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# Universal Health Coverage in the Philippines

## Progress on Financial Protection Goals

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## Abstract

Providing protection against the financial risk of high out-of-pocket health spending is one of the main goals of the Philippines' health strategy. Yet, as this paper shows using eight household surveys, health spending increased by 150 percent (real) from 2000 to 2012, with the sharpest increases occurring in recent years. The main driver of health spending is medicines, accounting for almost two-thirds of total health spending, and as much as three-quarters among the poor. The incidence of catastrophic payments has trebled since 2000, from 2.5 to 7.7 percent. The percentage of people impoverished by health spending has also increased and, in 2012, out-of-pocket spending on health added 1.5 percentage points to the poverty rate. In light of these findings, recent policies to enhance financial risk protection—such as the expansion of government-subsidized health insurance for the poor, a deepening of the benefit package, and provider payment reform aimed at cost-containment—are to be applauded. Between 2008 and 2013, self-reported health insurance coverage increased across all quintiles and its distribution became more pro-poor. To speed progress toward financial protection goals, possible quick wins could include issuing health insurance cards for the poor to increase awareness of coverage and introducing a fixed copayment for non-poor members. Over the medium term, complementary investments in supply-side readiness are essential. Finally, an in-depth analysis of the pharmaceutical sector would help to shed light on why medicines continue to place such a large financial burden on households.


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# Universal Health Coverage in the Philippines: Progress on Financial Protection Goals

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## 1. Introduction

Health systems are not just about improving health, but also about ensuring that people are protected from the financial consequences of illness, and especially the financial consequences of having to obtain medical care. One widely-used definition of universal health coverage (UHC) is, therefore, "a situation where all people who need health services (prevention, promotion, treatment, rehabilitation, and palliative) receive them *without undue financial hardship"* (WHO 2010). A recent WHO/World Bank Group proposal is that by 2030 everyone should have 100 percent financial protection from out-of-pocket payments (WHO/World Bank Group 2014).

In the Philippines, financial protection has been identified as a central pillar of universal health coverage. The Department of Health's 2011-2016 *Kalusugan Pangkalahatan* (literally "universal health care") strategy includes "financial risk protection through expansion of the National Health Insurance Program (NHIP) enrollment and benefit delivery" as one of its three "strategic thrusts" for UHC, along with improved access to quality hospitals and health care facilities, and the attainment of the health-related MDGs.

Using fives waves of the Family Income and Expenditure Survey (FIES), two waves of the National Demographic Health Survey (NDHS), and one Family Health Survey (FHS) between 2000 and 2012, this paper aims to assess the progress of the Philippines in reaching its UHC goal of financial risk protection, as measured by estimates of health insurance coverage, out-of-pocket spending, catastrophic payments and impoverishing health expenditures. It also seeks to explain the reasons for the trends and patterns observed and suggests a set of measures that could be taken to make further progress.

## 2. Recent policy developments

The Government of the Philippines has followed through on its strategic commitment to financial risk protection with a number of policies that seek to reduce out-of-pocket spending on health.

Most prominent among these has been the expansion of the National Health Insurance Program (NHIP), administered by the Philippine Health Insurance Corporation (PhilHealth). To complement the existing health insurance for civil servants and the mandatory coverage for the formally employed, as well as local government subsidies for health insurance enrollment, national government-subsidized health insurance was introduced in 1996 for poor people in select poor provinces and expanded in 1998 to also cover additional poor people in more affluent provinces and cities. In 2010, following PhilHealth's adoption of the Department of Social Welfare and Development's National Household Targeting System for Poverty Reduction (NHTS-PR) as the sole means of identifying the nationally-sponsored poor, subsidized coverage was extended to a total 5.2 million poor families (PHIC 2010). Simultaneously, local governments continued to partially subsidize the health insurance of families that they deemed poor and vulnerable, with a 50% matching subsidy from the national government. Then, in 2014, following the landmark 2012 tobacco and alcohol excise tax increase (also known as the Sin Tax Law) which earmarked the majority of revenues for the health insurance premiums of the poor, coverage was further expanded to a total of 14.7 million poor families (2013 Amendment to the National Health Insurance Act of 1995 (RA 10606))[1].

[1] The additional families are composed of (i) higher income households further up the NHTS-PR list, i.e. the near-poor, and (ii) individuals who were not previously covered by PhilHealth even though they were part of poor households (as defined by the NHTS-PR) where the principal member and dependents were covered by PhilHealth.

Coverage expanded further in early 2015 when a new 2014 law mandating government-sponsored health insurance for all senior citizens over 60 years of age (not already covered by PhilHealth) come into effect (PHIC 2014).

According to the PhilHealth database, by the end of 2014, 86 million (equivalent to around 85 percent of the population) were beneficiaries (either members or dependents) of PhilHealth. Of these, 43.7 million were indigents, i.e., people below the relevant poverty threshold of the NHTS-PR list and eligible for 100 percent government-subsidized health insurance. Other membership categories include formal sector employees (in government, private sector and working overseas) whose contributions are collected automatically through payroll deductions or other means (27 million), the so-called "informal sector" (which includes not only those employed in the informal economy, but also migrant workers and self-earning individuals and anyone else who is responsible for directly paying their premiums themselves (7.4 million), sponsored members whose premiums are paid by a third party such as a church, local government entity or individual (2.1 million), lifetime members, i.e. retirees who because of a solid contribution record no longer have to pay premiums (1.6 million), and other senior citizens who are also now fully government subsidized (4.3 million).

The second set of policy developments relate to the expansion of the generosity of the PhilHealth benefit package. The package currently includes coverage on an inpatient basis of a wide range of medical cases and surgical procedures at accredited public and private providers; maternity care and newborn care benefits; a few specific outpatient interventions (such as treatment for tuberculosis, rabies, and leptospirosis); a so-called catastrophic "z-benefit" package which includes certain types of cancers, some cardiovascular surgeries, dialysis and kidney transplants, among others; and a primary care benefit package which has recently been expanded to include also screening and treatment for some non-communicable diseases (such as breast cancer and cervical cancer) and a small medicines benefit. The benefit package for subsidized (poor/indigent) members and non-subsidized members is the same, with the exception that indigent members benefit from a "no balance billing" policy (introduced in 2011). This policy states that PhilHealth-accredited providers (both government and private) are prohibited from charging the poor any fees or charges over and above what is reimbursed by the PhilHealth benefit package (PHIC 2011a, PHIC 2011b, PHIC 2014a).

Insurance premiums are set proportional to income. For the formal sector, annual contributions range between PHP2,400 and PHP10,500 per family, with contributions split equally between employers and employees. Other members pay either PHP2,400 or 3,600, depending on whether their monthly incomes exceed PHP25,000.

There are a number of other policies which, if implemented well, will also help make progress toward financial protection goals. These include the Department of Health's initiatives to reduce medicines prices such as reference pricing, ceilings on the prices of certain drugs, and the promotion of the use of generic medicines (Picazo 2011) [2], as well as a shift in the payment of providers at the hospital level from fee-for-

This situation arises because of the definition of dependents used for insurance purposes which excludes, for example, children over the age of 21, as well as grandchildren or grandparents of the principal member.

[2] These include, among others, a Generics Act (1988) to mandate the use of generics terminology in prescriptions, the mandatory use of a national drug formulary in the public sector (2006), the Cheaper Medicines Act (2008) intended to increase competition in the pharmaceutical sector, an administrative order to introduce referencing pricing for drug selection, the Presidential executive order on maximum drug retail prices, as well as specific

service to case-based payments which reimburse health care institutions a predetermined fixed rate for each treated case or disease (PHIC 2013). Primary health care providers are reimbursed on a capitation basis with additional incentives for completing patient health profiles.

## 3. Methodological approach

### 3.1 Data

The data on out-of-pocket health spending and consumption are drawn from the Family Income and Expenditure Surveys (FIES) which are nationally representative household budget surveys conducted every three years. The sample size for the sub-sample of households for which data are available on health expenditures was 39,615 in 2000, 42,094 in 2003, 38,483 in 2006, 38,400 in 2009 and 40,171 in 2012. Since FIES does not contain information on health insurance coverage, this information is drawn from the National Demographic and Health Surveys (NDHS) of 2008 and 2013, as well as the similarly-structured Family Health Survey (FHS) of 2011. The sample size for households on which data are available on health insurance coverage is 58,722 in 2008, 225,841 in 2011 and 69,926 in 2013.

### 3.2 Measurement

For the purposes of this paper, health insurance coverage is measured at the individual level and we include both public insurance (though PhilHealth) and private insurance (through) private health maintenance organizations (HMO)[3]. Out-of-pocket health expenditure is defined as direct purchases of health services or goods by households. The content of the health expenditure module in the FIES varies by survey year, with a particularly marked change in the number and type of categories in 2012, but we have tried to homogenize the construction of the out-of-pocket spending measure to the extent possible (see Annex 1). The measure includes spending on medicines, hospital room charges, consultation fees and diagnostic tests. It excludes dental charges, food supplements, various alternative therapies, transportation for medical care, and plastic surgery. We also exclude medical services received as "gifts" or "free" because they do not lower household consumption and, thus, will not reduce financial protection.

Estimates are disaggregated by socioeconomic quintile, with the first quintile being the poorest. In the case of out-of-pocket spending, households are ranked by per capita consumption where the consumption measure includes cash and in-kind expenditure on various goods and services, as well as the value of home production. In the case of health insurance coverage, we use an asset index constructed by principal components analysis (following Filmer and Pritchett 2001) since the NDHS and FHS surveys lack information on consumption.

Following O'Donnell et al. (2008) and Wagstaff and van Doorslaer (2003), two complementary measures of financial protection are used. "Catastrophic payments" are defined as health care payments in excess

programs intended to improve the availability of cheap medicines such as the Botikang Barangay (BnB), the Botikang Bayan (BNB) and the P100 treatment pack initiatives.

[3] There is less than a percentage point difference in coverage rates when comparing the percentage of household members covered by either PhilHealth or a health maintenance organization (HMO) to the percentage of household members covered only by PhilHealth. This is likely because PhilHealth coverage is typically a precondition for HMO membership.

of two commonly-used thresholds: 10 percent of total consumption and 40 percent of total non-food consumption. The incidence (or headcount) of catastrophic payments refers to the proportion of households who spend more than the given thresholds; the distribution of catastrophic payments is measured using the standard concentration index[4]. The extent of "impoverishing health expenditure" is measured by comparing the poverty headcount, as well as the poverty gap, when household consumption is calculated gross of out-of-pocket health spending and net of out-of-pocket health spending. We are concerned, therefore, with whether health spending is large enough to push a household from being above the poverty line to below the poverty line (in the case of the poverty headcount measure) and also with by how much health spending deepens existing poverty (in the case of the poverty gap measure). The assumption is that out-of-pocket spending is involuntary, caused by health shocks, and has to be financed by reducing current consumption. Two poverty lines are used: the lower line corresponds to US$1.25 per day at purchasing power parity (PPP); the upper line corresponds to US$2.00 per day. The poverty gap gives the average shortfall from the poverty line (expressed in pesos)[5].

## 4. Findings

### 4.1 Health insurance coverage

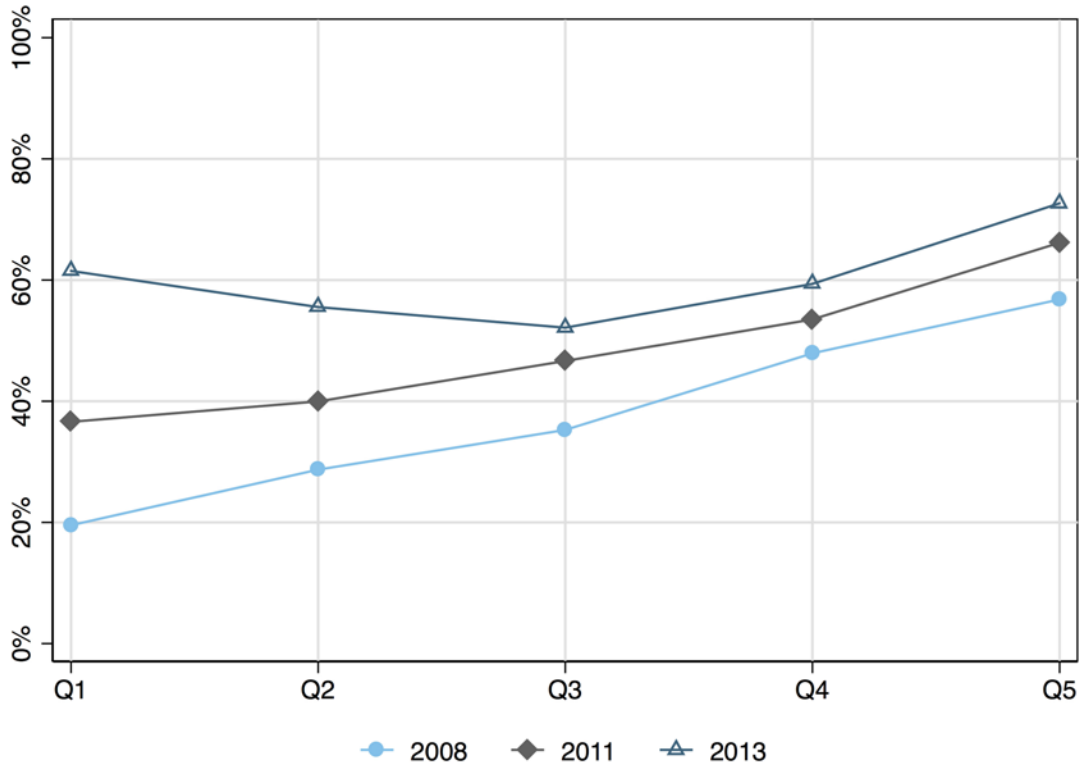
There was a large increase in the percentage of people reporting health insurance coverage between 2008 and 2013; by 2013, coverage had reached 61 percent of the population. Importantly, the largest increases in coverage occurred among the poorer population segments. As can be seen in Figure 1, the steep socioeconomic gradient in insurance coverage in 2008 had become slightly less steep by 2011, and by 2013 had been replaced by a U-shaped pattern of coverage: health insurance coverage among the poorest quintile was second only to that of the wealthiest quintile. The concentration index changed from being a pro-rich 0.21 in 2008 to a neither pro-rich nor pro-poor 0.04 in 2013[6].

[4] A positive value of the concentration index indicates a greater tendency for the better-off to have out-of-pocket spending in excess of the payment threshold, whereas a negative value indicates that it is the relatively economically worse-off who are more likely to have out-of-pocket spending exceeding the threshold.

[5] We also report the normalized poverty gap which is obtained by dividing the poverty gap by the poverty line and the normalized mean positive poverty gap which is a measure of the intensity of poverty, i.e. the average poverty gap divided by the poverty line.

[6] See Annex 5 for detailed disaggregations by quintile and year.

Figure 1 Percentage of people with health insurance, by quintile, 2008-2013



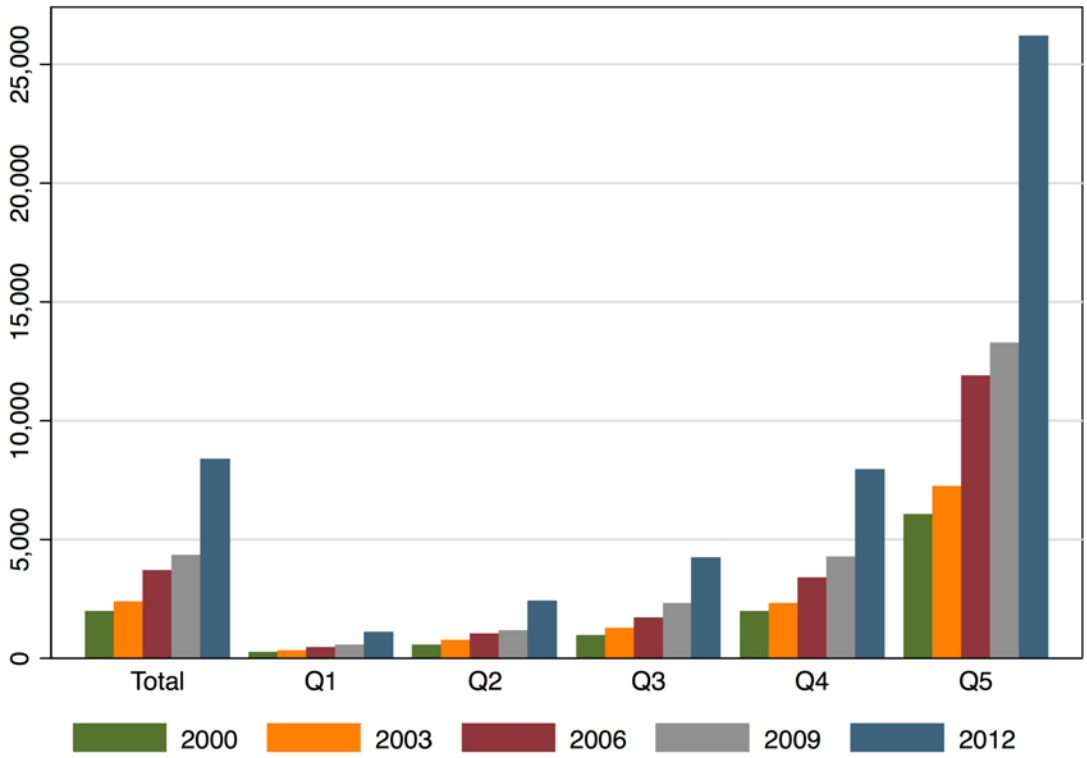

*Source: Authors calculations using NDHS 2008, FHS 2011 and NDHS 2013*

### 4.2 Out-of-pocket spending on health

Out-of-pocket spending on health care has increased dramatically over time (see Figure 2). Mean out-of-pocket spending more than quadrupled (in nominal terms) between 2000 and 2012. In 2000, cash expenditure on health amounted to PHP 1,951, had more than doubled by 2009 (to PHP 4,308), and almost doubled again by 2012 (to PHP 8,360). This is a nominal increase of 328 percent and, in real terms (deflated by the consumer price index produced by the Philippines Statistical Agency), translates into an increase of around 150 percent over a little more than a decade.

Not unexpectedly, out-of-pocket spending rises as socioeconomic status increases. In 2012, mean health expenditure in the wealthiest quintile was about 24 times higher than in the poorest quintile. Total health expenditure has been increasing over time across all income groups and, while absolute differences between poor and rich have grown, the ratio of health spending between the poorest and richest quintile has remained more or less the same since 2000.

Figure 2 Annual out-of-pocket spending on health, by quintile, 2000-2012, pesos (nominal)

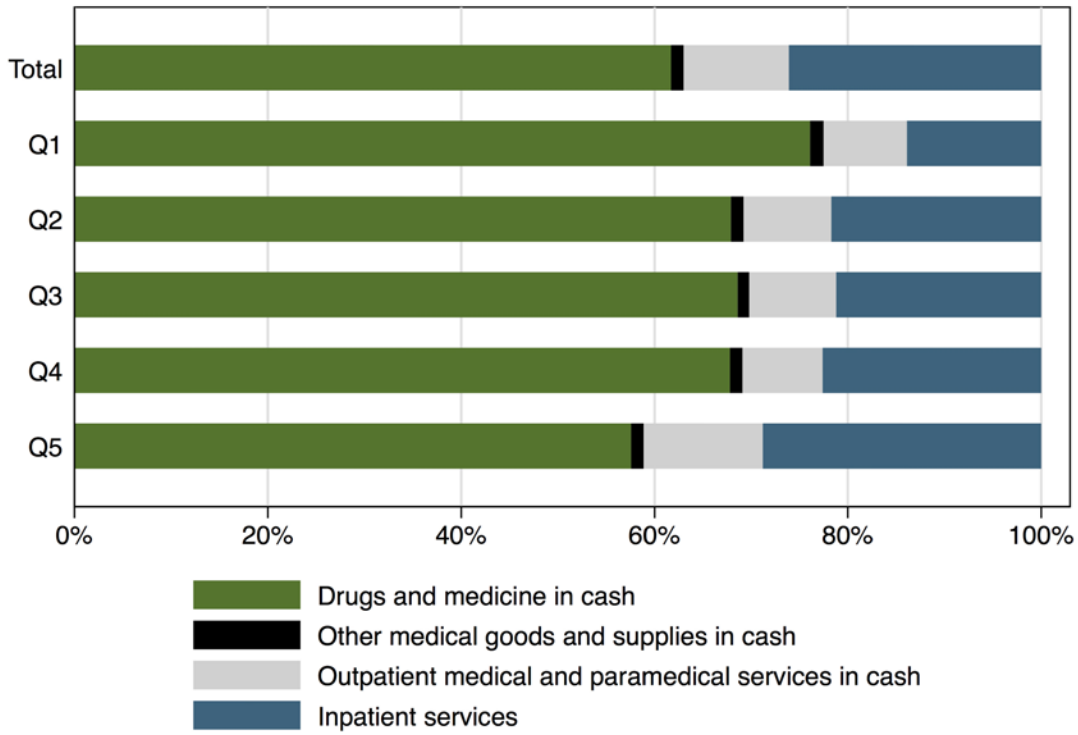



*Source: Authors' calculations, FIES 2000, 2003, 2006, 2009 and 2012*

The largest contributor to out-of-pocket expenditure is medicines. While the share of medicines in health spending has always been high, it was much higher in 2012 than in previous years: medicines constituted 49 percent of reported health spending in 2000, 48 percent in 2003, 47 percent in 2006, 45 percent in 2009, and jumped to 62 percent in 2012 (see Figure 3).

Among the poor, the share of medicines in total reported health spending is even higher than the average; the poorest quintile reports a spending share of 76 percent (or PHP 823), compared to 58 percent (or PHP15,070) among the wealthiest quintile. The difference might, at least in part, reflect the higher expenditure among the rich on other areas of health spending such as consultations and hospital room charges, as well as the greater likelihood of using types of care or types of providers that are not covered by their PhilHealth benefit package. This hypothesis is borne out by data on actual expenditures which show the wealthiest quintile spending PHP 7,548 on inpatient services per year (compared to PHP 151 among the poorest quintile) and PHP 3,221 on outpatient services (compared to PHP 93 among the poorest) (see Annex 2). Still, medicines are clearly a very large expenditure item for both the wealthy and the poor.

Figure 3 Composition of out-of-pocket spending on health, by quintile, 2012




*Source: Authors' calculations, FIES 2012*

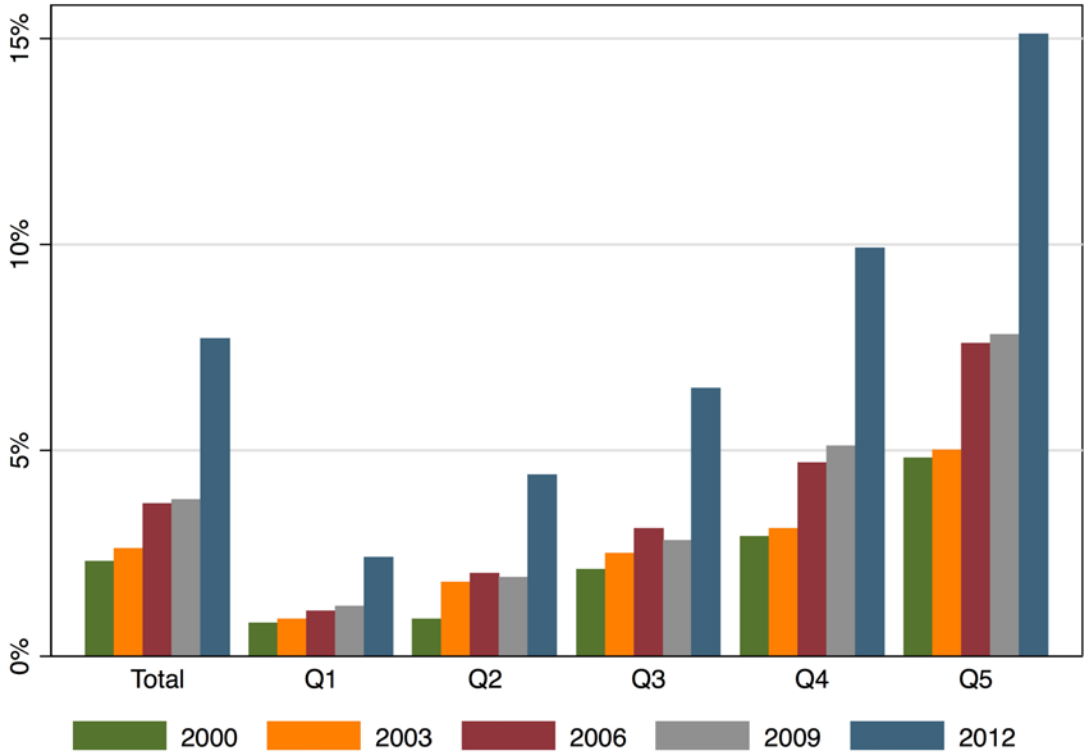
### 4.3 Catastrophic health payments

Between 2000 and 2012, the incidence of catastrophic spending (at the 10 percent consumption threshold) trebled – from around 2.5 percent in 2000 and 2003, to just under 4 percent in 2006 and 2009, to as much as 7.7 percent in 2012 (see Figure 4). This trend is robust to the use of the alternative 40 percent non-food consumption threshold. By this measure, the incidence of catastrophic spending was 0.5 percent in 2000 and 2003, climbed to just under 1 percent in 2006 and 2009, and reached 2.3 percent in 2012. Estimates using alternative thresholds are shown in Annex 3.

From an equity perspective, it is perhaps some consolation that the incidence of catastrophic payments is concentrated among the better-off in all years under analysis (see Figure 4). In 2012, the catastrophic payment concentration index was 0.338 when measured at the 10 percent of consumption threshold level and 0.259 when measured at the 40 percent of non-food consumption threshold. In other words, the percentage of households incurring catastrophic payments is higher among the relatively well off than among the poor, indicating a greater degree of financial protection among the poor – at least by this measure. Moreover, catastrophic payments have not become markedly more or less concentrated among the rich or poor over time; the 2012 values of the concentration index are similar to their range across the previous decade (see Annex 3). The more important point, though, is that, over time, catastrophic payments have been rising for all income groups, including the poor (see Figure 4). This matters because

the poor are also typically less well-protected from the financial effects of catastrophic payments than the relatively wealthy who can use their savings or more easily borrow to finance health expenditures.

Figure 4 Percentage of households incurring catastrophic payments, by quintile, 2000-2012




*Source: Authors' calculations, FIES 2000, 2003, 2006, 2009 and 2012*
Note: Catastrophic payments are defined as out-of-pocket payments exceeding 10% of total household consumption

While a relatively small share of the overall population may be incurring catastrophic payments, among those who do health expenditures are very high. On average, those households incurring catastrophic payments spend over 60,000 pesos on health care, with even those in the poorest quintile spending upwards of 10,000 annually. The levels and composition of expenditure among those incurring catastrophic payments in 2012 is shown in Table 1. It confirms that that not only are medicines the largest component of out-of-pocket spending, but they are also the main driver of catastrophic payments, regardless of income group. Among those incurring catastrophic spending (measured at 10% of consumption), spending on medicines is the largest expenditure item (equivalent to 55 percent of the total), followed by expenditure on inpatient services (equivalent to around 34 percent of the total). The situation is even worse among the poor. Among the poor, spending on medicines accounts for more than two-thirds (70 percent) of spending among those incurring catastrophic spending, compared to the wealthy where it accounts for just more than one half (51 percent).

Table 1 Annual out-of-pocket spending on health, by category and quintile, among those incurring catastrophic spending (10% of consumption threshold), 2012 (in PHP)

| | Total | Q1 | Q2 | Q3 | Q4 | Q5 |
|---|---|---|---|---|---|---|
| Total | 61,681 | 10,390 | 19,759 | 29,144 | 45,231 | 122,120 |
| Drugs and medicine in cash | 33,700 | 7,290 | 11,995 | 18,531 | 28,581 | 61,677 |
| Other medical goods and supplies in cash | 475 | 77 | 142 | 177 | 456 | 894 |
| Outpatient medical and paramedical services in cash | 6,794 | 790 | 1,372 | 2,046 | 2,788 | 16,031 |
| Inpatient services | 20,712 | 2,232 | 6,250 | 8,390 | 13,406 | 43,517 |

*Source: Authors' calculations, FIES 2012*

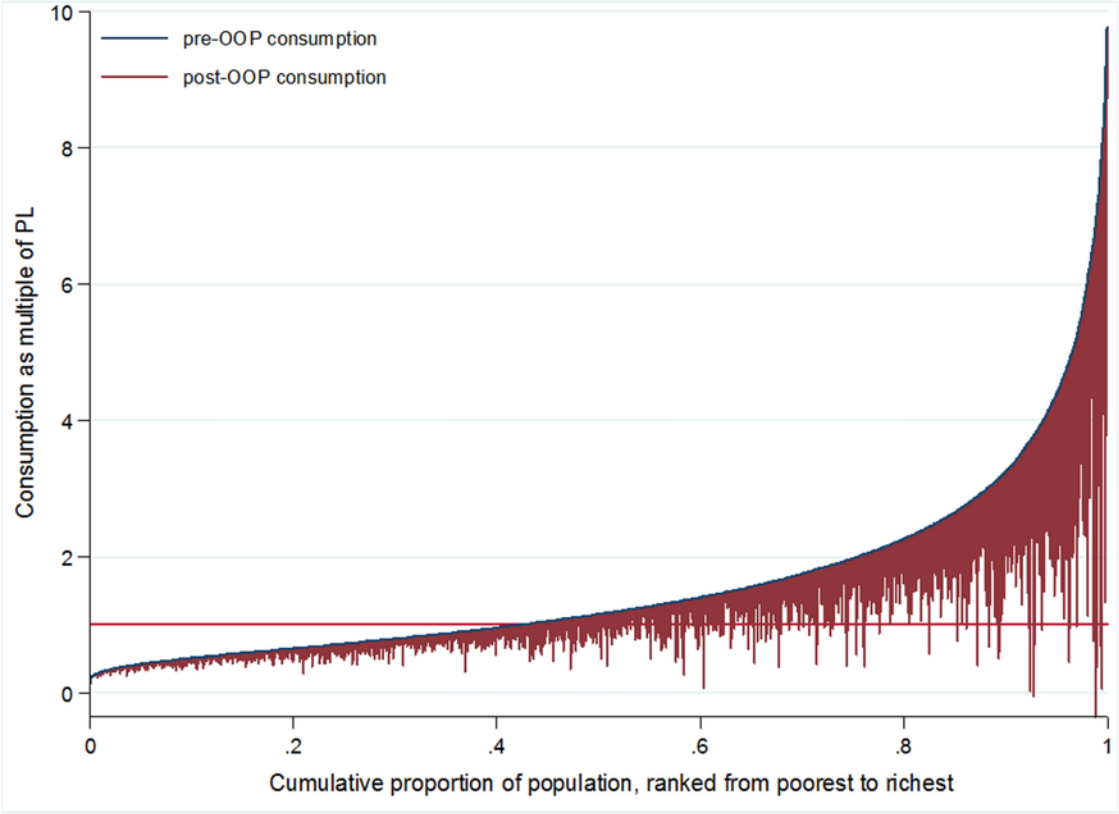
Finally, it is important to point out that the increase in catastrophic payments over time (and the increased share of out of pocket spending in overall consumption spending more generally) is truly driven by rising out-of-pocket health costs (i.e. the numerator), rather than contracting consumption (i.e. the denominator). Total consumption expenditure in this sample has, in fact, risen quite substantially over time, almost doubling from PHP 118,002 to PHP 192,540 between 2000 and 2012.

**4.4 Impoverishing health expenditure**

In 2012, out-of-pocket payments on health were responsible for a 3.7 percent increase in the poverty rate when using the US$2.00 per day poverty line (see Annex 4). The figure reaches as high as 5.8 percent when the US$1.25 per day poverty line is used. Put differently, out-of-pocket spending on health adds one additional percentage point to the poverty rate at the US$1.25 poverty line and 1.5 percentage points to the poverty rate at the US$2.00 poverty line. The poverty gap rises from PHP1.7 (9.3) at the US$1.25 (US$2.00) poverty line to PHP 1.8 (9.8). Normalized, the poverty gap rises from 4.1 percent (14.0 percent) of the poverty line to 4.3 percent (14.7 percent) when money spent on health care is taken into consideration. However, the normalized mean poverty gap rises by less than this meaning that the rise in the poverty gap is thus mainly due to more households being brought into poverty through out-of-pocket spending on health, and not because of a deepening of the poverty of the already poor.

These findings can be visualized in a Pen's Parade diagram (see Figure 5). Households are ranked in increasing order of pre-payment consumption with the top of the curve showing pre-payment consumption levels. The vertical lines show the relative magnitudes of health spending, such that the bottom of each vertical line shows the household's position after health spending. It shows that among the poorest 40 percent of the population health spending does contribute to a deepening of poverty among the already-poor, but in general not by very much. Beyond this point on the distribution, some households incur impoverishing health spending (as can be seen by the vertical lines extending below the horizontal poverty line), while others incur health spending but remain above the poverty line. A surprising number of upper income households appear to incur impoverishing health spending. In reality, though, relatively few of these wealthier households are likely to be severely adverse affected by this over the long-term since this spending is frequently financed through savings, manageable credit or, perhaps, later reimbursed through insurance.

Figure 5 Pen's parade illustrating the incidence of impoverishing expenditure, at US$1.25 per day poverty line, 2012




*Source: Authors' calculations, FIES 2012*

Over time, the percentage of households impoverished by health expenditures has increased (see Annex 4). Using a US$2.00 per day poverty line, health spending increased the poverty headcount by 0.6 percentage points in 2000, but by 1.5 percentage points in 2012. The trend is similar when using the lower US$1.25 poverty line. Health spending increased the poverty headcount by around 0.4 percentage points in 2000, but by 1.0 percentage point in 2012. The normalized mean positive poverty gap (i.e. the average shortfall from the poverty line, among the poor) has also increased, but again not by much. Taken together, these results show a generally low, but increasing incidence and intensity of impoverishing health expenditures.

## 5. Discussion

In this section, we compare the Philippines' performance to other countries in the region, discuss data and measurement limitations, and explore policy implications.

### 5.1 The Philippines in a regional context

While the considerable variation in survey instruments across countries limits comparability across countries[7], it seems fair to say that the Philippines does not fare too badly compared to other middle-income countries in the region at a similar level of economic development when it comes to protecting households against the financial effects of health expenditure. Figures are in a similar ballpark to recent estimates from Indonesia, Thailand and Vietnam (see Table 2).

Table 2 Incidence of catastrophic and impoverishing expenditure in Indonesia, Thailand and Vietnam

| **Country** | **Year** | **Catastrophic payment headcount** | | **Percentage point change in impoverishment** | | **Data** |
|---|---|---|---|---|---|---|
| | | 10% of consumption | 40% of non-food consumption | US$1.25 per day threshold | US$2.00 per day threshold | |
| Indonesia | 2011 | 4% | 1.8% | 0.9pp | 1.3pp | SUSENAS |
| Thailand | 2009 | 1.8% | 0.2% | 0pp | 0pp | HSES |
| Vietnam | 2008 | 7.8% | 2.5% | 2.pp | 3pp | VHLSS |
| **Philippines** | **2012** | **7.7%** | **2.3%** | **1pp** | **1.5pp** | **FIES** |

Source: Limwattananon et al. (2013) for HSES 2009; World Bank staff calculations for SUSENAS (2011), VHLSS (2009) and FIES (2012).

But, findings on financial protection from the FIES should be interpreted together with information on health care utilization because one reason for apparently good financial protection could be that people are not accessing care, due to financial or physical barriers, and therefore not incurring health expenditure. In the Philippines, in 2008, 74 percent of households reported that "getting money for treatment" was a struggle and 56 percent of households reported that the distance to health facilities was a problem (National Statistical Office 2008). There is, therefore, likely to be a share of households who forgo care (or perhaps self-medicate) because of high treatment costs and, therefore, are not considered in the financial protection calculations. Indeed, data from the 2014 World Health Report show that the Philippines performs worse than most of these comparators when it comes to access to care: skilled birth attendance is only 72 percent (compared to 99 percent in Thailand, 83 percent in Indonesia and 92 percent in Vietnam) and access to antenatal care is 78 percent (compared to 80 percent in Thailand, 88 percent in Indonesia and 60 percent in Vietnam) (WHO 2014).

An additional lesson from the region is that the Philippines is not alone in finding that an expansion of health insurance does not necessarily translate into an improvement on financial protection indicators or the (expected) drop in out-of-pocket health spending. In Indonesia, the roll-out of the Askeskin/Jamkesmas program of tax-financed care for the poor did not reduce households' medical expenditure; in fact, out-of-pocket payments even increased among the targeted urban population (Sparrow et al. 2014). In China, it has been found that the expansion and deepening of coverage of the

[7] Differences include the number and type of health spending examined and whether spending is measured gross or net of health any insurance reimbursements, among others.

rural National Cooperative Medical Scheme (NCMS) did not reduce out-of-pocket spending, was accompanied by increased out-of-pocket spending on inpatient stay and did not decrease expenditures associated with an outpatient visit (Wagstaff et al. 2009; Hou et al. 2014). By contrast, the expansion of coverage in Thailand (which offered a near-comprehensive benefit package) was associated with reduced OOP and catastrophic payments, both by one-third, and by even more among those who had been spending the most (Limwattananon et al. 2013). What one can take away from these experiences is that the expansion of health insurance needs to be complemented by other health system reforms and policies – some of which will be discussed in section 5.3 – if financial protection goals are to be achieved.

### 5.2 Data issues and limitations

The FIES is the best available instrument with which to measure trends in financial protection in the Philippines, but it has significant limitations:

First, the survey does not contain any variable(s)[8] that allow us to assess whether the out-of-pocket expenditure reported in the FIES is net of health insurance reimbursements. Nor does it contain an instruction to households to net out insurance reimbursements in formulating their answers to the health expenditure questions. This means that the FIES may overstate the amount of out-of-pocket spending and the degree of catastrophic and impoverishing expenditure, thus underestimating the extent of financial risk protection[9]. This should not, however, affect the observed *trend* of increased out-of-pocket spending and catastrophic payments since the bias would be systematic over time.

Second, changes in the degree of financial protection over time may partly reflect changes in the way that health spending is measured in the FIES rather than actual changes in expenditure (see Annex 1). We have attempted to limit the bias by homogenizing the data categories across years to the extent possible. While this could be done quite effectively for survey waves 2000, 2003, 2006 and 2009, the change in the way that out-of-pocket health spending module was constructed in year 2012 means that some skepticism needs to be exercised about the extent to which the observed rapid increase in out-of-pocket spending between 2009 and 2012 reflects actual increases in expenditure. Specifically, there are more categories of expenditure included in the survey (which is likely to increase the overall estimate by improving recall), expenditure items are organized differently, and some of the items are ambiguous and/or repetitive.

Subsequent rounds of the FIES would do well to (i) include a brief question on health insurance coverage, including PhilHealth coverage, (ii) make the distinction between out-of-pocket spending that is reimbursed and out-of-pocket spending that is not reimbursed by insurance, and (iii) review the categories of health spending included in the survey with a view to improving both the precision of the estimates and their comparability over time.

### 5.3 Policy and implementation

[8] There is a receipts category on "back pay and proceeds from insurance", but one cannot distinguish health insurance from other types of insurance payments (or from back pay for that matter).

[9] Since PhilHealth almost always reimburses providers directly, rather than members, this is more likely to affect the measurement of health expenditure of those people which have complementary private health insurance in addition to PhilHealth.

The data suggest that there has not been much progress on financial protection goals in the Philippines over the last 17 years, at least as measured using the catastrophic and impoverishing health expenditure methodologies, nor in reducing the amount that Filipinos spend out-of-pocket on health. Also, while the overall incidence of catastrophic payments is not unusually high from a regional perspective, the large amounts of money spent on health-related costs among those who incur catastrophic spending suggests a great vulnerability among this segment of the population.

While the data used in this analysis are the most recent available data for the Philippines, they pre-date or are coincident with many of the recent pro-poor reforms of the Department of Health and PhilHealth, including the recent large expansion of nationally-subsidized health insurance and some of the more recent additions to the PhilHealth benefit package. Consequently, the results of this analysis do not yet reflect the impact of recent policies aimed at enhancing financial protection. Rather, the results of the analysis serve as validation that recent reforms were very much needed and also as motivation to ensure that these policies are well-implemented.

What additional steps can be taken to ensure that recent policies translate into better financial protection for all Filipinos?

*5.3.1 Ensure that all PhilHealth beneficiaries know of their entitlement and their benefits, especially the poor*

First and foremost, efforts need to be made to ensure that all PhilHealth members know that they are covered and know of their full range of benefits. This applies particularly to the poor and near-poor who are members by virtue of their poverty status (and have their premiums paid directly by the national government) and not by virtue of having actively enrolled, either by themselves or indirectly through their employer.

Indeed, household survey data confirm that not all PhilHealth beneficiaries know of their benefits. In 2011, when the PhilHealth database reported almost 80 million members (equivalent to around 80 percent of the population), only 49 percent of survey respondents (households) reported having PhilHealth (authors' estimates, using FHS 2011)[10]. Worse, the share of the poorest quintile reporting health insurance coverage was only 37 percent, despite the fact that this group should be completed covered by tax-subsidized insurance (authors' estimates, using FHS 2011) [11]. By 2013, when the PhilHealth database was reporting around 83 million beneficiaries (equivalent to around 83 percent of the population), survey data showed an insurance coverage rate of 61 percent of the population (authors' estimates, using DHS 2013). If the share of eligible members who know of their entitlement to coverage is so low, then the number of people with full knowledge of their range of benefits – a factor which influences whether one uses one's insurance when seeking care – would be even smaller.

PhilHealth is implementing a number of activities to improve benefit awareness. These include radio, television and newspaper advertisements, information sessions for the beneficiaries of the conditional

[10] Estimates from the PhilHealth database and household surveys are not expected to be exactly the same since surveys use households as the unit of analysis whereas PhilHealth enrolls families. However, this factor cannot account for the very large differences observed, however.

[11] The asset index that the FHS uses to categorize households into quintiles does not have the same components as the proxy means test that is used to classify households as "poor" for the purposes of health insurance subsidies, but, again, this does not fully account for the low level of coverage observed among this group.

cash transfers program (called family development sessions), an outreach campaign at the local *barangay* (community) level (through the "*Alaga ka* campaign"), and hospital-based interventions including signboards and patient outreach officers. An additional measure to consider would be to issue health insurance cards to all indigent members. This would help to overcome the problem that a number of people who are listed as beneficiaries in the PhilHealth database, and for whom the national government is providing subsidies, are not aware of their entitlements. If coupled with information pamphlets on benefits and/or an information hotline, knowledge of the full range of benefits could also be improved.

*5.3.2 Continue to reform provider payments and enforce no balance billing*

Second, how providers are paid matters. In 2013, PhilHealth moved from a fee-for-service (FFS)-based reimbursement method for inpatient care to case-based payments which pay a fixed amount for the treatment of a particular disease or condition, regardless of the actual cost of treating the patient. In contrast to FFS which creates an incentive to encourage more patient visits, charge higher fees and prescribe more diagnostic tests and procedures than is medically necessary, the move to case payments encourages providers to treat patients more cost-effectively. On the flipside, it also carries the risk of under-provision of services and medicines, and of compromises on quality, and overall cost-savings will depend critically on the level at which the reimbursement is set. Primary care is reimbursed through a capitation payment. The implementation of an expanded primary care benefit package for the poor (called "*Tsekap*") which also includes certain non-communicable diseases and a medicines benefit in 2015 is another step in the right direction.

Also, the fact that, beyond primary care, most outpatient care is still largely excluded from the PhilHealth benefit package means that many patients may delay treatment until the condition worsens sufficiently for hospital admittance, or alternatively be treated on an inpatient basis for care that could be more cheaply provided on an outpatient basis. Including an outpatient package may help to improve the timeliness and cost-effectiveness of care. Any policy move in this direction would need to be carefully examined, though.

Authorities will also need to ensure compliance with the "no balance billing" policy of PhilHealth. While indigent/poor members are not supposed to be charged any fees (for conditions in the PhilHealth package) when seeking care at PhilHealth-accredited facilities, in practice this is quite common, even in government facilities. Recent studies based on exit interviews from hospitals found compliance with no balance billing of only 13 percent in 2012 (PHIC 2012, World Bank 2012) and 7 percent in 2013 (PHIC 2014b)[12], but with a marked improvement to 41 percent by late 2014 (PHIC 2015).
Failure to effectively implement the no balance billing policy can be attributed to a combination of factors: supply-side failures (such as when hospitals run out of medicines), unscrupulous providers (who may

[12] A 2012 study by PhilHealth, consisting of exit interviews of a sample of 400 patients from 20 hospitals, found no balance billing compliance of only 13 percent among the 222 sponsored program members (PHIC 2012). 37 percent of patients had to pay part of the hospital bill and 82 percent of patients had to make medical purchases outside the hospital for use during the stay[12], despite their medical conditions being covered by the PhilHealth package. A World Bank study six months earlier, employing a convenience sample of 8 hospitals, obtained the same number and a similar pattern of expenditure (World Bank 2012). A follow-up PhilHealth study in 2013, utilizing a similar methodology but with a much larger sample size of 6.657 respondents from 315 government hospitals (of a total of 690 government hospitals in the country), found that no balance billing compliance was only 7 percent, with medicines again topping the source of out-of-pocket spending (PHIC 2014b). The latest set of exit interviews conducted by PhilHealth (July-October 2014) show no balance billing compliance of 41 percent.

purposely balance bill or fail to stock required inpatient medicines in order to induce outside purchases at pharmacies in which they have a financial interest), lack of knowledge of the no balance billing policy among patients, and failure to sufficiently enforce compliance as a condition of reimbursement of providers. As per a 2014 circular, PhilHealth has announced measures intended to strengthen the implementation of the no balance billing policy, including through more intensive monitoring (e.g. patient exit interviews, claims audits), providing information and assistance to patients (through a SMS hotline and the PhilHealth CARE program), and penalizing providers found guilty of balance billing (PHIC 2014a).

Finally, from a financial protection perspective, it is problematic that for membership categories other than the poor, providers (both public and private) can charge patients unlimited fees over and above what PhilHealth will reimburse. This erodes the most fundamental benefit of health insurance which is to provide financial protection by replacing unpredictable and potentially high health spending with a predictable premium payment. To further enhance the financial protection provided to members, PhilHealth could consider complementing its no balance billing policy for the poor with the introduction of a fixed copayment for other members. This would likely also require a revision of the case rates, based on a costing exercise.

*5.3.3 Take steps to reduce the high spending on medicines by improving the pharmaceutical regulatory environment*

This analysis has shown that medicines are an important driver of out-of-pocket spending in the Philippines. They account for almost two-thirds of out-of-pocket spending (reaching three-quarters among the poor) and, over the last 20 years, the share of out-of-pocket health spending on medicines has not fallen while levels of expenditure have increased in real terms.

While an in-depth analysis of the pharmaceutical sector (drug-pricing, regulation and supply-chain management) is beyond the scope of this paper, the literature suggests that among the reasons for high out-of-pocket spending on medicines are that drug prices of both brand and generic medicines are high by international standards, prescribing and dispensing practices favor brands, and that hospitals frequently have stock-outs of medicines with the result that inpatients must pay out-of-pocket even though medicines are included in the PhilHealth inpatient benefit package (Picazo 2011, Lavado 2011, Batangan and Juban 2009)[13]. This suggests that policy action is needed on the supply-side to contain medicine prices and ensure the availability of medicines in facilities.

On the demand-side, a complementary action that could be explored is the introduction of a small general medicines benefit as part of the PhilHealth package; it would also have the added benefit of creating an additional incentive for the informal sector to enroll in PhilHealth. However, with annual PhilHealth premiums for the informal sector starting as low as PHP 2,400 per family and out-of-pocket spending on medicines already as high as PHP 823 on average in the poorest quintile (and as much as PHP 5,518 on average for the population), a benefit large enough to make a dent in out-of-pocket spending on medicines is unlikely to be affordable. Also, there is a risk that a medicines benefit could lead to further price escalation and forestall regulatory reform of the pharmaceutical sector. It may be prudent to wait

[13] Brand prices are anywhere from 5 to 30 times more expensive than similar brand names of similar manufacturers in India and Pakistan, with the gap growing between 2004 and 2010 (Lavado 2011). Batangan and Juban (2009) estimated that the lowest-paid government employee would have to work 1.4 days to purchase one day's worth of generic medicine for high cholesterol, around 1 day to purchase one day's worth of generic medicine for hypertension and almost half a day to afford one day's worth of medicine for adult respiratory infection .

and assess the effect of primary care medicines benefit (for twelve conditions) that has been included as part of the expanded primary care benefit package on prescribing behavior and financial protection before considering additional medicines benefits.

### *5.3.4 Match the expansion of health care demand through health insurance with supply-side readiness*

Reaching financial protection goals will require matching the expansion of the demand for health care through health insurance with supply-side readiness, in other words ensuring that there are PhilHealth-accredited health facilities within close geographic proximity of all PhilHealth members. In this regard, there have been great improvements, even within the last year: according to the PhilHealth database, between December 2013 and December 2014, the percentage of towns and municipalities with an outpatient clinic (government or private) that has been accredited by PhilHealth to deliver the primary care benefit package has increased from 79 percent to 93 percent. For the maternity care package, the share increased from 62 percent to 71 percent and for the TB DOTS package (for tuberculosis), the share increased from 67 percent to 75 percent (PHIC 2014, PHIC 2015). Next steps would likely need to involve both further improvements in the share of LGUs with accredited facilities, but also efforts to improve the quality of service delivery within the accredited facilities.

Local governments, which in the decentralized health delivery context of the Philippines are responsible for facility and human resource provision, will need to invest more in the quality of local health facilities. Local government investments can be complemented by the careful targeting, and speedier implementation, of the resources of the Health Facilities Enhancement Program (HFEP) through which the national government supports health facility construction and renovations. Without quality accredited health facilities, PhilHealth members will not be able to benefit from their coverage.

## 6. Conclusion

With the passage of several landmark policies – expansion of health insurance coverage, the no balance billing policy, a renewed emphasis on primary care, and several provider payment reforms – the Philippines has put itself on the right track to reaching the UHC goal of financial risk protection. Many of these policies are relatively new, having been implemented within the last five years, and it may be too soon to comment on their effectiveness (or lack of effectiveness) in containing out-of-pocket spending and providing financial protection. Indeed, many of the key reforms were implemented only after the 2012 FIES survey, which is the most recent instrument available with which to assess financial protection.

Still, it is clear that up until 2012, the Philippines had been making very little progress towards financial protection and, if anything, going backwards. Every year since 2000, out-of-pocket spending had climbed, catastrophic payments had increased and impoverishing expenditure did not diminish. Consequently, the new reforms are to be applauded.

To speed progress toward financial protection goals, the Philippines could increase efforts to ensure that all those enrolled in PhilHealth know of their eligibility and of their benefits, improve compliance with the 'no balance billing' policy, and continue to reform the way that providers are reimbursed in order to further incentivize cost containment. Quick wins in this regard could include increasing benefit awareness by issuing health insurance cards for poor members and increasing the predictability of health expenditures by complementing the no balance billing policy of the poor (equivalent to zero copayments) with a fixed copayment for non-poor members.

Perhaps the most challenging question is what to do about the high out-of-pocket spending on medicines. In this regard, the paper raises more questions than it can answer using the available data. These include questions about the market structure, supply chain and quality of the regulatory environment (related to dispensing and pricing practices) for which additional analysis would be needed.

Achieving financial protection goals will require the combined effort of multiple entities because the responsibility for implementation of these policies, and therefore attainment of financial protection goals, lies not only with PhilHealth. The Department of Social Welfare and Development can improve the targeting of the PhilHealth indigent program through refining their NHTS-PR enumeration process. In order to improve physical access to care and improve quality, local governments (using their own resources) will need to invest in upgrading facilities for PhilHealth accreditation and the DOH will need to better target HFEP resources towards the most under-served areas; health care providers must strictly implement the no balance billing policy.

Finally, in order to ensure, and improve, measurement of progress toward the UHC financial protection goal, the Philippines Statistical Authority needs to help to ensure the continued collection of out-of-pocket payments data and work to progressively improve the contents of the relevant survey modules.

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**Annex 1 Construction of the health expenditure variable**

Out-of-pocket health expenditures are defined as direct purchases of health services or goods by individuals or households. These include expenditure on consultations, hospital stays, medicines, and diagnostic tests, among others. The content of the health expenditure module varies by FIES survey wave. That said, there is a fair amount of consistency across survey years 2000-2009. The difference in the 2012 survey year is marked.

Our measure of out-of-pocket expenditures includes medicines, hospital room charges, consultation fees and diagnostic tests. We exclude dental charges, food supplements, various alternative therapies, transportation for medical care, and plastic surgery. We also exclude medical services received as "gifts" or "free" (referred to in the FIES questionnaire as "in-kind" care received) since, because they do not lower household consumption, these expenditures will not reduce financial protection.

For each FIES survey, health expenditures are calculated over the last 6 months for each survey round and then annualized. 2012 data are only from the first 6 months (annualized) because later data are not yet available.

Table A1 Health expenditure categories included and excluded from the health spending variable, by FIES year

| **FIES 2000, 2003, 2006, 2009** | **FIES 2012** |
|---|---|
| *Cash expenditure* | |
| Drugs and medicine in cash* | Medicinal preparations, medicinal drugs and patent medicines in cash* |
| Hospital room charges in cash* | Pharmaceutical products for nutrition and/or prevent diseases in cash* |
| Medical charges in cash* | Other medicinal preparations, medicinal drugs and patent medicines in cash* |
| Dental charges in cash | Other medical products in cash* |
| Other medical goods and supplies in cash* | Therapeutic appliances and equipment in cash* |
| Contraceptives (pills, etc.)* | Outpatient services - Medical services in cash* |
| Other medical health services in cash | Outpatient services - Dental Services in cash |
| Food Supplements in cash | Outpatient services - Paramedical Services in cash* |
| | Inpatient services - Public hospital services in cash* |
| | Inpatient services - Private hospital services in cash* |
| *In-kind care received* | |
| Drugs and medicine in kind | Medicinal preparations, medicinal drugs and patent medicines in-kind |
| Hospital room charges in kind | Pharmaceutical products for nutrition and/or prevent diseases in-kind |
| Medical charges in kind | Other medicinal preparations, medicinal drugs and patent medicines in-kind |
| Dental charges in kind | Other medical products in-kind |
| Other medical goods and supplies in kind | Therapeutic appliances and equipment in-kind |
| Contraceptives (pills, etc.) in kind | Outpatient services - Medical services in-kind |
| Other medical health services in kind | Outpatient services - Dental Services in-kind |
| Food Supplements in kind | Outpatient services - Paramedical Services in-kind |
| | Inpatient services - Public hospital services in-kind |
| | Inpatient services - Private hospital services in-kind |

Note: * indicates health expenditures included in the out-of-pocket spending variable

**Annex 2 Out-of-pocket spending on health**

Table A2 Annual out-of-pocket spending on health, by category and quintile, 2012, pesos

| | Total | Q1 | Q2 | Q3 | Q4 | Q5 |
|---|---|---|---|---|---|---|
| Total | 8,360 | 1,082 | 2,393 | 4,222 | 7,927 | 26,176 |
| Drugs and medicine in cash | 5,158 | 823 | 1,625 | 2,896 | 5,376 | 15,070 |
| Other medical goods and supplies in cash | 108 | 15 | 32 | 50 | 105 | 336 |
| Outpatient medical and paramedical services in cash | 913 | 93 | 217 | 379 | 655 | 3,221 |
| Inpatient services | 2,181 | 151 | 519 | 897 | 1,791 | 7,548 |

*Source: Authors' calculations, FIES 2012*

**Annex 3: Incidence of catastrophic payments**

Table A3 Incidence of catastrophic out-of-pocket spending, 2000-2012

| | Threshold share of total household consumption | | | | |
|---|---|---|---|---|---|
| | 5% | 10% | 15% | 25% | 40% |
| **2000, FIES** | | | | | |
| Headcount | 5.5 | 2.3 | 1.2 | 0.5 | 0.1 |
| Concentration index | 0.280*** | 0.370*** | 0.465*** | 0.489*** | 0.671*** |
| **2003, FIES** | | | | | |
| Headcount | 6.3 | 2.6 | 1.4 | 0.5 | 0.1 |
| Concentration index | 0.267*** | 0.306*** | 0.361*** | 0.466*** | 0.656*** |
| **2006, FIES** | | | | | |
| Headcount | 8.3 | 3.7 | 2.0 | 0.8 | 0.2 |
| Concentration index | 0.298*** | 0.356*** | 0.426*** | 0.532*** | 0.676*** |
| **2009, FIES** | | | | | |
| Headcount | 8.2 | 3.8 | 2.1 | 0.8 | 0.2 |
| Concentration index | 0.294*** | 0.364*** | 0.433*** | 0.551*** | 0.674*** |
| **2012, FIES** | | | | | |
| Headcount | 15.5 | 7.7 | 4.5 | 1.9 | 0.6 |
| Concentration index | 0.263*** | 0.338*** | 0.377*** | 0.469*** | 0.628*** |
| | Threshold share of nonfood consumption | | | | |
| | 5% | 10% | 15% | 25% | 40% |
| **2000, FIES** | | | | | |
| Headcount | 11.5 | 5.8 | 3.4 | 1.4 | 0.5 |
| Concentration index | 0.130*** | 0.160*** | 0.169*** | 0.252*** | 0.353*** |
| **2003, FIES** | | | | | |
| Headcount | 13.4 | 6.3 | 3.7 | 1.6 | 0.5 |
| Concentration index | 0.119*** | 0.142*** | 0.152*** | 0.194*** | 0.297*** |
| **2006, FIES** | | | | | |
| Headcount | 15.7 | 8.1 | 4.9 | 2.2 | 0.8 |
| Concentration index | 0.134*** | 0.182*** | 0.196*** | 0.246*** | 0.355*** |
| **2009, FIES** | | | | | |
| Headcount | 15.5 | 8.0 | 5.0 | 2.3 | 0.9 |
| Concentration index | 0.140*** | 0.188*** | 0.214*** | 0.250*** | 0.370*** |
| **2012, FIES** | | | | | |
| Headcount | 28.8 | 16.0 | 10.5 | 5.4 | 2.3 |
| Concentration index | 0.097*** | 0.152*** | 0.179*** | 0.226*** | 0.259*** |

Source: Authors' estimates using FIES 2000, 2003, 2006, 2009 and 2012

Note: * CI is significant at 10%, **CI is significant at 5%, ***CI is significant at 1%

**Annex 4: Impoverishing health expenditures**

Table A4 Impoverishment through out-of-pocket health spending, 2000-2012

| | Consumption including health payments | Consumption excluding health payments | Change | Percentage change |
|---|---|---|---|---|
| **Poverty line at US$1.25 per capita per day** | | | | |
| **2000, FIES** | | | | |
| Percentage in poverty / Poverty headcount | 23.8 | 24.2 | 0.4 | 1.6% |
| Poverty gap | 1.5 | 1.6 | 0.0 | 2.1% |
| Normalized poverty gap | 6.3 | 6.4 | 0.1 | 2.1% |
| Normalized mean positive poverty gap | 26.3 | 26.4 | 0.1 | 0.5% |
| **2003, FIES** | | | | |
| Percentage in poverty / Poverty headcount | 21.9 | 22.4 | 0.5 | 2.4% |
| Poverty gap | 1.5 | 1.6 | 0.0 | 2.7% |
| Normalized poverty gap | 5.7 | 5.8 | 0.2 | 2.7% |
| Normalized mean positive poverty gap | 26.0 | 26.1 | 0.1 | 0.4% |
| **2006, FIES** | | | | |
| Percentage in poverty / Poverty headcount | 21.5 | 22.1 | 0.6 | 2.7% |
| Poverty gap | 1.7 | 1.8 | 0.1 | 3.3% |
| Normalized poverty gap | 5.3 | 5.5 | 0.2 | 3.3% |
| Normalized mean positive poverty gap | 24.7 | 24.9 | 0.1 | 0.6% |
| **2009, FIES** | | | | |
| Percentage in poverty / Poverty headcount | 16.9 | 17.5 | 0.6 | 3.5% |
| Poverty gap | 1.4 | 1.4 | 0.1 | 3.7% |
| Normalized poverty gap | 3.7 | 3.9 | 0.1 | 3.7% |
| Normalized mean positive poverty gap | 22.0 | 22.1 | 0.0 | 0.2% |
| **2012, FIES** | | | | |
| Percentage in poverty / Poverty headcount | 17.8 | 18.9 | 1.0 | 5.8% |
| Poverty gap | 1.7 | 1.8 | 0.1 | 7.2% |
| Normalized poverty gap | 4.1 | 4.3 | 0.3 | 7.2% |
| Normalized mean positive poverty gap | 22.7 | 23.0 | 0.3 | 1.3% |
| **Poverty line at US$2.00 per capita per day** | | | | |
| **2000, FIES** | | | | |
| Percentage in poverty / Poverty headcount | 47.7 | 48.3 | 0.6 | 1.3% |

| | | | | |
|---|---|---|---|---|
| Poverty gap | 6.9 | 7.0 | 0.1 | 1.6% |
| Normalized poverty gap | 17.7 | 18.0 | 0.3 | 1.6% |
| Normalized mean positive poverty gap | 37.1 | 37.2 | 0.1 | 0.3% |
| | | | | |
| **2003, FIES** | | | | |
| Percentage in poverty / Poverty headcount | 44.9 | 45.6 | 0.7 | 1.6% |
| Poverty gap | 7.1 | 7.2 | 0.1 | 2.1% |
| Normalized poverty gap | 16.3 | 16.7 | 0.3 | 2.1% |
| Normalized mean positive poverty gap | 36.4 | 36.5 | 0.2 | 0.5% |
| | | | | |
| **2006, FIES** | | | | |
| Percentage in poverty / Poverty headcount | 45.2 | 46.0 | 0.9 | 1.9% |
| Poverty gap | 8.2 | 8.4 | 0.2 | 2.4% |
| Normalized poverty gap | 16.1 | 16.5 | 0.4 | 2.4% |
| Normalized mean positive poverty gap | 35.7 | 35.9 | 0.2 | 0.5% |
| | | | | |
| **2009, FIES** | | | | |
| Percentage in poverty / Poverty headcount | 41.2 | 42.1 | 0.9 | 2.2% |
| Poverty gap | 8.0 | 8.2 | 0.2 | 2.6% |
| Normalized poverty gap | 13.5 | 13.8 | 0.3 | 2.6% |
| Normalized mean positive poverty gap | 32.7 | 32.9 | 0.1 | 0.4% |
| | | | | |
| **2012, FIES** | | | | |
| Percentage in poverty / Poverty headcount | 42.0 | 43.6 | 1.5 | 3.7% |
| Poverty gap | 9.3 | 9.8 | 0.5 | 5.0% |
| Normalized poverty gap | 14.0 | 14.7 | 0.7 | 5.0% |
| Normalized mean positive poverty gap | 33.4 | 33.8 | 0.4 | 1.3% |

*Source: Authors' estimates using FIES 2000, 2003, 2006, 2009 and 2012*

**Annex 5: Health insurance coverage**

Table A5 Health insurance coverage, by quintile, 2008-2013

| | Total | Q1 | Q2 | Q3 | Q4 | Q5 | CI |
|---|---|---|---|---|---|---|---|
| 2008 PhilHealth or HMO | 38.3% | 19.7% | 28.9% | 35.7% | 48.5% | 58.8% | 0.214*** |
| 2008 Any PhilHealth | 37.7% | 19.5% | 28.7% | 35.3% | 47.9% | 56.8% | 0.208*** |
| 2011 PhilHealth or HMO | 48.7% | 36.6% | 40.0% | 46.8% | 53.7% | 66.6% | 0.125*** |
| 2011 Any PhilHealth | 48.5% | 36.6% | 40.0% | 46.7% | 53.5% | 66.2% | 0.123*** |
| 2013 PhilHealth or HMO | 60.6% | 61.5% | 55.7% | 52.3% | 59.8% | 73.4% | 0.038*** |
| 2013 Any PhilHealth | 60.2% | 61.5% | 55.5% | 52.1% | 59.4% | 72.7% | 0.036*** |

*Source: Authors' estimates, using NDHS 2008, FHS 2011 and NDHS 2013*

Note: * CI is significant at 10%, **CI is significant at 5%, ***CI is significant at 1%