Policy Brief #1

Initial government subsidy for households to enroll in social health insurance is effective in encouraging them to do so, and in prodding them later when the subsidy is withdrawn to purchase enrollment on their own.

UPecon Foundation

Temporary Incentives Can Have Persistent Effects on Informal-Sector Households for the Purchase of Social Health Insurance Coverage[1]

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Introduction

Many households in low- and middle-income countries cannot afford to pay the full cost of membership premium in social health insurance, much less in a private health insurance. As these countries try to achieve universal enrollment of households in their health insurance programs (both public and private), policymakers are thinking of innovative ways of encouraging them to enlist, including providing them information about the benefits of health insurance, with subsidies or incentives to pay membership premiums, or assisting them in their application, or any combination of such. Providing the uninsured an array of incentives is deemed necessary because they may have varied difficulties in valuing the prospective benefits or the indirect costs of health insurance prior to purchase.

While providing premium subsidies on a permanent basis may encourage many to enroll, such an intervention, especially when targeted to a large population group, is obviously fiscally unsustainable, especially for poor or lower middle-income countries. A temporary or once-off premium subsidy incentive may be a more realistic option. Once the subsidy is withdrawn, however, the initial high enrollment rate achieved may not be sustained. The policy issue then is: Do temporary incentives have lasting or persistent effects? In other words, can low-income households be encouraged to purchase health insurance coverage with a once-off premium subsidy and then be expected to pay the full premium in subsequent years after they have learned the benefits of such an insurance coverage?

In 2011 the Philippine Health Insurance Program (PhilHealth), the country's social health insurance program, faced the challenge of achieving universal enrollment. PhilHealth provides mandatory, contributory health insurance for the formal-sector salaried employees and, in principle, fully subsidized insurance for the poor (indigents). Before 2011 determining who was poor lies with local government units (LGUs), who used to pay their premiums; they are now identified and fully subsidized by the National Government through direct budgetary transfer to the PhilHealth Corporation. The rest of the population consisting largely of the self-employed and informal-sector workers are supposed to pay their premiums under the Individually Paying Program (IPP) of PhilHealth, but in 2016, only a third of the eligible population were enrolled under the IPP. Therefore, the greatest challenge of universal enrollment to social health insurance in the country lay in this population group.

[1] Based on the article "Persistent effects of temporary incentives: Evidence from a nationwide health insurance experiment" by Aurelien Baillon, Joseph Capuno, Owen O'Donnel, Carlos Antonio Tan Jr., and Kim van Wilgenburg. *Journal of Health Economics* **81** (2021) https://doi.org/10.1016/j.healeco.2021.102580.

To encourage enrollment in IPP, PhilHealth adopts a progressive premium schedule. At that time, a person with monthly income of no more than PhP25,000 will have to pay an annual premium of PhP 1,200 (around US$30) to become a PhilHealth member, while a person with a higher income will have to pay an annual premium of PhP 2,400. As with other PhilHealth programs, cover is extended to the member's spouse, their children who are younger than 21 years old, and other dependents. The benefit package includes a wide range of inpatient services at accredited public or private hospitals, some specific outpatient treatments, and limited primary care.

Study Design and Data

The key interest of the study is to determine whether or not a once-off premium subsidy to informal-sector households can encourage them to purchase PhilHealth coverage, and whether this behavior extends once such subsidy is withdrawn. In other words, does the once-off subsidy have persistent – or just temporary or immediate – effects? To answer this question, a field experiment was conducted in 2011-2012 involving a random sample of 2,950 households in 243 municipalities all over the Philippines. Of the total number of municipalities, 179 were randomly assigned as treatment sites, with 2,220 households while 64 municipalities were randomly assigned as control sites, with 730 households. To assess their longer-term enrollment status, the participant households were visited and interviewed again in July-August 2015.

A baseline survey was conducted in February-April 2011 to determine which households were eligible for IPP membership. In the treatment sites, 1,037 households were deemed eligible and were offered the premium subsidy (and information packet plus SMS reminders) while the remainder of 1,183 households were excluded for being ineligible. Similarly, in the control sites, 383 households were deemed eligible while 347 were ineligible. The control households were not offered subsidy or information.

The premium subsidy came in the form of a non-cash, non-transferrable voucher worth PhP 600 that can be used to enroll in PhilHealth at any time until Dec 31, 2011. After that the household would have to re-enroll at the full-price following PhilHealth's standard procedures under the IPP. If the household did not re-enroll, then its health insurance coverage would lapse and it would lose PhilHealth benefits.

Out of the 1,037 households offered a subsidy, 906 accepted the offer, while 131 refused the same. Of those who accepted the offer, 119 households enrolled in IPP and 787 households did not, by the end of 2011. In January 2012, the 787 households were randomly allocated to one of two groups: one group (comprising 392 households) were informed through mail that the validity of the voucher had been extended for two months up to the end of February 2022. The other group (comprising 395 households) were also sent a letter that told them the voucher would remain valid until they were visited by survey enumerator (March- May 2012), who would offer assistance in the completion and submission of their PhilHealth membership form, and ensure their insurance cards mailed back to them. The results of first the follow-up survey in March-May 2012 were used to determine the immediate effects of the subsidy on enrollment. After this survey, no further incentives were offered or introduced in any study site.

To determine the persistent effects, a second follow-up survey was conducted in July-August 2015, which is more than three years after the incentives were withdrawn. While the intention was to interview all 1420 households —1037 from treatment sites and 383 from control sites—that were eligible to join the IPP but had not done so at baseline, it proved possible to trace and interview only 1000 of them in 2015.[2]

[2] To see the distribution of the sample households across sites and survey periods, the reader is referred to Figure 1 (Participant Flow) in the paper.

Data Analysis and Key Results

The main outcome of interest of the study is the insurance enrollment status of the household after three years (i.e., in 2015). Three years provide a long-enough horizon whether the households that initially enrolled with subsidized premium continued to do so after the subsidy was withdrawn in the next year (2013) and in succeeding year (2014). Thus, the average persistent effect of the subsidy was estimated by comparing the mean difference in health insurance status between the treatment group and the control group. To complete the analysis, the immediate effect of the subsidy is also estimated by comparing the average health insurance statuses of the two groups in 2012. Likewise, both the immediate and persistent effects of the application assistance are derived.

Using various statistical techniques (linear regression, probit, factor analysis), the main results are shown in Table 1.

Table 1. Effects of Incentives on Insurance Enrollment

OUTCOMES	PREMIUM SUBSIDY		APPLICATION ASSISTANCE		COMBINED	
	Immediate effects	Persistent effects	Immediate effects	Persistent effects	Immediate effects	Persistent effects
A. Insured	0.0562 (0.0209)	0.0451 (0.0262)	0.2912 (0.0311)	0.0536 (0.0249)	0.3149 (0.0292)	0.0872 (0.0224)
Control group mean	0.0491	0.0502	0.0426	0.0687	0.0471	0.0399
No. of households	740	740	548	548	712	712

Notes: Figures in parentheses are robust standard errors clustered at the municipality level.

The results of the study show that:

- Both incentives (premium subsidy and application assistance) succeeded in raising enrollment in the IPP of PhilHealth. They did this not only while in operation but also three years after they had been withdrawn.

- The premium subsidy is estimated to have raised enrollment by 4.5 percentage points three years after it had been withdrawn. This persistent effect is 90 percent of the control group mean and it is 80 percent of the immediate effect. Application assistance is estimated to have raised enrollment by 29 percentage points when it was offered. This is more than six-fold increase on the control group mean and it is more than five times larger than the immediate effect of the subsidy.

- After three years, those who had received the one-time offer of assistance with application continued to be more likely to insure, but the effect had fallen to less than one-fifth of the immediate impact. The combined effect of the subsidy (plus information and reminders) followed by application assistance if the household initially did not enroll at the subsidized is 31.5 percentage-point increase when the incentives are in operation. After three years, the effect that persists is more than a quarter of the immediate effect and more than double the control group mean, indicating a relatively large, sustained impact on insurance. The estimated effects on insurance enrollment are robust to alternative methods of estimation and sample selection.

Conclusions

The study has shown that temporary household incentive to purchase social health insurance, such as government subsidy, can have a persistent effect on their behavior, i.e., that the household, once it has experienced the benefits of health insurance, will be encouraged to buy the premium on its own. This means that permanent incentives (which may be fiscally unaffordable) may not be necessary to change household behavior; for some, a once-off subsidy would do. Eliminating administrative hassles of enrollment (such as application and registration costs and onerous procedures) is also helpful in encouraging enrollment to health insurance among low-income households.