

**MULTI-YEAR SPENDING PLAN FOR THE
DEPARTMENT OF HEALTH:
AN UPDATE**

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1. INTRODUCTION

The objective of this study is to develop a multi-year expenditure plan for the Department of Health or a health sector expenditure framework (HSEF) ¹ that are consistent with the attainment of the Millennium Development Goals and the goals, objectives and strategies set forth in the DOH's Health Sector Reform Agenda (DOH 2001), National Objectives for Health 2005-2010 (DOH 2005-2010) and the health care financing strategy (DOH 2009). In particular, the general objective for health financing (as enunciated in the NOH 2005-2010) is to secure increased, better and sustained investments in health to provide equity and improve health outcomes, especially for the poor (DOH 2005). The strategies that have been formulated to achieve this objective include:

- mobilization of additional resources for health by improving the revenue generation capacities of health agencies without compromising the poor's access to services,
- efficiency improvements in the utilization of health resources in terms of maximizing the expected outputs from existing resources (i.e., technical or operational efficiency) and allocating resources to programs that yield the greatest health impact (i.e., allocative efficiency), and
- strengthening of the national health insurance program by expanding enrollment coverage, improving benefits and leveraging payments on quality of care.

Furthermore, measures that are meant to result in efficiency gains include: (i) the adoption of the sector-wide approach to the overall management of total health investments, (ii) the coordination of national and local government health expenditure and redirecting the same on priority health programs, specifically basic and essential health goods and services used by the poor, (iii) the shift to performance-based in financing health agencies, (iv) formulation of multi-year spending plan to help ensure support for programs that require long-term financing.

Specifically, this study will:

- (1) estimate the resource requirements needed to achieve the health-related targets of the Millennium Development Goals, i.e., Goal 4 (reduction by 2015 of the infant mortality rate and the under-five mortality rate by two-thirds of their 1990 levels), Goal 5 (reduction by 2015 the maternal mortality rate by three-quarters of the 1990 level), and Goal 6 (combating HIV/ AIDS, malaria, TB and other diseases);
- (2) estimate the financial requirements of the specific interventions that have been identified in support of the health care financing reform,

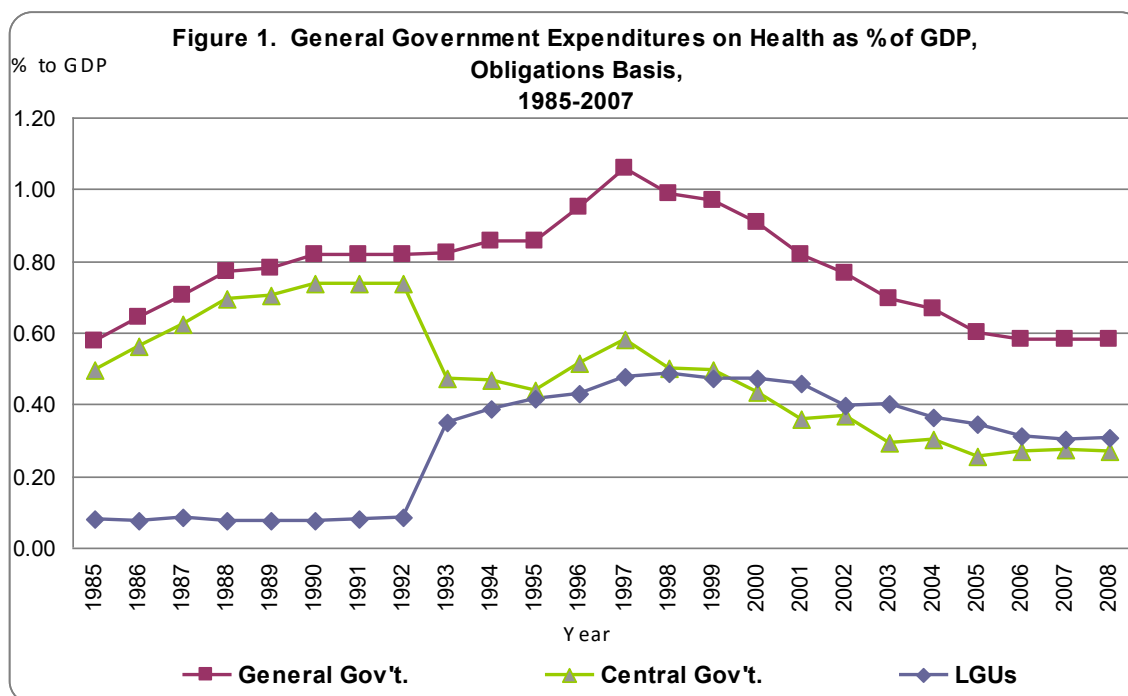
¹ The term "Health Sector Expenditure Framework" does not quite apply to the output of the present exercise because the current effort is focused on a subset of the entire health sector - the budgetary requirements of the premium subsidy for Sponsored Program of the Philippine Health Insurance Corporation and the various programs of the Department of Health.

- (3) compare the estimates of the resource requirements with the funding level that is likely to be made available (as measured by the Department of Budget and Management's forward estimates of the DOH budget given existing policy) to determine the funding gap for the MDG goals and the health care financing reform interventions; and
- (4) based on (1), (2) and (3) above, generate estimates of the total budgetary allocations for the four major final outputs (MFOs) of the Department of Health that are needed in order to achieve the MDGs for health and to move forward the department's health care financing reform.

2. TREND AND COMPOSITION OF GOVERNMENT SPENDING ON THE HEALTH SECTOR

2.1. Overall trend

Because of the tight fiscal situation in the country, general government spending on health deteriorated consistently from 1.06% of GDP in 1997 to 0.58% of GDP in 2006-2008 (**Figure 1**). It is notable that the share of local government units (LGUs) in general government spending on the health sector became larger than that of national government (NG) starting in 2000. This came about following the more severe contraction in NG health spending compared to that of LGU health spending between 1997 and 2005.



Total NG health spending declined in nominal terms by 0.1% yearly on the average from PhP 14.9 billion in 1997 to PhP 14.0 billion in 2005. In contrast, total LGU health spending registered positive growth in 1997-2007. Thus, total LGU health spending in

the aggregate increased by 5.6% yearly on the average from PhP 11.6 billion in 1997 to PhP 18.9 billion in 2006 in nominal terms.

However, the high and unmitigated pace of population growth exerts more pressure on the budget. Thus, the reduction in NG health spending is even more pronounced when it is adjusted for inflation and population growth. Thus, NG health spending in real per capita terms went down by 8.1% yearly on the average from PhP 250 in 1997 to PhP 127 in 2005 (**Table 1**). On the other hand, real per capita aggregate LGU health spending went down by 0.1% yearly on the average from PhP 204 in 1997 to PhP 160 in 2006.

Table 1. Real Per Capita Health Expenditure of Government Expenditures (in 2000 prices)

	NG	LGU	Gen Govt
1996	216	180	396
1997	250	204	454
1998	209	203	412
1999	210	199	409
2000	190	207	397
2001	157	201	358
2002	163	175	338
2003	135	186	320
2004	144	175	319
2005	127	169	296
2006	137	160	297
2007	148	163	311

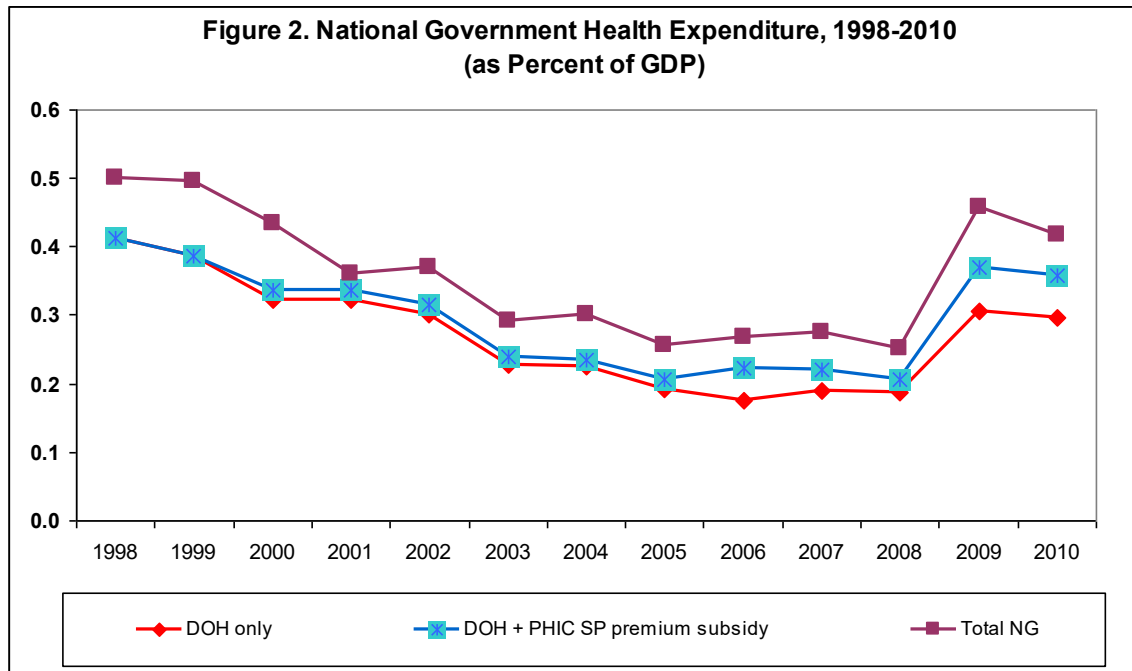
With the greater fiscal space made available with the amendments to the excise taxes on sin products in 2005 and the passage of the reformed value added tax law in 2006, national government health spending started to recover, albeit slowly starting in 2006. Thus, total NG spending on health rose from 0.26% of GDP in 2005 to 0.27% of GDP in 2006-2008 (**Figure 1**). On the other hand, LGU health spending posted a turnaround in 2008 as their IRA registered more robust growth starting in 2008.

2.2. Composition of National Government Health Expenditures

National government spending on health is largely driven by DOH spending and national government subsidy for the premium contribution to the PhilHealth Sponsored Program. Taken together, the share of these two big ticket items in total NG health expenditures is fairly stable at 82% in 1998-2010.

However, there has been a shift in their relative importance. To wit, the share of the DOH budget in total NG health spending contracted from an average of 79% in 1998-2005 to 69% in 2006-2010. On the other hand, the share of NG subsidy to the PhilHealth Sponsored Program premiums expanded from 3% to 13% of total NG health expenditures.

Thus, DOH expenditures declined from 0.41% of GDP in 1998 to 0.17% of GDP in 2006 before rising again to 0.19% of GDP in 2007-2008 and 0.30% of GDP in 2009-2010 (**Figure 2**). In contrast, NG subsidy to PhilHealth Sponsored Program premiums increased continuously from 0.02% of GDP in 2000 to 0.05% of GDP in 2006 before declining to 0.03% of GDP in 2007-2008 and rising again to 0.06% of GDP in 2009-2010.

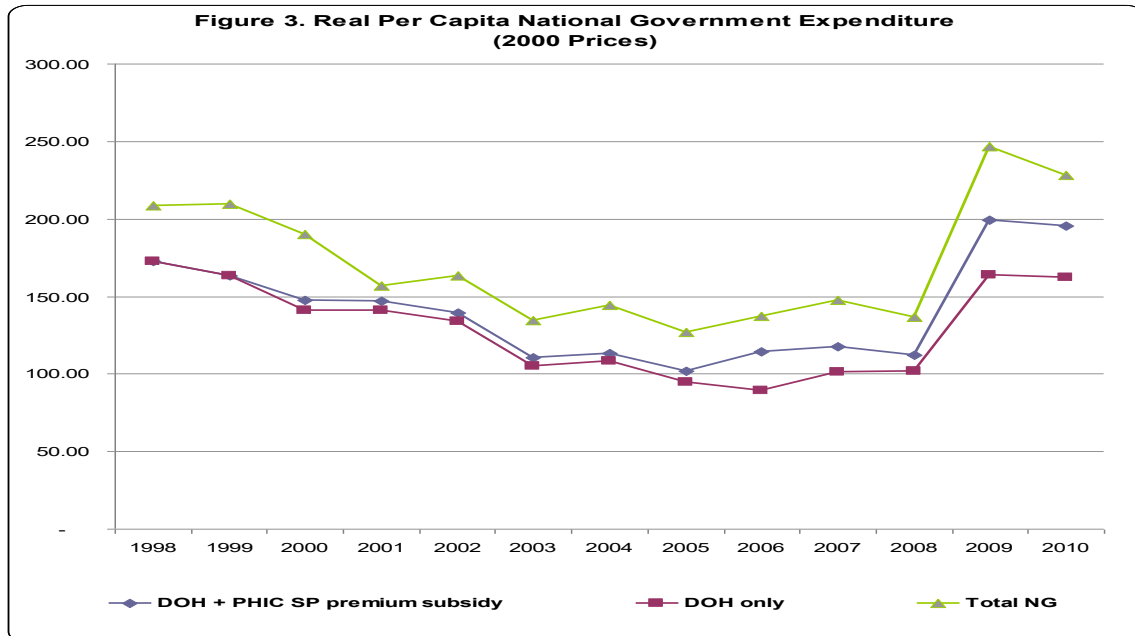


Consequently, real per capita DOH expenditure in 2000 prices decreased from PhP 173 in 1998 to PhP 89 in 2006 before increasing to PhP 101 in 2007-2008 and PhP 163 in 2009-2010 (**Figure 3**). On the other hand, real per capita DOH spending inclusive of NG premium subsidy to the Sponsored Program of the PhilHealth declined from PhP 173 in 1998 to PhP 102 in 2005 before rising to PhP 115 in 2006-2008 and PhP 197 in 2009-2010.

Composition of DOH spending. The DOH budget is analyzed in terms of four major outputs: (i) policy advice, (ii) regulatory services, (iii) public health, (iv) hospital care services. A shift in the composition of the DOH budget is evident in

Tertiary care in retained hospitals consistently captured about two-thirds of the DOH budget except for a brief period (2000-2001). With the adoption of the income retention policy in 2003, the budget share of retained hospitals contracted somewhat. However, the budget share of retained hospitals remains high and its 2006 level is still higher than that of 1998 (**Figure 3**).

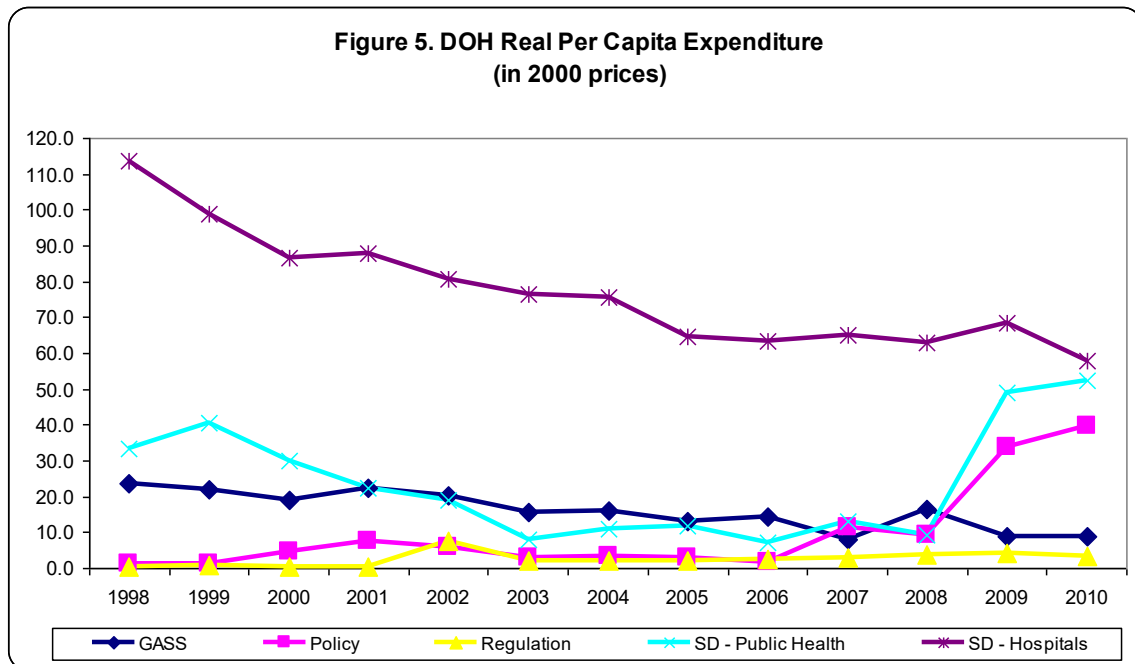
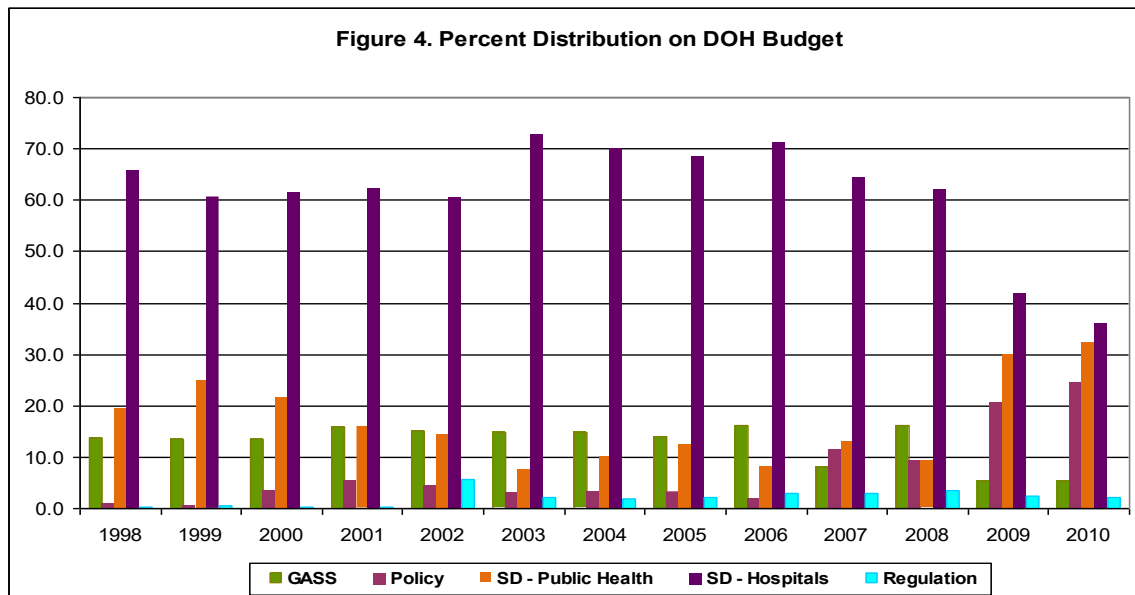
In comparison, the share of public health in the DOH budget initially went down from 21.4% in 2000 to a low of 7.6% in 2003 but has since recovered gradually to 14.2% in 2006 (**Figure 3**). However, the budget share of public health in 2006 is still lower than its 1998 level (19.5%).



A shift in the composition of the DOH budget is evident in 1998-2010. The brunt of the restrictive fiscal stance of the national government was borne most heavily by the public health services. Thus, the budget share of public health services (largely in the form of commodities and technical assistance given to LGUs) went down first from 19% in 1998-2002 to 10% in 2003-2006 before improving to 11% in 2007-2008 and 31% in 2009-2010 (**Figure 4**). In contrast, while DOH retained hospitals have consistently captured the biggest share of the DOH budget in 1998-2008, their budget share rose first from 62% in 1998-2002 to 71% in 2003-2006 before declining to 63% in 2007-2008 and 39% in 2009-2010. Meanwhile, DOH expenditures on policy advice/ reform went up from 2.9% of the total DOH budget in 1998-2006 to 10% in 2007-2008 and 23% in 2009-2010. On the other hand, the budget share of regulatory services in the total DOH spending went up from an average of 0.3% in 1998-2001 to 2.9% in 2002-2010..

The higher priority given to public health may partly be attributed to the increasing urgency of providing the budgetary support to the achievement of the MDGs for health. At the same time, the increased share of policy reform in the DOH budget is on account of the higher budget allocation provided to the Health Facilities Enhancement Program (HFEP). The HFEP aims to assist government hospitals to meet DOH licensing and PhilHealth accreditation requirements so as to enable them to better access PhilHealth reimbursements and, consequently, operate in a more sustainable manner prospectively.

As a result of the overall decline in DOH spending in real terms for most of 1998-2010 and the shift in the composition of DOH spending during the period, real per capita DOH spending on public health and hospital care dropped dramatically by 22% and 7% yearly on the average, respectively, in 1999-2006. Consequently, real per capita DOH spending on public health went down from PhP 40 in 1999 to PhP 7 in 2006 before rising to PhP 11 in 2007-2008 and PhP 51 in 2009-2010 (**Figure 5**). Likewise, real per capita DOH spending on hospital care services declined from PhP 114 in 1998 to PhP 63 in 2006 before inching up to PhP 65 in 2007-2009.



3. ESTIMATION OF RESOURCE REQUIREMENTS AND RESOURCE GAPS IN THE CONTEXT OF DOH BUDGET REFORMS

In this section, the resource requirements for the priority programs in the health sector that support the MDGs for health (**Sub-section 3.1**) as well as the health care financing reform articulated in the NOH 2005-2010 (**Sub-section 3.2**) are estimated. Then, the estimates of the resource requirements are compared with the DBM's forward estimates for the various programs, projects and activities (PPAs) of the DOH in order to arrive at an estimate of the resource gap.

In the case of the estimates for the budgetary requirements for (i) the upgrading of barangay health stations (BHSs) and rural health units (RHUs) for the provision of BEmONC services, (ii) the upgrading of LGU hospitals for the provision of CEmONC services, and (iii) the upgrading of other LGU hospitals, DOH retained hospitals in order to help them meet DOH licensing and PhilHealth accreditation requirements so as to enhance their ability in accessing PhilHealth reimbursements, the "low cost" estimates reflect a more staggered phase of implementation.

(6) enrollment of indigent population in the national health insurance program (PhilHealth). In the water and sanitation sector, the provision of level 1 water supply (through the installation of deepwells) and sanitation (latrine) are costed individually.

Although the delivery of public health services is largely devolved to LGUs in accordance with the provisions of the Local Government Code of 1992, the public good nature of public health services suggests that the central government cannot fully abdicate its role in this sub-sector despite devolution. Because of this, this study also derives estimates of the amount of complementary resources that have to be forthcoming from local government units (LGUs) if the MDGs for health are to be attained.

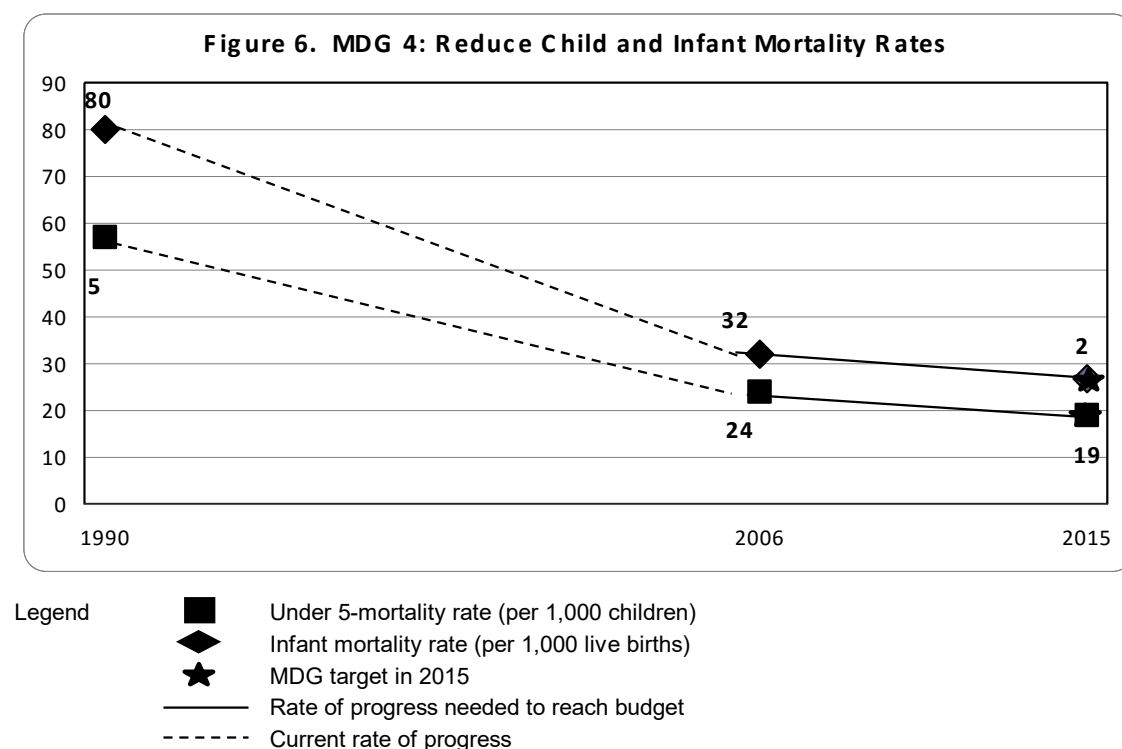
3.1. Resource Requirements and Resource Gap for Key Public Health Interventions

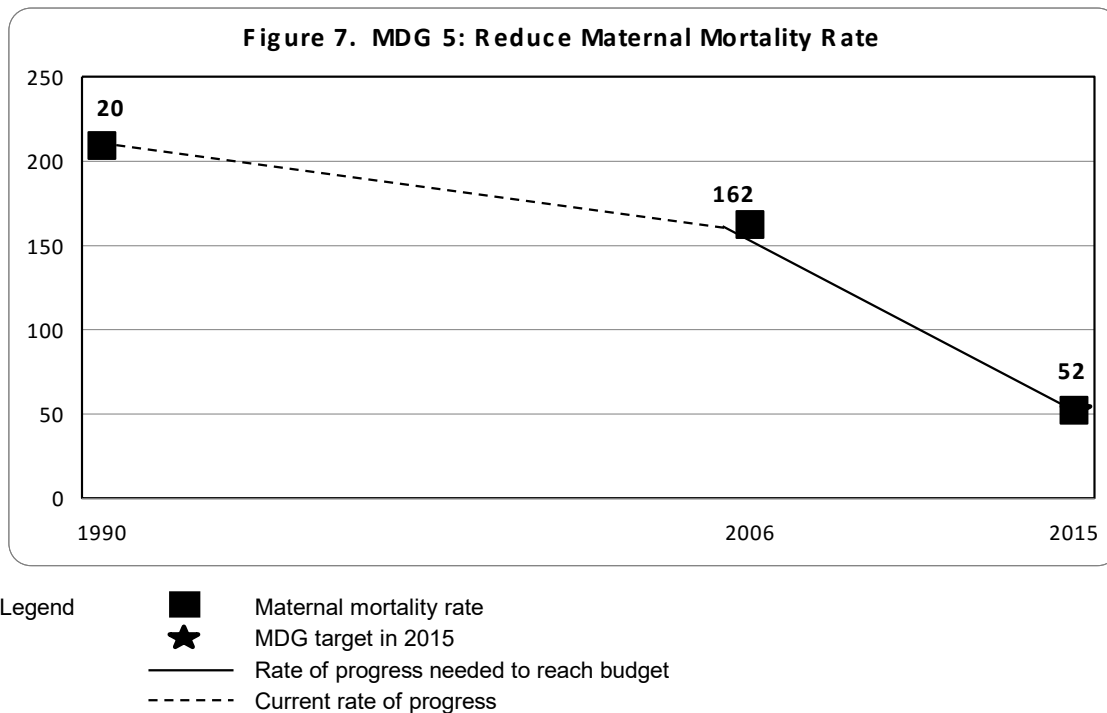
Background. Perhaps the most worrisome trend in national government health sector spending in 1998-2006 is the sharp drop in real per capita DOH spending on public health (as shown in **Figure 5** above) as public health services tends to deteriorate in accordance with the said decline in government spending. The Philippines posted notable gains in 1990-2006 in reducing both the infant mortality rate (IMR) and the under-5 mortality rate (U-5MR). During this period, the infant mortality was halved from 57 infant deaths per 1,000 live births in 1990 to 24 in 2006 (**Figure 6**). In like manner, the under-5 mortality rate went down from 80 to 32 under-five deaths per 1,000 children. In both cases, the rate of progress needed to reach the 2015 target is less than the actual rate of progress to date suggesting that it is likely that the MDG targets for child health will be achieved.

On the other hand, the country's performance in reducing the maternal mortality rate (MMR) is not as commendable, with the MMR declining from 209 maternal deaths per 100,000 live births in 1990 to 162 maternal deaths per 100,000 live births in 2006 (**Figure 7**). The rate of progress necessary to reach the 2015 target is thus more than 3 times higher than the actual rate of progress in 1990-2006, suggesting that the Philippines would have to reduce MMR at a considerably faster pace than its historical performance to date. This indicates that the government would have to exert additional effort relative to what it has done in the past if the Philippines is to attain the MDG in this area.

However, the decline in recent years in the proportion of fully immunized children before they turn a year old in recent years may put the gains in child health at risk. To wit, the proportion of fully immunized children dipped from 87% in 2000 (FHSIS 2000) to 83% in 2006 (FHSIS 2006) [**Table 2**]. At the same time, the proportion of children with diarrhea given ORS went down from 28% in 1998 to 14% in 2006. Also, the proportion of pneumonia cases among under-5 children given treatment was fairly stagnant at around 95%-96% in 1998-2006 although the indicator reached a high of 97% in 2003 and 100% in 2004.

In contrast, the performance with respect to some of the key maternal care interventions has stagnated, if not deteriorated (**Table 2**). In particular, the proportion of pregnant women who had three or more pre-natal visits fluctuated around 61%-65% in 1999-2006. On the other hand, the proportion of pregnant women who received tetanus toxoid vaccination went down from 63% in 2000 to 54% in 2001-2002 before stagnating at 60%-61% in 2003-2006. Also, the proportion of births attended by professional health provider was fairly flat at 68%-70% in 1999-2006.





Meanwhile, after being cut by about 45% from 90 to 50 per 100,000 population over the three-year period between 1999 and 2002, the decline in the incidence of malaria appears to have faltered, posting a reduction of 25% from 37 to 28 over the three-period between 2003 and 2006 (**Table 2**). On the other hand, the incidence of tuberculosis went up from 120 per 100,000 population in 2003 to 170 in 2006 after declining from 207 in 1998 to 154 in 2002.

Estimation of resource requirement for public health. Given this perspective, this paper argues for a need to ensure that adequate resources from both the national government and LGUs be made available for public health services in order to attain the MDGs for health. Because of data constraints, detailed estimates of resource requirements based on unit costs and service targets are derived for selected key interventions/ programs only, i.e., those that are considered critical for the attainment of MDG targets. In particular, the critical interventions that are costed in this manner include the following: (1) expanded program of immunization for children that aims to provide maximum resistance against seven vaccine-preventable diseases: tuberculosis, poliomyelitis, diphtheria, pertussis, tetanus, hepatitis B and measles, (2) tetanus toxoid vaccination for mothers, (3) micronutrient Vitamin A and iron supplementation for mothers and children, (4) basic emergency obstetric care (BEmONC) and comprehensive emergency obstetric care (CEmONC) services for all deliveries, (5) reproductive health, (6) integrated management of children's illnesses namely, diarrheal disease and acute respiratory infection, (7) prevention and treatment of HIV/ AIDS, TB, and malaria, (8) new born screening program, (9) orally fit children program, and (10) pneumococcal and influenza vaccination for senior citizens.

Table 2. Selected Health Outputs/ Indicators, 1991-2006

	1998	1999	2000	2001	2002	2003	2004	2005	2006
% of pregnant women with 3 or more pre-natal visits	59.4%	65.6%	64.8%	62.9%	60.5%	64.3%	64.7%	62.3%	61.5%
% of pregnant women given tetanus toxoid vaccination at least twice	68.8%	59.4%	62.5%	54.2%	54.3%	59.6%	60.0%	58.8%	59.1%
% of lactating mothers given Vitamin A	49.1%	54.6%	57.0%	55.3%	52.9%	61.6%	53.2%	54.7%	59.3%
% of livebirths attended by medical professional		69.0%	69.0%	70.0%			68.7%	68%	70.0%
% of fully immunized children under 1	84.8%	87.9%	86.5%	81.7%	76.7%	83.7%	84.8%	83.7%	82.9%
% of infants given 3rd dose of Hepa B	37.3%	45.2%	6.2%	41.9%	38.5%	45.2%	45.6%	42.9%	72.9%
% of diarrhea cases amongst children under 5 given ORS	28.4%	25.9%	24.1%	22.4%	17.7%	17.8%	15.5%	14.2%	14.0%
% of pneumonia cases amongst children under 5 given treatment	94.7%	94.5%	93.9%	94.2%	94.7%	97.3%	99.9%	95.3%	96.0%
% of children under 1 given Vitamin A	72.8%	74.0%	76.9%	74.6%	74.7%	89.8%	79.2%	80.0%	81.0%
% of children between 1 and 5 given Vitamin A	89.6%	84.1%	101.3%	95.1%	94.1%	106.1%	111.1%	97.8%	95.7%
TB morbidity rate a/ b/	206.7	203.9	174.1	149.9	154.1	120.3	133.3	137.1	169.9
Malaria morbidity rate a/	96.8	91.8	66.6	39.1	50.3	36.5	24.9	43.3	27.6

* data shown for entire Philippines but data by province and city also available

a/ per 100,000 population

b/ respiratory plus other forms of TB

Source: Field Health Service Information System, various years

While other programs are also considered important (e.g., control of degenerative diseases² in the health sector), no detailed costing was made for said programs. Instead, what is done is simply to allow the forward estimates for these programs in 2010 to grow in tandem with inflation. Implicitly, this approach ensures that expenditures on these “other” items are maintained in real terms at their levels during the benchmark year.³

Although the delivery of public health services is largely devolved to LGUs in accordance with the provisions of the Local Government Code of 1992, the public good nature of public health services suggests that the central government cannot fully abdicate its role in this sub-sector despite devolution. As such, the estimates of the resource requirements for the MDG interventions are based on the prevailing assignment of expenditure responsibilities between the central government and LGUs. In particular, in child and maternal health care, the national government finances the procurement of antigens for the expanded program of immunization (EPI) while the provision of syringes and safety boxes for the immunization program is assigned to LGUs. Similarly, the procurement of supplies for iron supplement for children and drugs for the control of acute respiratory infections and diarrhea in children is delegated to LGUs. Further, the cost of training of frontline health workers (who are part of the personnel complement of LGUs) is largely lodged with LGUs as well. Also, the provision of contraceptive supplies is an LGU responsibility. On the other hand, the national government provides drugs for HIV/ AIDS, malaria and TB while the training of health personnel for the delivery of basic and essential health care including that related to the prevention and control of HIV/ AIDS, malaria and TB as well as the provision of BEmONC and CEmONC is the joint responsibility of the national government and LGUs.

Given this context, this study does not only present estimates of the resource requirements for the selected public interventions that are expected to be financed by the national government, it also derives estimates of the amount of complementary resources that have to be forthcoming from local government units (LGUs) if the MDGs for health are to be attained. It should be emphasized that the approach used in the estimation of resource needs in the health sector focused only on recurrent non-personnel cost of essential package of basic health services. This implies that the additional personnel requirement arising from the higher service levels for the basic health services that are needed for the attainment of the MDGs are not taken into account in this study. This limitation is not a serious concern for the central government which has responsibility for the financing of commodities, technical assistance and training for LGU partners but not direct service delivery. However, it does mean that estimates of the resource requirements at the local government level would tend to be on the conservative side.

² Note that in recent years degenerative diseases have emerged as a major cause of morbidity and mortality.

³ It should be emphasized that this approach does not allow for the expansion of coverage (assuming that these interventions do not quite reach full coverage) nor the improvement in the quality of these interventions.

The estimates of the full cost requirement of the selected MDG interventions are based on the following assumptions and are referred to as the “high cost” assumption estimates in the following tables:

- Expanded program of immunization
 - Includes BCG, DPT, measles, polio, hepa B
 - Target population – children aged 0-11 months
 - Coverage – to increase from 91% in 2010 to 95% in 2015
- Micronutrient Vitamin A supplementation for children
 - Target population – children aged 6-59 months
 - Coverage – 100%
- Micronutrient iron supplementation for children
 - Target population – low birth weight children aged 2-6 months; underweight children aged 12-71 months
 - Coverage – 100%
- Integrated management of children’s illnesses including acute respiratory illness and diarrhea
 - Target population –sick children under 5 years of age
 - NG to provide medicines to 5th/ 6th income class munis
- Tetanus toxoid vaccination
 - Target population – pregnant women
 - Coverage to increase from 69% in 2010 to 80% in 2016
- Micronutrient Vitamin A and iron supplementation for mothers
 - Target population – pregnant and lactating women
 - Coverage – 100%
 -
- Basic Emergency Obstetrics & Neonatal Care (BEmONC) and Comprehensive Emergency Obstetrics and Neonatal Care (CEmONC)
 - Target – 100% of deliveries are facility-based
 - Maximum of 30 minutes of travel time to BEmONC facility
 - Increase facility-based births from 40% to 80%
 - Upgrading of all identified facilities to be completed in 2011
 - Training of staff for identified facilities to be completed in 2011
- Reproductive health
 - Modern contraceptive prevalence rate to increase from 36% in 2006 to 70% in 2015

- STI & HIV/ AIDS
 - Prevention - condoms
 - Diagnostics
 - Treatment
- Malaria
 - Vector control – mosquito nets/ spraying
 - Diagnostics
 - Treatment
- Tuberculosis – based on PhilPACT study
- Influenza/ pneumonia vaccine for senior citizens
 - Prevention - condoms
 - Diagnostics
 - Treatment
- Orally fit children
 - Distribution of toothpaste kit
 - Target population – children aged 3-5 years enrolled in day care centers
- Newborn screening
 - Provision of new born screening (NBS) kits to hospitals and LGU facilities

In addition, estimates of the resource requirement based on the “low cost” assumptions are also derived. The “low cost” estimates reflect some improvement in the efficiency of vaccination program by assuming lower “wastage” factors in the administration of vaccines than what it is assumed in the department’s own computation of the cost of attaining the Millennium Development Goals for health.⁴ On the other hand, the “low cost” estimates assume some pro-poor targeting in the delivery of some the public health programs (namely, micronutrient supplementation, reproductive health and management of children’s illnesses) in contrast to what is typically assumed by program managers. This implies that non-poor households will self-financed these services. Meanwhile, the “low cost” estimate for the BEmONC/ CEmONC services assumes that the completion of upgrading of identified facilities and the training of personnel in these facilities will be staggered over two years (2011 and 2012) instead of just one year (2010).

Perhaps the most costly component of the MDG interventions is the upgrading of the RHUs and BHSs to serve as BEmONC facilities and the upgrading of selected LGU provincial and district hospitals as CEmONC facilities. The importance of this program is premised on the need to treat every delivery as an emergency case and the importance of facility-based deliveries in reducing the maternal mortality rate. As such, the program

⁴ The lower wastage factors used in this study are the same as those found in the DOH EPI Logistics Manual.

proposes the travel time of households to BEmONC facilities should not exceed 30 minutes. The upgrading of RHUs/ BHSs and selected LGU hospitals is also expected to improve their “gatekeeping” function and, thereby, reduce hospital patient case load.

In 2007-2009, some 499 RHUs and BHSs were upgraded to the level of a BEmONC facility while 429 LGU hospitals were upgraded to the level of a CEmONC facility (**Table 3**). In 2010, another 100 RHUs/ BHSs and another 83 LGU hospitals are due for similar upgrading. However, there is a need to upgrade an additional 1,200 RHUs/ BHSs and 175 LGU hospitals to help ensure sufficient reduction in the MMR in order to meet the MDG for maternal health. Given the unit cost estimates, the total amount of additional resources needed for the BEmONC/ CEmONC program in 2011 is estimated to equal PhP 14 billion.

Table 3. Estimate of Budgetary Requirement for BEmONC/CEmONC Upgrading

	Overall Targets	Upgraded in 2007-2009	To be upgraded in 2010	Gaps	Average unit cost	Budgetary requirement (in PhP mill)
1. Upgrading of RHUs & BHSs as BEmONCs incl. GIDA	1799	499	100	1200	PhP 5 million	6,000
2. Upgrading of Level 1 & Level 2 hospitals as CEmONCs						
Level 1	319	176	50	93	PhP 30 million	2,790
Level 2	282	199	25	58	PhP 60 million	3,480
Level 3	32	29	3	0		
Level 4	54	25	5	24	PhP 70 million	1,680
TOTAL						13,950

Putting together the estimates of the resource requirement of the BEmONC/CEmONC program that is presented above with that of other MDG interventions, **Table 4** presents the “high cost” estimates of the resource requirements for key public health programs in 2011-2016 in order to attain the MDG targets. It also compares said estimates with the amount of resources that is projected to be available (based on the forward estimates of DBM) to arrive at estimates of the “high cost” resource gap.

The resource gap based on the “high cost” assumption is estimated to be equal to PhP 29.1 billion in 2011 (or 0.33% of GDP or 119% of the DOH budget for 2010), PhP 8.4 billion (or 0.09% of GDP or 34% of the DOH budget 2010) in 2012, and PhP 10.8 billion (or 0.10% of GDP or 44% of the DOH budget for 2010) in 2012.

On the other hand, **Table 5** presents the “low cost” estimates of the resource requirements for the years 2011-2016 for the key public health interventions. It also compares said estimates with the amount of resources that is projected to be available (based on the forward estimates of DBM) to arrive at estimates of the “low cost” the resource gap.

The resource gap based on the “low cost” assumption is estimated to be equal to PhP 15.5 billion in 2011 (or 0.17% of GDP or 63% of the DOH budget for 2010), PhP 5.3 billion (or 0.06% of GDP or 21% of the DOH budget 2010) in 2012, and PhP 6.4 billion (or 0.06% of GDP or 26% of the DOH budget for 2010) in 2012.

Meanwhile, **Table 6** and **Table 7** present estimate for the total resource requirement for key public health interventions based on “high cost” and “low cost” assumptions, respectively. Table 5 shows that the total resource requirement for key public health interventions will rise from PhP 3.9 billion (or 0.046% of GDP or 1.26% of total LGU expenditures) in 2011 to PhP4.3 billion (or 0.047% of GDP or 1.27% of total LGU expenditures) in 2011 to PhP 4.8 billion (or 0.047% of GDP or 1.27% of total LGU expenditures) in 2012.

3.2. Resource Requirement for DOH Retained Hospitals

DOH subsidy to retained hospitals is said to be inefficient and inequitable (DOH 2006). It is inefficient because the budget spent on retained hospitals can benefit more people if converted to social health insurance premium subsidies. It is inequitable because access to retained hospitals tends to be limited to residents of mostly well-off urban centers. The following discussion illustrates these points more clearly. In line with this, central subsidies for and access to revenues by retained hospitals should be rationalized in terms of their compatibility with local health care networks, competitiveness with the private sector and contributions to clinical research and training.

The capacity and willingness of retained hospitals to generate revenues have generally been strengthened with the adoption of the income retention policy in 2003. For instance, the ratio of hospital income to the MOOE allocation from the DOH budget for Specialty Hospitals went up from an average of about 20% in 1995-2000 to 60% in 2003 and 73% in 2004 to 94% in 2007 and 95% in 2008(**Table 8**). However, some decline in the ratio of hospital income to the MOOE allocation from the DOH budget for Specialty Hospitals is evident in 2008. Thus, the applicable ratios for San Lazaro Hospital, East Avenue Medical Center, Philippine Orthopedic Hospital, National Center for Mental Health, and Amang Rodriguez Medical Center all went down in 2008 relative to their 2007 values.

The same is true for the ratio applicable to non-NCR DOH retained hospitals. To wit, while the average ratio of hospital income to MOOE allocation from the DOH budget for all DOH retained hospitals as a group went up from 70% in 2004 to 124% in 2007, the ratio dipped to 85% in 2008 (**Table 9**). Moreover, the average ratios for DOH retained hospitals in Region 1, CAR, Region 5, Region 8, Region 10 and Region 12 also went down in 2008 from their 2007 levels.

**Table 4. Summary of DOH resource requirement and resource gap for public health, 2011-2016 (in million pesos)
(High Cost Assumption)**

	2010	2011	2012	2013	2014	2015	2016
Child care							
EPI	556	594	635	679	726	776	824
EPI (including hepatitis)	501	536	573	612	655	700	743
2nd dose of measles vaccine	55	59	62	67	71	76	81
Vitamin A (100%)	67	71	76	80	85	91	96
Assistance to 5th/6th class munis for CARL	3	3	3	3	4	4	4
Maternal care							
Tetanus toxoid immunization	33	37	40	44	48	52	56
Micronutrient supplementation	176	187	198	210	223	237	251
Vitamin A (100%)	88	93	99	105	112	118	126
Iron (100%)	88	93	99	105	112	118	126
BEmONC/ CEmONC training	33	68	13	14	15	15	16
BEmONC/ CEmONC facilities upgradinbg		13,950					
Disease control							
STI and HIV/ AIDS	1,454	1,593	1,748	1,919	2,108	2,318	2,552
STI treatment	1,418	1,548	1,691	1,846	2,016	2,202	2,404
HIV/ AIDS treatment	36	45	57	72	92	116	147
Malaria treatment and control	2,463	1,044	1,106	2,956	1,243	1,317	3,549
Malaria treatment	2	2	2	2	2	2	2
Lab supplies for malaria	6	6	6	6	6	5	5
Mosquito nets (100%)	1,477	0	0	1,784	0	0	2,153
Spraying	799	851	906	965	1,028	1,094	1,165
Malaria training (net of LGU share)	177	184	192	199	207	216	224
Tuberculosis treatment and control	3,564	3,863	3,683	3,867	4,212	3,850	4,004
Filariasis	271	282	293	305	317	330	343
Emerging diseases/ New programs							
New born screening	0	59	62	64	67	70	72
Orally fit children	28	29	31	33	35	37	39
Pneumococcal/influenza vaccine (100%)	0	12,008	5,247	5,568	5,909	6,271	6,655
All MDG-related interventions	8,648	33,789	13,136	15,743	14,992	15,367	18,461
Resource available for non-PS items a/	4,630	4,703	4,768	4,959	5,158	5,364	5,578
Resource gap	4,018	29,086	8,368	10,784	9,834	10,003	12,882
% of GDP	0.05	0.33	0.09	0.10	0.09	0.08	0.10
% of NG budget	0.3	1.9	0.5	0.6	0.5	0.5	0.6

a/ obtained from forward estimates of DBM as shown in Appendix 1.

Table 5. Summary of DOH resource requirements for public health to meet MDGs (in million pesos)
(Low Cost Assumption)

	2010	2011	2012	2013	2014	2015	2016
Child care							
EPI	445	476	509	544	582	622	660
EPI (including hepatitis)	401.5	429.4	459.3	491.1	525.2	561.6	595.9
2nd dose of measles vaccine	43.8	46.8	50.0	53.4	57.0	60.8	64.6
Vitamin A (w/ some targeting)	32.5	33.7	34.9	36.1	37.3	38.6	39.8
Assistance to 5th/6th class munis for CARL	2.8	3.0	3.2	3.4	3.6	3.8	4.0
Maternal care							
Tetanus toxoid immunization	21.3	23.4	25.6	28.1	30.7	33.5	35.6
Micronutrient supplementation	85.0	88.1	91.2	94.4	97.6	100.8	104.1
Vitamin A (w/ some targeting)	42.5	44.0	45.6	47.2	48.8	50.4	52.1
Iron (w/ some targeting)	42.5	44.0	45.6	47.2	48.8	50.4	52.1
BEmONC/ CEmONC training	32.9	34.2	35.6	14.0	14.5	15.1	15.7
BEmONC/ CEmONC facilities upgrading		6,975.0	6,975.0				
Disease control							
STI and HIV/ AIDS	1,454	1,593	1,748	1,919	2,108	2,318	2,552
STI treatment	1,418.0	1,548.5	1,690.9	1,846.5	2,016.4	2,201.9	2,404.5
HIV/ AIDS treatment	35.5	45.0	57.0	72.3	91.6	116.1	147.1
Malaria treatment and control	1,699	1,044	1,106	1,973	1,243	1,317	2,289
Malaria treatment	2.4	2.4	2.3	2.3	2.2	2.1	1.9
Lab supplies for malaria	6.3	6.2	6.1	5.9	5.7	5.4	5.0
Mosquito nets (w/ some targeting)	713.9	0.0	0.0	800.6	0.0	0.0	892.6
Spraying	799.4	851.2	906.3	965.0	1,027.6	1,094.1	1,165.0
Malaria training (net of LGU share)	177.1	184.2	191.6	199.2	207.2	215.5	224.1
Tuberculosis treatment and control	3,564.3	3,862.5	3,683.0	3,866.9	4,212.0	3,849.5	4,003.5
Filariasis	271.1	282.0	293.3	305.0	317.2	329.9	343.1
Emerging diseases/ New programs							
New born screening	0.0	59.5	61.9	64.3	66.9	69.6	72.4
Orally fit children	28.1	29.3	31.1	33.0	35.0	37.1	39.4
Pneumococcal/influenza vaccine (w/ targeting)	0.0	5,665.1	2,415.4	2,499.6	2,585.0	2,671.5	6,700.1
All MDG-related interventions	7,636.2	20,169.4	10,038.6	11,381.0	11,332.5	11,406.9	16,858.5
Resource available for non-PS items	4,629.6	4,703.2	4,768.4	4,959.1	5,157.5	5,363.8	5,578.4
Resource gap	3,006.7	15,466.2	5,270.2	6,421.9	6,175.0	6,043.1	11,280.1
% of GDP	0.04	0.17	0.06	0.06	0.06	0.05	0.09
% of NG budget	0.2	1.0	0.3	0.4	0.3	0.3	0.5

a/ obtained from forward estimates of DBM as shown in Appendix 1.

Table 6. LGU Resource Requirement for MDG - High Cost Assumption
(in million pesos)

	2010	2011	2012	2013	2014	2015	2016
Child care							
EPI logistics	130.2	139.7	149.9	160.9	172.6	185.1	196.5
Iron supplementation (100%)	126.9	134.7	142.9	151.7	160.9	170.8	181.2
CDD (100%)	253.4	268.9	285.4	302.9	321.4	341.1	362.0
CARI (100%)	34.8	36.9	39.2	41.6	44.1	46.8	49.7
Deworming/ STH	165.7	175.8	186.6	198.0	210.1	223.0	236.6
CAPABILITY BUILDING (net of DOH)							
BEmONC/ CEmONC	0.6	0.8	0.9	0.5	0.6	0.6	0.6
Malaria	7.7	8.0	8.3	8.6	9.0	9.3	9.7
TB	7.7	8.0	8.3	8.6	9.0	9.3	9.7
STI/ HIV/ AIDS	10.6	11.0	11.4	11.9	12.4	12.9	13.4
Reproductive health (100%)	2833.4	3159.5	3514.9	3901.9	4323.2	4781.5	5279.7
Total resource needed	3,570.9	3,943.3	4,347.8	4,786.6	5,263.3	5,780.5	6,339.1
% of GDP	0.044	0.046	0.047	0.048	0.049	0.049	0.049
% of total LGU expenditures	1.26	1.26	1.27	1.27	1.27	1.27	1.26

Table 7. LGU Resource Requirement for MDG - Low Cost Assumption
(in million pesos)

	2010	2011	2012	2013	2014	2015	2016
Child care							
EPI logistics	130.2	139.7	149.9	160.9	172.6	185.1	196.5
Iron supplementation (with some targeting)	61.3	63.5	65.8	68.1	70.4	72.8	75.1
CDD (with some targeting)	122.5	127.4	132.5	137.8	143.3	149.0	155.0
CARI (with some targeting)	17.0	17.6	18.2	18.8	19.4	20.0	20.6
Deworming/ STH	165.7	175.8	186.6	198.0	210.1	223.0	236.6
CAPABILITY BUILDING (net of DOH)							
BEmONC/ CEmONC	0.6	0.7	0.7	0.3	0.3	0.3	0.3
Malaria	7.7	8.0	8.3	8.6	9.0	9.3	9.7
TB	7.7	8.0	8.3	8.6	9.0	9.3	9.7
STI/ HIV/ AIDS	10.6	11.0	11.4	11.9	12.4	12.9	13.4
Reproductive health (w/ some targeting)	1369.1	1490.6	1618.0	1751.5	1891.2	2036.9	2188.7
Total resource needed	1,892.4	2,042.2	2,199.7	2,364.5	2,537.6	2,718.6	2,905.6
% of GDP	0.023	0.024	0.024	0.024	0.023	0.023	0.023
% of total LGU expenditure	0.67	0.65	0.64	0.63	0.61	0.60	0.58

Table 8. Ratio of Hospital Income to Hospital MOOE and Total Hospital Budget of DOH Specialty Hospitals, 1995-2008 (in %)

	1995-2000		2003		2004		2007		2008	
	MOOE	Total Budget	MOOE	Total Budget	MOOE	Total Budget	MOOE	Total Budget	MOOE	Total Budget
1. Jose Reyes Memorial Medical Center	37.9	10.4	121.9	33.6	125.9	34.7	162.9	37.8	211.6	49.5
2. San Lazaro Hospital	5	1.6	9.4	4.0	10.0	4.3	31.4	11.5	25.0	9.7
3. Jose Fabella Memorial Hospital	9.1	2.4	85.4	19.7	108.0	25.0	100.5	19.5	123.1	24.3
4. East Avenue Medical Center	33.7	9	63.2	22.3	87.7	30.9	98.1	30.3	86.0	38.4
5. Philippine Orthopedic Center	35.2	10.3	46.7	15.6	54.1	18.1	69.4	20.6	24.6	7.6
6. National Center for Mental Health	8.7	2.6	24.1	6.7	28.0	7.8	42.0	10.4	40.3	10.9
7. National Children's Hospital	4	0.9	32.6	10.5	34.9	11.3	62.9	17.1	55.4	20.3
8. Tondo Medical Center	21.8	3.9	83.7	21.2	82.4	20.9	100.5	20.6	116.9	25.4
9. Quirino Memorial Medical Center	23	4.1	128.7	46.8	186	67.6	216.9	56.8	222.9	73.5
10. Amang Rodriguez Medical Center	13.3	2	109.9	29.2	139.8	37.1	172.2	26.4	171.5	29.9
11. Rizal Medical Center	20.5	5.2	103	28.5	122.2	33.9	135.4	29.6	198.0	46.9
12. Research Institute for Tropical Medicine	23.3	5.1	21.1	6.3	24.5	7.3	24.1	6.3	34.3	11.1
Total	20.5	5.2	60.2	18.7	73.1	22.7	93.9	24.4	95.3	28.8

Table 9. Ratio of Hospital Income to Hospital MOOE and Total Hospital Budget across Regions, 2004-2008 (in percent)

	2004		2007		2008	
	MOOE	Total Budget	MOOE	Total Budget	MOOE	Total Budget
NCR	73.6	23.1	94.0	24.5	95.3	28.8
Region I	102.3	35.7	241.1	71.2	77.8	24.0
CAR	53.0	19.6	102.9	36.1	101.4	37.3
Region II	81.3	31.3	130.4	36.9	146.2	50.0
Region III	51.2	51.2	87.3	29.4	100.6	37.8
Region IV	31.7	11.4	100.5	25.2	114.7	37.3
Region V	85.8	31.7	102.3	30.9	101.8	34.1
Region VI	86.3	32.2	86.4	25.4	111.2	38.5
Region VII	73.6	19.8	121.6	33.4	155.7	40.8
Region VIII	42.0	14.4	45.8	13.2	43.8	14.0
Region IX	35.7	15.5	107.7	35.9	85.9	30.5
Region X	54.8	22.1	174.8	68.1	140.5	58.8
Region XI	142.8	44.5	469.7	115.1	552.4	164.1
Region XII	47.8	18.9	115.6	29.8	30.7	10.5
CARAGA	45.4	15.3	89.7	30.0	96.9	35.0
Philippines	70.4	24.0	123.6	35.1	84.6	26.6

This development occurs even as the growth in MOOE allocation for retained hospitals in DOH budget remained modest in 2006-2008 after significant reductions in 2003 and 2005 (**Table 10**). This situation is suggestive of the increasing difficulty on the part of hospitals to recover their cost from user fees and may be related to issues in the national health insurance program that will be discussed later. Given this situation, the proposal to reduce the allocation for hospital MOOE from the DOH budget in the hope that DOH

retained hospitals will move towards greater self-sufficiency, that appeared reasonable when the first Health Sector Expenditure Framework was formulated in 2006, is difficult to justify at present without more concrete steps being taken to reform the national health insurance program. Thus, this paper simply allowed the DOH allocation allows the forward estimates for DOH retained hospitals to grow in pace with inflation in formulating of the Medium-term Spending Plan for the DOH at present. This implicitly assumes that there is no resource gap for DOH retained hospital services.

Table 10. Growth in MOOE Allocation for DOH Retained Hospitals, 1998-2008

	Govt Hospital MOOE (PhP million)	% change
1998	2205.1	
1999	2714.0	23.1
2000	1953.8	-28.0
2001	1942.1	-0.6
2002	2516.0	29.5
2003	2041.6	-18.9
2004	2641.3	29.4
2005	2249.5	-14.8
2006	2332.4	3.7
2007	2435.4	4.4
2008	2465.6	1.2

However, considerable variation in the ratio of total hospital expenditures to hospital output is evident across hospitals (**Table 11**). This suggests the need to move forward with proposals for performance-based allocations for DOH retained hospitals. However, the present exercise does not address this micro-level reallocation of resources across implementing units due to resource constraints.

3.3. Resource Requirements and Resource Gap of Health Care Financing Reform Strategies

Context of reform. **Table 12** shows that the share of out-of-pocket expense in the country's total health expenditure (THE) surged from 51% in 2000 to 59% in 2005. This occurred as the share of social insurance in THE failed to compensate for the contraction in share of general government spending in THE from 41% in 2000 to 29% in 2005. Note the disappointing increase in the share of social insurance from 7% in 2000 to 11% in 2005.

Given this situation, the DOH has reassessed its progress towards the reforming country's health care financing system (DOH Health Policy Note 6:1 2009b, DOH Health Care Financing Strategy 2010-2020 2009a). The health care financing system aims to:

- provide financial protection to all,
- ensure equitable financing,
- ensure equitable access to health services, and
- establish universal coverage.

Table 11. Average cost per patient day (in pesos) in selected DOH retained hospitals, 2007

	average cost per patient day (in pesos)	Rank
1. Rizal Med. Ctr.	2,342	4
2. Quirino Mem. Med. Ctr.	1,732	14
3. Amang Rodriguez Med. Ctr.	2,086	7
4. Valenzuela Gen. Hosp.	2,127	6
5. San Lorenzo Ruiz Spl. Hosp.	3,326	1
6. Region 1 Medical Ctr.	1,755	13
7. Ilocos Trng Regl Med. Ctr,	2,859	2
8. Cagayan Valley Med. Ctr,	2,030	9
9. Southern Isabela Gen Hosp.	1,014	20
10. Bicol Medical Center	1,074	19
11. Bicol Regl. Trng	2,213	5
12. Western Visayas Med. Ctr.	1,653	15
13. St. Anthony Mother & child	1,887	12
14. Eastern Visayas Regl. Med. Ctr.	1,554	18
15. Dr. Jose Rizal Mem. Hosp.	2,772	3
16. Northern Mindanao Med. Ctr.	1,921	11
17. Davao Med. Ctr.	2,005	10
18. Davao Regl. Hosp.	1,578	17
19. Caraga Regl. Hosp.	2,067	8
20. Adela Serra Ty Mem. Med. Ctr.	1,646	16
Mean	1982	
Standard deviation	556	
min	1,014	
max	3,326	
median	1,963	

Financial protection is secured when the system is such that cost of illness / health care does not lead to the impoverishment of households. This is assured when the share of out-of-pocket as a source of financing the health system is minimized, when the coverage of the social health insurance is universal, and when the benefits payments from PhilHealth is adequate. At present, low and volatile social health insurance coverage, low support value, and balance billing all contribute to weak financial protection.

Table 12: Share in Total Health Expenditure by Financing Agents, 2000 – 2005 (%)

	2000	2001	2002	2003	2004	2005
Government	40.6	36.2	31	31.1	30.7	28.7
National	21.2	17.1	15.8	15.2	15.7	15.8
Local	19.3	19.1	15.2	15.9	15.0	12.9
Social Insurance	7.0	7.9	9.0	9.1	9.6	11.0
Philhealth	6.8	7.7	8.8	8.6	9.4	10.7
Employees' Compensation	0.2	0.2	0.2	0.5	0.3	0.4
Private Sources	51.2	54.5	58.6	58.6	58.5	59.1
of which:						
Out-of-Pocket	40.5	43.9	46.8	46.9	46.9	48.4
Private Insurance	2.0	2.5	2.9	2.3	2.5	2.4
HMOs	3.8	3.1	3.6	4.7	4.3	3.9
Others	1.3	1.3	1.4	1.2	1.2	1.2
Memo item:						
Total Health Expenditure						
in billion pesos	114.9	116.6	117.2	148.6	165.3	180.8
% of GDP	3.4	3.2	3.0	3.4	3.4	3.3

Source: National Health Accounts, NSCB, various years

PhilHealth estimates that the support value of PhilHealth benefits for hospitalization to be 62% overall - 88% for public hospitals and 53% for private hospitals (Kwon 2005).⁵ However, there is evidence to suggest that these numbers may in fact over-estimate the actual support value of PhilHealth benefits. A patient exit survey of public hospitals in the Visayas in 2005 shows that PhilHealth's support value for the hospitalization of children under 6 is 71%, lower than the 88% based on PhilHealth's own estimate. At the same, the hospital bill accounts for 72% of total medical expenses, with the remaining 28% accounted for by purchases of drugs and medicines outside the hospital. This implies that the support value of PhilHealth (based on the total medical expense) is equal to 50% (or 71% of 72%).

On the other hand, equitable financing of the health care system is promoted when a prepayment mechanism for health care that is progressive in terms of household income is established. Essentially, this requires that the premium contribution of employed PhilHealth members is based on their ability to pay. While the premium contribution of members who are employed in the formal sector varies with their salary (albeit subjected to a cap in the computation of premium contribution), individually paying members and OFWs continue to pay a flat premium contribution that is below the average paid by the employees in the formal sector. To wit, the premium for the Individually Paying Program is uniformly set at PhP 1,200 per year for all members enrolled under this program regardless of the member's capacity to pay. On the other hand, the premium for the Overseas Workers Program is also uniform but is equal to PhP 900 per year even if OFW tend to have higher incomes than some of the individually paying members. While the

⁵ This is based on a survey on support value of PhilHealth benefits conducted by the PhilHealth in 2004 which included 193 hospitals.

premium for the Sponsored Program is also set at PhP 1,200, it is fully subsidized and is paid for jointly by the national government, the province and municipality/ city where the indigent family resides.

In 2008, the PhilHealth is estimated to cover some 76 % of the population (**Table 13**). However, the coverage of the contributory programs of the PhilHealth cover is even lower at 38% of total number of employed workers. The number of principal members covered under Individually Paying Program and the Overseas Workers Program combined represents 25% of the informal sector workers in 2008.⁶ In contrast, the coverage rate of the Private Employed Sector Program even deteriorated from 54% in 2007 to 48% in 2008.

On the other hand, the coverage of the Sponsored Program (reckoned relative to the estimated number of poor households) is equal to 67% in 2008. Thus, the contributory and non-contributory programs of PhilHealth taken together covered 68.7 million beneficiaries or 76% of the total population in 2008, higher than 72% registered in 2007.

At the same time, the distribution of accredited health facilities and health providers tend to be concentrated in urban areas, thus leaving the poor in geographically isolated areas with poor access to health care. As a result, PhilHealth utilization rate by Sponsored Program members is low compared to that of individually paying members. In turn, the utilization rate of individually paying members is lower than that of government and private sector employees. Note that the share of Sponsored Program and Individually Paying Program to total benefit payments is less than their share in the total number of beneficiaries while the opposite is true of government and private sector members (Refer to the last column of **Table 13**).

Components of health care financing reform package. Given this perspective, the DOH has started to put in place reform measures that are aimed at improving the health care financing system. At present, the most important aspects of this reform package are:

- Health Facilities Enhancement Program (HFEP) involves the rehabilitation and upgrading of NG and LGU health facilities
 - Aimed at enabling government hospitals to operate on a more sustainable basis
 - Enhancing ability of these facilities to provide quality and appropriate services that are responsive to the priority health needs of their catchment population
- National Drug Policy which is aimed at reducing the out-pocket cost of health care by reducing the cost of drugs and medicines
- Expanding the coverage of the PhilHealth.

⁶ For our purposes here, the informal sector workers includes the own account workers, unpaid family workers, wage workers in private households and wage workers in family-owned business

Table 13. Benefit payments and collections of PhilHealth, 2008

	No. of members (in million)	% distn	Coverage rate as % of eligible members	No. of beneficiaries a/ (in million)	% distn	Benefit payments (million pesos)	% distn	Premium contributions (in million pesos)	% distn	Ratio of premium contributions to benefits	% distn of benefits / % distn of beneficiaries
2008											
Government employees	1.9	11.3	100.0	7.7	11.3	3,559	19.6	5,240	20.4	1.5	1.7
Private employees	6.4	38.8	48.2	23.2	33.8	7,649	42.1	15,752	61.4	2.1	1.2
Sponsored indigents	3.3	19.8	67.0 b/	16.5	24.0	2,664	14.7	2,705	10.5	1.0	0.6
OWP	1.8	11.2		8.1	11.7	593	3.3	713	2.8	1.2	0.3
Individually paying members	2.7	16.5	24.8 c/	12.5	18.2	2,491	13.7	1,231	4.8	0.5	0.8
Non-paying members	0.4	2.4		0.7	1.0	1,199	6.6		0.0	0.0	6.6
TOTAL	16.5	100.0	38.2 d/	68.7	100.0	18,155	100.0	25,641	100.0	1.4	1.0
% to GDP						0.24		0.35			

a/ beneficiaries refer to principal members and dependents.

b/ as % of poor households

c/ combined OFW and individually paying members

d/ refers to contributory program only and estimated relative to total number employed

Health Facilities Enhancement Program and National Drug Policy Program

Table 14 shows the breakdown of the remaining resource requirement totaling PhP 34.5 billion for the Health Facilities Enhancement Program (HFEP). This amount is divided as follows: PhP 6.5 billion for the upgrading of LGU hospitals in the 13 roll-out provinces and ARMM which are part of F15, PhP 21.0 billion for the upgrading of LGU hospitals in 42 roll-out provinces under F44, and PhP 7.0 billion for the establishment of the additional specialty centers in Luzon, Visayas and Mindanao.

On the other hand, **Table 15** shows the breakdown of the resource requirement for the National Drug Policy Program (NDPP) in 2011-2016. It shows the total resource requirement for the NDPP rising from PhP 1.6 billion in 2011 to PhP 2.6 billion 2016.

Table 14. Estimate of Budgetary Requirement for Health Facility Enhancement Program

	Original Targets	Upgraded in 2007-2009	To be upgraded in 2010	Gaps	Average unit cost	Budgetary requirement (in PhP mill)
1. Upgrading of LGU hospitals to meet DOH % PHIC accreditation						
* selected priority provinces with approved PIPH & RAT	16 F1 priority provinces			13 roll-out provinces & ARMM in F15	PhP 500 million	6,500
	2 volunteer provinces			42 roll-out provinces in F-44	PhP 500 million	21,000
	2 roll-out provinces in Region 12					
2. Establishment of Specialty Centers in Northern Luzon, Southern Luzon, Visayas & Mindanao for the ff specialties: Heart-Lung-Kidney Centers, Cancer Centers, Blood Centers, Toxicology Centers, Trauma Centers, Orthopedic Center, Burn Centers, Ear/ Eye Centers, Neurosurgery Center, Psychiatry Center	at least 1 subspecialty in Luzon, Visayas & Mindanao	6 HLK Centers (2 each in Luzon, Visayas & Mindanao); 1 Orthopedic Center, 1 Eye Center and 1 Geriatric Center in Luzon	1 Trauma Center in Luzon; 1 Cancer Center in Mindanao	funding of other identified specialty centers in LVM	PhP 600 million to PhP 800 million	7,000
TOTAL						34,500

Table 15. Resource Requirement for National Drug Policy Program

PROGRAMS/ACTIVITIES	2010	2011	2012	2013	2014	2015	2016
I. Drugs and Medicines							
A. Botika ng Barangay Millenium Development Goal (MDG)	110	132	158	165	171	178	185
B. P100 Project	150	195	273	284	295	307	319
C. Vulnerable Group MDG							
1. Women & Mother Basic Emergency Obstetric & Newborn Care (pilot)	20	100	150	156	162	169	175
2. Children (Anti-leukemia)	30	75	100	104	108	112	117
3. Elderly (Inflenza Polyvalent Vaccine)	30	50	75	78	81	84	88
II. RA 9502 Strategies to lower costs of drugs and medicines	510	765	1,020	1,061	1,103	1,147	1,193
III. Administrative Cost	150	225	300	312	324	337	351
IV. Capital Outlay	-	73	109	113	117	122	127
Total Budget	1,000	1,615	2,185	2,272	2,363	2,458	2,556

Table 16 and **Table 17** present the estimate of the total resource requirement and resource gap for the HFEP and the NDPP based on the high cost assumption and the low cost assumption, respectively. The estimate of the resource requirement for the HFEP under the high cost assumption assumes that the program will be completed in toto by 2016 while that under low cost assumption assumes that the program will be completed by 2020. Under the high cost assumption, the combined resource gap for the HFEP and the NDPP ranges from PhP 4.3 billion to PhP 4.8 billion in 2011-2016. On the other hand, under the low cost assumption, the combined resource gap for the HFEP and the NDPP varies from PhP 2.0 billion to PhP 2.5 billion in 2011-2016.

Table 16. Summary of DOH resource requirements to support F1 financing policies (in million pesos)
(HFEP needs funded in 2011-2016 - high cost assumption)

	2010	2011	2012	2013	2014	2015	2016
Resource requirement							
F1 health care financing reform	4,224.2	7,365.0	7,935.0	8,022.4	8,113.3	8,207.8	8,306.1
NDP	1,000.0	1,615.0	2,185.0	2,272.4	2,363.3	2,457.8	2,556.1
HFEP	3,224.2	5,750.0	5,750.0	5,750.0	5,750.0	5,750.0	5,750.0
Resource available for F1 health care financing reform	3,063.9	3,063.2	3,132.2	3,257.5	3,387.8	3,523.3	3,664.2
NDP	1,030.2	1,060.7	1,129.6	1,174.8	1,221.8	1,270.7	1,321.5
HFEP	2,033.7	2,002.5	2,002.5	2,082.6	2,165.9	2,252.6	2,342.7
Resource gap	1,160.3	4,301.8	4,802.8	4,764.9	4,725.5	4,684.6	4,641.9
NDP	-30.2	554.3	1,055.4	1,097.6	1,141.5	1,187.1	1,234.6
HFEP	1,190.5	3,747.5	3,747.5	3,667.4	3,584.1	3,497.4	3,407.3

Table 17. Summary of DOH resource requirements to support F1 financing policies (in million pesos)
(HFEP needs funded in 2011-2020 - low cost assumption)

	2010	2011	2012	2013	2014	2015	2016
Resource requirement							
F1 health care financing policies	4,224.2	5,065.0	5,635.0	5,722.4	5,813.3	5,907.8	6,006.1
NDP	1,000.0	1,615.0	2,185.0	2,272.4	2,363.3	2,457.8	2,556.1
HFEP	3,224.2	3,450.0	3,450.0	3,450.0	3,450.0	3,450.0	3,450.0
Resource available for F1 health care financing policies	3,063.9	3,063.2	3,132.2	3,257.5	3,387.8	3,523.3	3,664.2
NDP	1,030.2	1,060.7	1,129.6	1,174.8	1,221.8	1,270.7	1,321.5
HFEP	2,033.7	2,002.5	2,002.5	2,082.6	2,165.9	2,252.6	2,342.7
Resource gap	1,160.3	2,001.8	2,502.8	2,464.9	2,425.5	2,384.6	2,341.9
NDP	-30.2	554.3	1,055.4	1,097.6	1,141.5	1,187.1	1,234.6
HFEP	1,190.5	1,447.5	1,447.5	1,367.4	1,284.1	1,197.4	1,107.3

Table 18 and **Table 19** put together the estimates of the resource requirements for key public health interventions, the HFEP and the NDPP to arrive at the projected DOH budget by MFO for 2011-2016 based on the high cost and low cost assumptions, respectively. If the resource gaps under the high cost assumption are to be funded fully by the national government, the DOH budget is projected to increase from PhP 24.5 billion (or 0.3% of GDP) in 2010 to PhP 54.6 billion (or 0.6% of GDP) in 2011 to PhP 34.8 billion (or 0.4% of GDP) in 2012 and PhP 37.7 billion (or 0.4% of GDP) in 2013 (**Table 18**). The composition of the DOH budget will also register significant changes: the share of public health in the total DOH budget will increase from 32% in 2010 to 65% in 2011 before declining to 44% in 2012 and 47% in 2013. In contrast, the share of hospital care services will decrease from 36% in 2010 to 14% in 2011 to 22% in 2012 and 21% in 2013.

On the other hand, if the resource gaps under the low cost assumption are to be funded fully by the national government, the DOH budget is projected to increase from PhP 24.5 billion (or 0.3% of GDP) in 2010 to PhP 38.7 billion (or 0.5% of GDP) in 2011 to PhP 29.4 billion (or 0.3% of GDP) in 2012 and PhP 31.0 billion (or 0.3% of GDP) in 2013 (**Table 19**). The share of public health in the total DOH budget will increase from 32% in 2010 to 57% in 2011 before declining to 41% in 2012 and 44% in 2013. In contrast, the share of hospital care services will decrease from 36% in 2010 to 19% in 2011 to 26% in 2012 and 25% in 2013.

Expanding the coverage of PhilHealth

Expanding the coverage of the Sponsored Program of PhilHealth and improving the selection of beneficiaries are critical for two reasons. First, PhilHealth provides the poor financial protection against illness. Second, achieving universal coverage of PhilHealth supports the health sector reform agenda and make the health system, in general, and the public hospital system, in particular, more sustainable.

Table 18. Projected DOH Budget by MFO, 2011-2016 (High Cost Assumption)

	2010	2011	2012	2013	2014	2015	2016
(in million pesos)							
GASS	1,312.3	1,513.5	1,461.1	1,488.4	1,516.8	1,546.3	1,576.9
POLICY	6,023.6	9,521.8	9,987.5	10,043.2	10,101.2	10,161.5	10,224.2
REGULATION	518.8	518.3	530.2	542.2	554.7	567.7	581.2
PUBLIC HEALTH	7,904.5	35,654.9	15,176.5	17,803.9	17,073.3	23,180.6	26,297.0
HOSPITALS	8,762.0	7,437.9	7,681.2	7,786.0	7,895.0	8,008.4	8,126.3
DOH budget	24,521.3	54,646.5	34,836.4	37,663.7	37,141.0	43,464.5	46,805.8
% of GDP	0.30	0.63	0.38	0.38	0.34	0.37	0.36
Memo items							
Total gap		33,387.4	13,170.8	15,549.2	14,559.7	14,687.9	17,524.2
% of GDP		0.39	0.14	0.16	0.13	0.12	0.14
Percent distribution							
GASS	5.4	2.8	4.2	4.0	4.1	3.6	3.4
POLICY	24.6	17.4	28.7	26.7	27.2	23.4	21.8
REGULATION	2.1	0.9	1.5	1.4	1.5	1.3	1.2
PUBLIC HEALTH	32.2	65.2	43.6	47.3	46.0	53.3	56.2
HOSPITALS	35.7	13.6	22.0	20.7	21.3	18.4	17.4
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* 2010 is based on GAA

However, enrollment in the Sponsored Program is typically not sustained. Enrollment in the Sponsored Program rose from 2,904 households in 1997 to 551,328 households in 2000, to 1.8 million in 2003. Enrollment of indigents in the Sponsored Program surged in 2004 (to 6.3 million households) due mainly to the Plan 5/25 launched by the Arroyo administration prior to the elections held that year. Plan 5/25 aimed to enroll five million families, or 25 million beneficiaries, under the Sponsored Program. In order to achieve this, funds were earmarked from the Philippine Charity Sweepstakes Office (PCSO) to pay the premium contributions of indigent members in full (i.e., without any LGU contribution).

When funding from the PCSO stopped, the number of sponsored members declined such that only 3.3 million households were enrolled in the Sponsored Program in 2008, accounting for 20% of PhilHealth's total membership. If the households enrolled in the indigent program were indeed all poor, they would represent 67% of the total number of poor households.⁷

⁷ Based on the 2006 FIES, 26.9% of total number of households are poor.

Table 19. Projected DOH Budget by MFO, 2011-2016 (Low Cost Assumption)

	2010	2011	2012	2013	2014	2015	2016
(in million pesos)							
GASS	1,312.3	1,513.5	1,461.1	1,488.4	1,516.8	1,546.3	1,576.9
POLICY	6,023.6	7,221.8	7,687.5	7,743.2	7,801.2	7,861.5	7,924.2
REGULATION	518.8	518.3	530.2	542.2	554.7	567.7	581.2
PUBLIC HEALTH	7,904.5	22,035.5	12,078.7	13,441.5	13,414.2	19,220.3	24,694.8
HOSPITALS	8,762.0	7,437.9	7,681.2	7,786.0	7,895.0	8,008.4	8,126.3
DOH budget	24,521.3	38,727.1	29,438.6	31,001.3	31,181.9	37,204.2	42,903.6
% of GDP	0.30	0.45	0.32	0.31	0.29	0.32	0.33
Memo items							
Total gap		17,468.0	7,773.1	8,886.8	8,600.5	8,427.6	13,622.0
% of GDP		0.20	0.08	0.09	0.08	0.07	0.11
Percent distribution							
GASS	5.4	3.9	5.0	4.8	4.9	4.2	3.7
POLICY	24.6	18.6	26.1	25.0	25.0	21.1	18.5
REGULATION	2.1	1.3	1.8	1.7	1.8	1.5	1.4
PUBLIC HEALTH	32.2	56.9	41.0	43.4	43.0	51.7	57.6
HOSPITALS	35.7	19.2	26.1	25.1	25.3	21.5	18.9
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* 2010 is based on GAA

However, many analysts (e.g., Torregosa 2001) note that much is left to be desired in the manner that indigents were actually identified under the Sponsored Program in the absence of a sound assessment of poverty indicators and mechanisms to effectively target beneficiaries. These points remain valid today. For instance, in 2006-2008, 23%-44% of provinces have enrolled beneficiaries in excess of the actual number of poor households in their jurisdictions as per the 2006 Family Income and Expenditure Survey (FIES). On the average, the “excess” enrollment in these provinces account for 64%-78% of the actual number of poor households in said provinces. However, if one assumes that enrolled beneficiaries with the exemption of “excess” households are in fact all poor (a strong assumption given the absence of a means test in the selection of beneficiaries), the leakage rate is estimated to range between 20%-24% in 2006-2008 (**Table 20**). If one adjusts for the leakage rate, then one finds that at least 2.4 million poor households (or at least 49% of the total number of poor households) are not yet covered under the Sponsored Program. This implies that the coverage rate of the Sponsored Program is 51%.

It is notable that the national government allocated enough money in the 2008 General Appropriations Act to cover the national government’s share of the premium contributions of all poor households in 2008. This indicates that the constraint in expanding the enrollment in the Sponsored Program very clearly lies on the LGU side which initiates the enrollment process.

Proposals for the national government to shoulder 100% of the premium contributions for indigents and for LGUs to take care of partially subsidizing the informal sector appear to be in the right direction. These proposals will eliminate the political economy issues associated with the present practice of LGUs identifying the beneficiaries under Sponsored Program. These proposals also appear to be consistent with the current practice in a number of LGUs which ask the enrolled beneficiaries in the Sponsored Program to co-share the premium contribution. There is, however, a need to articulate how this approach will be beneficial for all stakeholders: the national government (in its role of both as funder of health care and as provider of health care through the retained hospitals), LGUs, PhilHealth and the general public.

Table 20. Coverage of PhilHealth Sponsored Program

	2006	2007	2008
No. of HHs enrolled	4.7 million	2.7 million	3.3 million
Total no. of poor HHs	4.7 million	4.8 million	4.9 million
Coverage rate	100%	57%	67%
No. of provinces w/ enrolment greater than no. of poor HHs	44	26	23
"Excess" enrolment as % of no. of poor HHs	65%	64%	78%
Leakage rate	20%	23%	24%
NG cost	3.0 billion	2.1 billion	2.5 billion a/
NG+LGU cost	5.6 billion	3.3 billion	3.9 billion

a/ estimated based on per enrolled member allocation in 2007 but PhP 4.5 billion has been allocated as per GAA

If the national government enrolls all poor households,⁸ the number of households enrolled under the Sponsored Program will increase from 3.3 million to 4.9 million households, increasing PhilHealth coverage from the current 76% to 85% of the population. On the other hand, if LGUs continue to allocate the PhP 1.4 billion they are currently setting aside for the premium contributions of indigents but use the amount instead to subsidize the contributions of informal sector members (say, on a 50-50 basis), then total number of beneficiaries could increase by another 12%, bringing total coverage of the PhilHealth to 97%.

⁸ The cost to the national government of doing this PhP 6 billion, PhP 1 billion more than the allocation for the subsidy of premium contributions to the PhilHealth Sponsored Program in the 2009 GAA.

The cost of enrolling 100% of poor households in the Sponsored Program is estimated to be PhP 6 billion, PhP 1 billion more than the PhP 5 billion allocation in the 2010 General Appropriations Act and PhP 2.5 billion more than the 2010 forward estimate.

Finally, **Table 21** and **Table 22** put together the estimates of the resource requirements for key public health interventions, the HFEP, the NDPP and the enrollment of 100% of poor households in the Sponsored Program to arrive at the projected DOH budget inclusive of the allocation for the premium subsidy to the Sponsored Program for 2011-2016 based on the high cost and low cost assumptions, respectively. If the resource gaps under the high cost assumption are to be funded fully by the national government, the DOH budget is projected to increase from PhP 24.5 billion (or 0.3% of GDP) in 2010 to PhP 60.6 billion (or 0.6% of GDP) in 2011 to PhP 40.8 billion (or 0.4% of GDP) in 2012 and PhP 43.7 billion (or 0.4% of GDP) in 2013 (**Table 21**).

On the other hand, if the resource gaps under the low cost assumption are to be funded fully by the national government, the DOH budget inclusive of the premium subsidy for the Sponsored Program of PhilHealth is projected to increase from PhP 24.5 billion (or 0.3% of GDP) in 2010 to PhP 44.7 billion (or 0.5% of GDP) in 2011 to PhP 35.4 billion (or 0.4% of GDP) in 2012 and PhP 37.0 billion (or 0.4% of GDP) in 2013 (**Table 22**).

It should be emphasized that the needed reforms in the social health insurance system are multi-pronged. Moreover, it is critical that the reforms be done almost simultaneously. Thus, in addition to expanding coverage there is a need to:

- Introduce greater progressivity in the level of premiums, especially those for the individually paying program, the Overseas Worker Program and the Sponsored Program,
- Increase premiums overall,
- Increase benefits ceiling,
- Introduce cost-sharing mechanisms like deductibles and co-insurance to minimize moral hazard, and
- Abolish balance billing and shift payment system from fee-for-service to capitation or case payments.

Table 21. Projected DOH Budget Inclusive of Premium Subsidy to PhilHealth Sponsored Program, 2011-2016 (High Cost Assumption)

	2010	2011	2012	2013	2014	2015	2016
(in million pesos)							
GASS	1,312.3	1,513.5	1,461.1	1,488.4	1,516.8	1,546.3	1,576.9
POLICY	6,023.6	9,521.8	9,987.5	10,043.2	10,101.2	10,161.5	10,224.2
REGULATION	518.8	518.3	530.2	542.2	554.7	567.7	581.2
PUBLIC HEALTH	7,904.5	35,654.9	15,176.5	17,803.9	17,073.3	23,180.6	26,297.0
HOSPITALS	8,762.0	7,437.9	7,681.2	7,786.0	7,895.0	8,008.4	8,126.3
PHIC SP premiums	5,000.0	6,000.0	6,000.0	6,000.0	6,000.0	6,000.0	6,000.0
DOH+PHIC SP premiums	29,521.3	60,646.5	40,836.4	43,663.7	43,141.0	49,464.5	52,805.8
% of GDP	0.30	0.63	0.38	0.38	0.34	0.37	0.36
Memo items							
Total gap		35,887.4	15,670.8	18,049.2	17,059.7	17,187.9	20,024.2
% of GDP		0.42	0.17	0.18	0.16	0.15	0.16
Percent distribution							
GASS	4.4	2.5	3.6	3.4	3.5	3.1	3.0
POLICY	20.4	15.7	24.5	23.0	23.4	20.5	19.4
REGULATION	1.8	0.9	1.3	1.2	1.3	1.1	1.1
PUBLIC HEALTH	26.8	58.8	37.2	40.8	39.6	46.9	49.8
HOSPITALS	29.7	12.3	18.8	17.8	18.3	16.2	15.4
PHIC SP premiums	16.9	9.9	14.7	13.7	13.9	12.1	11.4
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* 2010 is based on GAA

Table 22. Projected DOH Budget Inclusive of Premium Subsidy to PhilHealth Sponsored Program, 2011-2016 (Low Cost Assumption)

	2010	2011	2012	2013	2014	2015	2016
(in million pesos)							
GASS	1,312.3	1,513.5	1,461.1	1,488.4	1,516.8	1,546.3	1,576.9
POLICY	6,023.6	7,221.8	7,687.5	7,743.2	7,801.2	7,861.5	7,924.2
REGULATION	518.8	518.3	530.2	542.2	554.7	567.7	581.2
PUBLIC HEALTH	7,904.5	22,035.5	12,078.7	13,441.5	13,414.2	19,220.3	24,694.8
HOSPITALS	8,762.0	7,437.9	7,681.2	7,786.0	7,895.0	8,008.4	8,126.3
PHIC SP premiums	5,000.0	6,000.0	6,000.0	6,000.0	6,000.0	6,000.0	6,000.0
DOH+PHIC SP premiums	29,521.3	44,727.1	35,438.6	37,001.3	37,181.9	43,204.2	48,903.6
% of GDP	0.36	0.52	0.38	0.37	0.34	0.37	0.38
Memo items							
Total gap		19,968.0	10,273.1	11,386.8	11,100.5	10,927.6	16,122.0
% of GDP		0.23	0.11	0.11	0.10	0.09	0.13
Percent distribution							
GASS	4.4	3.4	4.1	4.0	4.1	3.6	3.2
POLICY	20.4	16.1	21.7	20.9	21.0	18.2	16.2
REGULATION	1.8	1.2	1.5	1.5	1.5	1.3	1.2
PUBLIC HEALTH	26.8	49.3	34.1	36.3	36.1	44.5	50.5
HOSPITALS	29.7	16.6	21.7	21.0	21.2	18.5	16.6
PHIC SP premiums	16.9	13.4	16.9	16.2	16.1	13.9	12.3
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* 2010 is based on GAA

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Appendix Table 1. Forward Estimates/Resource Envelope (in million pesos)

	2010	2010	2010	2011	2012
GASS	716193.7534	1,375,860	1,375.9	1,528.7	1,568.3
POLICY	4,236,347	5,058,610	5,058.6	5,109.0	5,206.5
REGULATION	274860.1626	523,024	523.0	442.4	452.0
PUBLIC HEALTH	6,565,958	6,697,980	6,698.0	6,506.5	7,181.3
HOSPITALS	2,473,945	7,960,664	7,960.7	8,145.9	7,875.6
PHIC S P premiums	5,000,000	5,000,000	5,000.0	3,500.0	3,500.0
TOTAL	14,267,304	26,616,138	26,616.1	25,232.4	25,783.7
Memo items					
NDP	1030201	1030201	1,030.2	1,065.8	1,134.8
HFEP	2293189	2320709	2,320.7	2,331.2	2,350.4

Source: DBM