

## Accelerating Non- Communicable Disease Prevention and Control In the Philippines

### *Burden of Disease Caused by Non-communicable Diseases*

Non-communicable diseases (NCD) or lifestyle diseases represent a significant burden on public health regardless of the country's economic development and are likely to account for an increasing share of diseases in the future, particularly in developing countries. Globally, 60% of deaths are currently due to these diseases, amounting to more than 40 million deaths annually in both developing and developed countries.<sup>1</sup> Projected trends show that by 2020, NCDs are expected to account for 73% of global mortalities and 60% of the disease burden. Each year at least: <sup>2</sup>

- 4.9 million people die as a result of tobacco use;
- 1.9 million people die as a result of physical inactivity;
- 2.7 million people die as a result of low fruit and vegetable consumption;
- 2.6 million people die as a result of being overweight or obese;
- 7.1 million people die as a result of raised blood pressure; and
- 4.4 million people die as a result of raised total cholesterol levels.

According to the WHO report entitled Preventing Chronic Diseases: A Vital Investment, countries can incur national income losses as a result of the impact of deaths from NCDs on the labor supply and savings. The following data shows that the estimated loss in 2005 for China was 18.3 billion, 11.0 billion for the Russian Federation and 9 Billion for India. According to the report, these losses accrue over time because each year more people die. Estimates for 2015 for the same countries are between approximately three and six times those of 2005. The cumulative and average losses are higher in the larger countries like China, India and the Russian Federation, and are as high as 558 billion international dollars in China.<sup>3</sup>

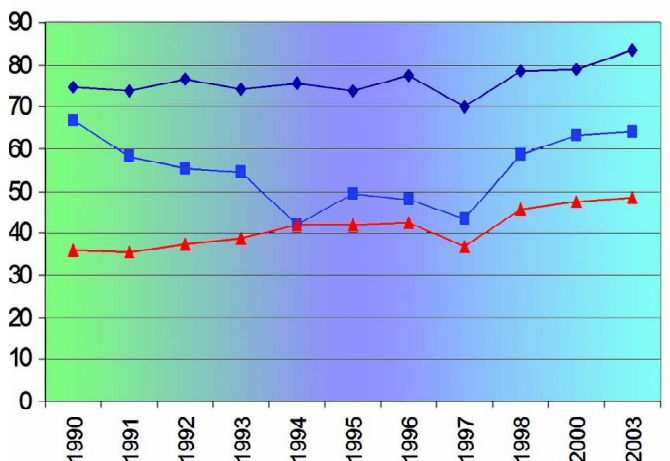
Table 1 Projected forgone national income due to heart disease, stroke and diabetes, selected countries, 2005-2015 (billions of constant 1998 international dollars)

	Brazil	Canada	China	India	Nigeria	Pakistan	Russian Federation	U.K.	Tanzania
Estimated Income Loss in 2005	2.7	0.5	18.3	8.7	0.4	1.2	11.1	1.6	0.1
Estimated Income Loss in 2015	9.3	1.6	13.18	54.0	1.5	6.7	66.4	6.4	0.5
Accumulated loss in 2005 value	49.2	8.5	557.7	236.6	7.6	30.7	303.2	32.8	2.5

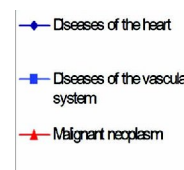
Source: Preventing Chronic Diseases: A Vital Investment, p. 78

This ominous epidemiologic situation and its implications are likewise reflected in the Western Pacific Region where 26% of the world's population resides. In this region over 75% of deaths are attributable to non-communicable diseases, compared to 14% of deaths caused by communicable diseases. Cardiovascular disease and malignant cancers cause more deaths in middle- and low-income countries and areas within the Western Pacific Region than all communicable diseases combined <sup>4</sup>

Fig. 1 Mortality Trends of Selected Non-communicable Diseases, 1990-2003, Philippines.



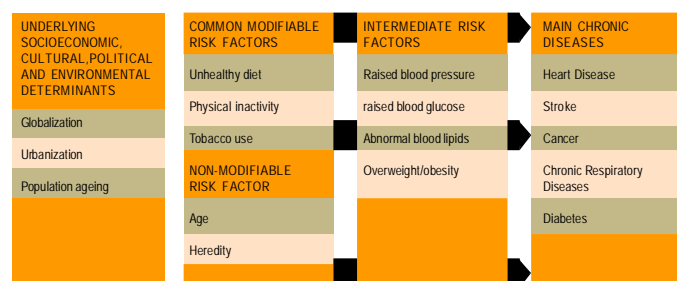
Source: DOH, 1990-2003.



In the Philippines, heart diseases, cancers, vascular diseases, diabetes and COPD are 5 of the 10 leading causes of deaths in the country. Three of these diseases are in the top 5 positions (diseases of the heart and the vascular system, cancers). These diseases make up 40% of all Filipino deaths. Morbidity trends in 2003, on the other hand, showed that hypertension and heart diseases are leading causes of illness. Fig.1 shows the unabated increase of NCD mortalities in spite of preventive, promotive and curative interventions implemented by the DOH, health facilities, health professionals and various organizations – a disquieting threat to the health of Filipinos!

The causes of this growing trend are attributed to the changing socioeconomic, cultural, political and environmental climate. Globalization and urbanization serve as conduits for the promotion of unhealthy habits and behaviors (e.g. tobacco and alcohol use, unhealthy diets, and physical inactivity) and environmental changes (e.g. indoor and outdoor air pollution).

### Causes of Chronic diseases



These risk factors give rise to intermediate risk factors such as raised blood pressure, raised blood glucose, unhealthy lipid profiles, obesity and impaired lung function. These intermediate risk factors, in turn, predispose individuals to major NCDs – cardiovascular disease (heart disease and stroke), cancer, chronic respiratory disease and diabetes. <sup>5</sup>

According to the 2003 NNHeS, 90% of Filipinos has one or more of these seven prevalent risk factors:

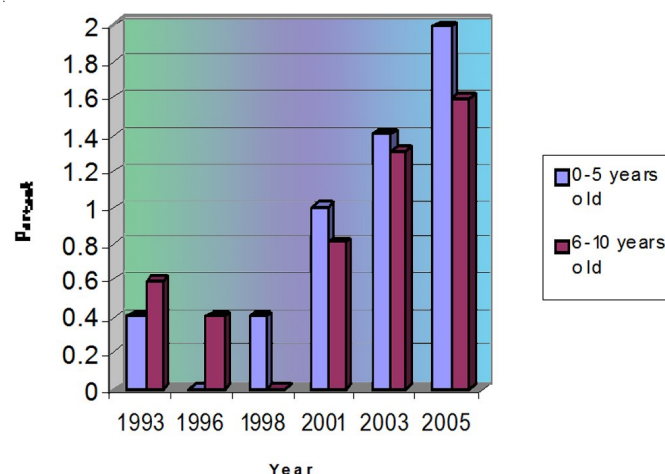
Table 2 Prevalent Risk Factors, FNRI NNHeS, 2003.

Prevalent Risk Factors	Rate
1. Physical inactivity	60.5%
2. Smoking	34.8%
3. Hypertension	22.5%
4. Hypercholesterolemia	8.5
5. Overweight	20%
6. Obesity	4.9
7. Diabetes	4.6%

Source: FNRI, 2003

Local studies conducted to investigate the prevalence of risk factors for lifestyle related diseases in the Philippines showed that although awareness of risk factors is very high among Filipinos, current prevalence of tobacco use, alcohol drinking and physical inactivity are moderately high and intake of fruits and vegetable is relatively low.<sup>6</sup> These risk factors are not only prevalent among adults. Alarming, younger children are already showing the propensity of becoming overweight at an early age (Fig. 2).

Fig. 2 Trends in Overweight among Children 0-10 years, 1993-2005, Philippines



Source: FNRI, 2003

Following the same trend, diabetes prevalence has increased significantly over the years to 20.06% among Filipino adults at present. Adult incidence of diabetes from 1998 to 2007 is likewise alarming at 8.5%.<sup>7</sup>

Willet, Koplan et. al (2006) summarized the changes in lifestyle and diet and its health benefits through the analysis of NCD-related epidemiologic studies (Table 3). This review showed the possible relatedness of risk factors and their effects on health. As shown below, avoidance of smoking can result to a decrease in the risk of having cardiovascular disease, diabetes, cancer, dental disease, cataract and sexual dysfunctions.

Their analysis led to the following conclusions: **1)** reducing identified, modifiable dietary and lifestyle risk factors could prevent most cases of coronary artery disease, stroke, diabetes, and many cancers in high-income populations (Willet 2002); **2)** low rates of these diseases can be attained without drugs or expensive medical facilities, an outcome that is not surprising, because their rates have historically been extremely low in developing countries with few medical facilities; and **3)** preventing these diseases will require changes in behaviors related to smoking, physical activity, and diet; investments in education, food policies, and urban physical infrastructure are needed to support and encourage these changes.<sup>8</sup>

**Table 3 Convncing and Probable Relationships between Dietary and Lifestyle Factors and Chronic Diseases**

Dietary and lifestyle factors	CVD	Type 2 diabetes	Cancer	Dental disease	Fracture	Cataract	Birth defects	Obesity	Metabolic syndrome	Depression	Sexual dysfunction
Avoid smoking	↓	↓	↓	↓	↓	↓		↑			↓
Pursue physical activity	↓	↓	↓		↓			↓	↓	↓	↓
Avoid overweight	↓	↓	↓		↑	↓			↓		↓
<b>Diet</b>											
Consume healthy types of fats <sup>a</sup>	↓	↓							↓		
Eat plenty of fruits and vegetables	↓		↓		↓	↓	↓	↓			
Replace refined grains with whole grains	↓	↓						↓	↓		
Limit sugar intake <sup>b</sup>	↓	↓		↓				↓	↓		
Limit excessive calories								↓	↓		
Limit sodium intake	↓										

Source: Authors' summary of a review by the WHO and FAO 2002; Bacon and others 2003; Fox 1999; IARC 2002.

Note: Bold = convincing; Standard = probable relation; ↑ = increase in risk; ↓ = decrease in risk.

a. Replace trans and saturated fats with mono- and polyunsaturated fats, including a regular source of N-3 fatty acids.

b. Includes limiting sugar-based beverages.

Source: Disease Control Priorities in Developing Countries, second edition, 2006, p. 834

## Poverty and Non-Communicable Diseases

The WHO report entitled Preventing Chronic Diseases: A Vital Investment (2006) documented the interrelatedness of chronic diseases and poverty. The following figure explains that poor people are more susceptible to chronic diseases because they are materially deprived, have lesser choices to pursue a healthier lifestyle and have higher levels of risky behaviors. This then leads to increased risk to disease, lesser access to good and quality care and poorer chances in preventing complications. The discussions above showed that both the obese people in developed countries and the impoverished in developing countries are at risk to get sick of chronic diseases. Such is vital to note in designing policies and programs for NCDs. It also shows that the relationship of NCDs and poverty as demonstrated by the factors is more than linear. It recurs and needs to be halted as it can result to more deaths and deeper poverty situations.



The cost of care for chronic diseases is often high, to the detriment of the poor. A study on costs, availability, and affordability of diabetes care in the Philippines indicate that the median out-of-pocket expenditures for out-patient care is PhP 687 and hospitalization is PhP 8,580. Median daily cost of maintenance medicines is PHP 25/day. Medicines too in general are more expensive compared with other Asian countries. Not surprisingly among diabetics, only 69% are able to sustain regular consultations, 76% maintain regular medication, and 40% maintain regular laboratory tests. Social health insurance covers 79% of those in the formal sector, but lowest at 15% among the informal sector.<sup>9</sup> Investments in NCD prevention and control programs are essential, much more in low and middle income countries, to hamper the increasing chronic disease trends and reduce poverty.

## Global and National Integrated Frameworks to curb the growing NCD epidemic

The World Health Organization (WHO) highlighted the need for integration in the mid 1980's. During the 53<sup>rd</sup> World Health Assembly in 2000, the Global Strategy for the Prevention and Control of NCDs (WHA53.14) was adopted. The goal was to support Member States in their efforts to reduce the toll of morbidity, disability and premature mortality related to NCDs.

### Box 1. Advantages of Implementing an Integrated Approach in Health Services Delivery

1. Cost-effective health services
2. Cost savings resulting from training one multi-purpose worker vs. several single purpose workers
3. Ease of implementation at the point of first contact with the patient
4. Improved productivity and efficiency (e.g. Better use of staff time, reduced duplication of services)
5. Improved health status by addressing health problems in a holistic manner, taking action both against actual diseases and against their underlying causes and encouraging more community participation and self care
6. Improved user satisfaction and convenience (via the opportunity for more personalized consultations and records)
7. Improved equity (redistributing responsibilities for health care for specific groups among public, non-government and private providers).

Source: Howard Research and Instructional Systems Inc. in Policy Development in Support of an Integrated Non-communicable Disease Prevention and Control Program in the Philippines Project, 2005



Continuous emphasis on the need to address the increasing NCD problems worldwide led to the creation and endorsement of the action plan for the prevention and control of non-communicable diseases during the Sixty First World Health Assembly (2008).

The Integrated NCD Prevention and Control Program (INCDPCP) of the Department of Health commenced with the formulation of the Framework for the Integrated Community-Based NCDPCP in 2000. The vision of the INCDPCP Program is to improve the quality of life of all Filipinos. Its objectives are to reduce the exposure of population to risks related to NCDs such as smoking, unhealthy diet, physical inactivity and to increase the proportion of NCD cases given appropriate treatment and care. The adoption of the integrated and comprehensive approach:

- Focuses on common risk factors cutting across specific diseases guided by a life course perspective;
- Encompasses the three levels of disease prevention: primary, secondary and tertiary level
- Emphasizes strategies which would benefit entire population or large sections of the population
- Integrate across settings; such as health centers, schools, workplaces and communities
- Make explicit links to other government programs, community based organizations; and emphasizes inter-sectoral action.

The INCDPCP and other programs of the DOH is guided by **FOURmula One for Health (F1)**. This is the Department of Health's current framework in the implementation of critical health interventions. In F1, interventions are **to achieve better health outcomes, obtain a more responsive health system and a more equitable health care financing**. The following INCDPCP challenges are categorized according to this framework, focusing on the aspects of GOVERNANCE, SERVICE DELIVERY, REGULATION and HEALTH CARE FINANCING.

## Challenges to the Sustainable Implementation of the Integrated Non-communicable Disease Prevention and Control Program

### A. GOVERNANCE

#### Linkages and Partnerships

**A core national coalition of stakeholders mostly from the health sector is currently in place. To more fully and effectively address the social and economic determinants of NCDs, there is a need to expand partnerships to other sectors, including the private sector. This will help harmonize national efforts to prevent and control NCDs.**

**Integration** is an act of combining parts into an integral whole thus uniting several components that are typically regarded as separate. Apart from the integration of program components, the concept of integration is also about the active involvement of key organizations within a network that plans, implements and delivers to pursue a unified endpoint. The Canada Health Transition Fund expresses this aptly as a "coordinated network of stakeholders involved in the organization, funding, delivery and governance of services to support health, well-being and quality of life".<sup>10</sup>

The problems caused by NCDs are perceived as both health and community concerns due to the **multi-sectoral nature of issues related to NCDs**. Globally, the trend towards addressing the NCD issues involves numerous stakeholders thereby needing integrated strategies to tackle them.

This multi-sectoral nature can be demonstrated by the need to increase the access of Filipinos to healthier food. To meet this objective, it involves the early education interventions by the DepED, regulation of fast food and stipulation of food and nutrition labeling and standards by the DTI, discovery of new mechanisms to deliver healthier food and drinks through research by the FNRI, analysis of rural and urban area transitions and its effect on food availability by LGUs and DA; and the over-all planning to ensure available, adequate, safe and healthy food for all Filipinos by the NEDA.

The intergovernmental approach to NCDs was promoted by Tiglao in 2001 in her study entitled Evaluation of the DOH Programs on the Prevention and Control of Lifestyle Diseases. The report put forth that the approach

to an integrated program on lifestyle diseases should be holistic and must be complemented by a network of agencies from different sectors – public and private.

To date and partnering with the DOH is the Philippine Coalition for the Prevention of Non-Communicable Diseases (PCPNCD). It is composed of 44 agencies/organizations and NGOs that are largely from the private sector. The collaboration between the DOH and the PCPNCD resulted in outputs such as the creation of the NCD Key Performance Indicators. The indicators and targets were based on the consensus forged among the stakeholders and were benchmarked against the National Nutrition and Health Survey and Philippines Global Youth Tobacco Survey results.

**A broader network of government and nongovernmental agencies with national mandates to address NCD-related issues is vital to complement the efforts of the DOH and the Philippine Coalition for the Prevention of Non-Communicable Diseases (PCPNCD). With the DOH at the core, strengthened and expanded partnerships advocate the *whole-of-government* and *whole-of-society* approaches. Government leadership and commitment shall remain at the forefront to coordinate multi-sectoral efforts in addressing the problems related to NCDs.**

### Policy Advocacy

**The health sector has adopted the integrated and comprehensive approach towards prevention and control of NCDs. There is an urgent need to enhance awareness among the health workforce and convince more stakeholders, including those from the other sectors, on the cost-effectiveness of this approach. This way, multi-sectoral synergy will be realized towards achieving global and national goals on NCDs.**

The different experiences in addressing the NCD problem throughout the world is expanding, diversifying and evolving. Such is also reflected in the INCDPCP. As shown by the program milestones (Box 2), progress over the recent years has yielded notable lessons which have provided impetus for the further development of the INCDPCP in collaboration with its partners.

Various community models and best practices have been shared and disseminated among partners. Continuous advocacy on the **integrated approach will expand inter-agency and inter-sectoral collaboration.**

#### Box 2. INCDPCP Milestones

##### 2000

- DOH commissioned: External evaluation study to assess the effects of the existing programs as basis for integration;
- Formulated the Framework for the Integrated Community-Based NCDPCP;
- The Training Module for Health Service Providers on the Integrated NCDPCP developed
- The Degenerative Disease Office consisting of two divisions was mandated to manage the NCDPCPs under the National Center for Disease Prevention and Control;

##### 2001

- Demonstration Project: Integrated Community-Based NCDPC in Pateros and Guimaras.

##### 2002

- The Healthy Lifestyle approach: recognition of 3 major risk factors: physical inactivity, tobacco use and unhealthy diet
- DOH in partnership with Philippine Heart Association staged a national advocacy program on the prevention and control of cardiovascular and other chronic diseases

##### 2003

- Launching of the "Mag HL Tayo Campaign"
- Nationwide training of Regional NCDPC Coordinators and Training staff/ HEPOs on the promotion of HL
- Passing of the Anti-Tobacco Law

##### 2004

- The Philippine Coalition for the Prevention of Non-Communicable Diseases established
- Scanning of NCD-related laws and policies
- DOH initiated talks with commercial food establishments to offer healthier menu options to the public

##### 2005

- Training of national government agencies on HL (DILG, DepED, DSWD, DOT, etc.)
- A Policy Development Study completed identifying policy agenda in support to the integrated NCDPC Program
- The demonstration project in Guimaras and Pateros was assessed and results show very promising results

##### 2006

- Pilot Study on Breast Cancer Intervention Study in Pateros and Pilot Study in Guimaras the community-based CRD Program initiated
- 3<sup>rd</sup> Public Health Convention on NCD Prevention and Control



## Box 2. INCDPCP Milestones

2007

- Post NCD survey in Guimaras and Pateros
- The DOH-NCDPC adaptation of the WHO Preventing Chronic Diseases: A Framework for Action for the Philippines

2008

- 4<sup>th</sup> Public Health Convention on NCD Prevention and Control
- Finalization of manual of operations for community-based NCD prevention and control

## Monitoring and Surveillance

**Surveillance System for non-communicable diseases and risk factors is available but currently limited. There is a need to enhance information systems to generate timely and relevant data for continuing policy enhancement and program response.**

The main source of NCD mortality and morbidity data is from the Philippine Health Statistics, national prevalence surveys, and cancer registry. The Philippine Health Statistics derive data from death registries nationwide and has tracked over the years the continuing dominance of noncommunicable diseases among the leading causes of mortality in the country.

The Field Health Service Information System (FHSIS), which monitors implementation of DOH programs, includes reporting for cases of hypertension and heart disease and excludes other noncommunicable diseases, notably cancers, chronic obstructive pulmonary disease, and diabetes. The data more accurately refers to number of consultations done at the RHU level, but can nonetheless provide an estimate of the NCD burden in the country.

Hospitals also collect data on diseases encountered, including NCDs, but this is not aggregated at the national level to provide information for use in program implementation, monitoring, and evaluation. There is currently no mechanism that allows hospitals to process vital health data and link these with the DOH. The same is true even for DOH-run hospitals that have established their own information systems.<sup>11</sup>

Functional cancer registries are maintained in collaboration with private organizations/ institutions that help fund the system. At present, cancer data is collected only in Metro Manila and extrapolated to come up with national estimates. Other chronic diseases registries, e.g. stroke registry, diabetes registry, etc are done by different professional organizations in selected facilities but collected data remains untapped and not linked to DOH.

Data generated from national population-based surveys, such as the National Nutrition and Health Survey (NNHeS) and the Global Youth Tobacco Survey (GYTS) serve as management benchmarks for most NCD-related initiatives. However, these surveys require huge resources and thus are done only every 3-5 years.

There is a need to invest on health information systems that covers and tracks trends and program performance on NCDs. Similarly, efforts to harmonize, disseminate, and utilize available data should be continued.

## B. SERVICE DELIVERY

**Health services and products addressing NCD needs are generally available at the field level, especially at the public health facilities, but widely perceived to be at varying levels depending of local government resources and priorities. Wider access and availability should be advocated and ensured, particularly at the level of communities.**

The INCDPCP recently stipulated the guidelines for the overall delivery of NCD prevention and control services at various levels of care – primary, secondary and tertiary care. The requirements set by the guidelines include the type or category of personnel and their competencies, logistics (drugs/medicines/supplies), equipment, physical set-up, forms for recording the services, and intervention packages necessary to implement the services. The guideline underscores that in the delivery of the NCD prevention and control services, it is important to ensure the continuity of care so that the lifestyle improvements realized by the individual clients are further enhanced and sustained. Establishing a monitoring and feedback mechanism and a good referral system are critical in the delivery of services.

**The NCD package of services needs to be adopted, implemented and monitored at all levels of care.** Referral systems will also have to be enhanced to more effectively prevent and manage NCDs.

## C. REGULATION

Some policies and legislations are already in place to facilitate implementation of relevant interventions. There is a need to enhance and ensure efficient implementation of these policy instruments already in place. Similarly, there is a need to come up with additional regulatory mechanism to support and strengthen current initiatives on NCD prevention and control.

Republic Act 9211, otherwise known as the Tobacco Regulation Act of 2003, is leading the way to ensure supportive environment for healthy lifestyle. Its effective implementation however remains to be a major concern, faced with the massive marketing strategy of tobacco companies and the need for continued advocacy among local government units to implement said law.

The Bureau of Food and Drugs (BFAD) play an important role in ensuring the availability of safe and nutritious food to the public. Critical and basic is the **proper implementation of nutrition labeling and disclosure of the contents** of food products, which can be complemented by information dissemination activities to influence consumer behavior in selecting and purchasing healthy food products.

BFAD can likewise liaise with agencies like the National Nutrition Council to put in place policies that encourage reduced salt consumption in the population. Moderate reduction (of 2-4.6 g/d) in salt consumption has been shown to reduce absolute systolic blood pressure. Reduction can be achieved by voluntary reduction in the salt content of processed foods and condiments by manufacturers, to be supplemented by a sustained mass media campaign aimed to encourage dietary change within household and communities. WHO recommends a salt intake of no more than 5g/dl.<sup>12</sup>

## D. HEALTH CARE FINANCING

NCDs often result to catastrophic expenditures, plunging many families deeper into poverty and ill-health. Many are often not able to continue with treatment and care, contributing to the growing burden of diseases due to NCDs. There is a need to put in place mechanisms to protect individuals and families from financial difficulties and catastrophe in dealing with NCDs.

The health care costs related to non-communicable diseases are significant in both developing and developed countries. In a developed country like the U.S., heart diseases and stroke are the topmost (1<sup>st</sup> and 3<sup>rd</sup>) causes of mortality for both men and women as these comprise more than 35% of all mortalities. The cost of heart disease and stroke in the U.S for 2008 is projected to be more than \$488 billion. This amount includes health care expenditures and productivity losses due to death and disability. The economic impact of heart disease and stroke is projected to increase in the U.S. due to its aging population.<sup>13</sup>

Table 4 Estimated Direct and Indirect Costs of Major Cardiovascular Diseases and Stroke\*, United States, 2008<sup>14</sup>

Cardiovascular Diseases	In Billions
Heart Diseases <sup>†</sup>	\$287.3
Coronary Heart Disease	\$156.4
Stroke	\$65.5
Hypertensive Disease	\$69.4
Heart Failure	\$34.8

\* Totals do not add up because of rounding and overlap.

<sup>†</sup> Includes coronary heart disease, congestive heart failure, part of hypertensive disease, cardiac dysrhythmias, rheumatic heart disease, cardiomyopathy, pulmonary heart disease, and other or ill-defined "heart" diseases.

Source: American Heart Association. *Heart Disease and Stroke Statistics—2008 Update*.

On the other hand, the cost of having diabetes in developed countries within the Western Pacific Region, like Australia and Japan have estimated that about 5-10% of the total health care can be attributed to the care of diabetes and its complications. For Australia, at least US\$ 720 million was spent on diabetes health care in 1995 compared with US\$ 550 million in 1990. In Japan, the direct cost of diabetes to the health care sector is about US\$ 16.94 billion and accounted for 6% of total health budget in 1998.<sup>15</sup> According to the Western Pacific Declaration on Diabetes (2001) people with diabetes consume a greater proportion of health care costs than people without diabetes. This is primarily due to the cost of complications but includes the ongoing requirement for medications, supplies, laboratory assessments, and relatively frequent visits to health professionals.<sup>16</sup>

It is likewise noteworthy that in the Region, 75% of diabetes cases and 90% of cancer cases are diagnosed in **developing countries**. Non-communicable diseases can therefore contribute to the Region's burden of poverty due to high out-of-pocket expenditures, retard national development and can widen the health inequities within and across countries.<sup>17</sup> To have a clearer picture of the **economic impact of these diseases on families in the developing region**, a recent study on the Economic Burden of Smoking-Related Disease in Thailand by Leartsakulpanitch et al (2007) estimated the direct out-of-pocket medical costs of treating major diseases attributable to smoking amounted to 9,857.02 million baht, 0.48% of GDP in 2006.<sup>18</sup>

In the Philippines, because data on costs of NCD treatment and out-of-pocket expenditures are not readily available, the National Health Accounts (2005) is presented as substitute to show the dominance and utilization of private out-of-pocket expenditures over all types of fund sources for health. Private sources accounted for more than 50% of all sources. As shown OOP increased in 2005 (46.9% to 48.4%) and is higher than government (30.7%, 28.7%) and social insurance (9.6%, 11%) expenditures. It also demonstrated that though the rate of Social insurance (PhilHealth and Employees' Compensation) expenditure increased, it was still not enough to lower private out-of-pocket expenditures in 2005.

Table 4 Sources of Funds for Health, PNHA, 2005<sup>19</sup>

Sources of Funds	Amount in Million Pesos		Growth rate(%)
	2004	2005	
Government	50,792 (30.7%)	51,922 (28.7%)	2.2
National	26,019	28,651	10.1
Local	24,772	23,271	(6.1)
Social Insurance	15,935 (9.6%)	19,899 (11%)	24.9
PhilHealth (Medicare)	15,481	19,253	24.4
Employees' Compensation	454	646	42.4
Private Sources	96,616 (58.4%)	106,848 (59.1%)	10.6
Out of Pocket	77,524 (46.9%)	87,508 (48.4%)	12.9
Private Insurance HMOs	4,084 7,079	4,344 7,082	6.4 *
Employer based plans	5,903	5,755	(2.5)
Private Schools	2,026	2,158	6.5
Others	1,953	2,102	
All Sources	165,295	180,772	9.4

/ Revised \*less than 0.1%

Source: PNHA, 2005

On specific health expenditures, the Family Expenditure on Health (2000) reported that of the total expenditures, 1.9% or 35 billion pesos were spent on medical care. Of this, 46.4% was allocated on drugs and medicines.<sup>20</sup> Further, a more current study conducted by PhilHealth in 2006 on hypertension and the compliance to medications of PhilHealth members and dependents point to indications of difficulties faced by the members and dependents with hypertension. The results showed that 67-92% of the respondents from NCR, Region IV-A, VII and X think that the medicines for hypertension cost too much. This was their response when asked about the reasons for not taking blood pressure drugs every day or for taking less than the recommended. Further, 50-83% of the respondents cited financial reasons as the cause for missing or taking less blood pressure drugs than the prescribed amount.<sup>21</sup>



A study on the costs, availability and affordability of diabetes care in the Philippines revealed that nearly three-fourths of the respondents answered that they had given up diabetes care because of financial difficulties at one time in the past. Sixty seven percent (67%) experienced shortage of money because of diabetes-related expenditure, and borrowed money or pawned assets. Only 26% answered they were prepared for future acute care with their own money or private insurance. In the study, Philhealth coverage was lowest among the informal sector at 15%.<sup>22</sup>

As seen, **macro level expenditures related to NCDs are devastating for developed and developing economies.** This condition is multiplied many times over at the micro level especially because socio-economically disadvantaged families are more at risk of getting sick, have less access to good quality care and they commonly have to pay out-of-pocket for health expenses.

**Out-of-pocket expenditures related to the treatment of non-communicable diseases can be catastrophic as NCDs are chronic in nature and require long-term and expensive treatment, not to mention the medicines that need to be taken continuously and hospitalization and rehabilitation events that should be attended to. Such circumstances can further plunge families, especially those who are poor, into cycles of ill-health, poverty and social exclusion.**

Social health protection mechanisms primarily through PhilHealth and social safety nets play very vital roles in **ensuring Filipinos' financial protection and access to quality health care in times of ill-health.**

### Way Forward

The following recommendations aim to improve health outcomes and access of Filipinos to relevant health services and financial protection. To improve the overall approach towards the integrated prevention and control of selected lifestyle diseases thereby lowering their incidence and prevalence and, there is a need to:

- Strengthen linkages with relevant government and non-government agencies to improve their regard of the problem, to increase support for NCD prevention and control and to complement the existing efforts of the Philippine Coalition for the Prevention of Non-Communicable Diseases (PCPNCD). This direction will give way to organizational and technical quality and expand the social accountability of various stakeholders and sectors to address the NCD related problems.
- Improve the surveillance system on NCDs. Information systems at the level of public health facilities and hospitals should be established and linked to the DOH for harmonized national data on NCDs. Similarly, efforts to disseminate and utilize data for policy enhancement and program management should be continually pursued.
- Health promotion and advocacy are cross-cutting interventions that the broad network of stakeholders can collaboratively engage in as part of social responsibility. Such should be consistently provided as support to other interventions to change behavior.
- Ensure sustainable financing to support the initiatives of the INCDPCP and its partners. Different financing mechanisms such as funding, resource allocation, contracting and reimbursement can be utilized to support implementation of NCD prevention and control policies, plans and programs. Local governments should be encouraged to increased their resources and investments for NCD prevention and control. Sustained financing will contribute to the affordability and availability of quality NCD health care services to Filipinos.
- Improve social health protection through the enhancement PhilHealth's benefit package to cover lifestyle diseases, to increase the benefit package's support value and to improve the coverage of the indigents and those in the informal economy. Explore social safety nets to address NCDs. Effective access and social responsibility are the principles upheld in pursuing this recommendation.
- Operationalize and promote integrated approach to NCD prevention and control at the local level. This will ensure access and availability of relevant services and products in the communities and among affected and vulnerable populations. Enhancing referral systems will also provide for the continuity of interventions along the spectrum of non-communicable diseases. .

- To promote social responsibility, there is a need to pursue the *policy agenda* in collaboration with government agencies and private organizations to:<sup>1</sup> There is a need to create, enhance or change policies to curb the increasing NCD trends. The policies the need support include the
  - 1) Lowering of saturated fat and lower salt content in food offerings especially in fast food chains and restaurants;
  - 2) Mandating fast food chains and restaurants to keep public informed of the nutritional value of food offerings;
  - 3) Providing subsidies/ tax breaks to encourage consumption of health food (e.g. fruits, vegetables and milk)
  - 4) amendment of the Food Fortification Law; and the legislation of graphic health warnings to improve tobacco control.
- To promote technical quality and contribute to policy development and relevance of services, there is a need to fulfill the *research and development agenda* in collaboration with government agencies and private organizations. To further fill in program data needs, the R&D agenda can comprise joint evaluation researches on the implementation of administrative orders promoting exercise, tobacco control and good nutrition and relevant national policies such as the Food Fortification Act, Tobacco Control Act and Salt Iodization Act.<sup>24</sup>
- The **integrated approach** provides for harmonized NCD prevention and control policies and programs, delivery of services and health care financing thereby creating a “seamless and smooth system” to achieve good health outcomes and coverage. However, commitment of all public and private stakeholders and integrated planning must be set in place before objectives can be fully realized.

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