4 (2008)	88
Households with sanitary toilet is increased	% Households with sanitary toilet facility	NSO-APIS	88.6 (2008)	90
	% Households connected to sewer system	NOH Midline Survey	34(2010)	40
	% Households with septic tank desludged for the last 5 years	NOH Midline Survey	23.4(2010)	30

STRATEGIES FOR 2011-2016

- Increase investment in environmental health programs to target the whole population.
- Develop technical assistance packages for stakeholders especially for the LGUs.
- Develop a comprehensive communication package for environmental health concerns. This will support stronger advocacy campaigns that will push for the local and nationwide implementation of environmental laws through sustainable measures like low-cost waste treatment technologies available in the market.
- Strengthen capacity building and collaboration among partners.
- Support environmental infrastructure development projects. This includes construction and upgrading of regional and provincial laboratories for the use of environmental and occupational health programs.

5.2. GOALS FOR OTHER DISEASES

5.2.1. COMMUNICABLE DISEASES

5.2.1.1. Diseases for Prevention and Control

5.2.1.1.1. Soil-Transmitted Helminthiasis and other Parasitoses

Soil-transmitted helminthiasis (STH) and other parasitoses are a group of parasitic infections that commonly occur in areas where sanitation practices are poor. The three major causes of intestinal parasitism in the Philippines are ascariasis or roundworm infection, trichuriasis or whipworm infection, and hookworm infection. In 2009, STH prevalence is 43.7 percent among children aged one to five years old and 44.7 percent among children aged six to twelve years old (Department of Health, 2009).

STH is high in poverty-stricken areas, where there are inadequate sanitary facilities and water supply and poor personal hygiene. Children from ages one to twelve years old are one of the most important population groups affected by these diseases. This age group has the highest prevalence rate and is the greatest source of transmission for the infection. Other population groups at risk are pregnant women, farmers, and indigenous people.

In order to bring down the prevalence rates of STH, mass deworming of school children is being done every January and July each year as part of the "*Garantisadong Pambata*" Campaign. Furthermore, STH control strategies have been integrated into the mass treatment programs for filariasis and schistosomiasis endemic areas. However, only 67 percent of children aged 1-12 years old and only 38.6 percent of IP schoolchildren were dewormed as of 2009 (DOH-DepED and WHO , 2009).

Soil-transmitted helminthes produce varied symptoms including intestinal manifestations (such as diarrhea and abdominal pain) and general malaise and weakness. Hookworms, in particular, can even cause anemia. The effects of these symptoms are detrimental to the child's school performance and to the adult's productivity.

The goal of the STH and Other Parasitoses Control Program is to reduce the STH prevalence among children aged one to twelve years old and reduce the risk of pregnant women, adolescent females and special groups for STH infection.

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOAL: Morbidity and other health effects of soil transmitted helminthiasis and other parasitoses are reduced

Strategic Objective	Indicator	Data Source	Latest Baseline	2016 Targets
Prevalence of STH and other parasitoses among children is reduced	% STH cases among 1- 5 years old	Sentinel Surveillance of STH	43.7 (2009)	34.96*
	% STH cases among 6- 12 years old	Sentinel Surveillance of STH	44.7 (2009)	35.76*
Coverage of deworming services is increased	% IP schoolchildren dewormed	Special Study	38.6 (2009)	30.88*
	% Deworming coverage among 1-12 year-old children	DOH-DepED Report	67 (January 2009)	95
Proportion of targeted population with observed healthy practices is increased	% Mothers/ caregivers with 1-12 year old children practicing appropriate personal and food hygiene	Special Study	30 (2004)	75

*Computed at 20 percent reduction from the baseline

STRATEGIES FOR 2011-2016

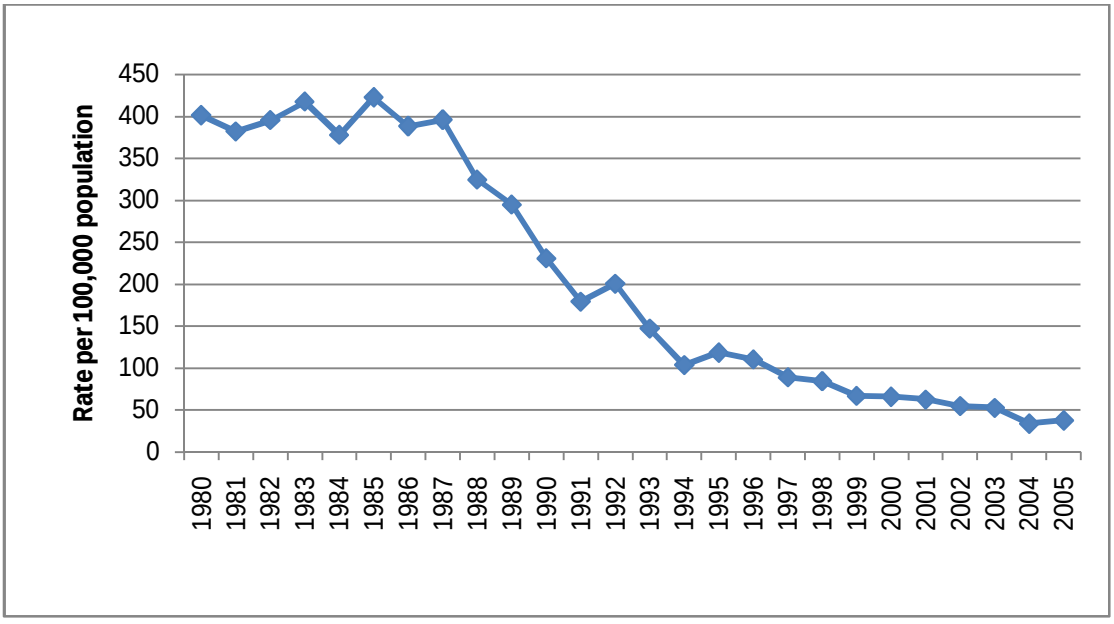
- Local mass deworming integrated with other national programs such as mass treatment for filariasis and schistosomiasis, DepEd and DSWD's CCT programs. Mass deworming should be carried out for at least three consecutive years among the target population.
- Deworming programs integrated with nationwide immunization campaigns, and on a regular or routine basis, with other programs targeting children.
- Advocacy, social preparations and mass media campaign that precede and support the mass treatment schedules.
- Personal hygiene and sanitation practices like hand washing, proper food preparation, proper footwear practices and proper human waste disposal.
- Provision of safe water and sanitation services.

5.2.1.1.2. Pneumonia and other Acute Respiratory Infections

Pneumonia and other acute respiratory infections (ARIs) remain a public health concern as one of the top ten leading causes of morbidity and mortality in the Philippines. Pneumonia ranked second among the causes of morbidity in 2010 and fourth among the causes of death in 2005. Mortality due to pneumonia is highest in Western Visayas, Ilocos and Cagayan and lowest in ARMM, Central Mindanao and Western Mindanao (Department of Health, 2012). Acute respiratory infection is the most common cause of morbidity in 2010 (Department of Health, 2012).

The death rate from pneumonia among children under-five years of age declined significantly from 118.69 per 100,000 in the 1995 to 37.99 per 100,000 in 2005 as shown in **Figure 29** (Department of Health, 2005). The morbidity rate among under-five year old children went down from 5,076.17 per 100,000 in 2002 to 1,801.14 per 100,000 in 2010 (Department of Health, 2012). The 2008 NDHS revealed that half of the children below five years of age who had the symptoms of acute respiratory infection were taken to a health facility or health care provider for treatment. This is an 8 percent reduction from the 58 percent reported in the 1998 NDHS. Forty-two percent of them were given antibiotics (National Statistics Office, 2008).

FIGURE 29. TRENDS IN PNEUMONIA MORBIDITY AMONG UNDER-FIVE YEARS OLD, PHILIPPINES, 1980-2005



Source: Philippine Health Statistics 2005

The populations most vulnerable to developing fatal respiratory diseases are the very young, the elderly, and the immuno-compromised. Children below five years of age have the highest risk, especially those belonging to the middle to low economic classes because of their lower capacity to acquire basic needs.

Morbidity is also known to have adverse consequences on children's growth and development, daily activities, and school performance. The program aims to reduce mortality from pneumonia and other acute respiratory infections.

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOAL: Mortality from pneumonia and other acute respiratory infections is reduced.

Strategic Objective	Indicator	Data Source	Latest Baseline	2016 Targets
Mortality from pneumonia among children under 5 years old is reduced	Mortality rate from pneumonia per 100,000 under five year old children	DOH-PHS	23.3 (2005)	18.6*
	% Under five year old children with symptoms of ARI who sought treatment from a health facility or health provider	NSO-NDHS	50 (2008)	90
Mortality from pneumonia among older persons is reduced	Mortality rate from pneumonia per 100,000 60-year-old persons and older	DOH- PHS	569 (2005)	540
Mortality from pneumonia among the general population is reduced.	Mortality rate from pneumonia per 100,000 population	DOH-PHS	41.4 (2005)	33*

* computed based on 20 percent reduction from the baseline

STRATEGIES FOR 2011-2016

- CHT promotion of good hygiene and other preventive measures to prevent the transmission of ARI through the CHTs
- Surveillance and monitoring and evaluation
- Timely and appropriate management for pneumonia.
- Ensuring availability of essential IMCI drugs for children below five years of age at the local level.

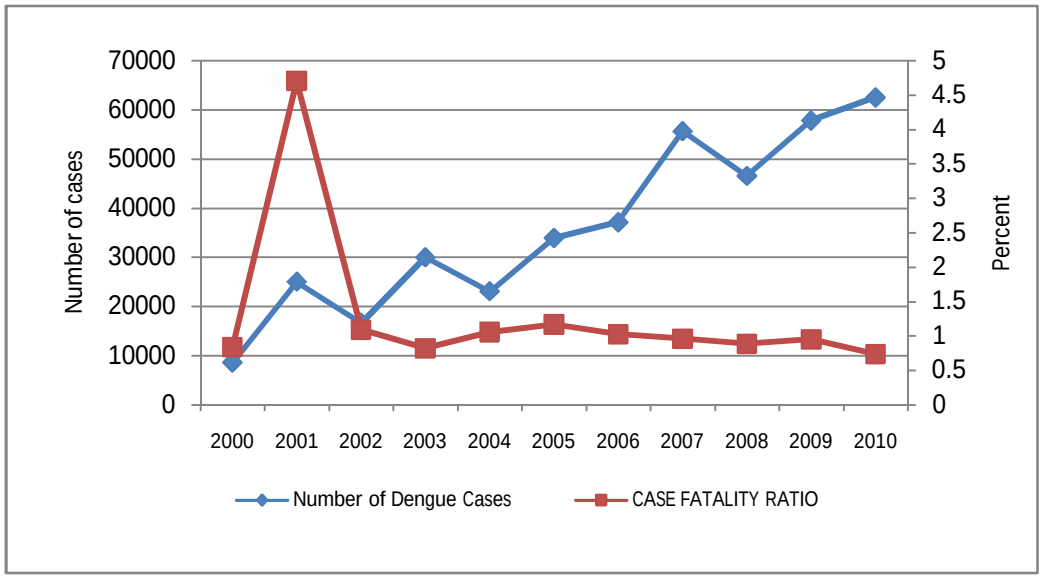
5.2.1.1.3. Dengue

Dengue fever is a viral disease characterized by sudden onset of fever, headache, muscle and joint pain, and rashes. It is potentially fatal especially when the more severe form, dengue hemorrhagic fever (DHF) or dengue shock syndrome (DSS), develops. At present, there is no vaccine to prevent this disease. Despite its risks, dengue has become rather commonplace in endemic tropical countries such as the Philippines. However, with climate change and the rise of urbanization, the disease once associated with

the rainy season is beginning to change its pattern, and is proving to be an even more urgent year long public health problem.

Figure 30 shows that between 2004 and 2007, dengue cases in the country steadily increased from 23,040 cases to a peak of 55,639 cases. In September 2009 it peaked again to 57,819 cases (World Health Organization, 2010). The case fatality rate for dengue fever decreased from 1.17 percent in 2005 to 0.74 percent in 2010 (World Health Organization, 2010). The availability of funding enabled campaigns to run all year long beginning in 2007, as compared to relegation of campaigns to the Dengue Awareness Month in previous years.

FIGURE 30. TRENDS IN DENGUE CASES AND CASE FATALITY, PHILIPPINES, 2000-2010



Source: WHO DengueNet Database, 2011

The vector easily proliferates in congested urban areas where access to water and sanitation is poor, and residents are constrained to adopt various water storage practices. Additional risk factors for dengue hemorrhagic fever include immune status and type of infecting virus. Persons previously infected with one or more types of dengue virus are thought to be at greater risk for developing DHF if infected again (US Army Public Health Command, 2010). Acute Hemorrhagic Fever (Dengue Hemorrhagic Fever) cases were high in Davao, Zamboanga Peninsula, Cagayan Valley and CALABARZON in 2009 (Department of Health, 2009).

An affected individual may lose up to ten days of school or work due to ambulatory or hospital care. Similarly, caretakers must devote work hours to patient care. Economic productivity is further reduced by direct and indirect costs including medication, hospital care, and income lost by the household due to

illness. Moreover, national interest is compromised by dengue outbreaks that discourage tourists (Suaya, Shepard, & Beatty, 2006).

The Dengue Control Program works to lower the incidence of dengue fever in the country by intensifying its advocacy on vector control and by redirecting its focus to school children. The success of the program relies on changing behaviors and targeting young persons may result in good preventive habits. Educating those most at risk prevents disease and its more severe forms. With the help of agencies operating within schools, the morbidity and mortality of dengue will decrease.

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOAL: Reduction of morbidity and mortality from dengue infection

Strategic Objective	Indicator	Data Source	Latest Baseline	2016 Targets
Morbidity from dengue infection is reduced	Incidence of dengue cases per 100,000 population	WHO-DengueNet Database	0.6 (2009)	<0.6
Mortality from dengue fever is reduced	% Dengue case fatality rate	WHO-DengueNet Database	0.9 (2009)	< 0.9

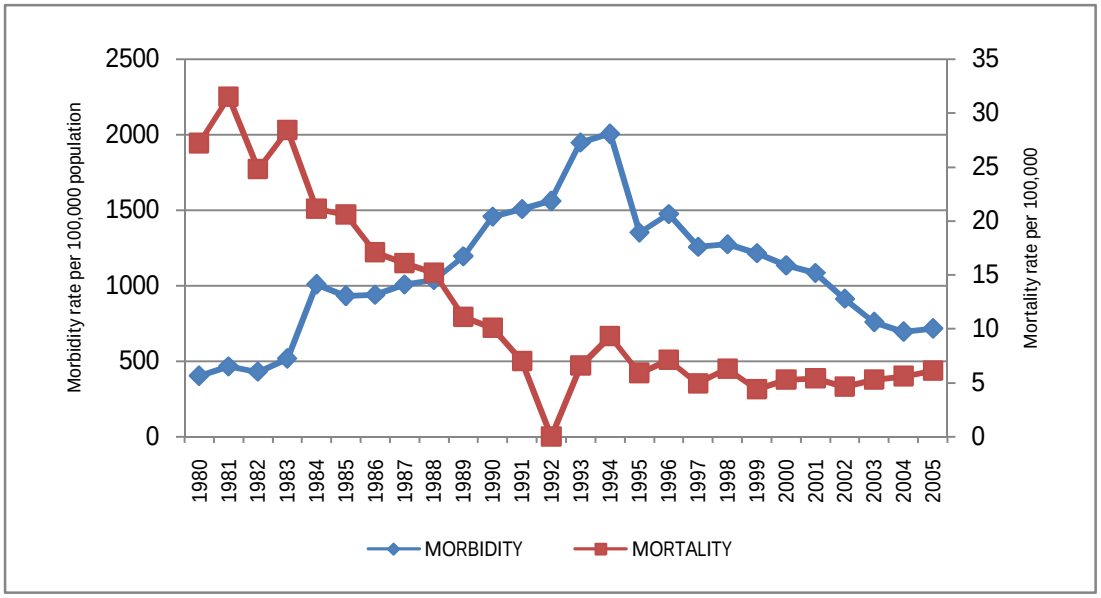
STRATEGIES FOR 2011-2016

- Timely mass media and community-based information campaigns on dengue control.
- Early diagnosis and quality clinical care for dengue cases at all levels of care. This is achieved by continuing the training of clinic-based and hospital-based health care providers and improving the case referral networks.
- Risk-reduction interventions such as environmental sanitation and removal of mosquito breeding places, specifically during the peak season for the disease.

5.2.1.1.4. Food-borne and Water-borne Diseases

Food-borne and water-borne diseases are usually manifested as diarrhea, which is second to pneumonia as the leading cause of morbidity in the Philippines. At present, both the Field Health Services Information System (FHSIS) and the Philippine Health Statistics (PHS) show a generally decreasing trend in the morbidity rate of diarrhea. PHS shows a decrease from 759.3 cases per 100,000 population in 2003 to 716.4 per 100,000 population in 2005 (Department of Health, 2005). However, the mortality rate slightly increased from 5.3 per 100,000 population in 2003 to 6.1 per 100,000 population in 2005 (Department of Health, 2005) (see **Figure 31**).

FIGURE 31. TRENDS IN DIARRHEA MORBIDITY AND MORTALITY, PHILIPPINES, 1980-2005



Source: Philippine Health Statistics, 2005

Several notable outbreaks of food and water-borne diseases occurred in 2008. There were a total of 2,500 typhoid cases and 800 cholera cases during that year (Department of Health, 1980-2010). Four hundred thirty-six cases of acute bloody diarrhea (ABD) were reported from sentinel sites nationwide. Seventy-seven hepatitis A cases and 79 cases of paralytic shellfish poisoning were also reported (Department of Health, 2008).

This group of diseases is usually caused by infectious organisms like viruses, bacteria and parasites. However, some forms are secondary to chemical food poisoning (which will be discussed separately under the environmental health hazards). These diseases are transmitted from person to person via soiled hands and via food and water contaminated by human waste through the oral-fecal route. The incidence of food-borne and water-borne diseases peaks during the rainy season and is usually high in areas where sanitation and hygienic practices are poor.

The goal of the Food and Water-borne Diseases Prevention and Control Program is to reduce the morbidity rate and eliminate deaths due to diarrhea. The program also aims to reduce the number of all typhoid, paratyphoid, and cholera outbreaks to one per year. Since the occurrence of food and water-borne diseases is essentially related to economic and socio-cultural factors, the program recognizes that outbreaks will persist unless underlying social ills are corrected. Along with poverty comes the prevalence of infectious diseases. However, if specific interventions are employed, a drastic reduction of bacterial and parasitic infections can also be expected.

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOALS:

Morbidity and mortality from food-borne and water-borne diseases are reduced.
Outbreaks of food-borne and water-borne diseases are reduced.

Strategic Objective	Indicator	Data Source	Latest Baseline	2016 Targets
Morbidity and mortality rates due to food-borne and water-borne diseases are reduced	Morbidity rate from diarrhea per 100,000 population	DOH-FHSIS	288.7 (2010)	230
	Mortality rate of diarrhea per 100,000 population	DOH-PHS	6.1 (2005)	No deaths
Number of FWBD outbreaks is reduced or eliminated	Number of typhoid, paratyphoid and cholera cases as confirmed by the DOH	DOH Surveillance Report	2008 data: Cholera: 800 cases Typhoid: 2,500 cases	Zero outbreak per year

STRATEGIES FOR 2011-2016

- Regulate and monitor food and water sanitation practices at the local level through enforcement of national and local legislations, application of appropriate technical standards and participation of non-government agencies.
- Sustain inter-agency collaboration to fast-track sanitation infrastructure development in poor urban areas and in rural areas with low access to safe water and sanitation facilities.
- Promote personal hygiene, food and water sanitation practices and the principles of environmental health.
- Promote the use of ORS in the management of diarrhea to prevent dehydration, especially among infants and children.
- Promote breastfeeding and other good feeding practices for infants and children
- Continue training of health personnel in the early diagnosis and treatment of food-borne and water-borne diseases
- Continue nationwide information campaign for the prevention and control of food-borne and water-borne diseases.

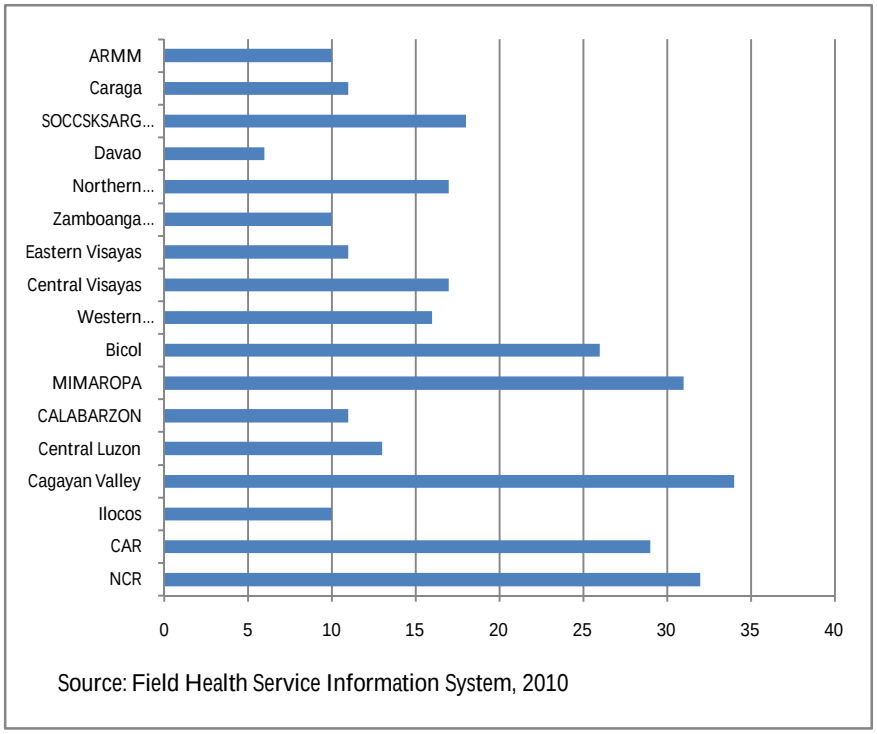
5.2.1.1.5. Dental and Periodontal Infections

Oral health is an essential component of general health, and is a major determinant of the quality of life. Unfortunately, oral disease continues to be a serious public health problem in the Philippines. Dental and oral diseases create a silent epidemic, placing a heavy burden on Filipino schoolchildren.

The 2006 National Oral Health Survey (NOHS) revealed that 97.1 percent of six-year-old and 82 percent of 12-year-old children suffer from tooth decay. More than four out of every five children of this

subgroup manifested symptoms of dentinogenic infection. In addition, 78.4 percent of twelve-year-old children suffer from dental caries and 49.7 percent of the same age group manifested symptoms of dentinogenic infections (Department of Education, 2006). The severity of dental caries, expressed as the average number of decayed teeth indicated for filling/extraction or filled permanent or temporary teeth (DMFT) was 8.4 DMFT for the six-year-old age group and 2.9 DMFT for the twelve-year-old age group (Department of Education, 2006).

FIGURE 32. PROPORTION OF ORALLY FIT CHILDREN (12-71 MOS OLD) BY REGION, PHILIPPINES, 2010



Source: Field Health Service Information System, 2010

Filipinos bear the burden of gum diseases early in their childhood. According to the 2010 FHSIS Report, the proportion of orally fit children is only 17 percent with the highest at Cagayan Valley (34 percent) and lowest in Davao Region (6 percent) (see **Figure 32**). On the other hand, 74 percent of twelve-year-old children suffer from gingivitis (Department of Education, 2006). Poor oral health poses detrimental effects on school performance and on success in later life. In fact, children who suffer from poor oral health are 12 times more likely to have restricted-activity days (US Government Accountability Office, 2000). In the Philippines, toothache is a common ailment among schoolchildren, and is the primary cause of absenteeism from school (Araojo, 2003). If not treated early, these children become susceptible to irreversible periodontal disease as they enter adolescence and approach adulthood.

In general, tooth decay and gum diseases do not directly cause disability or death. However, these conditions can weaken bodily defenses and serve as portals of entry to other more serious and potentially dangerous systemic diseases and infections. Serious conditions include arthritis, heart disease, endocarditis, gastro-intestinal diseases, and ocular-skin-renal diseases. Aside from physical deformity, these two oral diseases may also cause disturbance of speech significant enough to affect work performance, nutrition, social interactions, income, and self-esteem.

The program therefore aims to reduce the prevalence rate of dental caries and periodontal disease to improve the oral health not only of children but of the general population.

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOAL: The oral health of the general population is improved.

Strategic Objective	Indicator	Data Source	Latest Baseline	2016 Targets
Prevalence of dental caries is reduced	% Prevalence rate of dental caries	National Monitoring and Evaluation Dental Survey (NMEDS) or National Oral Health Survey for Children (NOHS)	97 (6 years old) (2006) 82 (12 years old) (2006)	71.3 60.28
Prevalence of periodontal disease is reduced	% Prevalence rate of gingivitis among 12 year old children	NMEDS or NOHS	74 (2006)	54.4
The proportion of Orally Fit Children (OFC) 12-71 months old is increased	% Orally Fit Children 12-71 months old	DOH- FHSIS	17 (2010)	5*

*computed at 20 percent reduction annually from the baseline

STRATEGIES FOR 2011-2016

- Formulate policy and regulations to ensure the full implementation of OHP. Develop standards for oral health services.
- Expand the Oral Health Program to include other age groups
- Explore the development of an outpatient benefit package for oral health. Develop financing schemes for oral health applicable to other levels of care (fee for service, cooperatives, network with HMOs).
- Provide adequate dental personnel and build up highly motivated health professionals and trained auxiliaries to manage and provide quality oral health care
- Ensure delivery of quality oral health services. Upgrade dental services unit at all levels of care
- Provide relevant, timely and accurate information management system for Oral Health and enhance existing system of reporting and recording forms
- Design and implement grant assistance mechanism for high performing LGUs (Awards and incentives) or identify areas for priority assistance.

5.2.1.2. Diseases for Elimination

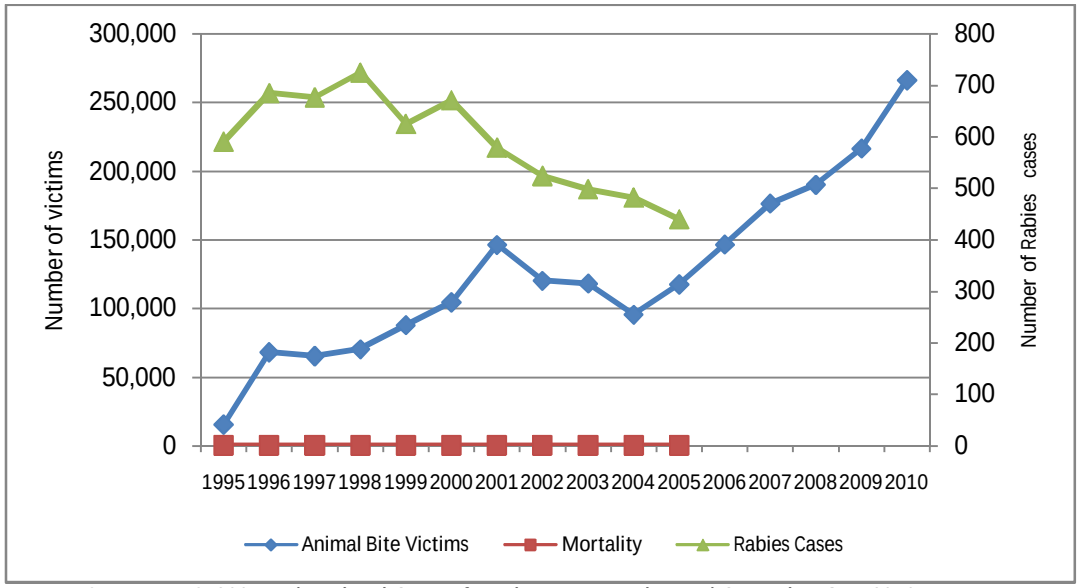
5.2.1.2.1. Rabies

The Philippines has consistently ranked among the top 10 countries with human rabies death. Rabies is one of the most acute of fatal infections. It is the cause of 200 to 300 deaths reported each year, more than half (59.3 percent) of which are children under 15 years old (National Statistics Office, 2008). In

2008, the top six provinces with the most number of human rabies cases include Isabela, Camarines Sur, Cagayan, Nueva Ecija, Iloilo, and Camarines Norte (Department of Health, 2008).

The number of animal bite victims increased in the past five years as shown in **Figure 33**, with 216,569 cases reported in 2009 (Department of Health, 1980-2010). Fifty-nine percent was recorded in Luzon, 24 percent in Visayas, and 17 percent in Mindanao (Lopido). However, rabies cases in the country have significantly decreased in the past few years. In 2005, the Department of Health registered a total of 440 rabies cases nationwide (Department of Health, 1980-2010). In 2008, the figure dropped to 248, posting a 43 percent difference in a span of 3 years. The mortality rate due to rabies also decreased from 0.9 per 100,000 population in 2000 to 0.5 per 100,000 population in 2005 (Department of Health, 2005).

FIGURE 33. TRENDS IN ANIMAL BITE VICTIMS AND RABIES CASES, PHILIPPINES, 1995-2010



Source: PHS, 2005 and National Center for Disease Prevention and Control, DOH, 2010

Rabies poses economic burdens to the victims and the country. The highest financial expenditure is the cost of rabies post-exposure prophylaxis. In addition to the expense of rabies biologicals are the expenditures for physician and hospital, the loss of income as a result of a physical visit to a clinic, and the emotional and psychological impact of post-exposure prophylaxis.

The goal of the National Rabies Prevention and Control Program is to eliminate human rabies in the Philippines and to declare the country rabies-free by the year 2020. As of 2010, there are five areas declared as rabies-free (Siquijor, Batanes, Camotes Island, Apo Island and Malapascua Island) (Department of Health, 1980-2010).

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOAL: To eliminate rabies and declare the Philippines Rabies-free by 2020.
(Rabies is eliminated as a public health problem at less than 0.5 cases per million population)

Strategic Objectives	Indicator	Data Source	Latest Baseline	2016 Targets
Number of deaths due to rabies is reduced	Mortality rate from rabies per 1,000,000 population	NSO	2.8 (2008)	Less than 1 .5
PEP completion rate among cases is increased	% Post-Exposure Prophylaxis (PEP) completion	DOH -Program report - PEP registry	<70 (2008)	90
RIG coverage is increased	% Rabies Immunoglobulin (RIG) coverage	DOH -Program report - PEP registry	25 (2008)	40
Percentage of animal bite victims that practice washing of bite sites with soap and water is increased	% Bite victims who washed the bite site with soap and water	DOH -Program report - PEP registry	37 (2008)	90
Number of rabies-free areas is increased	Number of rabies-free areas	DOH Program report	5 (2010)	10

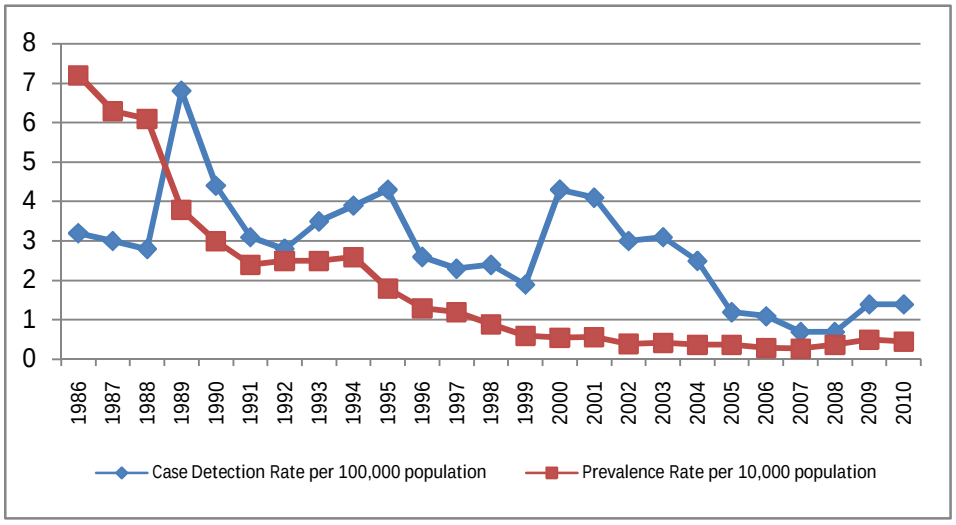
STRATEGIES FOR 2011-2016

- Ensure rabies exposed patients have access to Post-Exposure Prophylaxis (PEP)
- Ensure rabies exposed patients receiving PEP complete the recommended PEP regimen
- Intensify social and behavioral change communication campaign on Responsible Pet Ownership (RPO) and on the immediate and proper management of animal bites.
- Collaborate with all stakeholders to improve dog vaccination coverage

5.2.1.2.2. Leprosy

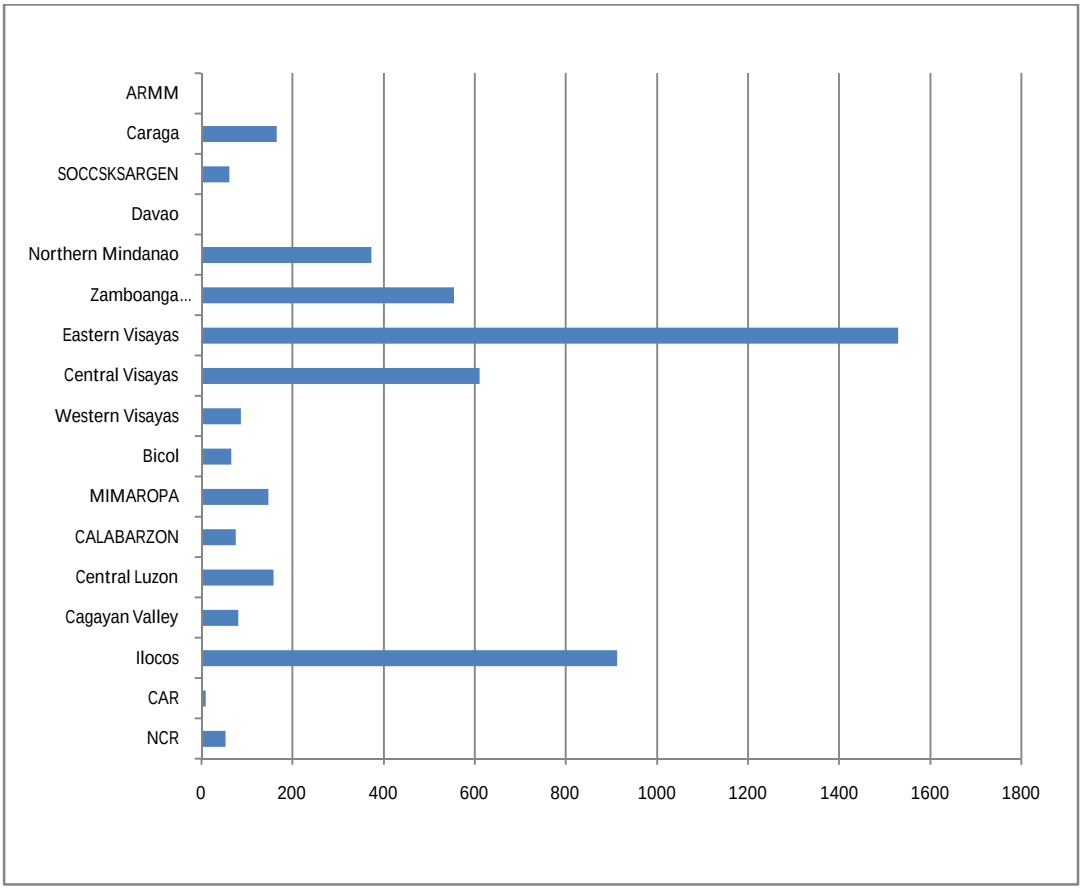
Since 1998, the national prevalence rate of leprosy has consistently been less than one per 10,000 population. However, the Philippines has the highest prevalence of leprosy among the countries in the Western Pacific Region. In 2010, the prevalence rate of leprosy is 0.46 percent (4,737 total cases), higher than the rate in 2008 (Department of Health, 2008) (see **Figure 34**). Less than 2 percent of the cases have Grade 2 deformities (Department of Health, 2008). The number of new cases have been fluctuating within the last 5 years, with a decline in 2007 but increasing in 2009 and 2010. The regions with the highest prevalence of leprosy are Eastern Visayas, Ilocos, Zamboanga Peninsula, Central Visayas and Northern Mindanao (see **Figure 35**).

FIGURE 34. TRENDS IN PREVALENCE AND CASE DETECTION RATE OF LEPROSY, PHILIPPINES, 1986-2010



Source: CDR source is DOH; prevalence rate computed from FHSIS and WHO WER

FIGURE 35. LEPROSY CASES BY REGION PHILIPPINES, 2010



Source: Field Health Service Information System, 2010

Leprosy brings about several problems – lowered quality of life and psycho-socio-economic burdens to the patient, the family and the community. These are compounded by social stigma, discrimination and human rights issues. In effect, finding of new cases becomes more difficult, thereby hindering utilization of free Multiple Drug Therapy (MDT) in the Rural Health Units. Spreading awareness about the disease and treatment is the next challenge for the Leprosy Program in order to eliminate leprosy as a public health problem in endemic areas and to achieve the goal of a "leprosy-free" country. The main goal of the program is to sustain the low prevalence status, to develop strategies for early detection at the subnational level, to treat current cases to prevent further disability, to screen contacts to reduce stigma and discrimination, and to help restore dignity to those affected.

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOAL: Leprosy is eliminated as a public health problem in endemic areas

(Leprosy is eliminated as a public health problem at a level of one case per 10,000 population)

Strategic Objective	Indicator	Data Source	Latest Baseline	2016 Targets
Leprosy in endemic areas is eliminated	% Prevalence rate of leprosy	DOH Program report	0.35 (2008)	<0.35
	Number of endemic provinces	DOH-FHSIS	2008 data: Province – 5; City – 4; Municipality – 6;	7 endemic areas
	% Case detection rate	DOH Program report	2.47 (2008)	1.8
	% Treatment completion	DOH Program report	85 (2008)	90

STRATEGIES FOR 2011-2016

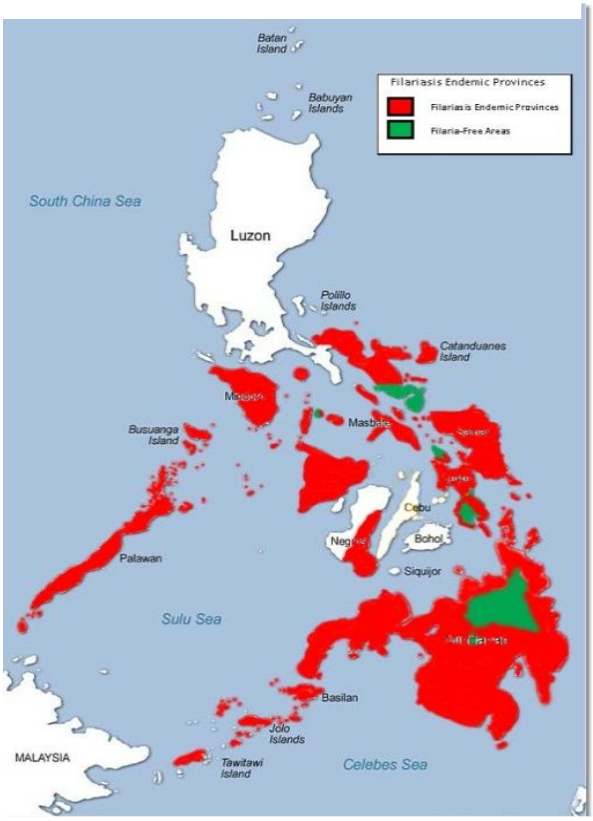
- Ensure the availability of adequate anti-leprosy drugs or multiple drug therapy (MDT) nationwide through the DOH as these are not available in the market.
- Prevent and reduce disabilities from leprosy through Rehabilitation and Prevention of Impairments and Disabilities (RPOID). This entails capability building of health workers in quality diagnosis and case management of leprosy cases, including the prevention and management of impairments and disabilities.
- Improve case detection and post-elimination surveillance system using the WHO protocol in all LGUs targeted for leprosy elimination and in areas where elimination (less than one case per 10,000 population) has been achieved. This will ensure timely reporting and recording of leprosy cases as well as quality monitoring and evaluation at all levels.
- Integrate leprosy control in other health services at the local level especially in endemic areas.
- Strengthen collaboration with partners and other stakeholders in the provision of services and for social mobilization and advocacy activities for leprosy.

5.2.1.2.3. Filariasis

Lymphatic Filariasis (LF) puts at risk more than a billion people in 83 countries and affects more than 120 million people globally, with over one-third becoming severely disfigured and disabled. In the Philippines, 43 out of 80 provinces are endemic for the disease, with over 28 million people living in these areas (Department of Health, 1980-2010). Majority of those affected are the marginalized groups living in remote, rural, and oftentimes inaccessible areas. The endemic provinces are classified and are identified based on the elimination level set by the WHO, which are: a microfilaria rate (MFR) of less than 1 percent; and an antigen rate of less than 1 percent per Implementing Unit (IU).

FIGURE 36. FILARIA ENDEMIC PROVINCES, PHILIPPINES, 2010

Filarial-Free Areas, Philippines, 2010



Source: National Center for Disease Prevention and Control, DOH, 2010

The use of mass drug administration (MDA) in eliminating the disease has so far been effective in some provinces such as Southern Leyte, Sorsogon, Biliran, Bukidnon, Romblon, Agusan del Sur and Dinagat Island. The success in these areas is mainly due to the collaboration of health professionals, community health workers, local government units, and other sectors who worked together to implement the program. However, majority of the endemic provinces still have not reached the target MDA coverage rate of 85 percent, with most only achieving a coverage rate of 60 percent (Department of Health, 1980-2010). This is mainly due to the lack of awareness and understanding about LF and its elimination.

Filariasis was a neglected disease in the past. But, with the global call for eliminating filariasis as a public health problem, the DOH heeded and responded. The primary goal of the National Filariasis Elimination Program (NFEP) is for LF to be eliminated as a public health problem by 2015. This is considered to be accomplished when the prevalence rate of microfilaremia is less than 1 percent. Similarly, the program aims to control and reduce the morbidity by alleviating the sufferings and disability caused by the disease's clinical manifestations.

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOAL: Elimination of filariasis as a public health problem through a comprehensive approach and universal access to quality health services

Strategic Objectives	Indicator	Data Source	Latest Baseline	2016 Targets
Filariasis in endemic areas is eliminated	Number of provinces that have reached elimination level	DOH Program report	7 (2010)	12
	% Mass Drug administration Coverage (MDA Coverage)	DOH Program report	70 (2009)	85
Disability management and prevention for patients with chronic complications is implemented	Number of LF patients with chronic complications provided with disability management	DOH Program report	To be determined	All validated LF patients provided disability management

STRATEGIES FOR 2011-2016

- Strengthen surveillance system to quickly identify other endemic areas and sustain elimination status of provinces/cities that have reached elimination level
- Sustain coverage of MDA in all established endemic provinces/cities to at least 85 percent
- Ensure provision of quality services to include MDA drugs
- Integrate training on disability prevention with leprosy
- Strengthen program performance by empowering LGUs for a community-based implementation
- Implement Integrated Vector Management

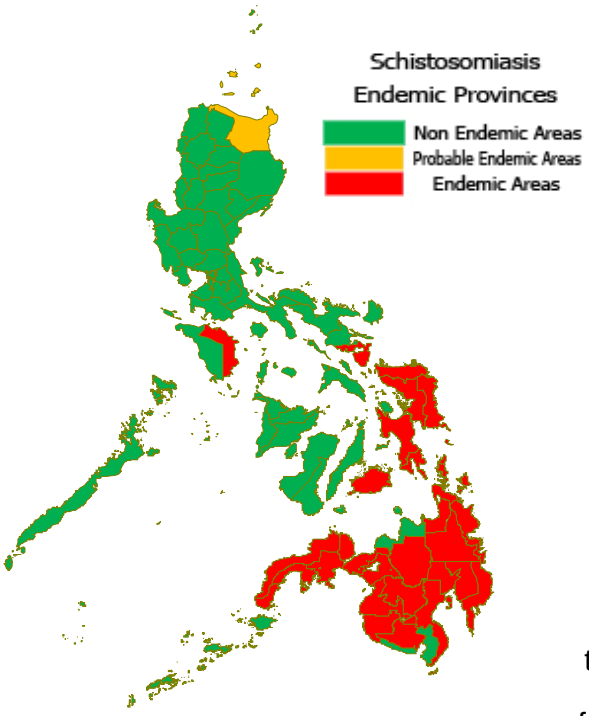
5.2.1.2.4. Schistosomiasis

Schistosomiasis remains to be a public health burden in endemic provinces in the Philippines. Worldwide, an estimated 207 million people living in 74 countries are infected by *Schistosoma spp*., about 120 million of whom are symptomatic. It causes severe disability to about 20 million people and an estimated 280,000 deaths each year (L. Chitsulo, 2000). *S. japonicum*is known to be endemic in China, Indonesia, and the Philippines (L. Chitsulo, 2000).

In the Philippines, the 2008 National Prevalence Survey revealed a national prevalence of 2.5 percent (Department of Health, 2008). In 2008, the morbidity rate due to schistosomiasis, by passive surveillance, has risen to 10 percent from 6.6 percent of the previous year (Department of Health, 2008). The survey also shows that more males than females are affected with a male to female ratio of 1.7 and a prevalence rate peaking at 15 to 49 years of age (Department of Health, 2008). Distribution of schistosomiasis is influenced by the presence of the snail intermediate host, environmental sanitation, access to safe water,

health services, and local infrastructure – factors often associated with poverty (Huang & Manderson, 2005). Similarly, the source of livelihood affects the disease distribution.

FIGURE 37. SCHISTOSOMIASIS ENDEMIC PROVINCES, PHILIPPINES, 2010



Source: Department of Health 2010

Schistosomiasis is endemic in twelve (12) regions covering 28 provinces, 190 municipalities and 20 cities as shown in **Figure 37** (Department of Health, 1980-2010). Two additional municipalities: Gonzaga, Cagayan (Region 2) and Calatrava, Negros Occidental (Region 6) were recently identified as schistosomiasis endemic areas in 2004 and 2006, respectively, through identification of indigenous cases and infected *Oncomelania hupensis quadrasi* snail vector (Velasco, et al., 2005) (Department of Health, 2007).

In high to moderate endemic provinces, the goal is to eliminate morbidity through mass chemotherapy of the exposed population (ages 5-65) to progressively reduce the prevalence of schistosomiasis to less than one percent. On the other hand, in areas within the elimination levels of below 1 percent, gains must be sustained through strengthened active surveillance of human and snail vectors, infection control (treatment of all cases found), transmission control (sanitation and hygiene along with improve access to health facilities, safe water supply, water sealed toilets, ordinances to control animal hosts), mass treatment of school children, and quality control of laboratory and laboratory staff.

NATIONAL OBJECTIVES 2011-2016

OVERALL GOAL: Schistosomiasis is eliminated as a public health problem in all endemic provinces (Schistosomiasis is considered eliminated as a public health problem if the prevalence rate is reduced to less than 1 percent for at least five consecutive years)

Strategic Objective	Indicator	Data Source	Latest Baseline	2016 Targets
Schistosomiasis in endemic areas is eliminated	% Prevalence rate of schistosomiasis	Special Survey	2.5 (2008)	<2.5
	Number of provinces that have reached elimination level	DOH Program report	0 (2010)	5
Coverage of mass treatment is increased in endemic provinces	% Coverage in mass treatment of exposed population (5-65 years old)	DOH Program report	To be determined	85

STRATEGIES FOR 2011-2016

- Shift from control to elimination strategies. The progress of the schistosomiasis elimination program will be demand-driven and depends highly in the commitment of communities and local governments.
- Develop the capacity of local health personnel and stakeholders in the elimination of schistosomiasis and improve the implementation of schistosomiasis initiatives through building of networks and linkage with collaborating institutions and program partners.
- Ensure the availability of reliable information, financial support and logistics crucial to schistosomiasis elimination through collaboration with other national agencies and international donors.
- Secure presidential directives, local legislation and international support necessary to eliminate schistosomiasis from the country.
- Intensify surveillance of human cases and surveillance of snail vector through environmental mapping of areas with positive snail colonies. Conduct of rapid epidemiologic surveys in response to suspected cases in new areas.

5.2.1.3. Emerging and Re-emerging Infections

The surge of infectious diseases has remained over the years as one of the leading causes of death and disability worldwide. It continues to pose a major challenge to human progress and survival. Outbreaks of new and old infectious diseases sporadically emerge, magnifying the global burden of infections. Emerging infections are newly identified or drug-resistant infections whose incidence in humans has increased within the past two decades, or whose incidence or geographic range threatens to increase in the near future. Re-emerging infections are those that have resurged secondary to the reappearance of a (previously) known infectious disease.

In the past five years, the A(H1N1) virus was the only major emerging infection witnessed in the Philippines. Despite the high number of fatality and contact cases reported in other countries, the Philippines remained relatively swine flu-free. With a total of 5,212 A(H1N1) cases monitored in the country in 2009, the country's case fatality rate was 0.6 percent, remaining well below the global case fatality rate which was at 1.2 percent (Department of Health, Various years).

The Ebola Reston Virus emerged in pigs from the last quarter of 2008 until the first quarter of 2009 (Department of Health, Various years). Surveillance studies were carried out in Pangasinan and Bulacan, where most of the animal cases had been reported. Studies revealed that a number of people had been infected; however, none of them presented any signs of illness.

Cases of Meningococcimea and Japanese Encephalitis have also been reported in some areas. These infections have thus far remained endemic to certain areas and have not caused disease outbreaks. On the other hand, the country witnessed a leptospirosis epidemic outbreak after Typhoon Ondoy hit the Philippines on September 2009. Leptospirosis cases went up to 4,326 in two months after the typhoon, reaching an average of 65 cases of hospital admissions in a day until the end of November (Department of Health, Various years).

The inherent unpredictability of emerging and re-emerging infections creates a gap between planning and concrete action. The program's policies can only be implemented once a disease has been identified; even then, the program can only be proactive to the extent of preparedness. The rest of the time, the program remains reactive, able to devise an attack plan only when the disease has arrived.

As in most developed countries, infectious disease problems are related to changing lifestyles, technical advancements that lead to increased susceptibility to infectious disease agents, incomplete immunization programs resulting in changes in the age distribution of susceptible population, and emergence of new agents of disease. The program needs to monitor factors that contribute to the spread of diseases, such as human demographics and behavior, technology and industry, economic development and land use, international travel and commerce, microbial adaptation and change, breakdown of public measures, and human vulnerability.

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOAL: Emerging and re-emerging infections are reduced.

Strategic Objective	Indicator	Data Source	Latest Baseline	2016 Targets
Death or casualty from any emerging and re-emerging infections are prevented.	% Case fatality ratio	DOH surveillance report	Avian flu case fatality rate: 0 Influenza A(H1N1) case fatality rate: 0.6 (2009)	0

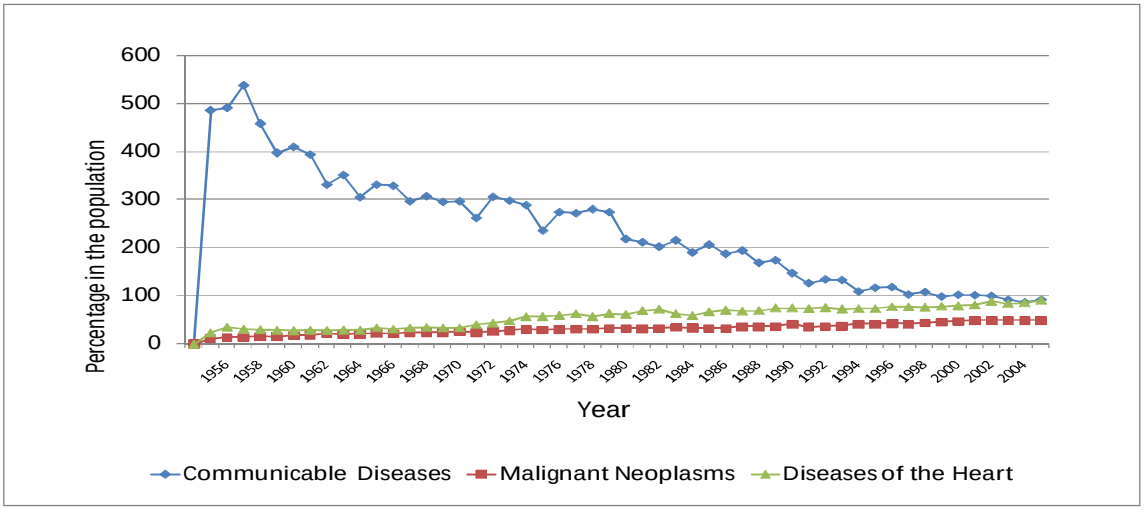
STRATEGIES FOR 2011-2016

- Isolate all cases of emerging and re-emerging infections
- Contact tracing and quarantine for any emerging and re-emerging infection are implemented
- Pre-emptive planning and organizing at national, regional, provincial, city or municipal levels to ensure preparedness for emerging infections with potential for causing high morbidity and mortality, with efforts to integrate prevention and control measures that are applicable for Avian flu, A(H1N1) and other emerging infections.
- Integrate surveillance of emerging infections with existing surveillance systems for other diseases.
- Train adequate health personnel of the national and local governments and other partner organizations for surveillance, response and management of diseases outbreaks.
- Secure adequate resources and develop systems to mobilize these efficiently when outbreak occurs.

5.2.2. PREVENTION AND CONTROL OF NON-COMMUNICABLE DISEASES

Infectious and pregnancy-related morbidities are still major health problems in the country. However, there is a noticeable epidemiologic shift from infectious to non-communicable diseases (NCDs) over the years (see **Figure 38**). NCDs are a broad classification of medical conditions which are non-infectious in nature. In general, they have relatively slow and long prognosis compared to infectious diseases.

FIGURE 38. MORTALITY TRENDS OF COMMUNICABLE DISEASES, MALIGNANT NEOPLASM AND DISEASES OF THE HEART: NUMBER & RATE/100,000 POPULATION, PHILIPPINES, 1955-2005



Source: Philippine Health Statistics, 2005

In 2005, seven of the ten leading causes of death were non-communicable in etiology. The death rates from malignant neoplasm and diseases of the heart have continued to increase through the years while the cumulative death rate from infectious causes has been decreasing over time (Department of Health, Various years). The continuous dominance of NCDs as the leading cause of death is expected to continue in the next few years.

5.2.2.1. Lifestyle-related diseases

The surge of chronic lifestyle-related non-communicable diseases (LRNCD) in the Philippines is no longer a looming epidemic but a real one. In fact, 90 percent of adult Filipinos have at least one or more risk factors for cardiovascular diseases, chronic respiratory diseases, diabetes mellitus, and cancers (Food and Nutrition Research Institute).

While the Philippines continue to suffer the double burden of communicable and non-communicable diseases, the number of deaths and disabilities due to LRNCDs are far greater than those due to infectious and parasitic diseases. In 2005, 49.9 percent of total deaths were caused by LRNCDs, with diseases of the heart and vascular system constituting almost one-third (30.8 percent) of all deaths across the nation (Department of Health, 2005). Unless an integrated and comprehensive response is established in local communities, LRNCDs will persist as a major burden to the country's public health.

LRNCDs are linked by common risk factors. These risk factors include tobacco use, unhealthy diet, physical inactivity, and alcohol use. The close association among risk factors provides the Department of Health an opportunity to prevent LRNCDs through interventions against these modifiable behavioral risk factors. Recent evidence supports that the prevention of these risk factors is the most cost-effective way of controlling these diseases. A successful public health program aimed at the elimination of these risk factors is presumed to decrease the prevalence of heart disease, stroke, and type-2 diabetes by 80 percent and prevent over 40 percent of cancer cases across the nation (Department of Health, 2009).

The causes of NCDs are multi-factorial in nature. However, majority of NCDs have malleable risk factors that are highly related to lifestyle. Diet interventions among adults are advocated primarily for the control of cardiovascular diseases and diabetes mellitus. Obesity prevalence among the different age groups is on the rise as shown in **Table 22**. Obesity among adults aged 40 to 59 years old and older persons aged 60 years old and above is 6.6 percent and 5.2 percent respectively (Food and Nutrition Research Institute, 2008).

TABLE 22. COMPARATIVE DATA ON OBESITY AMONG DIFFERENT AGE GROUPS, PHILIPPINES, 2008

Age Groups	Nutritional Status (% Obese)
Children 0-5 years old	2.0
Children 6-10 years old	1.6
Adolescents 11-19 years old	4.6
Adult 20-39 years old	4.5
Adult 40-59 years old	6.6
Older persons 60 years old and over	5.2

Source: National Nutrition Survey, FNRI, 2008

The National Nutrition Survey of 2008, as shown in **Table 23,** revealed that the mean total cholesterol of Filipino adults is still within normal levels but has increased from 159.2mg/dl in 1998 to 186.8mg/dl. The proportion of adults with high cholesterol level (over 240mg/dl) increased from 4 percent in 1998 to 10.2 percent in 2008 (Food and Nutrition Research Institute, 2008). The percentage of adults with high triglycerides level (≥400mg/dl) increased drastically from 0.8 percent in 1998 to 14.6 percent in 2008 (Food and Nutrition Research Institute, 2008). The mean fasting blood sugar (glucose) or FBS level of Filipinos slightly increased from 87.9mg/dl in 1998 to 88.1mg/dl in 2008 (Food and Nutrition Research Institute, 2008). Adults with high FBS level of more than 125mg/dl increased from 3.9 percent in 1998 to 4.8 percent in 2008 (Food and Nutrition Research Institute, 2008).

TABLE 23. PREVALENCE OF NUTRITIONAL RISKS AND BLOOD EXAMINATION PARAMETERS RELATED TO DEGENERATIVE DISEASES, PHILIPPINES, 2008

Nutritional Risk Blood Examination Parameters	1998	2003	2008
High Total Cholesterol	4.0	8.5	10.2
High LDL Cholesterol	2.0	11.7	11.8
Low HDL Cholesterol	65.4	54.2	64.1
High and Very High Triglycerides	0.8	0.7	14.6
High Fasting Blood Sugar Levels	3.9	3.4	4.8

Source: National Nutrition Survey, FNRI, 1998, 2003 and 2008

The intake of vegetable per capita per day has slightly decreased from 111 g/day in 1987 to 110 in 2008 (Food and Nutrition Research Institute, 2008) (see **Table 24**). However, the consumption of fruits has decreased drastically from 107 g/day in 1987 to only 54 g/day in 2008 (Food and Nutrition Research Institute, 2008). This means that the information and education campaigns have not resulted to improvements in the consumption of vegetables and fruits through the years. Tobacco smoking and alcohol intake shall be discussed more thoroughly under the section on substance abuse.

TABLE 24. PER CAPITA VEGETABLES AND FRUITS INTAKE PER DAY, PHILIPPINES, 1987, 1998 AND 2003

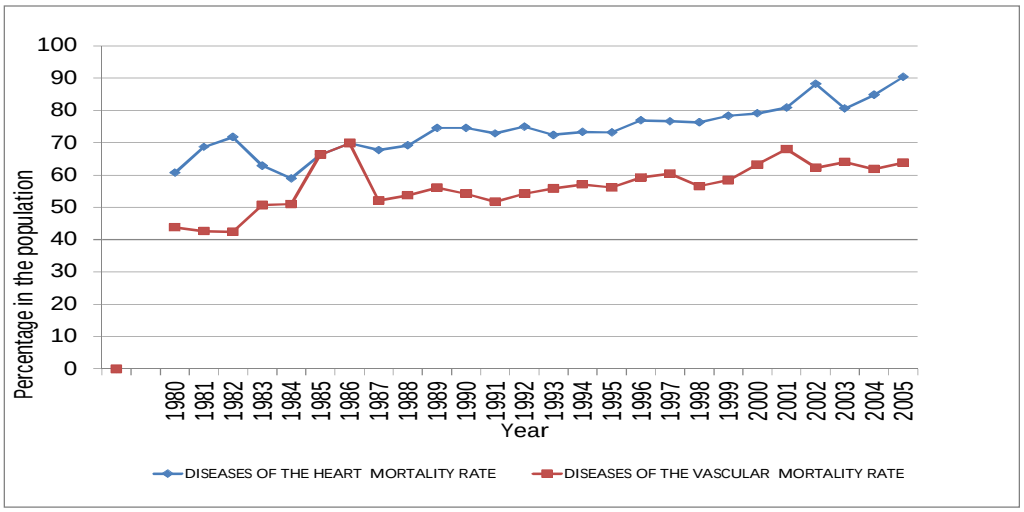
Food Taken	1987	1998	2003	2008
Vegetable (g/per day)	111	106	111	110
Fruits (g/per day)	107	77	54	54

Source: National Nutrition Surveys, FNRI, 1987, 1998 and 2003

5.2.2.1.1. Heart Disease and Diseases of the Cardiovascular System

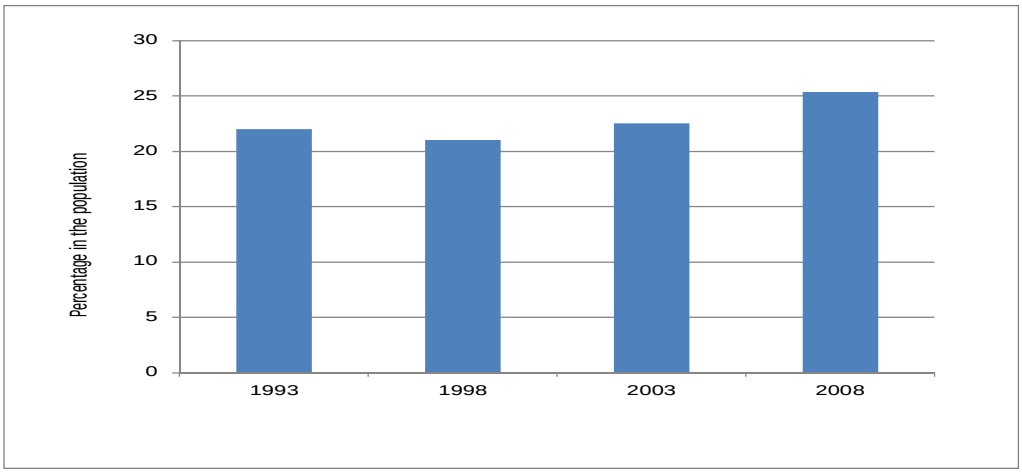
The mortality rate from Heart Disease and Diseases of the Vascular System has been increasing through the years as shown in **Figure 39** with mortality rates in 2005 reaching 90.4 and 63.8 deaths per 100,000 population respectively (National Statistics Office, 2008). In the span of 10 years, the prevalence of hypertension has increased 20 percent from its rate in 1998 (National Statistics Office, 2008) (see **Figure 40**).

FIGURE 39. TRENDS IN HEART DISEASE AND DISEASES OF THE VASCULAR SYSTEM MORTALITY, PHILIPPINES, 1980-2005



Source: Philippine Health Statistics, 1985 to 2005

FIGURE 40. TRENDS IN THE PREVALENCE OF HYPERTENSION, PHILIPPINES, 1993-2008



Source: National Nutrition Survey, 2008

5.2.2.1.2. *Diabetes Mellitus*

In 2008, the prevalence of diabetes mellitus among adults, as indicated by the high fasting blood sugar, has increased 23 percent since 1998 (Food and Nutrition Research Institute, 2008) (**Table 25**).

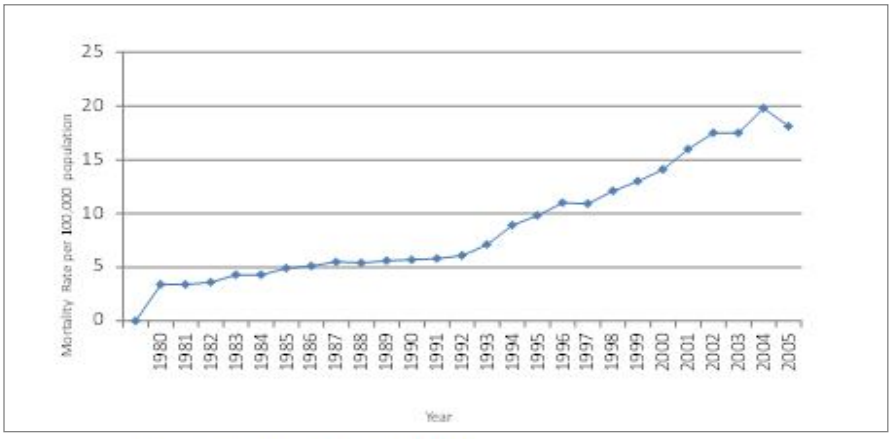
TABLE 25. PREVALENCE OF HIGH FASTING BLOOD SUGAR (FBS) AMONG ADULTS, PHILIPPINES, 1993, 2003 AND 2008

Year	% Prevalence of High Fasting Blood Sugar
1998	3.9
2003	3.4
2008	4.8

Source: National Nutrition Survey, FNRI, 1998 2003 and 2008

Figure 41 shows the mortality rate from DM increased significantly. From 9.8 deaths per 100,000 population in 1995, it almost doubled to 18.1 deaths per 100,000 population in 2005 (Department of Health, Various years). The prevention and control of the different risk factors in the development of this disease should be intensified and persons with a family history of diabetes mellitus should undergo lifestyle modification.

FIGURE 41.TRENDS IN DIABETES MELLITUS MORTALITY PER 100,000 POPULATION, PHILIPPINES, 1980-2005

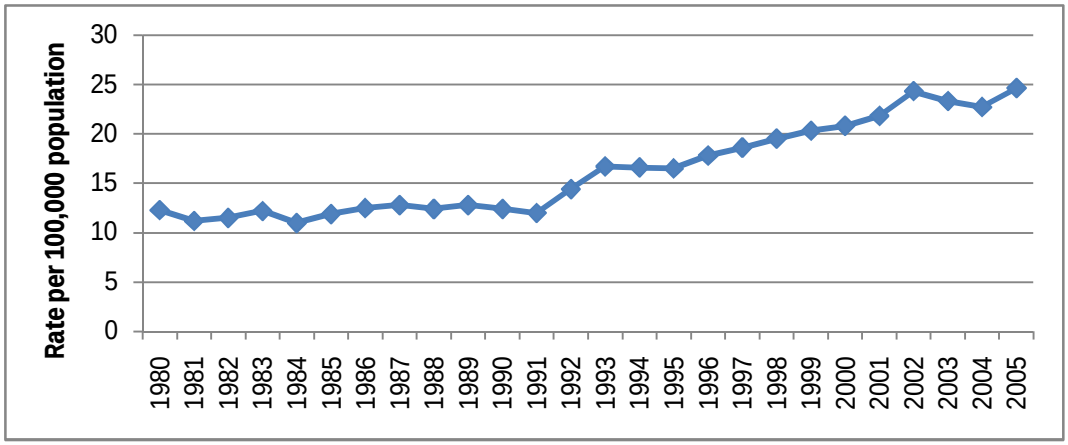


Source: Philippine Health Statistics, DOH, 1980-2005

5.2.2.1.3. Chronic Obstructive Pulmonary Diseases (COPD)

The mortality trend for COPD has slowly increased from 12.3 deaths per 100,000 population in 1980 to 24.6 deaths per 100,000 in 2005 (Department of Health, Various years) (see **Figure 42**). It is one of the diseases related to tobacco use. This may continue to increase if the risk factors for this disease remain unabated.

FIGURE 42. TREND IN COPD MORTALITY, PHILIPPINES, 1980-2005



Source: Philippine Health Statistics, DOH, 2005

5.2.2.1.4. Malignant Neoplasm

Many different types of cancers have been identified. In 2005, the most common sites of reported deaths from cancer in the Philippines are: trachea, bronchus and lung (8.5 deaths per 100,000 population); breast (5.3 per 100,000); and colon (3.1 per 100,000) (Department of Health, 2005) (see **Table 26**). Among males, the leading sites are the lungs, prostate, colorectal area and liver. Among females, the leading sites are the breast, uterus, cervix and lungs. Among children, the leading cancers are the leukemias and lymphomas.

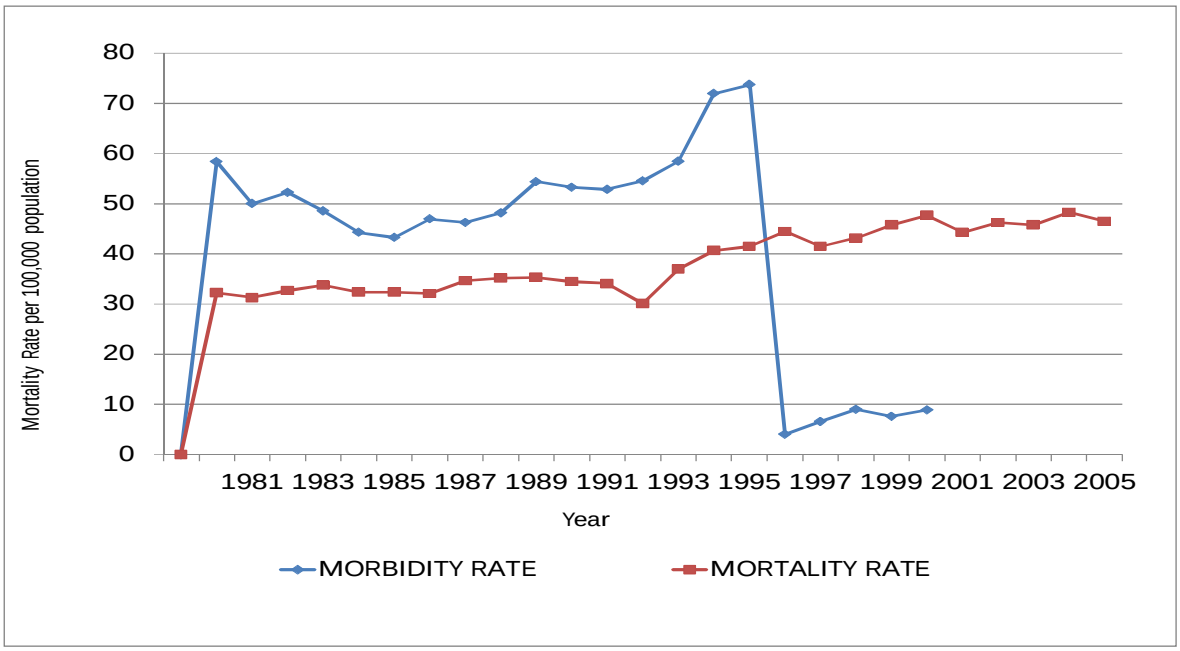
TABLE 26. MORTALITY RATES OF LEADING CANCER SITES, PHILIPPINES, 2005

RANK	SITE OF MALIGNANT NEOPLASM	MORTALITY RATE* (PER 100,000 POPULATION)
1	Lung, trachea and bronchus	8.5
2	Breast	5.3
3	Colon	3.1
4	Leukemia	2.8
5	Lip, oral cavity and pharynx	2.4
6	Prostate	2.1
7	Stomach	1.7
8	Uterus	1.5
9	Lymphatic tissue	1.3
	Cervix uteri	1.3
10	Malignant neoplasm of other female genital organs	1.2

Source: *computed based on data from Philippine Health Statistics, DOH, 2005

The reported cases of malignant neoplasms have been increasing up to 1995 but an abrupt decrease in the number of cases was noted in 1996 due to a change in the system of reporting (**Figure 43**). Malignancies were removed among the notifiable diseases in the Field Health Service Information System (FHSIS) in 2001. The morbidity rates have remained underreported thereafter. On the other hand, the trend for reported deaths from all kinds of malignant neoplasms has been increasing over the years, reaching 46.5 per 100,000 in the year 2005 (Department of Health, Various years).

FIGURE 43. TRENDS IN CANCER MORBIDITY AND MORTALITY, PHILIPPINES, 1980-2005



Source: Philippine Health Statistics, DOH, 2005

The Integrated Non-communicable Lifestyle-related Disease Prevention and Control Program envisions to improve the quality of life for all Filipinos by ensuring that LRNCD quality prevention and control services are accessible to all Filipinos, especially to the vulnerable and at-risk population. The objectives of the program are: to reduce the exposure of population to risks related to LRNCDs; and to increase the proportion of LRNCD cases given appropriate treatment and care. This will eventually lead to the reduction of morbidity and mortality from lifestyle-related diseases and the improvement of the quality of life of those who are suffering from such diseases.

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOAL: Morbidity and mortality from lifestyle-related diseases are reduced and the quality of life of those who are suffering from such diseases is improved.

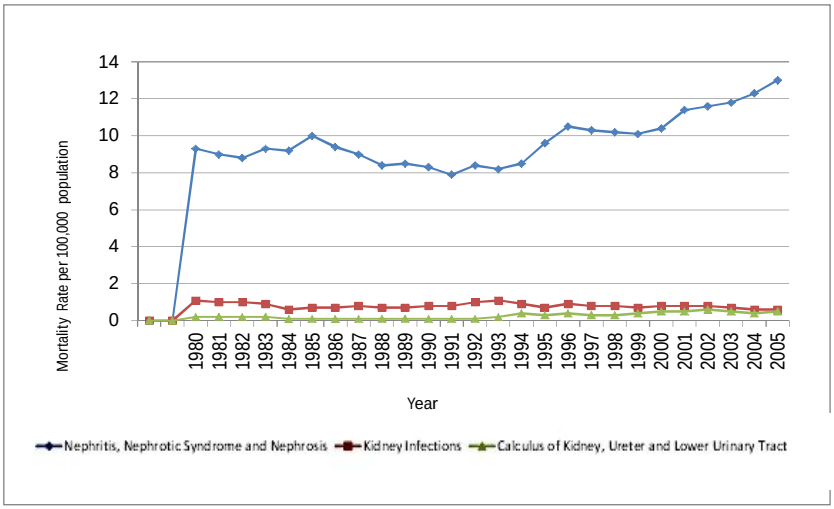
Strategic Objective	Indicator	Data Source	Latest Baseline	2016 Targets
Mortality from degenerative or lifestyle-related diseases is reduced.	Mortality rate from heart diseases per 100,000 population	NSO-PSY	84.8 (2008)	75*
	Mortality rate from vascular diseases per 100,000 population	NSO-PSY	61.8 (2008)	55*
	Mortality rate from diabetes mellitus per 100,000 population	DOH-PHS	21.6 (2005)	19*
	Mortality rate from COPD per 100,000 population	DOH-PHS	24.6 (2005)	22*
	Mortality rate from all forms of malignant neoplasm per 100,000 population	DOH-PHS	48.9 (2005)	43*
Morbidity from diseases of the heart and vascular system is reduced.	% Prevalence rate of raised blood pressure	FNRI-NNS	25.3 (2008)	22*
	% Prevalence of diabetes mellitus	FNRI-NNS	4.8 (2008)	<4.8
Early detection and screening for degenerative or lifestyle-related diseases are increased.	% Women 18-65 years old who have one Pap smear or visual acetic acid screening at least every 3 years	DOH-NOH Midline Survey	8.8 (2010)	35
Risk factors associated with lifestyle-related diseases are reduced.	% Prevalence rate of adults with high fasting blood sugar	FNRI-NNS	4.8 (2008)	4.3 *
	% Prevalence rate of high total serum cholesterol among adults	FNRI-NNS	10.2 (2008)	9*
	% Percentage of overweight and obese among adults	FNRI-NNS	26.6 (2008)	23.5*
	Mean population intake of salt per day in grams	FNRI-NNS	3.3 (2008)	<3.3
	Mean one-day per capita fruits and vegetables intake in grams 1. Fruits 2. Vegetables	1. FNRI-NNS 2. WHO Report	1. 54g (2008) 2. 110g	400 grams of fruits and vegetables
	% Prevalence of adults with high physical inactivity	FNRI-NNS	60.5 (2008)	50.8

STRATEGIES FOR 2011-2016

- Implement sound, long-term and sustained Healthy Lifestyle promotion programs using community-based approaches, with DOH supplementing local campaigns with regular mass media campaigns and CHED improving medical and paramedical curricula in the area of healthy lifestyle and behavior modification.
  - Promote information, education and advocacy campaigns in the reduction of risk factors, early detection and management, and improvement in the quality of life of people with lifestyle-related diseases.
  - Expand the capacity of primary health care facilities on health promotion, screening, early diagnosis and early management of LRDs.
- Translate and implement provisions of the tobacco laws as local ordinances and develop community infrastructure supportive of healthy lifestyle (sports centers, green parks, smoking cessation clinics, etc.).
- Pursue training of clinicians and other frontline health care providers in health promotion, screening, early diagnosis, treatment, rehabilitation and palliative care.
- Support and implement financial risk protection measures for persons with lifestyle-related diseases by lowering the cost of essential drugs and provision of better social health insurance benefit packages.
- Other strategies:
  - Manage risk behaviors and risk factors by establishing more smoking cessation clinics, finding and treating more patients with rheumatic heart disease, providing more training opportunities for diet counseling and smoking cessation programs, and organizing and counseling for healthful physical activities.
  - Strengthen networking and collaboration among GOs, NGOs and various stakeholders to ensure sharing of technologies, resources and expertise and to maximize efforts towards the prevention and control of lifestyle-related diseases.

5.2.2.2. Diseases of the kidney and the urinary tract

FIGURE 44.TRENDS IN KIDNEY DISEASE MORTALITY, PHILIPPINES, 1980-2005



Mortality trends for diseases of the kidney and urinary tract are generally increasing (see **Figure 44**). Kidney diseases killed more than 11,000 Filipinos in 2005. It is the tenth most common cause of mortality in the country (Department of Health, 2005).

The mortality rate for nephritis, nephrotic syndrome and nephrosis in 2005 was 13 deaths per 100,000 population (Department of Health, 2005). Kidney infections and calculi at any portion of the urinary tract had mortality rates of 0.6 and 0.5 deaths per 100,000 population, respectively, during that same year (Department of Health, 2005).

Among the kidney diseases, the most dreaded outcome is end-stage renal disease (ESRD), which requires either lifetime dialysis or kidney transplant. Without any of the two, ESRD is fatal.

Both dialysis and kidney transplant cause significant morbidity and financial burden to the patient. Dialysis involves being hooked up to a machine for a few hours for most days of the week while kidney transplant involves immuno-suppression which makes the patient vulnerable to infections.

Despite this, the incidence and prevalence of ESRD continue to rise as reflected in the dialysis registry. The prevalence of dialysis patients with ESRD is now 10,052, of which 7,589 are new cases identified in 2008 (Department of Health, 2008). However, it is important to note that these figures are only those captured by the dialysis registry and does not include patients unable to seek medical attention to get the necessary treatment or to directly undergo a kidney transplant. The real extent of ESRD in the country is still unknown.

ESRD cases must be prevented especially when caused by preventable causes like diabetes mellitus and hypertension. The country must be knowledgeable of kidney diseases, their causes, signs and symptoms, and preventive measures.

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOAL: Morbidity and mortality from kidney diseases are reduced and the quality of life of those who are suffering from such diseases is improved.

Strategic Objective	Indicator	Data Source	Latest Baseline	2016 Targets
Deaths from kidney diseases are reduced	Mortality rate from kidney diseases per 100,000 population	DOH-PHS	13.0 (2005)	10
Incidence of ESRD is reduced	Incident cases per 100,000 population	Philippine Renal Disease Registry	8.39 (2008)	4

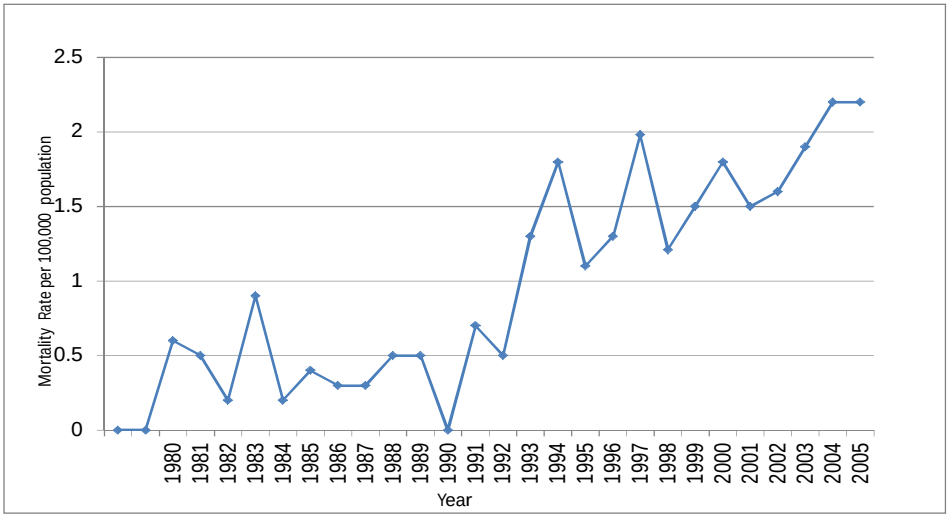
STRATEGIES FOR 2011-2016

- Integrate program on prevention of ESRD with the healthy lifestyle program of DOH
- Promote healthy lifestyle (promote physical activity and maintenance of normal body weight, prevent excesses in food, drinks and alcohol intake, and avoid smoking and substance abuse, etc.).
- Strengthen research and development and renal disease information system towards identifying high risk groups, preventable risk factors, effective preventive measures and behavioral influences for early detection and successful case management.
- Institute and campaign for better insurance benefit packages that are responsive to the needs of ESRD patients.
- Ensure collaboration and partnership among stakeholders in the prevention and control of kidney and urinary tract diseases and the promotion of quality of life and financial protection of persons with ESRD.
- Intensify and improve data collection on renal disease registry, compliance of medical practitioners and knowledge, attitude and practices (KAP) of the public regarding renal diseases

5.2.2.3. Mental Health and Mental Disorders

WHO estimates that 800,000 people commit suicide every year, 86 percent belonging in low- and middle-income countries. In the Philippines, there is an increasing trend of mortality rate from suicide and self-inflicted injuries which has reached a level of 2.2 deaths per 100,000 population in 2005 (Department of Health, 2005) (see **Figure 45**). Mental and behavioral disorders were identified to be part of the 17 Cause Groups of Mortality showing 1,061 affected individuals (males - 824; females - 237) with total deaths of around 0.2 percent of the population affected (Department of Health, 2005). A more recent report from WHO showed alarming percentages on mortality from neuropsychiatric disorders affecting more females than males.

FIGURE 45. TRENDS IN MORTALITY RATE FROM SUICIDE AND SELF-INFLICTED INJURIES, PHILIPPINES, 1980-2005



Source: Philippine Health Statistics, DOH, 2005

There is no existing system for reporting mental health cases in the country and epidemiological studies are fragmented and there is lack of updated data when it comes to mental health. In the year 2000, NSO reported that mental illness is the third most common form of disability after visual and hearing impairments (National Statistics Office, 2000). It was documented from the same survey that the prevalence rate of mental illness in the Philippines was at 88 cases per 100,000 population (National Statistics Office, 2000).

In 2004, data revealed that 0.7 percent of total households have a family member with mental disability (DOH-SWS, 2004), while a 2006 study conducted by the DOH that was limited to government employees revealed that 32 percent of respondents (n=327) have experienced a mental health problem in their lifetime (Department of Health, 2006). Among the most prevalent diagnoses were specific phobias (15 percent), alcohol abuse (10 percent), and depression (6 percent). Males were most likely to have substance-related problems than females. The DOH study concluded that mental health problems were significantly

associated with the following factors: ages 20-29 years, big families, and low educational attainment. Data from the 2006 study showed that the overall prevalence of mental health problems in National Capital Region was 32 percent, with a co-morbidity rate of 12 percent for other mental disorders (Department of Health, 2006).

Among patients diagnosed and treated, schizophrenia was the most frequent diagnosis, followed by mood disorders. On the other hand, outpatient facilities received more patients with diagnoses of substance abuse and neurotic disorders.

The economic burden of mental health is seen in the costs handled by the household. As mental illness becomes chronic, more losses in terms of economic opportunities are experienced. Government expenditure directed to mental health is 5 percent, majority (95 percent) of which goes to operations, mental hospital maintenance and personnel salary (Department of Health, 1980-2010). The Philippine Health Insurance Corporation recently covered mental disorders but restricted this only to patients with severe mental disorders confined over a short duration. At this time, there are no data to say that mental disorders are also covered by health maintenance organizations.

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOAL: Mental health is promoted in the general population, the risks and prevalence of mental disorders are reduced, and the quality of life of those who are suffering from such conditions is improved.

Strategic Objective	Indicator	Data Source	Latest Baseline	2016 Targets
Prevalence of mental illness is reduced	Prevalence of mental disorders per 100,000 population	NSO-PSY	88 (2000)	< 88
	% Households with family member having any form of mental disorder	SWS and DOH Study	0.7 (2004)	< 0.7
Mortality from suicide and intentional self-harm is reduced	Mortality rate from suicide and intentional self-harm per 100,000 population	DOH-PHS	5.58 (2005)	2.5

STRATEGIES FOR 2011-2016

- Intensify health promotion and advocacy to include the conduct nationwide awareness on mental health, mental disorder (e.g. depression and suicide) prevention and control through schools, community and government offices
- Build capacity of health workers in community diagnosis on mental health (knowledge, attitude and practices) and its risk factors, early identification, management of new cases/relapse cases and proper referral system.
- Expand the provision of mental health services through public-private partnership

- Develop policy and legislation for the enhancement of mental health program
- Encourage research culture and capacity development on mental health
- Establish database and information system and improvement of the Monitoring and evaluation system for mental health
- Develop model programs for mental health
- Develop/ upgrade health facilities for mental health

5.2.2.4. Substance Abuse

The abuse of tobacco and alcohol is included among the predisposing factors for the development of non-communicable or lifestyle related diseases. The abuse of addictive substances such as "*shabu*" (Methampetamine hydrochloride) is also directly linked towards the development of mental illness and disorders. Alcohol and drug abuse are often linked in the perpetration of petty and heinous crimes among individuals and the disruption of peace and order in the communities in general.

5.2.2.4.1. Alcoholism

Filipinos consume approximately 4 liters of pure alcohol per head. The trend of the recorded adult per capita consumption (age 15 and above) in the Philippines generally continued to increase from 1961 (≈0.75 liters of pure alcohol) to 2004 (3.75 liters of pure alcohol). The latest figures, however, masks higher figures in 1996 (6.77 liters) and in 2003 (4.8 liters) (World Drink Report in WHO Global Status Report on Alcohol, 2004).

The 2010 Midline Survey for the National Objectives of Health showed that one-third of all household members are alcohol beverage drinkers. The highest prevalence of alcohol intake was seen among adults (42.8 percent), followed by adolescents (31.3 percent), the elderly (27.2 percent) and children (14.1 percent) (Department of Health, 2009) (see **Table 27**).

Compared to the 2000 data, the prevalence of alcohol intake among adolescents remained the same; decreased slightly for adults and increased slightly for the elderly. However, children that are alcohol drinkers have increased significantly.

TABLE 27. PREVALENCE OF ALCOHOL BEVERAGE DRINKERS IN PERCENT, PHILIPPINES, 2000 AND 2010

Age Group	2000	2010
Adolescents	30	31.3
Adults	46	42.8
Elderly	22	27.2
Children	-	14.1

Source: BOS-NOH, 2000, and NOH 2005-2010 Midline Survey, DOH, 2008

Many Filipinos who suffer from alcohol dependence and abuse do not consider it as a medical problem; hence, they refuse to seek treatment even if their condition is chronic. Alcohol rehabilitation centers have lower admission rates in contrast to institutions treating drug dependency. It is for this reason that most cases go undocumented, and trends are not established. Despite the lack of data and statistics, the burden brought about by alcoholism in homes and communities is apparent and has been a growing concern of this country.

The primary goal for the following years is to reduce the harmful use of alcohol and its health-related effects. This is a realistic goal that takes into consideration that social drinking is entrenched in our culture and cannot simply be eliminated. The goal is to address the root causes of the problem: increased consumption beyond moderate levels and particular patterns that beget the adverse effects of alcohol use.

5.2.2.4.2. ***Tobacco smoking***

The Philippines is the top smoking country in the South East Asia and is one of the countries with the cheapest cigarettes in the world. On average, a Filipino smoker consumes 1,073 sticks annually (World Cigarettes 1: The 2007 Report). Each year, 87,600 Filipinos die from smoking-related diseases. The Tobacco and Poverty Study in the Philippines shows that about 6 to 8 percent of mortality is attributed to smoking-related diseases such as lung cancer, cerebro-vascular diseases, coronary artery diseases, and chronic obstructive pulmonary diseases (Baquilod, 2006). Annual productivity losses from premature deaths for the four smoking-related diseases are estimated at US $65.4 million to US $2.93 billion. The total cost of illness for the four smoking-related diseases is estimated at US $2.86 billion to US $6.05 billion (Baquilod, 2006).

The same study shows that, among the poor, tobacco receives the second highest allocation after food, a considerable 2.5 percent of total income. This is higher than the group's budget for clothing (2.3 percent), education (1.4 percent), and health (0.9 percent) (Baquilod, 2006). In the poorest households, tobacco expenditure is almost 16 times higher than the per capita monthly expense on health, eleven times higher than education, seven times higher than clothing, and twice higher than housing. Since 1995, the prevalence of tobacco use has been consistent at about 30 percent (National Statistics Office and Department of Health, 2009). To prevent this and decrease the overall ill effects of tobacco, the Philippine government has implemented policies on tobacco control.

The current focus of public attention on smoking is a public demand to push for amendments in tobacco legislation. One such amendment is the posting of graphic health warnings on cigarette packs. This increases overall public awareness of the ill effects of tobacco. Another is imposing a unitary tax measure to support the price increase of tobacco and discourage consumption. The program, with the help of

other offices in the DOH, also seeks to implement other amendments to RA 9211 and local tobacco-free and smoke-free ordinances in the provincial, municipal, and *barangay* levels.

5.2.2.4.3. Drug Abuse

The prevalence of drug abuse has increased from only 20,000 users in 1972 to about 3.4 million users in 1999 (1.8M regular users and 1.6M occasional users) (DDB Survey, 1999). This represents an increase of about 100 percent per annum. In 2001, the Social Weather Station Survey estimated that between 2.2 million and 9.3 million Filipinos are drug users (Social Weather Stations, 2001). In 2005, a survey by the Dangerous Drugs Board (DDB) showed an estimated 6.7 million drug users (Dangerous Drugs Board, 2005). The distribution of cases according to the types of illegal substances is summarized in **Table 28**. The problem of drug abuse continues to plague not only urban areas but also rural areas. The National Capital Region (NCR) remains as the area most affected by drug abuse, with 3,554 or 49.96 percent of the total admissions nationwide (Department of Health, 1980-2010). Region III and Region IV follow with 21.13 percent and 17.22 percent, respectively (Department of Health, 1980-2010).

TABLE 28. DISTRIBUTION OF REPORTED CASES OF DRUGS/SUBSTANCE ABUSE BY SEX AND TYPE OF DRUGS/SUBSTANCE OF ABUSE, PHILIPPINES, 2008 AND 2009

Drugs/Substance of Abuse	2008			2009		
	Male	Female	Total	Male	Female	Total
Shabu (Methampetamine Hydrochloride)	2,193	215	2,408	1,755	137	1,892
Marijuana (Cannabis sativa)	1,593	107	1,700	1,282	95	1,377
Cough/Colds preparation	43	-	43	22	3	25
Injectable	152	19	171	133	22	155
Inhalants	299	16	315	277	14	291

Source: Dangerous Drugs Board 2009, Philippine Statistical Yearbook, NSCB, 2010

Hand in hand with this increase in prevalence is a steady decline in admissions for treatment. The reported cases of new admission for drug/substance abuse in DTR centers by the Dangerous Drugs Board have been decreasing from 7,113 in 2003 to 2,013 in 2009 (Department of Health, 1980-2010).. The decreasing trend is also observed among cases of re-admission in the DTR centers at 1,076 cases in 2003 to 488 cases in 2009 (Department of Health, 1980-2010).

Based on the 4,278 cases admitted in different treatment and rehabilitation centers, both residential and out-patient facilities, male patients outnumbered female patients (9 males : 1 female), with a mean age of

28 years old. They are usually single (56.94 percent), unemployed (32.82 percent), have attained high school education (30.62 percent), and come from families with an average monthly family income of PhP 14,980.59. Among the substances the patients have used, the top three most common in 2008 were methamphetamine chloride (*shabu*), cannabis (marijuana), and contact cement (Department of Health, 1980-2010).

The battle cry of the DOH program campaign is "Drug Abuse is Preventable, Drug Addiction is Treatable". The program focuses on the establishment of services for drug treatment and intervention. The majority of the facilities for drug treatment and intervention concentrate on the residential/ in-patient rehabilitation of people dealing with substance abuse. The program aims to ensure one residential/in- patient rehabilitation center per region, one confirmatory drug-testing center per region, and one physician per municipality. The DOH continues to seek more proactive ways in addressing other substance-abuse problems, such as alcohol and nicotine.

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOAL: Prevalence of tobacco smoking, alcoholism and substance abuse and their health-related effects are further reduced.

Strategic Objective	Indicator	Data Source	Latest Baseline	2016 Targets
Prevalence of substance abuse is reduced	% Prevalence rate of dangerous drugs abuse among adolescents, adults, and older persons 1. Student: 2. Out-of-School Youth: 3. Adult employed: 4. Unemployed:	DDB-DILG Study	 10.9 9.97 48.4 30.76 (2008)	 9.36* 8.56* 25.72** 16.35**
	% Prevalence rate of current tobacco smoker 1. Adult population: 2. Adolescents aged 13-15 years: 3. Adult male: 4. Adult female:	GATS and GYTS	 28.3 (2009) 21.7 (2007) 47.7 (2009) 9 (2009)	 24* 12** 40* 7.9*
	% Prevalence rate of current alcohol intake 1. Children 6-11 years: 2. Adolescents: 3. Adult: 4. Elderly:	NOH Midline Survey	2010 data: 14.1 31.3 42.8 27.2	 8 25 36 21
To improve completion rate of treatment and rehabilitations centers nationwide.	% Drug Treatment and Rehabilitation (DTR) completion rate	TRC Reports	TBD	100%
	Number of readmission to DTR centers	DDB	488 (2009)	360

* Computed at 2.5 percent reduction annually
** Computed at 10 percent reduction annually

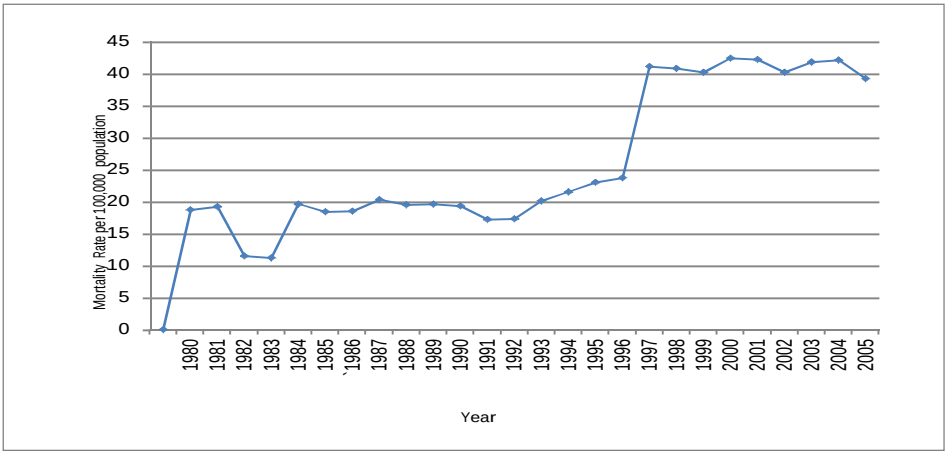
STRATEGIES FOR 2011-2016

- Develop a more responsive promotion, education and advocacy campaigns
- Promote and advocate for the full implementation of WHO-FCTC
- Enhance the enforcement of standards for human resources and facilities involved in providing services on addiction regulation by the Department
- Review and redirect policies on the implementation of intervention and treatment programs based on health-focused models
- Develop service packages that might be included as part of the NHIP
- Supervise and implement the rehabilitation and aftercare programs in all regions in the country
- Capacitate human resource in the conduct of interventions and treatment programs for drug dependents
- Continuously maintain and manage the information systems developed by the Department (Integrated Drug Testing Operations and Management of Information System or IDTOMIS) to provide updated information for policy development and program implementation
- Regularly monitor and evaluate program implementation

5.2.2.5. Accidents and Injuries

Accidents and injuries consistently remain as one of the leading causes of morbidity and mortality in the country. The mortality rate from accidents gradually increased (see **Figure 46**) from 18.7 deaths per 100,000 population in 1980 to 23 per 100,000 in 1996 (Department of Health, Various years). An abrupt increase was observed, reaching a level of 39.2 deaths per 100,000 population in 2005, almost double the mortality rate observed in 1996 (Department of Health, Various years).

FIGURE 46. TRENDS IN MORTALITY FROM ACCIDENTS AND INJURIES, PHILIPPINES, 1980-2005



Source: Philippine Health Statistics, DOH, 1980-2005

In the Philippines, 38 percent of all causes of deaths from accidents and injuries are due to assaults, followed by deaths from transport accidents at 20 percent as shown in **Table 29** (Department of Health, 2005). Other deaths from accidents and injuries are secondary to drowning, suicide, accidental falls, forces of nature, legal interventions, fire, and other undetermined causes (Department of Health, 2005).

TABLE 29. CAUSES OF ACCIDENTS AND INJURIES, PHILIPPINES, 2005

Kinds of Accidents and Injuries	Total Number of Deaths	Percentage from Total Accidents
Assaults	12,705	38.12
Transport accidents	6,770	20.31
Events of undetermined intent	4,029	12.09
Drowning and submersion	2,635	7.91
Intentional self-harm	1,861	5.58
Accidental falls	1,582	4.75
Others	3,745	11.24
Total	**33,327**	**100.00**

Source: Philippine Health Statistics, DOH, 2005

Despite the abrupt increase in the incidence of accidents and injuries from traffic accidents in recent years, the trend in case fatality rate is noted to be going down. This may be attributed to several factors like the enactment of Republic Act 8750 in 1999 requiring the mandatory use of seat belts among motorists and the improvement of capability of health facilities to respond to such cases.

The DOH shall continue to advocate for the necessary policy instruments (i.e., laws; executive orders; and ordinances to congress, other agencies, and LGUs). The Department shall also promote the execution of multi-disciplinary and multi-sectoral solutions and researches for purposes of developing national and local competence on injury prevention, health care services, and for other purposes that may be necessary. These approaches shall ensure sectoral and community-based interventions to propel actions on violence and injury prevention.

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOAL: Morbidity and mortality from accidents and injuries are reduced.

Strategic Objective	Indicator	Data Source	Latest Baseline	2016 Targets
Mortality rate due to accidents and injuries is reduced.	Mortality rate from accidents and injuries per 100,000 population	DOH-PHS	39.1 (2005)	34
	Morality rate from transport accident per 100,000	DOH-PHS	21.31 (2005)	17.5

STRATEGIES FOR 2011-2016

- Integrate all sources of data on violence and injuries from different departments to form a central database to serve as a basis for the development of appropriate prevention strategies and interventions
- Implement on a nationwide scale the National Electronic Injury Surveillance System to establish a common or standard set of injury related data that can be used for developing necessary guidelines towards minimizing violence and injuries

- Form inter-sectoral management committees that can closely coordinate and collaborate to harmonize efforts in violence and injury prevention
- Establish and expand initiatives to address violence and injuries through education, enforcement of existing policies, engineering, and economic incentives.

5.2.2.6. Blindness

Blindness comes in varying degrees. Legally blind pertains to people who, because of the severity of their error of refraction (near- or far-sightedness), are not able to function without the aid of prescription eyeglasses. Individuals who are totally blind, on the other hand, have lost the ability to completely see. Blindness may affect only one eye (monocular) or both eyes (bilateral). Causes of this disability include cataracts, glaucoma, age-related macular degeneration, diabetic retinopathy, trachoma, and eye conditions in children.

Globally, in 2004, about 314 million are visually impaired with 45 million considered to be blind. The leading causes of blindness worldwide are cataracts (39 percent), uncorrected refractive errors (18 percent), glaucoma (10 percent), age related macular degeneration (7 percent), with the rest accounted by corneal scars, diabetic retinopathy, trachoma and childhood blindness, onchocerciasis and others. Of the 45 million who are blind worldwide, up to 85 percent are avoidable by prevention, treatment or cure (Department of Health, 1980-2010).

Challenges, such as the lack of priority given to eye health, the lack of equipment and resources, inadequate public health facilities providing eye care services, and differences in approach among partner institutions, hinder the progress of the program. With increased PhilHealth coverage focused on population sectors needing better access, improved networking and collaboration efforts, and a more integrated health care system, these difficulties will hopefully be addressed. Blindness is an urgent public health problem and effects extend beyond the affected individual. The blind person and the caregiver, usually a family member, experience lost earnings, resulting to a twofold loss in economic productivity. Added to this are costs of treatment, special equipment, visual aids, and even premature death resulting from visual impairment (World Health Organization).

In addition to cataracts, error of refraction and childhood blindness were also found to be the leading causes of preventable blindness. Ageing, smoking, ultraviolet radiation, and diabetes are main risk factors for these conditions. Infants also have a greater chance of acquiring eye defects if they are born prematurely (retinopathy secondary to prematurity) or if their mothers suffered from diabetes during pregnancy (inborn cataract).

The Prevention of Blindness Program of the DOH aims to address these issues through collaboration and partnership with all stakeholders and the adoption of the WHO's Vision 2020 to increase cataract surgical rate, reduce visual impairment due to refractive errors and reduce the prevalence of visual disability in children. The program was established in November 2004 under Administrative Order 179. By identifying and managing eye conditions in the primary level of health care, blindness and its adverse results can be prevented. This program will decrease the morbidity of blindness, and keep the incidences and backlog of blind cases to a minimum.

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOAL: To reduce the prevalence of avoidable blindness in the Philippines through the provision of quality eye care

Strategic Objective	Indicator	Data Source	Latest Baseline	2016 Targets
Prevalence of visual disability in the general population is reduced	% Prevalence of visual impairment (national, all causes)	Special Survey	2.58	<2.58
Prevalence of visual disability in children is reduced	% Prevalence of visual disability in children < 20 years old	Special Survey	0.43 (2002)	0.20
Avoidable visual impairment due to cataract is reduced	% Visual impairment due to cataract	Special Survey	0.46	<0.46
Avoidable blindness due to error of refraction is reduced.	% Visual impairment due to uncorrected refractive errors	Special Survey	43.4 (estimate)	28

STRATEGIES FOR 2011-2016

- Detect potential blindness and cases early through the Community Health Teams and provide information on the prevention of blindness by authorized information provider.
- Treat and manage cases promptly
- Integrate care in the service delivery network to include the private and public sector, local and national organizations.
- Monitor and evaluate to include reporting of cases from the public and private sector.
- Advocate blindness prevention program. The local public health authorities taking responsibility for sustaining and improving interventions for the reduction of blindness using the public-private partnership (PPP) approach

5.3. HEALTH RISKS AND DISASTERS

5.3.1. OCCUPATIONAL HEALTH RISKS

There are approximately 35.5 million workers distributed among the major occupation groups (Department of Labor and Employment, 2009). Of these, less than 10 percent receive occupational safety and health protection and services (Department of Labor and Employment, 2009). With increasing economic activity, the trends of occupational diseases, injuries and accidents will likewise increase, yet very few will have access to appropriate health care for their occupation-related injuries or illnesses. Moreover, the victims of such incidents are likely the individuals who are the primary sources of income for their families. The additional cost and loss of working days becomes an added burden to individuals and the country as a whole.

According to a survey of non-agriculture-related occupational injuries, a total of 44,800 incidents occurred in 4,600 establishments that employed 20 or more workers. Two-thirds of these are in the manufacturing sector, followed by the wholesale and retail trade (8.1 percent), hotel and restaurants (7.4 percent), and financial intermediation (0.3 percent). Of the injury cases, 60 percent required first-aid treatment and thus did not entail days away from work (Department Of Labor and Employment, 2010). Majority were temporarily incapacitated. Fortunately, this type of injury does not keep the worker from returning to his normal duties.

Workplace-acquired musculoskeletal diseases were the most prevalent, accounting for 28.2 percent of the total occupational diseases. Other types of diseases that accounted for more than 10 percent of total reported occupational diseases include bronchial asthma (18.5 percent), infections (13.8 percent), essential hypertension (13.0 percent) and occupational dermatitis (12.6 percent) (Department of Health, 1980-2010).

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOAL: Reduce the health burden from occupational diseases, injuries and accidents

Strategic Objective	Indicator	Data Source	Latest Baseline	2016 Targets
Morbidity, disability and mortality from adverse occupational conditions are reduced	% Workers who become disabled as a result of occupational hazards % Workers died due to occupational hazards	Special surveys and reports	To be determined	To be determined
An occupational health information system is established	% Cities and municipalities with occupational health information systems	DOH and DOLE	TBD	40 percent
Occupational health programs at the local level established	% Health facilities providing special clinical assessment and treatment services to workers	DOH - BSNOH	8.51 (2000)	40
	% Health centers with stress management services	DOH - BSNOH	19.15 (2000)	40

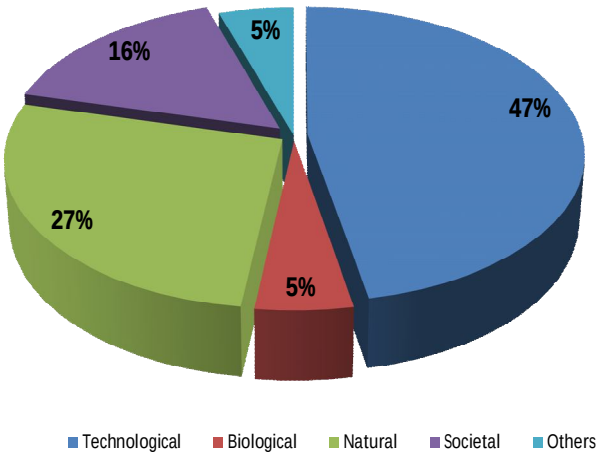
STRATEGIES FOR 2011-2016

- Protect individuals, families, workers and communities from exposure to occupational and environmental hazards, disease agents or stressors that could affect their health, through public health and environmental interventions.
- Set up healthy and safe workplaces in national agencies and LGUs. Key local health workers (provincial health officers, city health officers, municipal health officers, rural health physicians and public health nurses) will be trained on the prevention, recognition and management of occupational health-related diseases in coordination with the DOH.
- Strengthen infrastructure, human resource capabilities and systems for the registration of occupational diseases and injuries.
- Generate baseline health assessment information on workers in high-risk industries or hazardous workplaces.
- Review, update and strengthen laws, standards and regulations related to occupational health to make them relevant and practical for more decisive enforcement by LGUs and the labor sector.
- Conduct health promotion activities for the workers in industrial establishments.
- Develop policies on integrating basic occupational health services into the National Health Insurance Program. This is to target the workers in the informal sector in high risk industries(e.g. transport, mining and agriculture)
- Upgrade the capacity of personnel in the Department of Health and Local Government Units in responding to occupational health and its related concerns
- Establish coordinative linkages and meetings with partners that target DOH and other government agencies, academe, industry, Philippines National Poison Management and Control Center, non-governmental organizations and professional organizations.

5.3.2. DISASTERS AND EMERGENCIES

The country is located along the typhoon belt in the Pacific and within the circumferential Pacific Ring of Fire, which explains why the Philippines experiences about an average of 22 typhoons per year and constant threats from eruptions of its 300 volcanoes, 22 of which are currently active. Since 2005, the number of natural disasters has been steadily increasing, while manmade emergencies have fortunately been on the decline since 2007. Typhoons Reming (2006), Frank (2008), Ondoy (2009), and Pepeng (2009) caused a lot of damages in the country, destroying public and private properties indiscriminately. Although most typhoons pass through Region II, their worst hits are felt in Regions I, III, IV-A, CAR, and Metro Manila. Deaths due to disasters have been increasing since 2007 and injuries have reached to 19,101 cases for 2008 (Department of Health, 1980-2010).

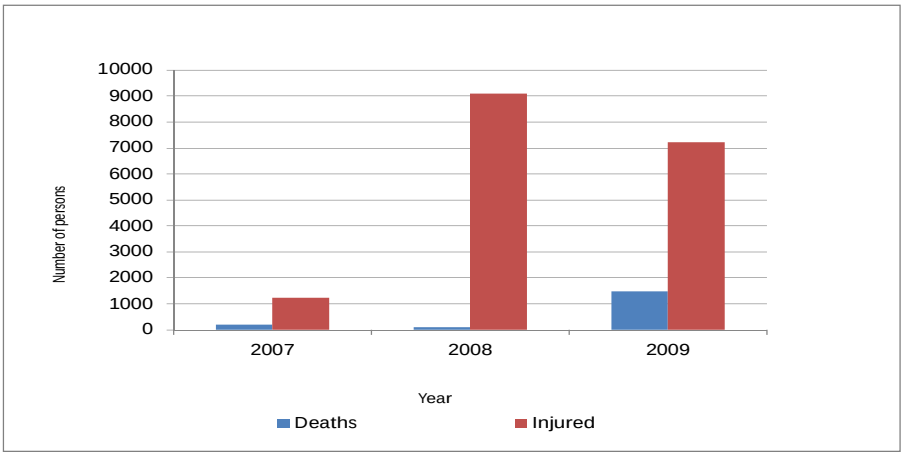
FIGURE 47. TYPES OF EMERGENCIES, PHILIPPINES, 2009



Source: Philippine Health Statistics, DOH, 1980-2005

Figure 47 shows the type of emergencies in the Philippines. Natural emergencies like tropical cyclones, flooding/ flashfloods, landslides, volcanic activity, and earthquakes constitute 27 percent of the emergencies in the Philippines. Technological emergencies like poisoning, transportation accidents, and fire constituted most (47 percent) of the disasters in 2009. Three of the major emergencies in transportation are the sinking of the MV Blue (2006), the MV Princess of the Stars (2008), and the Super Ferry 9 (2009). Deaths due to disasters have been increasing since 2007 and injuries have reached to 9,101 cases for 2008 (Department of Health, 1980-2010) (see **Figure 48**).

FIGURE 48. NUMBER OF DEATHS AND INJURED PERSONS DUE TO EMERGENCIES, PHILIPPINES, 2007-2009



Source: Department of Health, 2009

The Philippines aims to be the Western Pacific Region's model in Health Emergency Management. In order to achieve this, the DOH makes use of the following "10 Ps" as a strategic tool: Policies, Plans, Procedures/ Protocols and Guidelines, People, Promotion and Advocacy, Partnership Building, Physical – Facilities Enhancement, Program Development, Practices and Peso and Logistics.

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOAL: Reduced morbidity and mortality during emergencies and disasters

Strategic Objective	Indicator	Data Source	Latest Baseline	2016 Targets
Reduce the number of deaths and injuries related to disasters	Number of deaths related to disasters	DOH report	7,212	< 7,212
	Number of injuries related to disaster	DOH report	1,497	< 1,497

STRATEGIES FOR 2011-2016

- Increase the capacity of the LGUs on disaster preparedness and response and management of health emergencies
- Identify coordinators at every province/city levels and LGU hospitals in order to facilitate the expansion of network in all regions.
- Expand the Hospital Emergency Preparedness Response and Rehabilitation Plans (HEPRRP) to other local government units (LGUs) across other regions.
- Strengthen the support systems for disaster preparedness and response.
- Strengthen monitoring and evaluation of disasters situation.

5.3.3. CLIMATE CHANGE

In the Philippines, climate change has been measured as a 0.6104°C increase in annual mean temperature. From 1900 to 1950, the country had experienced a mere 0.3472°C increase in the mean temperature. From 1950 to 2006, an increase of 0.8904°C in the annual mean minimum and maximum temperatures was reported, placing the Philippines in a state of climate change (Department of Science and Technology). These deviations pose a great threat as they inevitably affect human health directly and indirectly. Direct impacts of climate change include the effects of changes in exposure to extreme weather, increased incidence of extreme weather events, and increased production of certain air pollutants and aeroallergens. These are measurable, but are infrequent. Indirect impacts, on the other hand, include changes in complex processes, such as the transmission of water, food, and vector-borne infectious diseases, and effect on regional food productivity. Such effects are more prevalent, although harder to measure (World Health Organization, 2003). This non-linear relationship between climate and health has made understanding and resolving the possible health impacts of climate change more complex.

In the epidemiologic triad of environment-host-agent, the environmental dimension in disease causation has acquired larger significance as the environment affects the life cycle of disease agents and the climate sensitivity of humans to diseases (Department of Health, 1980-2010).

The importance of this change was seen in correlations established between certain climate variables and the prevalence of vector-borne diseases, namely dengue and malaria. A comparison of the number of malaria cases and the temperature increases from 1995 to 2005 shows that trends in the malaria cases mirror those of the changes in temperature. The peak temperature increase during the 1998 El Niño Phenomenon corresponds to a sudden increase in the prevalence of malaria in the country. This pattern also holds true for the number of dengue cases from 1992 to 2005. The effects of climate change on water-borne diseases such as cholera, diarrhea, and typhoid fever and on conditions like under-nutrition, upper respiratory tract infection, cataract, skin cancer, and mental health are also considered, together with direct impacts such as deaths and illnesses due to flooding, heat wave, and other calamities. These conditions are studied particularly in populations such as the children and the elderly, chronically ill and disabled individuals, and low income, homeless, and subsistence groups, who are more vulnerable to the negative effects (Department of Health, 1980-2010).

Since the climate change and health initiative is only in its infancy, gaps remain that must be addressed. These include the implementation of a sectoral climate change adaptation framework, the need to create integrated systems and mechanisms, particularly national and local coordination mechanisms and private-public partnerships, and the issue of resilience and readiness of health facilities to respond to the effects of climate change (Department of Health, 1980-2010). Other issues include technical gaps such as: (1) the need for a national health assessment to look at the vulnerabilities both at the national and local level, while considering risk factors, e.g., geography, socio- economics, and others; (2) creation of means of assessment of the burden of climate-sensitive health outcomes, which enable the measurement and identification of response mechanisms; (3) the necessity of continuous, more in- depth research and development in the climate change and health relationship; and (4) correlation studies on zoonotic diseases, and on the connection between biodiversity and climate change and health impacts (Department of Health, 1980-2010).

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOAL: To build the capacity and strengthen health systems of national and local government units for the impact of climate change on health.

Strategic Objective	Indicator	Data Source	Latest Baseline	2016 Targets
Capacity of key government and agencies and local government units for managing the health impact of climate change is strengthened.	Number of LGUs with trained personnel on the prevention and management of the health impact of climate change	LGU Annual Reports	5 cities(NCR) 5municipalities (Albay)	30 provinces/ cities per year
Climate change adaptation concerns mainstreamed in all health programs	Number of health programs with climate change element	DOH Annual Report	To be determined	All health programs
Individuals, families and communities' understanding on the impact of climate change is improved	Rate of improvement of knowledge	Special Survey	To be determined	Priority LGUs
Individuals, families and communities' health seeking behavior to prevent the occurrence of illness brought by climate change is improved	Rate of improvement in health seeking behavior	Special Survey	To be determined	Priority LGUs

STRATEGIES FOR 2011-2016

- Develop policy and systems including the programs or systems integration for climate change
- Conduct epidemiological research to determine the nature and to measure the impact of different aspects of climate change on health outcomes (to help in future priority-setting)
- Develop PhilHealth benefit packages for climate change related diseases and morbidities
- Develop new health-related technologies, tools and guidelines to support multi-sectoral efforts
- Strengthen information campaign, advocacy, policy development, capacity building and health systems support as part of multi-sectoral efforts to manage impact of climate change
- Monitor and evaluate interventions to manage the health impacts of climate change
- Build partnership both in the national and local levels, with implementation spearheaded by the Department of Health

5.4. HEALTH OF POPULATION GROUPS

The challenge remains in providing care and nurturing of vulnerability and risk among population groups such as the adolescent and youth, adult men and women and older persons. The approach to protect and promote the health of the vulnerable groups varies as one goes through the different stages of life. Health service packages specific for each stage differ and this should be made available to ensure a positive state of

well-being of the individual. They require more focused preventive efforts as a group. Understanding their needs and differences will aid in the development of intervention that is more focused and tailor fitted to the group. The goal is to decrease the health inequalities between socially defined groups and ensure access to quality health care for adolescents, adult males and females and older persons. The care for children and mothers is already presented under MDG 4 and 5.

5.4.1. ADOLESCENT AND YOUTH

By definition, adolescence is defined by the WHO as the period of life between 10 and 20 years old while the youth refers to those between 15 and 24 years old and the "young people" refers to both age groups, meaning those aged 10 to 24 years.

The adolescent age group in the country numbers around 19,404,800 and makes up 21 percent of the total population (National Statistics and Coordination Board, 2010). They are considered the healthiest age group. However, special characteristics possessed by adolescents make them vulnerable to certain health problems. First, their adventurous and bold behavior is attributed in the increased occurrence of accidents and injuries leading to death. In 2005, accidents ranked as the most common cause of death among young adolescents, leading to 1,130 premature deaths (Department of Health, 2005). Second, their sexual curiosity, combined with poor sexual and reproductive health education and services, poses serious problems, such as STI/HIV/AIDS. Between 2006 and June 2010, the number of newly tested HIV positive youth (15 to 24 years old) went from 39 to 222 cases, an 815 percent increase, while fifteen- to nineteen-year-old adolescents who tested positive for HIV increased from five in 2006 to 35 in 2010 (up to June) (Department of Health, 2010). This represents an increase of 700 percent.

Unwanted teenage pregnancies are other devastating events for adolescents. It causes significant psychological distress and is considered as a high-risk pregnancy. As of 2008, 10 percent of adolescent girls aged 15 to 19 years old have begun bearing children, increasing from 8 percent in 2003 (National Statistics Office, 2008). Third, the attitudes and behavior of adolescents towards health are likely to get carried over to adulthood. Substance abuse, (often involving alcohol, recreational drugs, and smoking) often begin when they are young. Reports regarding these negative behaviors among Filipino adolescents indicate that 17 percent have been drunk at least once, 4.5 percent have used recreational drugs, and 9.7 percent have smoked (World Health Organization, 2007).

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOAL: The total health and well-being of young people are promoted.

Strategic Objective	Indicator	Data Source	Latest Baseline	2016 Targets
Mortality among youths (10-24years old) is reduced	Mortality rate per 100,000 youths	DOH-PHS	83.02 (2010)	70
	Mortality rate per 100,000 among 10-24 years old due to accidents and injuries	DOH-PHS	41.97 (2010)	35
Reproductive health among adolescents is improved	% Pregnancy rate among adolescents	NSO-NDHS	9.9 (2008)	4
Malnutrition among adolescents aged 11-19 years old is reduced	% Adolescents that are obese	FNRI-NNS	4.6 (2008)	3

STRATEGIES FOR 2011-2016

- Ensure safe and nurturing environment for adolescents by protecting their rights.
- Develop the adolescent health service package and involve the youth in the development and provision of services.
- Address and provide reproductive health needs of the adolescents through the provision of information and education and quality health services.
- Scale-up capacity-building of adolescent-friendly health services at the regional, provincial and local levels.
- Expand capability-building to include community health workers and youth volunteers (e.g. orientation program on Adolescent and Youth Health and utilization of Adolescent Job Aid).
- Provide the necessary logistics and commodities for use in the Adolescent Health Program.
- Engage the adolescent in creative and productive activities and involve in the country and community development programs.
- Expand health care financing package for other essential services on adolescent health.
- Local stewardship for improving health outcomes for the adolescent and youth. The local public health authorities taking responsibility for sustaining and improving interventions for the adolescents using the public-private partnership (PPP) approach

5.4.2. THE ADULT MEN

In the Philippines, adult men ages 25-59 have poor health status. They display the highest level of health risk behavior and the lowest use of health services compared to other groups. The number of Filipino males aged 25-59 years old is close to 16 million or about 19 percent of the total population and 38 percent of the total male population (National Statistics and Coordination Board, 2010).

The leading causes of death for the adult male population only slightly differ from those of the entire Filipino population. But diseases that are more fatal to Filipino males than females are quite different. **Table 30** shows that cardiovascular diseases followed by accident and injuries are the leading causes of death among Filipino males.

TABLE 30. LEADING CAUSES OF DEATH AMONG FILIPINO MALES AGED 25-59, PHILIPPINES, 2005

Rank	Causes of deaths	Number of deaths	Rate per 100,000	% of males among total deaths of adults aged 25-59	% of adult males aged 25-59 among total deaths
1.	Cardiovascular diseases, all forms	28,370	169.84	19.94	6.66
2.	Accidents and injuries, all forms	17,701	105.97	12.44	4.15
3.	Malignant neoplasms, all forms	9,627	57.63	6.77	2.26
4.	Tuberculosis, all forms	8,716	52.18	6.13	2.05
5.	Diabetes mellitus	3,876	23.20	2.72	0.91
6.	COPD	3,846	23.02	2.70	0.90
7.	Chronic liver diseases and cirrhosis	3,803	22.77	2.67	0.89
8.	Pneumonia	3,251	19.46	2.28	0.76
9.	Nephritis, nephritic syndrome and nephrosis	3,136	18.77	2.20	0.74
10.	Gastric, duodenal, peptic and gastrojejunal ulcers and other diseases of the digestive system	2,667	15.97	1.87	0.63

Source: Philippine Health Statistics, 2005

Eight (8) out of ten (10) causes of the total deaths among adult males aged 25-59 are due to non communicable diseases where the cardiovascular diseases (19.94 percent) followed by accidents and injuries (12.44 percent) are the highest (Department of Health, 2005). The communicable diseases among the leading causes of deaths are tuberculosis and pneumonia.

There are diseases that are primarily of male concern like the occurrence of benign prostatic hyperplasia and prostatic malignancies (see **Table 31**). These increase in incidence as the males grow older and can be detected through regular digital rectal examination. On the other hand, deaths due to acute pancreatitis are often associated with alcoholic binges among the male population.

TABLE 31. CAUSES OF MORTALITY THAT HAS MALE PREPONDERANCE AMONG FILIPINOS, 2000 and 2005

Causes of deaths	2000		2005	
	Number of deaths	Rate per 100,000 25-59 male adults	Number of deaths	Rate per 100,000 25-59 male adults
Acute pancreatitis	1,405	9.67	1,945	0.01
Malignant neoplasm of the prostate	104	0.72	178	0.00
Hyperplasia of prostate	9	0.06	22	0.00

Source: Philippine Health Statistics, 2005

DOH data on seropositive cases of HIV point out that 85 percent of all who tested positive were males from 19 to 49 years old. There is yet inadequate sex-disaggregated national data on illegal drug use and alcoholism, but these have been known to result in disease and socio-economic problems among the male population. The higher prevalence of smoking among males than females correlates well with the fact that of every three who die of lung cancer two are males. The common denominator seems to be that certain behavioral patterns among men can be modified to prevent the occurrence, complications and fatal outcomes of the diseases predominantly affecting them.

Some risk factors leading to diseases in men have been studied: smoking, diet preferences and nutrition, reproductive health habits, risk-taking behavior and occupational activities. Although the information was generated for the purpose of monitoring and controlling the occurrence of disease or other unhealthy conditions, all these information may be brought together to focus intervention on men, specifically Filipino adult males between 24-59 years of age. In addition, the Healthy Lifestyle initiative and tobacco control movement have made a head start towards behavior modification.

5.4.3. THE ADULT WOMEN

Not all females will pass through the stage of pregnancy and motherhood either by choice or biological reasons. The objectives for pregnant and lactating women are discussed under the MDG 5. There are other health needs of the Filipino adult female population aged 25-59 years old that must be addressed: their reproductive health, gender issues and diseases affecting this population group.

Cardiovascular diseases are the leading causes of death among adult Filipino women in 2005 with a rate of 176.51/100,000 followed by malignant neoplasms with a rate of 60.36/100,000 (Department of Health, 2005). The leading causes of death among females are mostly degenerative and lifestyle-related in nature. TB and pneumonia are the only infectious diseases included in the leading causes of mortality among Filipino females. It can be observed that the only disease among the 10 leading causes of mortality that has higher percentage among females than among males are goiter, thyrotoxicosis, hypothyroidism and endocrine and other metabolic disorders wherein 55.62 percent of those who die of the said diseases are females (Department of Health, 2005).

Table 32. Essential Health Care Package for Adult Male and Female

1. Management of illness
2. Counseling on substance abuse, sexuality and reproductive tract infections
3. Nutrition and diet counseling
4. Mental health
5. Family planning and responsible sexual behavior
6. Dental Care
7. Screening and management of lifestyle related and other degenerative diseases

Malignant neoplasms are the second leading causes of death among adult Filipino females. These diseases when caught at the early stage, can greatly improve the treatment outcome and survival of patients. Among adult females aged 25-59 it is breast cancer which has a death rate of 20.57 per 100,000 populations, uterine malignancies at 5.37 per 100,000 population and cervical cancer at 5.17 per 100,000 populations as shown in **Table 33**(Department of Health, 2005).

TABLE 33. MALIGNANCIES WITH PREPONDERANCE AMONG FEMALES AGED 25-59, PHILIPPINES, 2005 and 2010

Malignancies	2000		2005	
	Number of deaths	Rate per 100,000 25-59 female adults	Number of deaths	Rate per 100,000 25-59 female adults
Malignant neoplasm of the breast	1,979	13.64	3,401	20.57
Malignant neoplasm of the uterus	593	4.09	889	5.37
Malignant neoplasm of the cervix uteri	563	3.88	855	5.17

Source: Philippine Health Statistics, 2005

There are more Filipino females than males who die of diabetes mellitus and thyroid problems.

However, in terms of deaths due to infectious diseases like TB and pneumonia, only 28.75 percent and 36.91 percent of those who die of the said diseases, respectively are females. It can also be noted that there are lesser percentages of females who die due to accidents and injuries.

International conventions on the rights of women to quality reproductive health care have clearly acknowledged the vital role of men in family planning. On another front, HIV/AIDS experts have declared that for the HIV/AIDS program in the Philippines, men hold the key to reducing HIV transmission and "the power to change the course of the AIDS epidemic."

In the same way that the role of men has been acknowledged as vital in the pursuit of goals to improve the health of women and the family, the challenge is to direct the health sector toward issues and problems that cause disease and death among men at levels unusually higher than females or than previous trends. In a health care environment that has been women- and child-oriented since its inception, and in a sector that is now dominated by females, ways must be found to shift health planning and administration towards regarding men as specific beneficiaries of the health care system and for men to participate more actively in the health promotion and health care programs for the community, family and men themselves.

Current health care provided to adults is disproportionately medicine-oriented and clinic-based. The identified causes of mortality and morbidity among adult men clearly show that majority are preventable, and

the more appropriate, high-impact and long-term interventions could be the modification of the political, socio-cultural and psychosocial environments. The Healthy Lifestyle program has not retrained its focus towards adolescent and adult men even if past studies have shown them to have a higher propensity to indulge in risky behaviors.

The essential components of the health care package for adult men and women are enumerated above. These services must be provided to ensure optimum health and prevent mortality and morbidity among adult men and women in the general population.

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOAL: Promote the total health, well-being and quality of productive life of adult men and women

Strategic Objective	Indicator	Data Source	Latest Baseline	2016 Targets
Mortality among adults is reduced	Mortality rate per 100,000 adult males	DOH-PHS	1,000 (2005)	900
	Mortality rate per 100,000 adult females	DOH-PHS	1,000 (2005)	900

STRATEGIES FOR 2011-2016

- Improve the overall participation of men in the health care system. Men should be made to actively participate in the development of health services appropriate to their needs and in setting up the organizational system that will provide health care for them.
- Develop male-focused information systems and strategic communication plans that will be used to harness local and national government and non-government resources towards effectively addressing the health care needs of men, aside from their participation in reproductive health programs.
- Develop and implement a health package for the Filipino adults. Focus on gender-specific packages responsive to the different health needs of adult men and women.
- Improve the health-seeking behavior of the Filipino adults through health education and information campaigns that are culturally-appropriate
- Intensify the implementation of policies and laws that promote and protect health and improve the quality of life of adult Filipinos.

5.4.4. THE OLDER PERSONS

Latest trend shows an increasing number of older persons and their longer life expectancy. The goal is to improve the quality of life of older persons and sustain their function, autonomy, self-esteem and life satisfaction. To undertake these goals to the DOH has developed a progressive older person health program. Most of the leading causes of morbidity and mortality can be prevented and measures for health promotion and disease prevention for this population group are available, thus reducing the country's burden of diseases is feasible.

TABLE 34. LEADING CAUSES OF DEATH AMONG OLDER PERSONS, PHILIPPINES, 2005

Rank	Causes of deaths	Number of deaths	Rate per 100,000 older persons	% of older persons among the total population
1.	Cardiovascular diseases, all forms	79,065	1,704.21	18.56
2.	Pneumonia	26,443	569.97	6.21
3.	Malignant neoplasms, all forms	21,785	469.57	5.11
4.	COPD	14,592	314.52	3.42
5.	Tuberculosis, all forms	12,934	278.89	3.04
6.	Diabetes mellitus	11,686	251.89	2.74
7.	Gastric, duodenal, peptic and gastrojejunal ulcers and other diseases of the digestive system	6,040	130.19	1.42
8.	Nephritis, nephrotic syndrome and nephrosis	5,062	109.11	1.19
9.	Accidents and injuries, all forms	4,179	90.08	0.98
10.	Chronic liver diseases and cirrhosis	2,483	53.52	0.58

Source: Philippine Health Statistics

In 2005, mortality data for older persons showed a preponderance of lifestyle related diseases as major causes of mortality while Pneumonia and TB are the main causes of death that are infectious in nature as shown in **Table 34** above.

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOAL: Quality of life among older persons is promoted and contributes to the nation building.

Strategic Objective	Indicator	Data Source	Latest Baseline	2016 Targets
Mean life expectancy is increased	Mean life expectancy for adult males	NSO-PSY	66.11 (2010)	68
	Mean life expectancy for adult females	NSO-PSY	71.64 (2010)	73

STRATEGIES FOR 2011-2016

- Redefine the minimum health care package for older persons to include primary, secondary and tertiary care. The package should consist of health services tied up with pre-financed sources of care in order to improve accessibility by older persons.
- Build the capacity of human health resources toward the promotive, preventive, curative and supportive care for older persons.
- Integrate into current licensing and accreditation requirements, building, facilities, equipment and personnel standards appropriate for care of older persons.
- Develop community-based and institution-based models of health care for older people.
- Pursue the implementation of laws and policies for the protection and improvement of the quality of life of the older persons such as the RA 9257 or The Expanded Senior Citizens' Act of 2003.
- Local stewardship for improving health outcomes for the older persons.
- Local public health authorities taking responsibility for sustaining and further improving the older person interventions using public-private partnership (PPP) approach with the public sector taking the lead.

CHAPTER 6

HEALTH SUPPORT SYSTEMS

6.1. LOCAL HEALTH SYSTEMS

The implementation of the Local Government Code of 1991 resulted in the devolution of health services to local government units (LGUs) which included among others the provision, management and maintenance of health services at different levels of LGUs. What used to be a centralized national health system became many independent local health systems. After more than seventeen (17) years of devolution, improvements in health status of populations show marked variations across LGUs. Variations in health status were associated with variations in the performance of health care providers and health care professionals in localities.

In spite of the devolution, the DOH is still the institutional steward of the nation's health system. As the prime national health agency, it has the authority to provide coherence and direction in enhancing operational effectiveness of local health systems towards improved health status in localities. The DOH encouraged provinces and their component municipalities and cities to plan together and develop a five (5) year Province-wide Investment Plan for Health (PIPH). This medium-term health plan became the key instrument that DOH utilized to forge partnership with the LGUs towards improved health outcomes, more equitable financing of health care and greater public satisfaction. As an approach to health reforms, the PIPH represents all the stakeholders' interests since all LGU officials and health stakeholders plan together to improve the health system of the province.

As of 2010, 80 provinces and 8 cities have completed their five (5) year investment plans for health (PIPH/CIPH) including their annual operational plans (AOP) (Department of Health, 1980-2010). These Plans undergo a review by a Joint Appraisal Committee (JAC) prior to DOH approval. The signing of a Memorandum of Agreement (MOA) between DOH and the LGU to support local health reform implementation triggers a series of inter-related events to facilitate the annual operationalization of the PIPH/CIPH: (1) release of start-up funds to jumpstart plan implementation ; (2) review and approval of the AOP; (3) forging of an annual DOH-LGU Service Level Agreement (SLA) which details DOH and health partner commitments as contained in the AOP ; (4) release of the DOH annual fixed allocation and other support; and (5) release of a performance-based incentive for the previous year achievement of specific indicators from the Local Government Unit (LGU) Scorecard.

The LGU Scorecard is the tool institutionalized by the DOH to track and assess the overall outcome of implementing health reforms in the province-wide health system (PWHS). It measures intermediate

outcomes of access, quality and efficiency including major reform outputs based on the Programs, Projects and Activities (PPAs) of the DOH. The LGU Scorecard thus provides a composite performance assessment of the efforts of various stakeholders within the PWHS.

Over time, a reformed PWHS will progressively achieve the national targets for the intermediate outcome indicators and show all excellent rating (greens) in the LGU Scorecard. It will ultimately exhibit no performance disparity across all its component municipalities/cities and inter-local health zones (ILHZs).

The goal for 2016 is to reduce the disparity of performance, particularly for the poor, among local health systems (LHS). Local health development will be supported by building systems for evidence-based policies, decision making and accountability mechanisms to strengthen local health authority, expand their partner and support networks, and improve client-centered care and community participation adopting Primary Health Care (PHC) principles in the context of Universal Health Care.

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOAL: Reduce performance disparity among LGUs and vulnerable groups in the country.

Strategic Objective	Indicator	Data Source	Latest Baseline	2016 Targets
All PWHS and HUCs/ICCs is engaged in sectoral development prioritizing the poor, over a medium term period	% Local health systems with PIPH/CIPH 1. PWHS 2. HUC 3. ICC	DOH Program Report	 100 24* 0 (2010)	 100 100 100
Functional ILHZs that provide public health protection, access to quality clinical care and efficient management of resources are established	% ILHZ that achieved functionality in domain of :public health protection, access to quality clinical care and efficient management of resources	DOH CHD reports	Baseline data for ILHZs being completed	75% ILHZ achieve 3 domains of functionality
	% of GIDA municipalities/ *barangays* covered with a standard service delivery or financing alternative	DOH CHD/ Program Reports or Survey	TBD	50
Local health capacity to reduce disparity among LGUs is strengthened	% LGUs with excellent (green) performance rating in LGU scorecard	DOH CHD / Program Reports or Survey	32 (2009)	80
Service delivery systems based on principles of PHC, with public private partnerships, client centered care, and community participation is improved	% ILHZ with public private partnerships % ILHZ with effective consumer participation systems	DOH CHD / Program Reports	TBD TBD	50 100

*computed at 8 out of 143 HUCs

STRATEGIES FOR 2011-2016

- Utilize the approved PIPH/CIPH and AOP to provide fund support and or technical assistance to LGUs to ensure health reform implementation in localities.
- Strengthen inter-LGU coordination in health operations through improved functionality of ILHZs.
- Ensure access and availability of quality health care sensitive and responsive to the health needs of communities in GIDAs.
- Maximize PPP in health to improve access to quality health care, increase effectiveness and efficiency in the delivery of services and enhance equity in the distribution of available resources.
- Improve consumer participation and ensure greater client participation in improving the health care delivery system through: (1) establishing a consumer-centered feedback mechanism; (2) increasing the poor's purchasing power; (3) providing health information (4) supporting consumers to co-produce or co-finance health services; and (5) Involving consumers in the policy and decision-making process, as well as in management.
- Make optimal use of the following tools to track LGU performance: LGU scorecard, CHD scorecard, Urban Health Equity Assessment & Response Tool and ILHZ functionality assessment tool.

6.2. HEALTH INFORMATION SYSTEM

The problems of completeness, accuracy, timeliness and access to health data, and fragmentation of various health information systems need to be addressed. Information systems that are managed separately by various data producers bring about inaccessibility of quality data for decision making. Critical to harmonization, interoperability and data exchange is an incessant multi-stakeholder collaboration among data producers and users with shared agreements and unified efforts towards increasing availability, access and use of timely, relevant and reliable health information. Use of available, relevant and cost effective information and communication technologies (ICT) enhances the development of institutional networks and makes processes and systems more efficient. It also enables health workers to do their work faster and better. The current health sector enterprise architecture (EA) and the e-health strategic framework define the proper use and function of ICT. Advancing in these areas will improve healthcare access, quality and efficiency of service and higher level of client satisfaction and better safeguards for patient safety.

EA and e-health strategic framework have five priority focus areas in using ICT to support KP and these are in various stages of development. These are defined as:

6.2.1. Enabling Structures and Resources

A rational and accountable eHealth agenda, with the essential legal and normative framework and structures in place including standards, sustained financing, e-mature human resources, ICT infrastructure and multi-agency collaborations.

6.2.2. Critical Application Systems

Increased efficiency of processes and systems in health care delivery and administration through new and better application systems and processes for Philhealth claims, health records, disease surveillance, drugs management and price monitoring, financial and procurement management and other regulatory support services.

6.2.3. Philippine Health Information System (PHIS)

The PHIN shall work towards harmonization and integration of data sources and information systems using acceptable data management standards and protocols and support initiatives that will enhance health service statistics reporting especially from LGUs and the private sector. This will also include improvements and scale-up programs for Information Systems (ISs) in health centers, hospitals and other critical information and service delivery centers and support service groups.

6.2.4. Knowledge Management

Greater and better capacity for exchange and utilization of knowledge resources and systems especially at the sub-national levels based on KM4Health framework. The latter encompasses health research, knowledge translation, including knowledge sharing and exchange programs such as call centers, e-library, best practices, Communities of Practice (CoPs) or K networks among others.

6.2.5. Telemedicine / mhealth

ICT capacities are maximized in reaching GIDAs, attaining MDGs and in collecting data and disseminating health information to policy makers, provider and citizens. Patient monitoring and tracking programs for MDGs such as maternal and neonatal events and TB treatment compliance, and disaster response shall be given priority focus.

In the execution of the strategic goals and targets, the following valued principles shall be applied: a) client-focused approach b) collaboration and partnerships and user involvement c) good governance and performance through judicious and efficient use of resources, transparency, accountability d) ethics in safeguarding privacy and confidentiality e) shared learning f) simple and cost effective technology application.

Long-term progress in the execution of the target activities will also help achieve the global commitment of the country in the 58th World Health Assembly and the 2011-2016 Philippine Digital Strategy vision - "A digitally empowered, innovative, globally competitive and prosperous society where everyone has reliable, affordable and secure information access in the Philippines, a Government that practices accountability and

excellence to provide responsive online citizen-centered services, and a thriving knowledge economy through public-private partnership".

NATIONAL OBJECTIVES FOR 2011-2016

OVER-ALL GOAL:

Establish harmonized, quality, relevant and responsive e-health services to provide the necessary tools, data, information and knowledge for evidence-based policy and program development towards the provision of accessible, quality, affordable, efficient and safe health services and attainment of better health outcomes for all Filipinos.

Strategic Objective	Indicator	Data Source	Latest Baseline	2016 Targets
The eHealth infrastructure is functional at various levels of health care delivery	Health Sector e-Health Road map established	DOH Report	DOH Information Systems Strategic Plan (ISSP) 2011-2013	1 Road map
	Health sector enterprise architecture (EA) and segment architecture for PhilHealth, central office, CHD, hospital and health center developed	ICT4H e-health Strategy Report , Feb 2012	Draft Health Sector EA , formulated by IMS and the ICT4H e-health Strategy Report , Feb 2012	4 segment EAs
	Basic ICT infrastructure establish in central office, regional and local level	DOH ISSP, 2011-2013	50%	70%
Increase efficiency of processes and systems in health care delivery and administration	Health Information Systems standards/ Health Information technology Standards (HISS/HITS) officially issued	ICT4H e-health Strategy Report , Feb 2012, DOH and WHO Reports	Only ICD 10 is nationally adopted	80%
	The Philippine Health Information Network (PHIN), ICT4H and various data management systems and communities of practice broadened/ expanded	DOH Report	PHIN, KM, PNIDMS and ICT4H at national levels only, KM team at CHD6	5 Regional PHINs
	Percent of health workers who are ICT literate and adept on HISS/HITS	DOH Report	10%	40%
	Percent of municipal and city health offices with functional health service statistics reporting and disease surveillance systems with trained HRH	DOH Report	40%	70%
	Improved data quality with increased data access and utilization	DOH portal uhmis2.doh.gov.ph	An uploading system and QMS	A health data warehouse established and used with regular reports

	Information and application systems in several priority areas harmonized and implemented	DOH Report	1	5 systems (NCDs; infectious disease; disease surveillance ; procurement, logistics and financial management, document management; hospital system with Philhealth e-claims modules and blood supply
	Data visualization system established	DoH reports	Phil. Health maps	Dashboard with Health mapping
	Knowledge Management hubs are expanded at sub-national levels	DOH report	1 at national level, 1 CHD	3 regional hubs
	% of hospitals with PhilHealth e-claims	PhilHealth Report	1%	100%
	% of hospitals with functional management information system and compliant with HISS/ HITS	DOH report	DOH- 45 LGUs – 36	DOH hospitals: 90% LGU hospitals: 30%
	National Telehealth Services Program (NTSP) established	DOH reports and contracts	Several pilot projects	NTSP program institutionalized
The private sector data is incorporated into the administrative reporting system of the government	Institutionalization of system for gathering health information private sector for administrative reports	DOH Report	1%	50% of system in place and institutionalized

STRATEGIES FOR 2011-2016

- Development and promotion of the eHealth agenda
- Development, promotion and adoption of critical health application systems , including real time reporting and recording of health information
- Adoption of national data, ICT and relevant eHealth standards
- Enhancement and expansion of stakeholder collaboration for both health data producers and users under the Philippine Health Information System and ICT for Health
- Creation of the National Telehealth Services Program
- Public-private partnership for eHealth and development and implementation of various systems

6.3. INTERNAL MANAGEMENT SYSTEMS

6.3.1. Financial Management

Having strong financial management systems is of utmost importance, especially in the health sector. This ensures that scarce resources are used optimally and that necessary controls are established. Inefficiency and ineffectiveness adversely affect health outcomes by compromising the delivery of health goods and services, especially to the country's most vulnerable groups. Among the crucial processes involved in financial management are financial planning, budget formulation, budget execution, accounting, financial reporting, and internal control.

Even though promising systems are already in place, the following limitations continue to impede effectiveness and efficiency in financial management:

1. Inconsistent implementation of financial processes, procedures, and guidelines at both national and local levels;
2. Lack of integration of the financial management systems;
3. Lack of a budgeting system that follows medium-term budget planning and prevents resource gaps in implementing multi-year priority health programs and activities;
4. Poor monitoring and evaluation of financial management;
5. Absence of an efficient information system that links DOH offices and LGUs;
6. Restricted government health budget; and
7. Difficulty in managing a highly decentralized system (NOH 2005, 138-9).

As a response to these limitations, the Public Finance Management Reform Strategy was launched in 2009 with goals of having improved budget credibility, improved budget execution, and improved internal controls (F1, 1-7).

6.3.1.1. Improved Budget Credibility

A credible budget serves as an instrument that ensures that public resources are delivered reliably and predictably. Efficiency will be promoted by integrating priority-setting, planning and resource allocation. Under this objective, the following reform initiatives are highlighted:

1. Development of the Health Sector Expenditure Framework (HSEF), a Medium-Term Expenditure Framework (MTEF) for the health sector, to better align budget with priority policies
2. Preparation of budgets using DOH Organizational Performance Indicator Framework (OPIF), in coordination with the Department of Budget and Management (DBM). OPIF is intended to measure the agency's performance in the implementation of PPAs with emphasis on major final outputs;

3. Operationalization of the Program Planning and Budget Development Committee (PPBDC), which improves budget preparation by reinforcing the links between planning and budget.

6.3.1.2. Improved Budget Execution

Improving budget execution entails making reliable information accessible to managers at all levels in the DOH for enhanced monitoring and evaluation. This enables early detection of problems so that necessary corrective measures may be taken before the situation gets out-of-hand. Steps taken to achieve this goal include:

1. Installation of the Electronic New Government Accounting System (ENGAS), which links CHDs, DOH hospitals, and the Central Office to form a DOH-wide financial information system. It ensures the correctness, reliability, completeness and timeliness in recording government transactions. The new system also generates financial reports, in accordance with generally accepted accounting principles.
2. Integration of procurement, logistics, and financial management information systems
3. Development of an Executive Information System (EIS) and Finance Tracking Module through a DOH Public Expenditure Tracking System (ETS), which is interfaced with the integrated procurement, logistics, and financial management system that is used for the regular reporting of actual expenditure against the budget listed by PPA.

6.3.1.3. Improved Internal Controls

Improving internal controls involves establishing and maintaining a network of systems to ensure effective operations; economic and efficient use of resources; compliance with policies, procedures, laws, and regulations; safeguarding of assets and interests from losses; and integral and reliable information. Significant strides under this goal include the following reforms:

1. Operationalization of a Monitoring Unit within the Financial and Management Service
2. Use of scorecards and other monitoring tools to measure outputs and outcomes
3. Development of the Financial Management Services Operations Manual and Internal Audit Manual
4. Upgrading the Internal Audit Division into the Internal Audit Service, a move to implement the shift from the traditional to a risk-based and process-focused approach towards internal audit
5. Preparation of a DOH risk identification and control matrix as part of the Risk Management Program
6. Operationalization of a Property Management Unit under the Administrative Service
7. Development of an Asset Management System in the Central Office, CHDs, and DOH hospitals
8. DOH-wide implementation of National Guidelines on Internal Control Systems (NGICS)

9. Use of e-banking facilities to improve the efficiency of operations, such as fund transfers and ATM payroll systems
10. Setting up of the Anti-Graft Initiative as a system of control that aims to minimize corrupt practices, enforce penalties and sanctions, and establish a system of accountability and transparency for those who are entrusted with government resources.

Cutting across all these proposed reforms are the key concepts of collaboration, integration, and enhanced monitoring and evaluation. It is of utmost importance that stakeholders work together during the planning and appropriation phases – priorities must be identified and addressed, resources must be allocated appropriately (i.e., prevent underestimation and overestimation). Moreover, systems must be utilized optimally and integrated to ensure that financial information flows across agencies, thereby promoting transparency, accountability, and enhanced decision-making. Integrated systems also pave the way for better monitoring and evaluation.

6.3.2. Procurement Management

The DOH has invested in management and training systems to support the implementation of reforms relating to procurement procedures and the delivery of health services. Additional checks and balances, particularly in the form of monitoring and evaluation, are advisable to assess and document the impact of these tools on the DOH's capacity to manage and allocate health expenditures.

Challenges previously identified that hamper the efficient administration of limited health resources remain largely exigent. Examples of these include: (1) Inconsistent implementation of procurement processes, procedures, and guidelines at national and local levels despite the development of management tools and training programs. (2) Inadequate coordination of activities between the various offices overseeing procurement. (3) Delays in procurement processes due to lack of unified standards in terms of product specifications as well as required documents on the end user side. (4) Limited consultation regarding desired services and lack of participation among firms and individuals resulting in bid failures.

To address some of these challenges, the Philippine government is overseeing the following interventions:

(a) Implementation of Republic Act 9184, or the Government Procurement Reform Act. Through institutionalized procurement planning functions and a procurement monitoring system in Centers for Health Development and DOH hospitals, the law seeks to lower procurement costs, generate substantial savings, and ensure that goods and services are available at service delivery points.

(b) Pilot testing of the Government Procurement Policy Board's Agency Procurement Compliance and Performance Indicators (GPPB-APCPI). The GPPB-APCPI is a system for monitoring compliance in the implementation of revised IRRs in CHDs and DOH hospitals.

(c.) Procurement Operations and Management Information System (POMIS) became operational in June 2010 with the main function of tracking documents and activities. POMIS serves as a system to

integrate and standardize the information flow between the centralized offices responsible for procurement operations and management.

6.3.3. Logistics Management

In spite of the continuing development of the processes and procedures, many challenges continue to hamper the efficient and effective administration of limited health resources. These include:

1) Inconsistent implementation of logistics processes, procedures and guidelines at national, regional (CHDs) and local levels;

2) Lack of integration between financial, procurement and logistics management systems;

3) Inadequate skills on the management of logistics systems at the central, regional (CHDs) and local levels and

4) Poor monitoring and evaluation of logistics management (Department of Health 2005).

In the past years, improvements in the logistics department had been made in terms of employees' skills training, space maximization, and development of guidelines. The next five (5) years will address the issues of implementation process, integration between and among departments, infrastructures, and human resource requirements.

Training health workers is essential to improve quality assurance encompassing proper storage practices and good manufacturing practices. This is in line with the Republic Act No. 9184 – an act providing for the modernization, standardization and regulation of procurement activities of the government.

Another problem encountered is the manual processes of doing inventory. The lag time between updating and reporting is a major issue leading to discrepancies between stock card count and physical count. Therefore to address this, computerization of logistics processes and inventory is well under way. Not only will it provide transparency of the processes and information on deliveries, but it will also strengthen other activities of the drug management cycle, such as forecasting and procurement; and serve as a medium to enhance financial data recording.

Last but not least, monitoring and evaluation procedures are needed to determine baseline data. From this, interventions can be assessed in terms of their outcomes – which projects to terminate and which ones to develop further.

NATIONAL OBJECTIVES FOR 2011-2016

OVERALL GOAL: Ensure the efficiency and effectiveness of financial, procurement and logistics management systems to support health program implementation.

Strategic Objective	Indicator	Data Source	Baseline Data	2016 Targets
Financial, procurement and logistics management performance are improved	% Budget utilization based on planned targets	DOH Financial Report	76 (2010)	100
	Number of budget augmentation requests	DOH Financial Report	20 (2010)	2
	% Procurement request processed out of the total requests received	DOH Procurement Service Report	60 (2010)	95
	% Regions with no stocks retained in the warehouse for more than 3 months	DOH Administrative Service Report	To be determined	100
Transaction time is reduced	Number of days to release funding requests	DOH Finance Service Report	To be determined	To be determined
	Number of calendar days to process goods procurement request	DOH Procurement Service Report	80-120 (2010)	40-60
	Number of days to issue the goods from receipt of request	DOH Administrative Service Report	15 days (2010)	5 days

STRATEGIES FOR 2011-2016

- Improve budget credibility, budget execution and internal controls
- Develop and institutionalize a strong monitoring and evaluation to ensure the smooth interaction of the management organization framework components namely, human resources, training, logistics, and relevant systems and tools
- Multi-level audit of current financial management tools and systems to establish a baseline for the development of comprehensive training workshops to build the capacity of health professionals on both national and local levels to manage finances and logistics in support of health sector goals,
- Advance role of procurement as a partnership in order to improve integration and cooperation between offices as well as increase support from suppliers and end users,
- Develop a standardized records keeping system to improve transparency of procurement and warehouse storage systems, including inventory tracking tools and system to measure lead times and potential for spoiled program commodities.
- Establish infrastructures for logistics management like air conditioners and handling units such as pallet trucks, weighing scales, carts, pallets, among others in the region and provinces
- Conduct trainings for supply officers and health workers on good practices for the proper handling and storage of medicines and supplies.
- Computerize logistics processes for more efficient information management and immediate roll out to the LGUs

CHAPTER 7

IMPLEMENTATION ARRANGEMENT FOR KALUSUGAN PANGKALAHATAN

To address the call of universal health care (UHC) or *Kalusugan Pangkalahatan (KP)*, the government is organizing and maximizing all possible resources, and coordinating with partners to respond to this call. Partner institutions include those that have the machinery to reach most of the target population.

The Department of Health (DOH) shall spearhead the implementation of KP in several phases from 2011 to 2016 with the support of the Local Government Units (LGUs), other national agencies, development partners, civil society organizations, non-government organizations and other stakeholders.

Individuals and families who are beneficiaries of KP are encouraged to assert their rights and entitlements for quality health care services and facilities and cooperate in the implementation of health programs, projects and activities.

The investment of the government for the health sector shall be complemented by development partners. It is expected that development partners shall align and harmonize their support to the thrusts and directions of KP. Development partners can fill health investment gaps and assist the DOH and LGUs in capacity building, policy and research development and systems strengthening.

Coordination mechanisms shall be put in place to ensure that health partners and stakeholders are well consulted and properly informed on policy directions as well as in program and project development and implementation towards the attainment of KP.

7.1. KP PERFORMANCE TARGET

The National Objective for Health performance target from 2011 to 2016 is reflected in **Table 35**

TABLE 35. KP KEY PERFORMANCE TARGETS

	2011	2012	2013	2014	2015	2016
CHTs deployed, RNheals / others deployed to achieve the MDGs	CHT and RN Heals as part of the SDN developed	**50,000 12,000**	**100,000 22,500**	**100,000 22,500**	**100,000 22,500**	**100,000 22,500**
Facilities upgraded to provide quality health services	Validation of health facility upgrading investment plans	1,377 RHUs 69 District Hospitals 72 Provincial and City Hospitals 8 DOH Hospitals	471 RHUs 243 District Hospital 55 Provincial and City Hospital 22 DOH Hospital	190 District Hospitals 6 City Hospitals 33 DOH Hospitals *Incentives to sustain delivery of quality care introduced	6 DOH Hospitals	Enhanced provision of health services in health facilities through improvement of processes and systems within the health facilities
Families covered by PhilHealth	All NHTS-PR are enrolled and eligible to the NHIP.	All NHTS-PR and informal sector are enrolled *catastrophic care package introduced	Universal Coverage *Catastrophic care package fully implemented	Universal Coverage	Universal Coverage	Universal Coverage

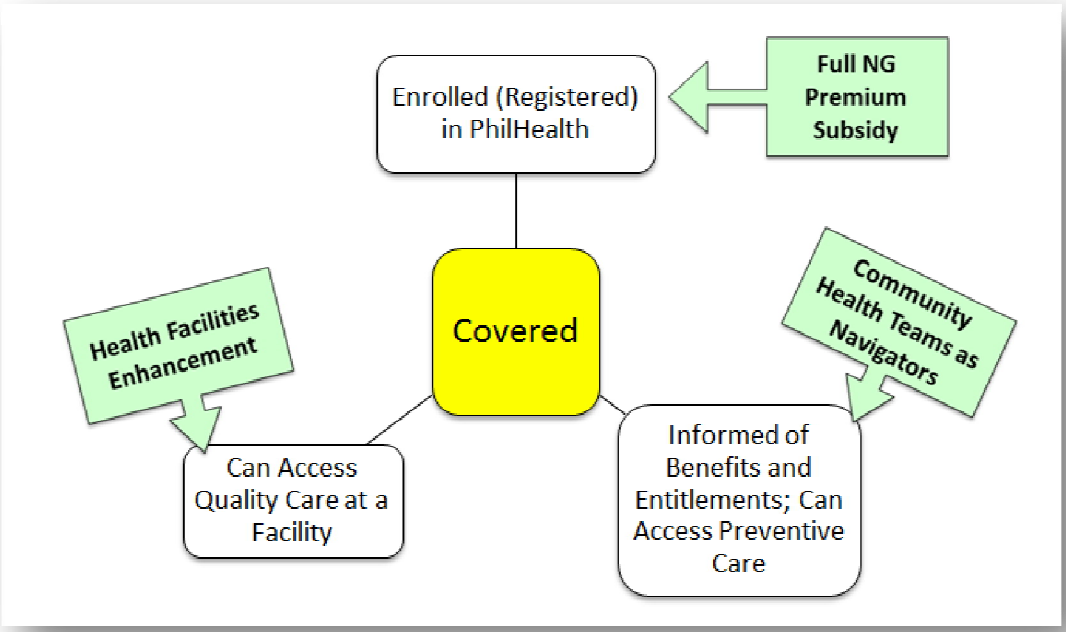
To improve financial risk protection, DOH will increase NHIP coverage by sustaining the enrolment of at least 5.3 M NHTS-PR poor households, with intention to expand to all 10.9 million NHTS-PR households. It will also improve benefits by implementing a no balance billing policy (i.e. no out of pocket charges) for members of the NHIP Sponsored Program. Twenty-three of the most common conditions for confinement are being considered under the scheme for PhilHealth Sponsored Program members admitted in government hospitals.

To improve access to modern health facilities, DOH will upgrade a total of 2,552 government health facilities nationwide in order to close the upgrading gap by 2016. The upgrading will make these facilities compliant with DOH and PhilHealth standards by ensuring that RHUs meet accreditation, district, provincial and city hospitals fulfill the licensing and accreditation standards and for DOH facilities to become modern medical

centers. The upgraded facilities will also be monitored for quality improvements and assisted to attain long term financial sustainability.

Lastly, KP will implement focused public health services in order to prevent families, especially the poor, from falling ill or injured. In order to do this, DOH will assist LGUs in deploying 100,000 Community Health Teams (CHT) and 22,500 RNheals to: engage families and provide information; assist in health risk assessment and health use plan development; and facilitate use of services and provide basic services (see **Figure 49**).

FIGURE 49. KP INTERVENTIONS TO ADDRESS CHALLENGES TO UNIVERSAL HEALTH CARE



It can be expected that by 2016, there is universal PhilHealth coverage, improved access to modern health facilities and quality services and MDG targets are achieved. These can be expected to improve financial risk protection, improve access to quality health services, reduce costs, and more importantly, save the lives of thousands of mothers and children and increase the productivity of future generations of Filipinos.

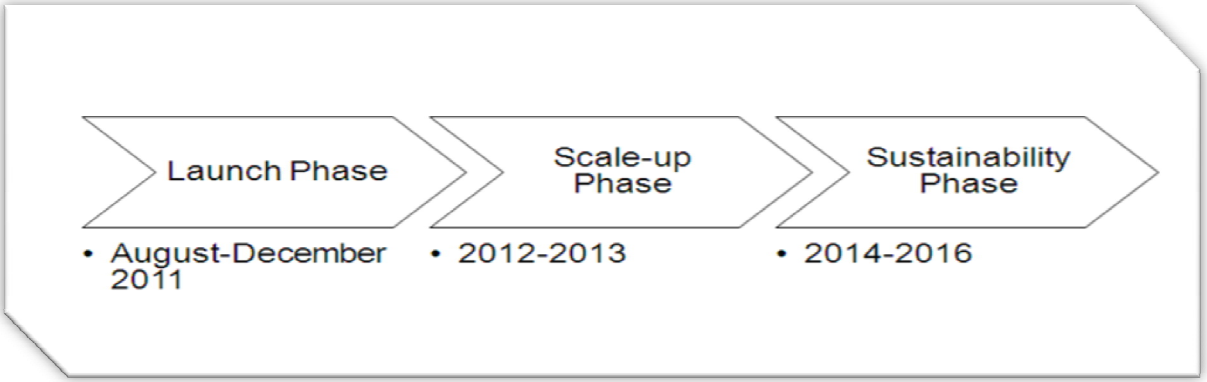
In particular, poor Filipino families will be aware that they are protected from vulnerabilities since they are:

1. enrolled in the NHIP;
2. assigned to a CHT;
3. linked to designated health facilities and providers that are KP compliant;
4. not charged for use of health services; and
5. provided with free public health services (e.g. vaccinations, TB DOTS, family planning).

7.2. PHASING OF KP IMPLEMENTATION

The implementation of KP shall be undertaken in three phases namely Launch Phase, Scale-up Phase, and Sustainability Phase as shown in **Figure 50**.

FIGURE 50. KP IMPLEMENTATION ROAD MAP



7.2.1. PREPARATORY AND LAUNCH PHASE (JANUARY TO DECEMBER 2011)

The Preparatory and Launch phase shall take place from January to December 2011 and it is expected that by the end of December 2011, at least the 2.3 million beneficiary families of the DSWD's Pantawid Pamilyang Pilipino Program (4Ps) are enrolled to the NHIP, provided information and guidance on NHIP benefit availment, and assigned and navigated to the public health and outpatient (OP) services that provide quality services with adequate supply of public health commodities and drugs. The 4Ps beneficiaries shall have access to inpatient services provided by upgraded hospitals with adequate supply of drugs and supplies.

7.2.1.1. The Interventions to be implemented for the KP thrust on financial risk protection:

1. Enrol 4.89 million of the poorest NHTS-PR households, including those who are beneficiaries of the 4Ps, into the NHIP sponsored program;
2. Train 10,000 RNheals nurses as trainers and supervisors to capacitate existing community-level workers (e.g. BHWs, BNS, *Barangay* officials) with community health team (CHT) functions;
3. Secure drugs, medicines, and supplies for DOH-retained hospitals serving NHTS-PR families (including 4Ps beneficiaries) for implementation of the "no balance billing" policy;
4. Consolidate inputs supporting local implementation of KP into one instrument and negotiation process by which to leverage better health performance from Provinces and Independent Cities through a system of Province- or City-wide agreement for KP
5. Amend the National Health Insurance Act (RA 7875, as amended) Implementing Rules and Regulations to define a new sponsored program that provides for a population based national local premium counterpart scheme that maximizes enrolment of poor families by earmarking national

subsidies for the NHTS-PR households with LGUs subsidizing both NHTS-poor households and LGU-identified poor;

6. Establish an NHIP membership services program that shall include, among, others, the provision of critical NHIP information to families such as their benefits and entitlements, their assigned primary providers, and the network of hospitals that can provide them inpatient services;
7. Implement a new NHIP Outpatient Benefit Package with No Balance Billing (OPB-NBB), based on a review of the implementation of PhilHealth Circular No. 40, s, 2000;
8. Implement a new NHIP Inpatient Benefit Package with No Balance Billing (IP-NBB) that draws from the experience of DOH and PhilHealth in NBB implementation;

7.2.1.2. The interventions for the KP thrust on health facilities enhancement shall include the following:

1. Upgrade 20 percent of DOH-retained hospitals, 46 percent of provincial hospitals, 46 percent of district hospitals, and 51 percent of RHUs to ensure that the poorest 5.2M NHTS-PR families shall have access to better quality inpatient and outpatient care;
2. Procure and distribute treatment packs for hypertension and diabetes to the RHUs for the use of 4Ps beneficiaries;
3. Develop a clear framework, objective criteria and transparent process in determining the necessity for providing assistance - a menu of options for the delivery of HFEP assistance, including mechanisms such as grants, central procurement, budget subsidy, etc.; and
4. Synchronize the procurement and logistics cycle with NG and LG procurement systems

7.2.1.3. The Intervention for the KP thrust on attaining health-related MDGs includes the following:

1. Procure and distribute public health commodities to RHUs serving 4Ps beneficiaries for the attainment of health-related MDGs; and
2. Develop budget execution plans for each CHD, including operational plans for implementing the MDG breakthrough strategy in the12 priority areas.

7.2.2. SCALE-UP PHASE 2012-2013

The Scale-up phase shall take place from January 2012 up to December 2013 with the following interventions.

7.2.2.1. The Interventions to be implemented for the KP thrust on financial risk protection are as follows:

1. Roll-out a new sponsored program with full national government premium subsidy to 5.2 million poorest families listed in the NHTS-PR at PhP 2,400.00 per family.
2. Ensure membership services to NHIP members; and
3. Introduce the new OPB and IP packages with No Balance Billing, including catastrophic care coverage by 2013.

7.2.2.2. The intervention to be implemented for the KP thrust on Health Facility Enhancement shall focus on the closure of the upgrading gap for local health facilities and DOH-retained hospitals so that the 10.8 million poor households in the NHTS-PR shall have access to improved quality of health services. The health facilities for upgrading in 2012 are listed below.

1. 25 DOH-retained modern medical centers financed through public private partnerships;
2. 27 provincial hospitals;
3. 118 district hospitals; and
4. 973 RHUs accredited to at least provide the new OPB package.

7.2.2.3. The MDG related interventions to be implemented for the KP thrust include the following:

1. Implement the MDG breakthrough strategy by focusing resources and efforts in the 12 areas with the highest concentration of NHTS poor, women with unmet need for family planning, mothers giving birth outside facilities, children not fully immunized, children not given Vitamin A supplementation, and adults who are TB smear positive; and
2. Mobilize at least 100,000 Community Health Teams (CHTs) to be trained and supervised by 21,070 RNheals nurses.

7.2.3. SUSTAINABILITY PHASE (2014-2016)

The sustainability phase shall take place from January 2014 to December 2016; the execution of KP budgets shall be done in the context of an expenditure framework that sets milestones for KP implementation, which include the interventions below.

7.2.3.1. The Interventions to be implemented for the KP thrust on financial risk protection:

1. Sustain coverage of at least 10.8M NHTS-PR families in the NHIP; and
2. Continue enhancement of the OPB and IP packages with no balance billing.

7.2.3.2. The intervention to be implemented for the KP thrust on Health facility Enhancement shall focus on the sustained provision of quality care at DOH-retained and local health facilities upgraded through HFEP.

7.2.3.3. The MDG related interventions to be implemented for the KP thrust shall cover the following:

1. Deploy CHTs and RNheals to serve at least the 10.8 M NHTS-PR families; and
2. Attain health-related MDGs by 2015.

The DOH shall oversee and guide the implementation of the KP implemented via total market approach with the local government as stewards of health in the provinces and cities. The total market approach shall ensure that all partners in the local market shall be mobilized from both the public and private sector. The development partners shall provide technical assistance and continue to support the implementation of the KP.

7.3. COST OF KP IMPLEMENTATION

The implementation of the KP shall require an estimated cost of *PhP*512.19B from all funding sources (DOH, LGU, PHIC, PCSO, development partners and private investments via PPP). The budget shall include a total of P111.66B for preventive and promotive programs and services, P92.6B for health facility upgrading,P263.42B for reducing financial risks of health care use (includes PhilHealth premiums and hospital operations). Additional P44.51B will be required to support policy, regulatory and sectoral management.

TABLE 36.TOTAL KP REQUIREMENTS IN *PHP* BILLION (2013-2016)

KP Thrust	Cost items	2013	2014	2015	2016	TOTAL
Attaining MDGs	Preventive and promotive programs and services	26.33	27.36	28.43	29.54	**111.66**
Financial risk protection	NHIP premium for primary and hospital care including catastrophic care	12.63	12.63	12.63	12.63	**50.51**
	Hospital operations	50.21	52.17	54.20	56.32	**212.91**
Health facilities enhancement	Construction and rehabilitation of health facilities	19.42	63.80	5	5	**92.60**
Policy support, regulatory and sectoral management	Regulatory unit operations	10.50	10.91	11.33	11.77	**44.51**
Total		**119.09**	**166.25**	**111.59**	**115.26**	**512.19**

7.4. STEWARDS AND PARTNERS FOR THE KP IMPLEMENTATION

7.4.1. THE DEPARTMENT OF HEALTH

The DOH is the steward of the whole health sector. The DOH primary role is to lead the country towards the attainment of the universal health goals. In order to ensure that the LGU goals are aligned with the national goals for health, the DOH and its attached agencies shall guide the implementation of *Kalusugan Pangkalahatan* in the provinces and cities. This is achieved by providing the LGUs with technical assistance, developing guidelines and policies.

The DOH has restructured itself to respond to the implementation of KP and achievement of the KP goals. The Center for Health Development (CHD) is responsible for meeting the KP performance targets in their respective provinces and cities and shall provide technical assistance to provinces and cities as they implement the three KP thrusts. The CHD shall manage the resources and leverage resources with the LGU for performance with respect to the KP implementation. The CHD shall sustain current efforts in the delivery of priority public health services throughout the region while applying increased effort in selected provinces/cities under the MDG breakthrough strategy and monitor the performance of provinces and cities in the region with respect to KP implementation. The CHD and the DOH ARMM are the stewards at the regional level. They shall be the key partners in working with the LGUs and other partners at the local level for the improvement of health outcomes.

The national public health programs should sufficiently complement the expansion of the national health insurance coverage in order to improve health outcomes, increase financial protection from costs of care and enhance responsiveness of the health care system. The Technical Clusters based at the Central Office shall provide technical support to KP implementation. They shall consolidate the national level performance regarding KP targets on NHIP, Health facilities enhancement and MDGs. These clusters shall consolidate overall resource requirements to implement KP from all sources, including the General Appropriations Act (GAA), NHIP, and Foreign Assistance Projects (FAPs) and ensure that the technical assistance capacities, packages, and tools are available to support the requirements in the implementation of KP. They shall develop measures and a collection, validation, and reporting scheme for monitoring the performance of KP implementation and shall also determine national level targets with area, regional and provincial breakdowns for KP implementation.

Resource mobilization for the KP implementation shall be conducted by the DOH. These shall include consolidation of the annual budget execution plans; performing timely and regular monitoring of budget expenditures through the Expenditure Tracking System (ETS); and facilitating the timely release of funds and delivery of commodities to CHDs. Guidelines shall be developed for the engagement and deployment of

doctors to the barrios (DTTBs), RNheals nurses, midwives and other personnel in support of KP implementation.

The CHDs shall be assisted in the operationalization of the new HFEP and a new approach to province-wide agreements for KP performance and implementation. A new method in validating service delivery outcome measures shall be developed including, among others, modern family planning (MFP) use, facility based deliveries, TB case detection and cure and developing a sustainable approach to secure access to essential lifesaving medicines for NHTS-PR families.

7.4.2. LOCAL GOVERNMENT UNITS (LGUs)

The LGUs are the local market stewards and shall ensure total market approach and mobilization of all partners for improved health outcomes. The LGUs shall formulate and implement the Province-wide Investment Plan for Health (PIPH) in the provinces and City-wide Investment Plan for health (CIPH) in the cities. The PIPH and CIPH shall help the provinces, cities, and municipalities to work as one unified health system and facilitate the achievement of the health goals and serve as the vehicle for implementing health reforms at the provincial and city level. In the next six years, the DOH will focus on improving the quality of the local health information systems in the LGUs and on institutionalizing the system. This includes the refinement of the LGU scorecard and its data collection and feedback system. Furthermore, analysis of certain weak and strong provincial areas will be made in order to provide better and more equitable services.

7.4.3. NATIONAL GOVERNMENT AGENCIES (NGAs)

The national agencies with the mandate to reduce poverty and serving the poorest of the poor of this administration shall be important partners in improving health outcomes. The national agencies with their own competencies and resources can contribute in the implementation of health sector reforms in the provinces and cities. The health stewards, the DOH and the LGUs, shall collaborate with the national agencies that will facilitate the achievement of the goals of KP.

Partnership with the Department of Social Welfare and Development (DSWD) shall primarily be done in reaching the poor families. The DOH coordinates with the DSWD through the CCT 4Ps program in reaching the poorest and marginalized sector that have the most needs. Providing the quality services and reducing financial risk protection shall be in coordination with the DSWD, in determining the poor through the NHTS. The intervention of deploying Doctors to the *Barrio*, RNheals, midwives and the CHT shall ensure that the CCT families will have an assigned health worker that will ensure proper health information and service provision.

Partnership with the Department of Education (DepEd) shall primarily be for ensuring the good health and nutrition of school children. Good health and effective education goes hand in hand in health and

development. School health programs are ideal vehicles to link the health, education and sanitation sectors in order to achieve better results in poverty reduction, development and good health. The coordination with DepEd shall be on the integration of simple evidence-based measures into the daily school routine to improve health in the school such as hand washing, tooth brushing and deworming which are components of the DepEd Essential Health Care Package.

Partnership with the Department of Interior and Local Government (DILG) shall include coordination with local government units to ensure total market mobilization for health at the LGU levels in the implementation of the three thrusts of the KP.

Partnership with the Department of Labor and Employment (DOLE) shall help in ensuring health in the workplaces, in the families of the employed and in the community where the worksite is provided, and that with quality care contributes to the KP goals.

Partnership with the National Economic and Development Authority (NEDA) and Department of Finance (DOF) shall facilitate the mobilization of development partners and other resources in support to the KP implementation.

Partnership with the Department of Budget and Management (DBM) shall result in resource mobilization in support to KP implementation and in the effective and efficient execution of the GAA.

7.4.4. DEVELOPMENT PARTNERS

The Development Partners (DP) shall provide official development assistance consistent with the national thrusts and directions for health. The DPs shall align and harmonize their systems and processes with government procedures and institutional reform processes and cooperate in the establishment of mechanisms to track development assistance for the KP and ensure the sustainability and institutionalization of assistance projects to appropriate agencies and offices.

The Development Partners (DPs) assist the DOH and LGUs through provision of technical assistance and resources through grants or loans. The collaboration between the DOH, LGUs and development partners is based on the Sector Development Approach for Health (SDAH). Through the SDAH, the DOH coordinates with the development partners and the national government to ensure the effective implementation of programs to improve health outcomes. The DOH, LGUs, and development partners interact through various institutionalized mechanisms, which allow the implementation of SDAH. The Bureau of International Health Cooperation (BIHC) coordinates and facilitates efficient and effective implementation of foreign-assisted projects. The DOH through BIHC has collaborated with the international organizations and development partners namely: UN Organizations (World Health Organization, United Nations Children's Fund and United Nation's Population Fund); multilateral agencies (World Bank and Asian Development Bank) and

bilateral agencies (US Agency for International Development, European Union Delegation, Japan International Cooperation Agency, Agencia Española de Cooperacion International para el Dessarolo, Australian Aid for International Development) among others.

7.4.5. PRIVATE SECTOR

One major approach in achieving maximum results in the present administration is in public and private partnerships. The private sector includes professional groups like medical, nurses, midwives and other paramedical groups, companies and pharmaceutical groups. The private sector is considered an integral part of the health sector. They are responsible for the production of health goods and services that will be of use to both health providers and consumers. The private sector guidelines and protocols in the provision of health services meet the standards set by the government. Public-Private Partnership for health (PPP) is an agreement between the government and the private sector. They serve as a venue in which the manner of support needed to achieve the health outcomes desired by the country is discussed. The private sector contributes to the partnership through the sharing of expertise and knowledge and its resources. PPPs are most evident at the local level where direct provision of services is implemented. The private sector works within the stewardship of the public sector. The private sector can be a provider of health services, provider of human resources, and provider of technical assistance to improve the health systems.

7.4.6. NON-GOVERNMENT ORGANIZATIONS (NGOs) AND PEOPLES ORGANIZATIONS (POs)

NGOs and POs also contribute to the health service delivery through program development, management, policy advocacy, resource mobilization and local service delivery. They provide enormous support to the system by reaching underserved areas and extending coverage in high-risk areas. These groups have the capacity to organize and mobilize communities and can serve as effective advocates of health programs at the national and local levels, as well as being direct providers of services in areas where government services are inadequate.

7.4.7. COMMUNITY HEALTH TEAMS (CHTs)

The Community Health Team (CHT) guarantees that every family in the community is periodically visited and attended by health providers as part of the government's efforts to achieve *Kalusugan Pangkalahatan* . The CHT Mobilization teams will do a nationwide door-to-door visit to reach all families, especially the poorest Filipino households, identified through the DSWD's National Household Targeting System (NHTS). The CHT Mobilization aims to link these families to health service providers, provide basic preventive/promotive health services when needed, and deliver key health messages. Health education and information in maternal and child care, adoption of a healthy lifestyle, and utilization and availing of NHIP benefits are among the key messages that will be disseminated, not only to NHTS poorest families but to each household in the community.

7.4.8. INDIVIDUALS AND FAMILIES

Individuals and families are included as important stakeholders for health since they are the direct beneficiaries of the KP being implemented. The responsibility of upholding the health of individuals and families does not solely fall upon the government and health care providers. Instead, the individuals and families themselves have the responsibility to care for their personal health and maintain healthy communities. Hence, it is important to involve them in decision-making processes through membership in health-related groups or structures. The individuals and families are empowered through participation in the decision-making for their own health care, planning and review of health service delivery, development, implementation and evaluation of health policies, strategies and programs. This enable effective strategies for improving health services from the standpoint of clients, providers, and policy makers.

7.5. COORDINATION MECHANISM FOR THE KP

A coordination mechanism to ensure total sector mobilization in attaining the KP goals shall be put in place at all levels. The public and private sector work together in improving the health outcomes. The private sector is mobilized with the stewardship of the public sector. Partners from the different sectors are involved in the resolution of issues and decision-making processes. Through this approach, the various stakeholders contribute their resources to include time and effort and their knowledge and experiences.

The stewards in promoting health in the Philippines are the Department of Health (DOH) and Local Government Units (LGUs). DOH and LGUs mobilize and coordinate with the national agencies, development partners, private sector, professional groups, non-government organizations (NGOs), people's organizations (PO), and individuals and families to achieve maximum results of the health reforms.

Coordinating mechanism with the development partners are conducted as follows:

1. Joint Assessment and Planning Initiative (JAPI). This is a multi-sectoral body composed of representatives from the DOH, other government agencies, international donor partners, and civil society. The JAPI serves as venue for partners to evaluate progress of reform implementation and recommend future actions at policy and strategic levels.
2. Joint Appraisal Committee (JAC) is another multi-sectoral body which reviews the national health reform efforts and the Provincial and City Investment Plans for Health
3. Health Partners Meeting (HPM) is conducted every two months to discuss operational issues or concerns in the implementation of reforms.
4. Technical Assistance Coordination Team (TACT) guarantees that the technical assistance provided by the partners is aligned with the sector program. This ensures that the manner of support given by the partners is complementary and is not duplicated.
5. Technical Coordination Meetings (TCM) ensures the monitoring and evaluation of foreign assisted project's performance indicators at a regular basis including the monitoring for the implementation

of strategies and activities under the project. It is in this venue that foreign assisted project and issues and concerns are also discussed and provided with resolutions together with all implementing partners.

Partnerships for health shall be performance-based and partners in health align and work together in achieving the national objectives for health. The monitoring and evaluation framework of DOH shall be made relevant to the parameters set for the KP. This would enable the DOH to manage and track health outcomes at the national and local levels. The Local Government Unit Scorecard (LGU Scorecard) shall measure the overall performance of provinces and their respective LGUs and track health outcomes in the provinces and cities. The Donor Scorecard shall measure the performance of development partners based on Sector Development Approach for Health (SDAH). The Performance Governance System scorecards at the central office, Centers for Health Development and hospitals shall measure the performance of the DOH Central Office, CHDs and hospitals in their contribution to the overall health outcomes.

All these can be achieved by laying down the necessary building blocks for an effective partnership. First, an environment that is conducive to collaboration should be fostered. A supportive and nurturing environment is central to managing and sustaining any partnership. Effective exercise of the leadership and stewardship role of the DOH is necessary to manage the wide array of stakeholders given the decentralized nature of the health system. Comprehensive policy frameworks should be supported with clear strategic directions that can be implemented at various levels. This creates involvement among various stakeholders. Second, institutional support systems have to be in place. This includes:

1. Systems and operating procedures for program and project management;
2. Financial and logistics management;
3. Sharing of information through updated and relevant information databases;
4. Clear reporting and feedback mechanisms; and
5. Functional monitoring and evaluation systems that would encourage the stakeholders to attain mutual goals.

ANNEX 1

PRIORITY LEGISLATIVE MEASURES

Achieving universal health care for all Filipinos will require the following priority legislation:

1. Amendment of the National Health Insurance Act;
2. Laws for corporate governance of hospitals ;
3. Restructuring of Sin Taxes (Alcohol and Tobacco);
4. Law on Responsible Parenthood; and
5. Amendment of selected laws governing practice of health professionals.

The proposed amendment of the National Health Insurance Act is intended to amend provisions concerning national and local premium counterpart sharing for the Sponsored Program. The amendment will allow for premiums of the poorest families to be paid in full by the national government. The amendments will also provide for the inclusion of the second poorest NHTS-PR families and LGU-identified poor into the Sponsored program through a three-way premium sharing scheme between the national and local governments and individual families.

On the other hand, specific laws converting public facilities into corporate hospitals will facilitate participation of individual hospitals into PPP arrangements. These specific laws will provide a corporate nature to the facility, define its mandate as a government corporation, provide for a governing board and allow the facility to enter into contracts, mobilize its assets as well as generate, retain and spend revenues to limit budgetary dependence and promote long term sustainability.

The restructuring of sin taxes for alcohol and tobacco will require an amendment of the existing Sin Tax Law (RA 9334). The amendments will allow maximizing revenues from sin taxes and making price levels high enough to discourage cigarette and alcohol consumption. The restructuring is expected to generate some *PhP* 60B per year, of which a portion shall be earmarked to finance universal health care investments.

A law on responsible parenthood, otherwise known as the RH Bill, will mandate the provision of modern FP services nationwide instead of it being an optional service subject to the political preference of government officials and health providers. The law will ensure explicit and sustained provision of modern FP and related services and effectively shield the family planning program from the annual uncertainty of the budget process.

Lastly, amending the specific laws governing health professions is intended to allow for flexibilities in the exercise of specific clinical functions to pave the way for substitution (e.g. Nurses or midwives as physician substitutes for specific functions) and allow other health professionals to be compensated by PhilHealth for services rendered. In particular, the flexibilities are needed to expand the reach of critical services such as maternal care especially in underserved areas. For example, midwives are currently prevented by the Midwifery Act and the Medical Act to administer lifesaving interventions such as IV therapy (i.e. administration of antibiotics). As a result, midwives who perform these procedures either need to be supervised by a physician or run the risk of being held legally-liable or not getting reimbursed by PhilHealth.

An alternative to passing specific pieces of legislation would be to pass a specific law on universal health care itself. This law on universal health care can be made to contain the specific provisions necessary to achieve the goals of specific amendments or new legislation as stated above