Philippine Journal of Development
Number 72, First and Second Semesters 2013
Volume XL, Numbers 1 & 2

Analysis of Out-of-Pocket Expenditures in the Philippines

Valerie Gilbert T. Ulep and Nina Ashley O. dela Cruz[1]

ABSTRACT

Health care remains inaccessible and inequitable for all, especially for the poor in the Philippines. Among the sources of health expenditures, out-of-pocket expenses remain to be Filipinos' major source of financing for medical care. However, it is this reliance on out-of-pocket expenditures that pushes Filipino households into poverty. This paper thus presents the current state of out-of-pocket expenditures in the Philippines by analyzing and estimating the burden of health payments, catastrophic payments, and impoverishments based on the Family and Income Expenditure Surveys from 2000 to 2012. This study reveals that out-of-pocket expenditures for health-care financing continue to increase. Among the components of total health expenditures, drugs or medicines account for the highest share among the poorest and richest quintiles. The burden of health payments has a positive relationship relative to one's socioeconomic status—more so among those in the richer quintiles because of their greater demand on health care. This study also reveals the higher share of out-of-pocket payments on households' nonfood expenditures. An increasing trend of catastrophic payments has been observed until recently where there was a 1.01-percent increase from 2000 to 2012. This is also the same for impoverishments: There is a rise in the prevalence of impoverished households due to high out-of-pocket expenditures. Furthermore, the poverty gap also increases after out-of-pocket payments.

[1] Former supervising research specialist and research analyst II, Philippine Institute for Development Studies, respectively. Email for correspondence: vgtulep@gmail.com.

BACKGROUND

In 2014, the Philippines posted a 6.11 percent gross domestic product (GDP) which was right on target and continued to be satisfactory since 2010. Despite the series of natural disasters and calamities, the GDP in the fourth quarter of 2014 grew by 6.99 percent (Official Gazette 2014). For the coming years, there is a positive outlook for the economy in general amid the challenges in the global environment and the impact of recent disasters. Economic growth is projected to be at 9 percent in 2015 (Chua 2014).

Despite the rosy picture on the domestic economy, income and social inequalities still persist. Basic social provisions remain generally inaccessible to vulnerable segments of the population. One such provision is health care. Although social safety nets are in place to facilitate access, out-of-pocket (OOP) expenditures remain to be Filipinos' major source of financing when health care is most needed. In 2011, more than 50 percent of total health payment came from Filipinos' own pocket (NSCB-NHA, n.d.).

Operationally, OOP expenditure is defined as "any direct outlay by households, including gratuities and in-kind payments, to health practitioners and suppliers of pharmaceuticals, therapeutic appliances, and other goods and services whose primary intent is to contribute to the restoration or enhancement of the health status of individuals or population groups. It is part of private health expenditure" (WB, n.d.).

The level of OOP health expenditures is an important indicator of an effective health-care system. Ideally, an optimal health-care system should restrain the irrational growth in health expenditures. It should also have the capacity to provide equitable financial protection. Financial protection mechanisms should substantially reduce the amount that people spend for health care. Heavy reliance on OOP expenditures may lead the population to forgo care, or worst, to impoverishment.

OBJECTIVES OF THE STUDY

This study's general objective is to analyze the OOP expenditures in the Philippines by examining the Family Income and Expenditure Surveys (FIES) from 2000 to 2012.

It has the following specific objectives: (1) to determine the trend of OOP expenditures at the household level; (2) to dissect the different types of OOP expenditure by socioeconomic status; (3) to estimate the burden of payments, catastrophic payments, and impoverishment due to OOP spending; and (4) to assess the performance of social health insurance as a factor influencing OOP expenditure.

The study has two significant policy and programmatic implications: (1) crudely assess the effectiveness of most recently implemented health financing

interventions aimed at mitigating OOP spending; and (2) identify the areas that require interventions so as to decrease OOP expenditures in the medium to long term.

METHODOLOGY

This study used the FIES from 2000 to 2012 to determine the patterns and trends in OOP expenditures. The FIES is a nationally represented dataset with approximately 40,000 observations. Similar datasets were used to calculate for the burden of payments, catastrophic payments, and impoverishments. Operationally, OOP expenditure was defined as the annual expenditure of households on the following health-related goods and services: medicines/ drugs, medical charges, dental charges, hospital room charges, other medical goods and supplies, other medical health services, and contraceptives. The household is the unit of analysis. Formulas for catastrophic and impoverishment estimation were based on the work of Xu (2005), while certain sections in this paper also used the methodology of O'Donnell et al. (2007) in presenting alternative estimates.

The following (Table 1) are the formulas employed to calculate the burden of health payments, catastrophic payments, and impoverishment:

Table 1. Formula for the calculation of indicators

Measurements	Formula
Burden of health payments (using capacity to pay)	$bhp_h = \frac{oop_h}{ctp_h}$ where *bhp* = burden of health payments *oop* = out-of-pocket *ctp* = capacity to pay
Catastrophic expenditure	$cata_h = 1 \text{ if } \frac{oop_h}{ctp_h} \geq 0.4$ $cata_h = 0 \text{ if } \frac{oop_h}{ctp_h} \leq 0.4$ where *cata* = catastrophic expenditure
Impoverishment	$impoor_h = 1 \text{ if } exp_h \geq se_h \text{ and } exp_h - oop_h < se_h$, otherwise, $impoor_h = 0$ Where *impoor(h) =1 =>* household expenditure is higher than subsistence spending but is lower than subsistence spending net of out-of-pocket health payments, and *impoor (h)=0=>* otherwise.

Source: Xu (2005)

SUPPLEMENTAL INFORMATION AND ANALYSIS

Health financing in the Philippines

The Philippines uses multiple sources to finance health services and goods. Its total health expenditure aggregates all the estimated value of identified sources of financing, namely: (1) government health expenditures (national and local government); (2) social insurance; (3) private sources; and (4) others. Private sources can be further disaggregated into OOP, private insurance, health maintenance organizations, private establishments, and private schools.

The Philippines' total health expenditure (THE) has been increasing both in nominal and constant terms. In constant terms, THE rose by more than two-folds in the last 12 years: from PHP 159 billion, it rose to PHP 347 billion. All major sources of health expenditures also increased over the last decade. Of these, OOP health expenditure remains to be the major source, accounting for more than 50 percent of the total. From 1991 to 2011, the average annual growth rates of expenditures for government, social insurance, OOP, and private insurance were 3.9 percent, 8.5 percent, 6.3 percent, and 9.5 percent, respectively. Figures 1 and 2 show the growth trends of these different sources of OOP expenditure.

Based on the Philippine Health Financing Strategy and National Objectives for Health, the government aims to reduce significantly the high level of OOP expenses by increasing the share of social health insurance (DOH 2012). The enactment of the National Health Insurance 1995 attempts to provide an alternative financing to OOP. However, after almost two decades, OOP continues to be the major source, while social insurance only accounts for 9 percent of total health expenditure.

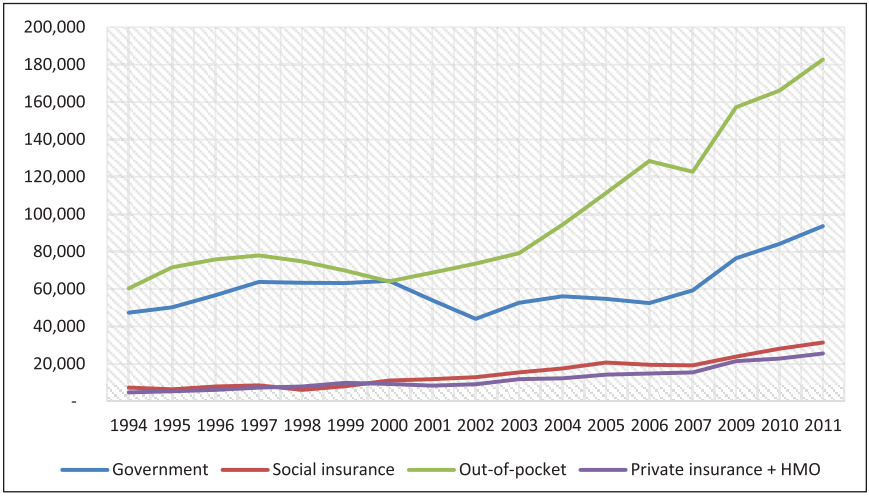
Ideally, OOP expenditure should be low especially when there is alternative health-financing mechanisms provided by the government. In countries with successful health-financing strategies, the OOP level could go as low as 15 percent–30 percent.

Negative effects of high OOP

High OOP expenditures have negative effects. These negative effects are often related to poverty, particularly on health outcomes, consumption spending, and decisionmaking.

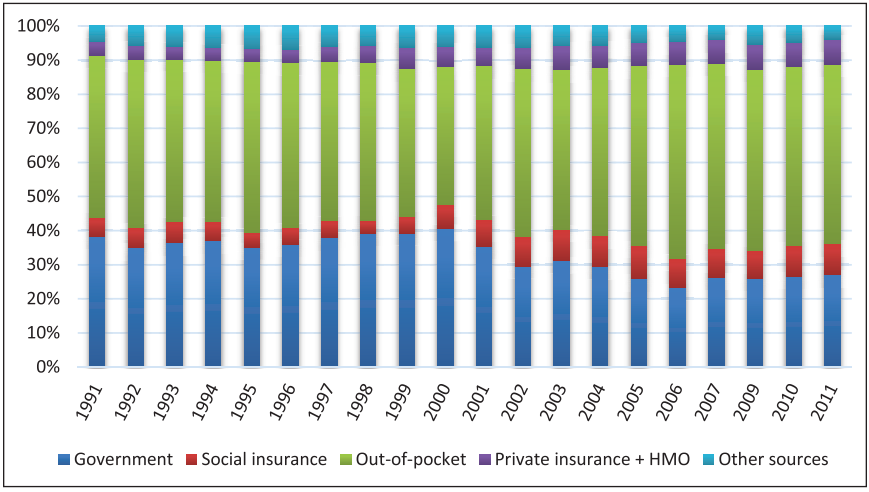
According to Plumper and Neumayer (2012), a high OOP level is regressive and damaging to the health of the relatively poor because it leads to increasing mortality among the marginalized groups. Other studies have reported that it increases mortality rates specifically among older people, particularly since it reduces the poor's demand for necessary health-care services.

Figure 1. Sources of health expenditures, Philippines, 1994–2011



Note: In constant terms using 2006 Consumer Price Index (CPI)
Source: National Health Accounts (NHA), various years

Figure 2. Sources of health expenditures, Philippines, 1991–2011



Source: NHA, various years

In terms of consumption spending and decisionmaking, high OOP expenditure can:

- redistribute income "in the wrong direction" (i.e., from chronically ill to healthy individuals and, typically, from the relatively poor to the relatively affluent groups [Plumper and Neumayer 2012]);

- lead people to make tough choices concerning their health such as not complying with prescribed drug use due to high costs, forgoing necessities, or borrowing money to pay for prescriptions;
- affect women and minorities who may forgo critical prevention screenings and skimp on medications due to high costs; and
- increase the financial burden on those with valid insurance (Aji et al. 2013).

In addition, when it comes to OOP transfers, various critics question whether such transfer schemes achieve cost containment or cost reduction considering information asymmetries and principal agent problems between patients and health-care providers (Plumper and Neumayer 2012).

In terms of the effects on other sectors, a study by Capuno et al. (2009) found that higher OOP expenditure reduces the likelihood of school attendance, as families are forced to skimp on education and other consumption spending. It also reduces the available resources for education. Other adverse consequences concern the labor sector such as loss of employment, income reduction, transient or aggravated poverty, and even poor health (Riphahn 1999; Gertler and Gruber 2002; Van Doorslaer et al. 2006; Capuno et al. 2009).

Catastrophic health expenditure is health spending that drives households to reduce their basic consumption of other goods so as to pay for health care instead, which to some extent leads to disruption of living standards (Rashad 2014). The two measures of catastrophic health expenditure—Van Doorslaer's approach and Ke Xu's approach—share the concept that OOP expenditures on health services should not exceed a threshold to be deemed catastrophic.

In Rashad's (2014) report, three preconditions for catastrophic health expenditure—namely, expensive health care, poor population, and the lack or failure of health insurance to cover health expense—are identified (Xu et al. 2003). These preconditions may aggravate poor households' poverty condition or pull down nonpoor families into poverty if met.

High OOP expenditure is more closely associated with catastrophic expenditure compared with the lack of a capacity to pay. This inefficient method of financing health care can eventually lead to family impoverishment. A study by Gupta (2009) showed that OOP health expenditure accounts for an average increase in poverty by as much as 3.5 percent and 2.9 percent for rural and urban India, respectively. Moreover, an analysis by Rashad (2014) suggests that poor households with chronic sick members are most vulnerable to catastrophic health expenditure. Also, the poorest quintiles are more likely to encounter catastrophic health expenditures.

Dissecting the OOP

The average household OOP expenditure grew over the years, both in nominal and constant terms. Table 2 shows that the average household OOP expenditure rose by 21 percent (using constant terms) from 2009 to 2012, which is faster than the rate in 2006–2009. Also, the average OOP health expenditure has a positive relationship with one's socioeconomic status. Over the years, it increased in all socioeconomic quintile groups. However, households in the lower income groups (Q1 and Q2) posted relatively high annual growth rates in the later part of the last decade.

One caveat in this analysis is the lack of a survey variable that would determine if the increase in health expenditure is parallel with utilization. This cannot be validated because the quantity of services and goods is not captured in the FIES. Theoretically, the increase in health expenditure can be attributed to the increase in utilization or price. In the public policy point-of-view, the approach in dealing with the two drivers of health expenditure may not be the same.

Higher utilization as a reason for the surge in household OOP expenditure may include the following: increased demand due to rising prevalence of illnesses, improved awareness and access to health-care services by the population, and increased health-care costs. One possible reason for the increasing costs of medicines is the rising use of generic drugs and higher prices for generic prescriptions brought about by the implementation of the Cheaper Medicines Act and the Generics Act.

The patterns of the average OOP expenditure in current and constant prices are the same but with different values. Hence, the increase in OOP expenditure cannot be mainly attributed to utilization.

Although the growth rate of health expenditure rose across income groups, those that are OOP remain to be inequitable. In 2012, almost 80 percent of OOP expenditures were from Q4 and Q5 households, and only 10 percent were from Q1 and Q2 (Figure 3). The important policy question on the richer segments' unnecessary health-care expenditures and overutilization of medical care, thus, remains to be relevant. The lack of effective policy and regulatory instruments that directly and indirectly control health expenditure among the richer groups may explain why there is no decrease in the total value of OOP expenditure.

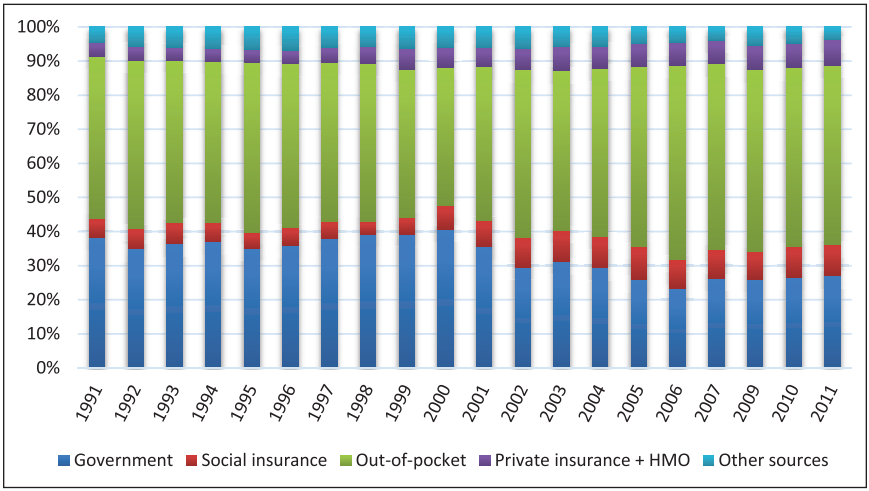
To determine what policy and programmatic interventions are necessary to mitigate the increasing OOP at the household level, it is thus important to disaggregate its components. Table 3 shows that drug remains to be the main OOP expenditure in 2012. This analysis is consistent with the study conducted by Lavado and Ulep (2011). Medical products account for around 50 percent of the total OOP expenditures. Of these, 64 percent and 29 percent are pharmaceutical products and nutritionals, respectively. This pattern leads to the observation that

Table 2. Average household out-of-pocket (OOP) health expenditures, Philippines, 2000–2012

Year	Current						Constant (2006)					
	Q1	Q2	Q3	Q4	Q5	National	Q1	Q2	Q3	Q4	Q5	National
2000	301	624	1,114	2,210	7,084	2,267	416	862	1,539	3,053	9,785	3,131
2003	388	843	1,452	2,708	7,528	2,582	445	967	1,665	3,106	8,633	2,961
2006	506	1,083	2,054	3,807	13,516	4,193	506	1,083	2,054	3,807	13,516	4,193
2009	635	1,312	2,426	4,892	15,138	4,880	547	1,131	2,091	4,217	13,050	4,207
2012	1,379	2,424	3,850	8,240	19,283	7,035	1,075	1,889	3,001	6,422	15,029	5,483
AGR*	66%	57%	51%	55%	40%	46%	37%	30%	25%	28%	15%	21%

* Annual growth rate from 2009 to 2012; CPI for health was used to adjust current to constant prices.
Source: Philippine Statistics Authority (2000–2012)

Figure 3. Share of OOP health expenditure by quintile groups, Philippines, 2000–2012



Source: Family Income and Expenditure Surveys (FIES), 2000–2012

a significant portion of OOP expenditure may not be "medically important". Pharmaceutical products and nutritionals can be curative and supplementary. Curative refers to essential ones while the supplementary medicines have a preventive function or act as supplements (Appendix B). Being deemed as not medically important in this context means some drugs, particularly nutritionals, are not prescriptive and are consumed voluntarily.

Although the average household OOP expenditure is positively correlated with households' socioeconomic status, the share is negatively correlated (Q1's 59% vs. Q5's 46%). Individuals in the poorest quintiles, despite their higher risk of diseases, tend to spend less on inpatient and outpatient care relative to their total OOP health expenditures. This scenario may suggest that there is heavy reliance on medical products during health-care episodes in lieu of actual visits to a health facility. Naturally, there might be a perception that actual visit to a health facility will entail higher OOP expenditure. Hence, purchasing medicines for self-medication is practiced by most of the poor households to avoid health facility visits, which may pertain to costly medical services such as surgery and diagnoses. However, such assumptions (i.e., that people forgo care and unnecessarily use medical products) should be validated with more empirical evidences.

Table 3 also presents that for the poorest quintile, the share of inpatient services to total OOP expenditures is only 28 percent compared to the richest quintile's share of 37 percent. Nevertheless, the poor usually go to public hospitals (74%) and only a few avail of private hospital services (26%). The reverse is

Table 3. Aggregates of household OOP health expenditures, Philippines, 2012

Components	Quintile 1		Quintile 2		Quintile 3		Quintile 4		Quintile 5		National	
	ave exp	Share (%)	ave exp	Share (%)	ave exp	Share (%)	ave exp	Share (%)	ave exp	Share (%)	ave exp	Share (%)
Medical products	514.6	59	994.1	53	1,898.7	53	3,479.4	53	10,189.6	46	3,415.1	49
Pharma products	329.7	64	624.3	63	1,211.4	64	2,197.1	63	6,597.6	65	2,191.9	64
Nutritionals	148.5	29	300.0	30	559.9	29	1,046.0	30	2,934.3	29	997.7	29
Other medical preparations	20.1	4	37.1	4	66.1	3	111.3	3	304.7	3	107.8	3
Other medical products	11.9	2	22.5	2	31.0	2	49.8	1	129.2	1	48.9	1
Therapeutic appliance	4.4	1	10.3	1	30.2	2	75.1	2	223.8	2	68.8	2
Outpatient services	113.7	13	260.8	14	471.6	13	783.3	12	3,876.2	17	1,101.0	16
Medical services	86.9	76	217.8	84	403.7	86	656.8	84	3,224.2	83	917.8	83
Dental services	3.3	3	8.5	3	23.4	5	46.3	6	366.0	9	89.5	8
Paramedical services	23.5	21	34.5	13	44.5	9	80.2	10	286.1	7	93.7	9
Inpatient services	242.2	28	633.8	34	1,180.4	33	2,268.3	35	8,271.0	37	2,519.0	36
Public	179.7	74	411.5	65	657.3	56	967.7	43	1,104.4	13	664.1	26
Private	62.4	26	222.3	35	523.1	44	1,300.6	57	7,166.6	87	1,854.9	74

Source: FIES 2012

true for the richest quintile, resulting to higher spending for inpatient as well as outpatient services.

The trends in OOP by types of expenditure can be presented only for the years 2000–2009 because components have been changed since the FIES 2012. Components in previous years include drugs and medicines, hospital room charges, medical and dental charges, other medical goods and supplies, other medical health services, and contraceptives. As mentioned earlier, the increasing share of drugs and medicines was consistently higher among the poor compared to the rich quintiles. In addition, there was a clear drop in the share of drugs and medicines from 2000 to 2009, although not significantly large (Lavado and Ulep 2011).[2]

Burden of health payments and catastrophe due to OOP expenses

What then is the impact of OOP health payments on total household financial resources or the burden of health payments? Xu (2005) defines *burden of health payments* as the share of OOP expenditure on health on household's capacity to pay. *Capacity to pay* is defined as the nonsubsistence effective income, which is the effective income minus subsistence expenditure of the household. The effective income proxy is the total household expenditure. Table 4 shows that the burden of health payment rose from 2.8 percent in 2000 to 4.8 percent in 2012.

Note that the diary approach in conducting the FIES (according to the Philippine Statistics Authority) might avoid the recall problems that the expenditure data may hold and can somewhat affect the computation on capacity to pay.

Burden of health payments is positively correlated with socioeconomic status. In other words, higher burden of health payments is occurring in richer quintiles. This is expected as the demand for care is higher among the rich. From 2000 to 2009, there was a change in the burden of health payments in lower

Table 4. Share of out of pocket on capacity to pay (in %)

Quintile Groups	2000	2003	2006	2009	2012
Q1	2.4	2.8	3.0	3.0	4.0
Q2	2.8	3.1	3.4	3.5	4.5
Q3	2.9	3.2	3.8	3.7	4.6
Q4	2.8	2.8	4.0	4.1	5.3
Q5	3.0	3.0	4.2	4.6	5.5
Philippines	2.8	3.0	3.7	3.8	4.8

Source: Authors' calculation of various rounds of FIES

[2] See Table 5 of Appendix A for the trends in OOP by types of expenditure, 2000–2009.

income quintiles (Q1 and Q2). However, a significant increase was noted from 2009 to 2012.

O'Donnell et al. (2007) uses expenditure, discretionary expenditure (expenditure minus food), or disposable income (income minus food) as a denominator to determine burden of health payments. In this study, the three aforementioned denominators were used as well.

There are advantages and disadvantages in using income as a denominator. It is advantageous to use since it is not directly responsive to medical spending. However, the health payments-to-income ratio is not responsive to the means of financing health care. Meanwhile, if total household expenditure is used as the denominator, the catastrophic payments are defined in relation to the health payments' budget share. A potential problem is that this budget share may be low for poor households, especially in low-income countries such as the Philippines (O'Donnell et al. 2007).

According to O'Donnell et al. (2007), income may be an inferior measure, not only because of measurement challenges but also because for most households, the fluctuation in income over time does not necessarily imply changes in living standards. If a household experiences a temporary negative income shock due to illness but is able to maintain consumption through savings or insurance it may be misleading to rank the households based on income or to express OOP payments as a share of income. It would show that they are spending more on health care as a share of income when they are not. Moreover, some nonpoor households may be made poor because of health shocks that necessitate OOP spending on health.

When using per-capita income as the denominator, it can be observed that the burden of health payments rose from 1.5 percent in 2000 to 2.6 percent in 2012. On the other hand, the burden of health payments also hiked from 3.8 percent in 2000 to 6.3 percent in 2012 when using disposable income as a denominator. It should be noted that in 2009, the share of OOP health expenditure using disposable income as denominator is negative among the poorest quintile. This highlights the problem of underreporting in household income.

When using expenditure as denominator, on the other hand, it can be noticed that the trend consistently increased during the period 2000–2012. A similar pattern can also be observed if such is disaggregated by quintile. Rich households have a higher share of OOP spending on their total expenditure (Tables 5 and 6).

Catastrophic payments

A household is said to have incurred *catastrophic payments* if the burden of payments [OOP/income] exceeds a specified threshold, x. The value of x represents the point at which the absorption of household resources by spending on health care is considered to impose a severe disruption to living standards.

Table 5. Share of OOP health expenditure on income

Quintile	OOP/Disposable Income (%)					OOP/Per-capita Income (%)				
	2000	2003	2006	2009	2012	2000	2003	2006	2009	2012
Q1	6.9	2.5	2.5	-0.6	11.6	1.0	1.3	1.4	1.3	1.7
Q2	3.0	3.9	4.0	4.2	5.2	1.2	1.4	1.7	1.7	2.1
Q3	3.7	3.0	4.2	4.0	4.7	1.5	1.6	2.1	2.0	2.4
Q4	2.8	2.7	3.8	4.6	5.5	1.6	1.7	2.5	2.6	3.2
Q5	2.8	2.8	3.9	4.3	4.9	2.0	2.0	2.9	3.2	3.6
Philippines	3.8	3.0	3.7	3.3	6.3	1.5	1.6	2.1	2.1	2.6

Note: disposable income = income - food expenditure
Source: Authors' calculation using various rounds of FIES

Table 6. Share of OOP health expenditure on total expenditure

Quintile	OOP/Nonfood Expenditure (%)					OOP/Per-capita Expenditure (%)				
	2000	2003	2006	2009	2012	2000	2003	2006	2009	2012
Q1	2.4	2.8	3.0	3.0	4.0	0.9	1.1	1.2	1.2	1.5
Q2	2.8	3.1	3.4	3.5	4.6	1.2	1.4	1.6	1.6	2.0
Q3	3.1	3.4	4.0	3.9	4.8	1.5	1.7	2.1	2.0	2.5
Q4	3.1	3.1	4.4	4.6	5.9	1.7	1.8	2.6	2.7	3.5
Q5	3.6	3.6	4.8	5.3	6.3	2.4	2.4	3.4	3.7	4.4
Philippines	3.0	3.2	3.9	4.1	5.1	1.5	1.7	2.2	2.2	2.8

Note: discretionary expenditure = total expenditure - food expenditure
Source: Authors' calculation using various rounds of FIES

World Health Organization researchers use 40 percent as threshold when capacity to pay (roughly, total expenditure minus food) is used as the denominator (Xu 2005). On the other hand, the World Bank uses 10 percent as threshold of total expenditure with the argument that this represents an approximate threshold at which the household is forced to sacrifice other basic needs, sell productive assets, incur debt, or become impoverished (O'Donnell et al. 2007).

There is an increasing trend of catastrophic health payments over time. The proportion of households that incur catastrophic payments rose from 0.49 percent in 2000 to 1.50 percent in 2012. This translates to roughly 1.5 million people spending more than 40 percent of their earnings on health care. Figure 4 also shows a positive relationship between catastrophic payments and socioeconomic status. As the socioeconomic status rises, catastrophic expenditure also increases

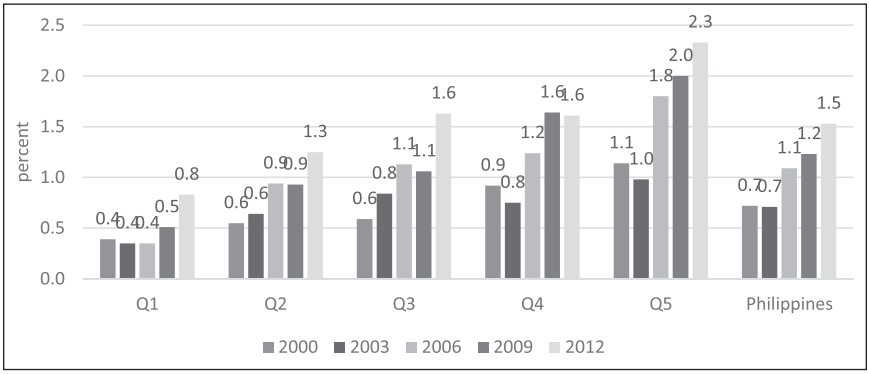
Impoverishment

In extreme cases, OOP payments can lead to poverty. In Table 7, around 18 percent of the population are living in poverty, which is defined as total expenditure being lower than the subsistence spending. If OOP payments for health care are netted out, this percentage rises to 19 percent. Thus, 1.0 percent of the population become poor once they spend on their health. The poverty gap also increases from PHP 282 to PHP 300 after the health-care expenditure.

RATIONALIZING THE HIGH OOP IN THE PHILIPPINES

As shown in the trends, OOP expenditures continue to grow significantly despite the presence of other alternative financing such as social health insurance. In this section, the performance of social insurance will be presented to explain the failure to decrease the level of OOP spending in the country.

Figure 4. Prevalence of catastrophic payments, by quintile, Philippines, 2000–2012



Source: Authors' calculation using various rounds of FIES

Table 7. Impoverishment indicators

Indicators	2000	2003	2006	2009	2012
Headcount pre-OOP (%)	23.1	19.2	19.8	18.4	19.4
Headcount post-OOP (%)	23.7	19.9	20.6	19.2	20.4
% of impoverished HH	0.6	0.7	0.9	0.8	1.0
Poverty gap before OOP	231.8	191.8	222.0	240.6	282.1
Poverty gap after OOP	239.1	199.4	232.7	252.6	299.7
Difference	7.2	7.5	10.7	12.0	17.5

Source: Based on authors' calculation using various rounds of FIES

Low benefit utilization of social insurance

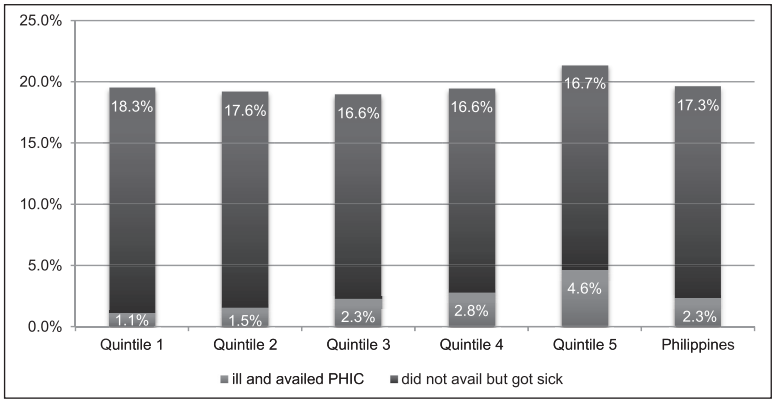
Based on PhilHealth official reports, around three in every four Filipinos are covered under the social health insurance. From 2010 to 2014, the national government has been aggressively expanding the coverage rate by enrolling poor households and in 2013, started covering the identified poor in the National Housing Targeting System (NHTS). In fact, almost 25 percent of the Department of Health's budget is allocated to the premium subsidy of poor households. However, as studies have shown, the coverage rate may not be translating into benefit utilization. A significant portion of enrolled households may still have difficulty in accessing health facilities or are unaware of their benefit entitlements. Data used in assessing the performance of benefit utilization come from the Annual Poverty Indicators Survey (APIS) 2011.

Figure 5 shows the benefit utilization by socioeconomic status. The demand for care (as measured by illness) is almost the same across income quintile, but benefit utilization across these socioeconomic groups is low. Even when assessed across regions in the Philippines, the same low utilization of benefits is observed (Figure 6).

As noted, the benefit utilization is higher among the richer segments of the population. This is also validated by statistics on the distribution of admissions by hospital. In the Philippines, the hospital market is highly segmented, where the poor population tends to utilize public hospitals. Figure 7 shows that private hospitals have higher admission of PhilHealth members: 65.9 percent of patients in private hospitals are PhilHealth members compared to 29.6 percent to 44.7 percent in government hospitals. In all hospitals, less than 50 percent of patients are PhilHealth members. This indicates that the remaining patients are either using OOP expenditures or other forms of financing.

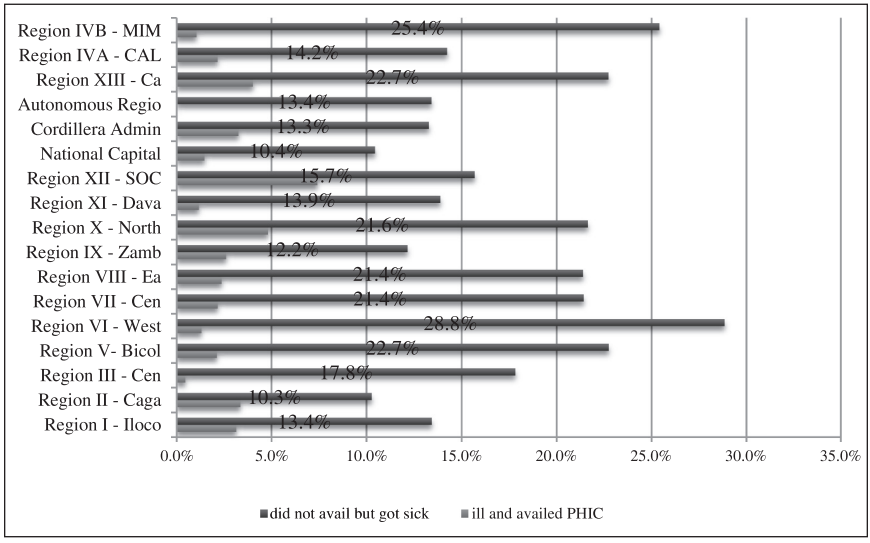
Figure 8 shows that in total, the highest percentage by distribution of admissions belongs to the paying non-PhilHealth patients (32.1%). Across

Figure 5. Benefit utilization and demand for care, 2011



Source: Authors' calculation using APIS

Figure 6. Benefit utilization vis-a-vis demand for care, by socioeconomic quintile, 2011



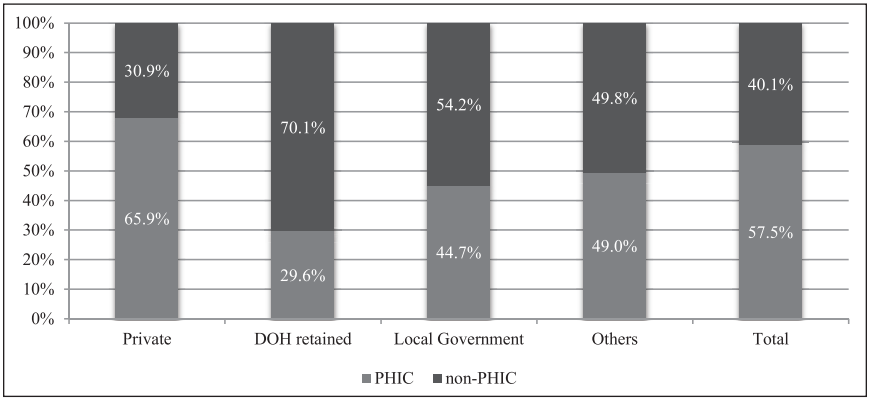
Source: Authors' calculation using APIS

different types of hospital, the charity non-PhilHealth members have higher percentages of admission, compared to the other two types of member-patients.

Low support value

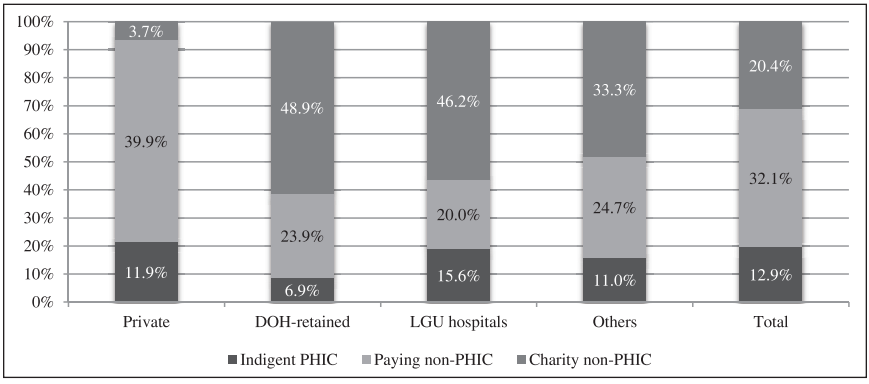
Support value is defined as the percentage of hospital bills supported by PhilHealth. Although members can avail of social insurance benefits, the support value of PhilHealth is still low, averaging around 40 percent.

Figure 7. Patient discharges, PHIC status, 2011



Source: Authors' calculation of Hospital Stat Reports, 2011

Figure 8. Distribution of admissions, by type of patients, 2011



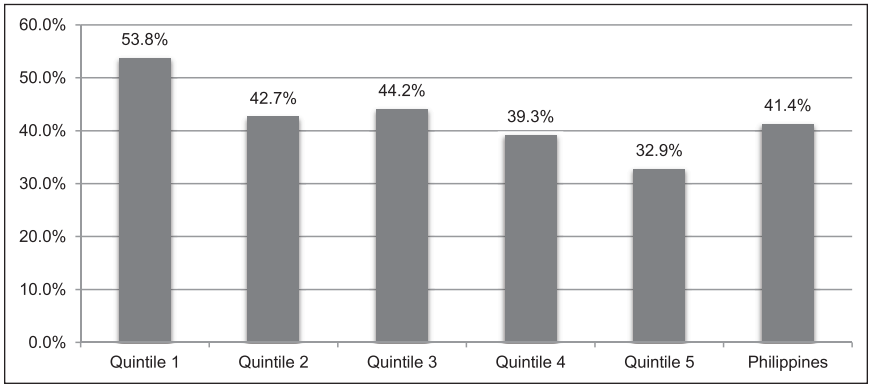
Source: Authors' calculation of Hospital Stat Reports, 2011

Figures 9 and 10 show the average support value by socioeconomic status and age group. Although such support value is negatively correlated with socioeconomic status, the poorest quintile tends to use other means of financing other than PhilHealth, which could be in the form of OOP expenses. Support values for vulnerable age groups such as children and the older population tend to be low, too.

CONCLUSION

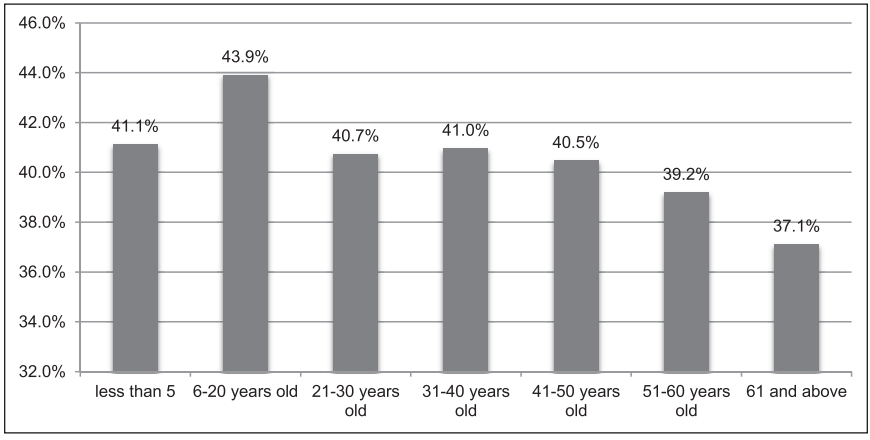
OOP health expenditures continue to increase over the years, despite the presence of alternative financing such as social health insurance. Both in nominal and constant prices, such increase shows no sign of slowing down across all socioeconomic quintiles.

Figure 9. Support value, by socioeconomic status, 2011



Source: Authors' calculation using APIS

Figure 10. Support value of PHIC, by age group, 2011



Source: Authors' calculation using APIS

Drugs or medicines continue to account for a major slice of OOP expenses. This is validated by previous studies conducted by Lavado and Ulep (2011) using the 2009 round of FIES. Such high share of drugs or medicines reflects the limited benefit package offered by PhilHealth, particularly pharmaceutical benefits. The average expenditure on medical products is higher among the richer quintile, but the share to total expenditure is higher among the poor. These findings might suggest that poor households heavily rely on medicines in lieu of actual health facility visits. They tend to use more medicines and delay or forgo expensive health procedures (e.g., surgery and diagnostic tests) to reduce

health expenditure. However, this assumption must be further validated by more in-depth or empirical studies.

One of the interesting findings is that a significant portion of the OOP expenses is on those that are deemed not medically important such as nutritionals and medical appliance. (Note though that determining whether certain OOP expenditure items are medically important or not is not within the scope of this study.) The inclusion of these goods in the OOP expenditure brings to fore the following important operational question: In analyzing OOP spending, is it important to include unnecessary medical expenditures? The decision to include the item or not has serious policy implications in tracking how health financing interventions succeed in lowering OOP spending.

Unnecessary medical expenditures

Unnecessary medical expenditures stem from unnecessary health-care services. These medical costs come from a variety of tests and procedures, which may not be beneficial or even harmful at times. These also include unnecessary drug prescriptions, tests and examinations, surgical services, and routine services (regular nursing and physician services) [Angell 1985].

A report by Wickizer et al. (1989) shows that 10 percent to 20 percent of hospital admissions and 20 percent to 30 percent of total patient days are deemed inappropriate or unnecessary use of hospital services, resulting in health-care cost problems.

Liu and Mills (1999) agree that fee-for-service encourages health care that is unnecessary. They define unnecessary care as care provided but medically not needed, particularly if on balance it does not benefit patients. Another definition states that care is unnecessary when, for an average group of patients presenting to an average physician, the expected health benefit of care provided does not exceed the expected negative consequences by a sufficiently wide margin, excluding monetary/cost considerations. This unnecessary care may include outpatient visits, inpatient admissions, days in hospital, diagnostic and treatment procedures, and drugs.

OOP expenditure is an indicator of the performance of the government's financing initiatives such as the National Health Insurance Program (NHIP); however, some items in the estimation of OOP are not currently covered or included in the NHIP benefit packages.

OOP expenses also continue to increase the burden on households in terms of catastrophic payments and impoverishments. The analysis on the burden of health payments (OOP/capacity to pay) highlights the increasing share of OOP spending in the nonfood expenditure of a household—i.e., OOP is becoming more and more significant in households' expenditure. Across the different rounds of

FIES, the most notable increase was seen during the period 2009–2012, where the burden of health payments jumped from 3.8 percent to 4.8 percent. The burden of payments also increased across socioeconomic groups. It is expected that poorer quintile will have a lower OOP share to their total expenditure. Richer households have higher benefit utilization while poorer households tend to underutilize the health-care benefits.

Data on the prevalence of catastrophic payments and impoverishment indicate a worsening effect on households. The proportion of households that experienced catastrophic effects of OOP spending has increased over the years (where at least 40 percent of the capacity to pay was used for health care). Such is noted across all socioeconomic groups. The proportion of impoverished households has also increased.

It thus appears that social insurance continues to only have a minimal effect in reducing Filipino households' OOP expenditures. Ideally, social insurance should not only provide financial protection, but should also have the capacity to contain the increasing health-care cost by becoming a strategic purchaser of health-care goods and services. PhilHealth's benefit package has been highly segmented and directed only on certain segments of the population (that is, more toward the poor or those under the Sponsored Program).

Without specific benefit packages for each segment and strategy that may cover all, the country's social insurance and other programs or interventions might not be able to significantly decrease Filipinos' OOP spending (especially on drugs and medicines). Highly segmented benefit packages may lessen the purchasing power of PhilHealth. As manifested, majority of the OOP expenditure in the country is incurred by households belonging in the higher socioeconomic bracket.

RECOMMENDATIONS

Based on the findings in this study, the following are recommendations on how to decrease Filipinos' OOP spending:

1) **Increase the benefits' depth by covering outpatient medicines**

   It is strategic to expand pharmaceutical benefits in the social health insurance system, as medicines account for around 40 percent of the total OOP expenditure. In the Philippines, the hospitalization rate is less than 5 percent (APIS 2011), suggesting that majority of the medicines might be consumed on an outpatient basis. However, in this expansion, PhilHealth should be rational in identifying the medicines to include, particularly in the Outpatient Benefit packages to improve utilization. Covering outpatient medicines may also prevent inpatient visits and eventually pull down the OOP expenditure on drugs.

Adopting a Health Technology Assessment (HTA) can help determine what medicines or procedures are most cost effective. It seems that the National Center for Pharmaceutical Access and Management is already looking into HTAs for cost-effective interventions. Another initiative would be for the government to enhance the provisions or the implementing regulations regarding the Cheaper Medicines Act and the Generics Act's provisions on pricing not only to prevent higher share of OOP spending on drugs but also to assist PhilHealth in terms of financial risk protection.

2) **Expand the benefit packages for all member types with adjusted premiums**
PhilHealth benefits are segmented as some benefit packages are only confined to certain segments of the population. To bring down households' OOP expenditures, the country needs to further expand the benefits to cover the whole population. This will be a big step to take. Thus, sources of funding should be developed first before adjusting premiums and developing additional benefit packages (Pantig, forthcoming).

As noted in an earlier section of this paper, more than 50 percent of the total OOP expenses are incurred by the upper quintiles. Covering more people—not only the poor—will increase the purchasing power of PhilHealth. This monopsony power will allow PhilHealth to control the costs, which could then help bring down OOP expenditures.

3) **Improve cost-containment strategy**
The country's social insurance should initiate a more proactive stance in controlling health-care costs. This can be done by taking advantage of its monopsony power in improving its provider-payment mechanisms toward best quality health care.

In fully analyzing the terms of financial protection, information on the health-care utilization and OOP health expenditures—such as the frequency of inpatient and outpatient visits as well as appropriate rates or fees in hospitals and other health facilities—should be critically incorporated in national surveys. These will help in further analyzing Filipinos' OOP spending on health.

4) **Further study on the relationship of OOP expenditure and the annual growth rate**
The surge in household OOP expenditure from 2009 to 2012 was attributed to the increase in utilization or price of health care, but this was not validated due to lack of data. This paper, thus, recommends that this matter be subjected to further studies.

APPENDIX A

Table 1. Share of out of pocket on capacity to pay, by region, 2000–2012 (in percent)

Region	2000	2003	2006	2009	2012
I - Ilocos Region	2.8	3.1	3.9	3.9	4.9
II - Cagayan Valley	3.0	3.9	4.3	4.4	4.4
III - Central Luzon	2.7	2.8	4.1	3.8	5.1
V - Bicol Region	3.1	3.8	4.5	4.2	5.4
VI - Western Visayas	4.0	4.0	4.2	4.9	6.5
VII - Central Visayas	2.7	2.9	3.5	3.9	4.7
VIII - Eastern Visayas	2.1	3.0	3.9	4.1	5.5
IX - Zamboanga Peninsula	2.4	1.5	3.5	3.5	4.5
X - Northern Mindanao	2.7	3.2	4.2	3.7	5.0
XI - Davao Region	3.6	3.6	3.8	3.9	4.6
XII – SOCCSKSARGEN	3.4	3.5	3.9	4.9	6.0
NCR	2.1	2.0	2.7	2.5	3.4
CAR	2.9	3.6	3.8	3.8	4.9
ARMM	1.5	1.5	1.9	1.8	1.6
Caraga	3.1	3.4	3.6	3.9	4.9
IVA – CALABARZON	2.7	3.1	3.5	3.9	4.7
IVB– MIMAROPA		3.1	4.2	4.2	4.7

Source: FIES, 2000–2012

Table 2. Capacity to pay, by region, 2000–2012

Region	2000	2003	2006	2009	2012
I - Ilocos Region	4,763.166	5,173.286	6,378.751	7,729.858	8,085.496
II - Cagayan Valley	4,274.793	5,035.671	6,097.025	7,194.031	6,657.975
III - Central Luzon	6,411.976	7,750.264	9,823.032	10,420	11,710.12
V - Bicol Region	3,609.019	4,772.067	5,547.841	6,666.871	6,810.26
VI - Western Visayas	4,876.334	5,116.42	6,032.869	7,318.932	8,534.861
VII - Central Visayas	4,184.955	5,418.841	6,620.128	7,953.289	8,560.943
VIII - Eastern Visayas	3,409.46	4,095.584	5,327.799	6,358.471	6,495.275
IX - Zamboanga Peninsula	3,167.684	13,314.14	4,927.712	5,602.195	5,661.225
X - Northern Mindanao	4,160.716	4,736.072	6,196.045	7,226.054	7,319.819
XI - Davao Region	4,637.821	5,521.558	5,884.748	7,233.236	7,723.13
XII – SOCCSKSARGEN	3,464.829	4,263.182	4,479.429	6,573.292	6,785.674
NCR	16,484.22	14,184.74	16,892.88	20,070.23	20,844.94
CAR	6,015.554	7,267.126	8,652.899	9,804.635	10,463.9
ARMM	2,502.485	2,769.433	2,932.699	3,699.79	4,075.297
Caraga	3,272.856	3,717.996	4,898.392	6,100.251	6,840.713
IVA – CALABARZON	7,809.584	9,480.361	11,241.18	12,384.12	14,429.95
IVB– MIMAROPA		4,158.266	4,517.262	5,854.254	6,831.04

Source: FIES, 2000–2012

Table 3. Total health expenditure per capita, by region, 2000–2012

Region	2000	2003	2006	2009	2012
I - Ilocos Region	455.39	560.49	1,011.77	1,223.61	1,592.90
II - Cagayan Valley	394.27	681.25	879.23	1,345.34	1,176.73
III - Central Luzon	578.21	733.80	1,332.92	1,513.66	2,280.94
V - Bicol Region	452.35	661.67	1,191.22	1,263.65	1,415.01
VI - Western Visayas	687.48	754.39	968.81	1,556.40	2,368.65
VII - Central Visayas	433.54	570.86	978.78	1,286.94	1,535.84
VIII - Eastern Visayas	279.10	533.53	841.41	1,218.94	1,709.76
IX - Zamboanga Peninsula	265.38	513.17	1,000.61	857.42	912.39
X - Northern Mindanao	363.73	545.17	840.25	932.53	1,230.31
XI - Davao Region	563.64	551.85	828.36	1,133.86	1,332.13
XII – SOCCSKSARGEN	385.46	506.17	770.21	1,331.13	1,788.43
NCR	968.59	1,088.06	1,998.70	1,522.11	2,504.62
CAR	553.70	647.27	983.20	1,873.50	2,137.66
ARMM	94.91	103.91	146.59	197.80	223.34
Caraga	429.00	388.28	614.83	939.56	1,486.69
IVA – CALABARZON	668.59	988.12	1,344.30	1,829.43	2,562.23
IVB– MIMAROPA		619.62	747.30	1,054.85	1,263.06

Source: FIES, 2000–2012

Table 4. Share of income on catastrophic payments by region, 2000–2012

Region	2000		2003		2006		2009		2012	
	0	1	0	1	0	1	0	1	0	1
I - Ilocos Region	2,083.85	11.17	2,343.07	19.01	2,067.39	25.85	2,064.79	26.52	2,039.10	32.23
%	99.47	0.53	99.20	0.80	98.77	1.23	98.73	1.27	98.44	1.56
II - Cagayan Valley	1,460.92	9.29	1,563.91	19.33	1,353.77	16.11	1,341.44	16.70	1,426.50	19.18
%	99.37	0.63	98.78	1.22	98.82	1.18	98.77	1.23	98.67	1.33
III - Central Luzon	3,910.19	25.64	4,754.70	25.56	4,176.41	45.84	4,175.54	43.99	4,393.31	79.94
%	99.35	0.65	99.47	0.53	98.91	1.09	98.96	1.04	98.21	1.79
V - Bicol Region	2,820.93	24.88	2,513.07	36.55	2,196.66	36.43	2,201.29	24.91	2,149.13	35.33
%	99.13	0.87	98.57	1.43	98.37	1.63	98.88	1.12	98.38	1.62
VI - Western Visayas	3,100.64	43.04	3,292.72	43.26	2,995.90	33.41	2,962.55	59.64	2,928.46	79.39
%	98.63	1.37	98.70	1.30	98.90	1.10	98.03	1.97	97.36	2.64
VII - Central Visayas	2,845.76	20.98	3,256.08	22.81	2,825.71	34.38	2,823.05	36.28	2,920.54	36.75
%	99.27	0.73	99.30	0.70	98.80	1.20	98.73	1.27	98.76	1.24
VIII - Eastern Visayas	1,902.96	8.58	1,942.17	11.40	1,779.27	21.03	1,774.85	24.91	1,654.91	36.05
%	99.55	0.45	99.42	0.58	98.83	1.17	98.62	1.38	97.87	2.13
IX - Zamboanga Peninsula	1,561.13	5.16	5,448.03	11.83	1,359.62	18.83	1,358.09	19.57	1,425.34	21.45
%	99.67	0.33	99.78	0.22	98.63	1.37	98.58	1.42	98.52	1.48
X - Northern Mindanao	1,379.18	10.71	1,979.00	14.12	1,713.15	30.53	1,733.01	13.29	1,799.30	30.98
%	99.23	0.77	99.29	0.71	98.25	1.75	99.24	0.76	98.31	1.69
XI - Davao Region	2,642.41	36.49	1,825.36	13.82	1,838.93	21.27	1,815.50	23.23	1,994.34	26.33
%	98.64	1.36	99.25	0.75	98.86	1.14	98.74	1.26	98.70	1.30

Table 4. (cont'd.)

Region	2000		2003		2006		2009		2012	
	0	1	0	1	0	1	0	1	0	1
XII – SOCCSKSARGEN	1,320.57	13.98	1,553.42	13.28	1,635.45	19.96	1,622.27	44.22	1,790.75	61.57
%	98.95	1.05	99.15	0.85	98.79	1.21	97.35	2.65	96.68	3.32
NCR	5,655.20	23.02	967.08	3.01	5,183.26	39.34	5,098.74	22.74	5,434.27	35.08
%	99.59	0.41	99.69	0.31	99.25	0.75	99.56	0.44	99.36	0.64
CAR	710.44	3.21	693.41	6.96	663.14	5.78	662.48	7.63	692.47	10.74
%	99.55	0.45	99.01	0.99	99.14	0.86	98.86	1.14	98.47	1.53
ARMM	1,022.50	0.34	1,359.35	1.03	1,176.12	4.53	1,185.16	4.76	1,042.13	2.50
%	99.97	0.03	99.92	0.08	99.62	0.38	99.60	0.40	99.76	0.24
Caraga	1,049.78	10.77	1,114.50	5.87	971.80	10.62	967.06	11.84	982.81	14.50
%	98.98	1.02	99.48	0.52	98.92	1.08	98.79	1.21	98.55	1.45
IVA – CALABARZON			5,846.91	44.97	4,933.87	42.50	4,928.78	77.62	5,707.06	72.25
%	5,863.79	37.51	99.24	0.76	99.15	0.85	98.45	1.55	98.75	1.25
IVB– MIMAROPA	99.36	0.64	1,340.71	7.73	1,192.80	13.36	1,214.36	13.21	1,177.42	18.90
%			99.43	0.57	98.89	1.11	98.92	1.08	98.42	1.58

Source: FIES, 2000–2012

Table 5. Distribution of out-of-pocket expenditure by components (in percent)

Components	Poorest				Richest				Philippines			
	2000	2003	2006	2009	2000	2003	2006	2009	2000	2003	2006	2009
Medicines	74	75	73	72	59	60	59	53	67	67	67	62
Hospital charges	2	2	2	2	7	7	7	7	4	4	5	5
Medical and dental	6	5	6	6	20	19	18	16	12	13	12	11
Other medical goods	9	8	9	13	12	14	10	16	11	12	10	15
Other medical services	9	1	2	2	1	0	1	1	4	1	2	2
Contraceptive	1	8	7	5	1	1	1	2	1	4	4	3
Food supplement			1	1			4	5			2	3

Source: Lavado and Ulep (2011)

APPENDIX B

FIES 2012 Questionnaire on Health

Medical Products, Appliances, and Equipment

1. Pharmaceutical products
    a. Medicinal preparations, medicinal drugs, and patent medicines
        a.1 Infections and infestations
        a.2 Hypertensive and cardiovascular diseases
        a.3 Pain relief and consciousness (analgesic, etc.)
        a.4 Allergy and respiratory diseases
        a.5 Endocrine and central nervous system
    b. Pharmaceutical products for nutrition and/or prevention of diseases
        b.1 Serums and vaccines
        b.2 Vitamins and minerals
        b.3 Cod liver oil and halibut liver oil
        b.4 Dietary supplements
        b.5 Other pharmaceutical products or articles for medical or surgical purposes disinfectant
    c. Other medicinal preparations, medicinal drugs, and patent medicines
        c.1 Local herbal medicines
        c.2 Dermatology
        c.3 Obstetrics
        c.4 Urinary
        c.5 Diagnostics
    d. Other medical products (clinical thermometer, adhesive and non-adhesive bandages, hypodermic syringes, hot-water bottles and ice bags, medical hosiery items such as elasticated stocking and knee supports, pregnancy tests and condoms and other mechanical contraceptive devices)
    e. Therapeutic appliances and equipment
        e.1 Corrective eye glasses and contact lenses, hearing aids, glass eyes
        e.2 Dentures but not fitting costs
        e.3 Other therapeutic appliances and equipment, n.e.c.

Outpatient Medical Services

1. Medical services
    a. General medical services availed of (consultation, physical check-up, and laboratory services)

a.1 Public medical service
a.2 Private medical service

b. Specialized medical services availed of [analysis and interpretation of medical images (X-ray, electrocardiogram, endoscopies, etc.)]
b.1 Public specialized medical service
b.2 Private specialized medical service

2. Dental services
   a. Public dental and laboratory services
   b. Private dental and laboratory services
3, Paramedical services
   a. Medical analysis laboratories and X-ray centers
   b. Freelance acupuncturists, optometrists, etc.
   c. Other paramedical services, n.e.c.

Hospital Services (Inpatient Services)

1. Public hospital services
2. Private hospital services

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