

**Factors Affecting Enrollment to PhilHealth of Low-Income Households in
Region 12**

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ACRONYMS

IPP	- Individually-Paying Program
HSRA	- Health Sector Reform Agenda
NDHS	- National Demographic and Health Survey
NHIP	- National Health Insurance Program
NSO	- National Statistics Office
PHIC	- Philippine Health Insurance Corporation (also known as PhilHealth)
SHI	- Social Health Insurance
WIQ	- Wealth Index Quintile
USAID	- United States Agency for International Development
SOCCKSARGEN	- South Cotabato, Cotabato Province, Sultan Kudarat, Sarangani, General Santos City

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ABSTRACT

The membership gap caused by the lagging enrollment rate from the informal sector of employment--relative to other programs of membership--has been of much concern to the to PhilHealth, especially when it relates to the National Health Insurance Program's (NHIP's) goal of universal coverage with which PhilHealth has been tasked to achieved. Thus, this study explains the factors affecting enrollment of to PhilHealth-Individually Paying Program (IPP) by households belonging to the three (3) lowest wealth index quintile (WIQ) in Region XII from 1998-2003. This has been done by utilizing the 2003 National Demographic and Health Survey. The study looked on significant socio-demographic, economic, health and health-related, and PhilHealth-related variables as determinants of likelihood of household's enrollment to IPP.

Result shows that, categorically, some socio-demographic, health and health-related and PhilHealth-related indicators can significantly explain households' likelihood to enroll to IPP while economic indicators came out to have an insignificant effect. Therefore, it has been recommended for policy action that the profile of eligible households and members, per se, must not be discounted in terms of the formulation of PhilHealth's strategic plan to expand enrollment to the informal sector. Recruitment or membership campaign in some first class provinces in the region has to be expansive and strengthened but the prospective enrollees from the second class province must not be ignored in designing strategies to boost enrollment to IPP.

Chapter 1

INTRODUCTION

Background of the Study

The Philippine Health Insurance Corporation (also known as PhilHealth) is the social health insurance provider in the country which is tasked to “expand enrollment, raise and expand health insurance benefits, progressively upgrade its administrative infrastructure in pace with enrollment expansion, and leverage for value for money from accredited service providers” (Solon, Panelo, and Gumafelix, 2004 pp. 28). The National Health Insurance Program (NHIP) is the social health insurance (SHI) system in the Philippines and which operationalization is carried over by the Philippine Health Insurance Corporation (PHIC) or popularly known as PhilHealth.

PhilHealth plays a primal role in the access of the population--especially the low-income segment of the informal economy--to quality health care given that the formal health insurance market in the country is not yet established. Yet, PhilHealth has to achieve universal coverage to pool risk effectively. But this objective has become an outright challenge to PhilHealth because of the slow membership growth posted by the Individually-Paying Program (IPP), the program in which self-employed individuals and professionals have to pay their

membership premium voluntarily. Unlike the compulsory enrollment of the employed sector, the unpredictability of eligible individual's preference for voluntary enrollment status and active membership results in an enrollment gap—which, as Jowett (2006) in his presentation of *Group Enrollment into SHI in the Philippine: the Conceptual Framework* in a conference on *Extending Social Health Insurance to Informal Economy Workers* stated that contributions is low and constitute the gap in the general SHI contribution in the Philippines. As enrollment gap widens or narrows down at a very slow rate due to lower rate of enrollment sustainable social health financing is at risk. In 2002, Solon, et al. (2004 pp. 30) stated in the *Review of the Health Sector Reform Agenda (HSRA) Implementation Progress* that in 2002, “only a little more than 1 million members have been enrolled in IPP.” Further, they stated that mechanisms to enroll individual paying members are not yet effective.

This phenomenon is a barrier to universal coverage amidst the operationalization of the Philippine Health Sector Reform Agenda (HSRA) spearheaded by the Department of Health (DOH). The HSRA was “launched in 1999 to improve the performance of the health sector and to address the inequities and inefficiencies in the delivery and financing of health services” (Philippine Chalks Up Modest Health Sector Reform Achievement but Needs to Address Risk, 2009).

In deducing further, it is worth stating that the problem mentioned above may adversely affect PhilHealth's “objective of providing health insurance

coverage to poor Filipinos” (Solon, Quimbo, and Panelo, 2003 pp. 20). This presumption is possible as some PhilHealth programs are not mutually exclusive to other programs, particularly the IPP and the Sponsored or Indigent Programs. The Sponsored Program, in which LGUs co-finance the premium payments of low-income individuals who were screened and became qualified to the Indigent Program, depends mainly on LGUs commitment and financial capability. Solon, et al. (2004 pp.29) stated that in the country, “Indigent Program enrollment under GMA 500 exceeded, but only 47% of HSRA target met.” Further, they pointed out that Indigent premium subsidies are not secured and contributions are not progressive. Therefore, given these facts, there is still a higher percentage distribution of low-income eligible individuals as specified in the HSRA, that were not able to be accommodated in the Indigent Program and automatically become eligible to the IPP.

As it has been stated in the 2003 HSRA, expansion in IPP becomes a challenge to PhilHealth. Social marketing program (by type of member) was developed and being implemented to heighten enrollment rate. This program, therefore, requires a crucial determination of the factors affecting IPP enrollment.

Objectives of the Study

General Objective:

- To determine the factors affecting enrollment to PhilHealth-Individually-Paying Program (IPP) of household members belonging to the three

(3) lowest wealth index quintile (WIQ) in Region XII (Central Mindanao)
from 1998-2003

Specific Objectives:

1. To describe the socio-demographic profile, economic status, health and health-related knowledge and practices of households, and their benefits and services utilization of PhilHealth;
2. To determine whether a household member's socio-demographic profile, economic status, health and health-related factors, and PhilHealth-related variables affect his/her PhilHealth enrollment decision; and
3. To know the magnitude and direction of likelihood of significant socio-demographic profile, economic status, health and health-related factors, and PhilHealth-related variables to household members' enrollment decision.

Framework of the Study

In Jowett's (2003 pp. 1158) model of demand for public voluntary health insurance (as shown in Figure 1) a person's SHI purchase decision can only be represented by two corner solutions, *ceteris paribus*: to get enrolled or not at all, assuming that she heard about SHI.

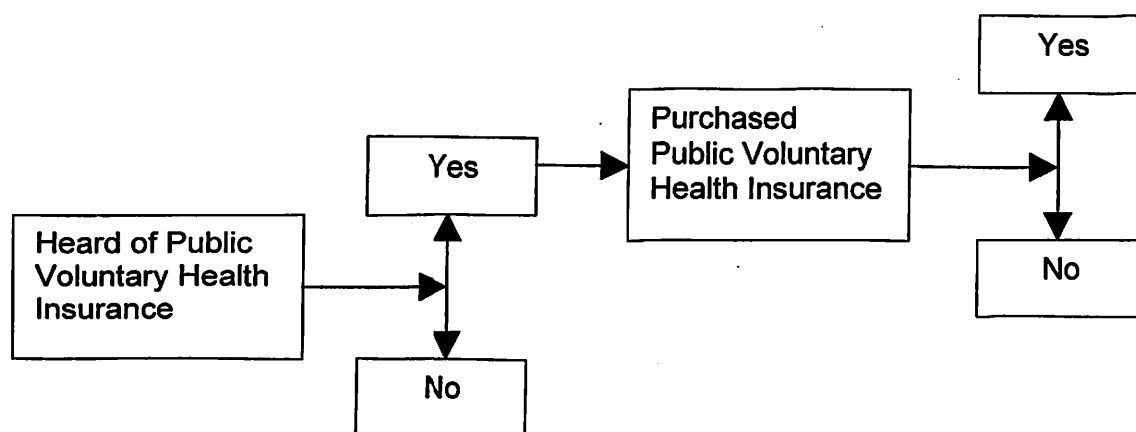


Figure 1
Model of Demand for Public Voluntary Health Insurance

SHI purchasing decision of an individual also revolves on the usual demand analysis assumption that any individual who would get herself enrolled voluntarily in SHI seeks to maximize her utility. However, based from the NSCB's 2004 *Regional Social and Economic Trends*, medical care expenditure is a distance away from food expenditure (see Table 1) which is an indication of the

preference ordering of bundle of goods by individuals. Then it can be said that utility analysis of individuals' health insurance preference (especially of those at the three lowest WQ) is valid only after food expenditure has been considered. Yet, we have to take note that in Region XII, there are limited and weak alternatives to SHI, hence, making SHI voluntary enrollment analysis, relative to other consumption expenditures and utility, simpler.

Table 1
Distribution of Total Family Expenditure by Expenditure Group and Income Class

Area/Expenditure	1997			2000		
	Total Family Expenditure (in P'000)	Food	Medical Care	Total Family Expenditure (in P'000)	Food	Medical Care
Region XII*	7,252,527	51.3	2.78	10,003,952	49.23	1.9
North Cotabato	10,499,720	50.8	3.7	13,812,067	53.2	1.8
South Cotabato	7,922,133	51.0	2.4	13,490,747	44.0	2.8
Sarangani	3,682,569	54.5	2.7	5,160,314	48.9	1.4
Sultan Kudarat	6,905,686	48.9	2.3	7,552,681	50.8	1.6
Cotabato City	1,902,024	51.4	1.3	3,435,826	44.4	2.0
General Santos City	4,642,506	46.3	2.2	9,716,176	43.2	3.2

* Exclusive of component cities

Source: National Statistical Coordination Board – Regional Division XII (2004). Regional Social and Economic Trends – Region XII. Cotabato City, Philippines

In a study of Cavagnero, Garrin, Xu, and Rivera (2006 pp. 9) on *Health Financing in Argentina: An Empirical Study of Health Care Utilization and Health Care Expenditure*, they presented household's capacity to pay on non-food expenditure (ctp_h) as follows

$$ctp_h = exp_h - se_h \quad \text{if } se_h \leq food_h \quad (\text{Eq. 1})$$

$$ctp_h = exp_h - food_h \quad \text{if } se_h > food_h \quad (\text{Eq. 2})$$

where exp_h represents household expenditure; se_h refers to household's subsistence expenditure (defined as household's food expenditure, with the sample median food share of total expenditure); $food_h$ is the food expenditure.

Equations (1) and (2) show the capacity to pay for non-food expenditure which to include, SHI of individuals in a household at the low and high WIQ, respectively. Since Cavagnero et al. (2006 pp. 9) consider that "the share of food expenditure in a household's total expenditure diminishes as income increases", the poor household's food expenditure, $food_h$ in equation (1), eats up almost their entire income. Thus, if a household subsistence expenditure is higher than food expenditure, $se_h > food_h$, and individual's wealth status is inclining to higher WIQ, and SHI enrolment is highly probable.

Then we can say that an individual's SHI enrolment (E_i) is being influenced significantly by income/expenditure variable (Y_i) with respect to other factors as shown in Equation 3.

$$E_i[Y/(D_i, H_i, P_i)] = f(\text{Wealth Index Quintile bracket, Tenure Status of Lot}) \quad (\text{Eq. 3})$$

where D_i represents demographic variables category; H_i is the health variables category; P_i is the PhilHealth-IPP-related variables category; *wealth index*

quintile (WIQ) bracket refers to eligible household members belonging to either of the three (3) WIQ; and *Tenure Status* refers the tenure status of household's lot.

Several observable factors in one category mentioned above also influence enrolment of household members. How these parameters influence enrolment is described below

$$E_i[(D/ Y_i, H_i, P_i)] = f(\text{Gender of Household Head, Age of Household Head and Share of Members based on Age, Household Size, Educational Attainment, Rural/Urban, Province and Class of Province of Residence}) \quad (\text{Eq. 4})$$

$$E_i[(H/ D_i, Y_i, P_i)] = f(\text{Visit to Health Facilities, Knowledge on Some Communicable, Non-Communicable, and Infectious Diseases, Knowledge and Utilization of Traditional Healing Practices and Alternative Modalities}) \quad (\text{Eq. 5})$$

$$E_i[(P/ D_i, Y_i, H_i)] = f(\text{Utilization of PhilHealth Benefits, Person Availing the Service, Satisfaction with the Service, Reasons for Non-Utilization of Benefits}) \quad (\text{Eq. 6})$$

The separate effect of the components of each variable category may be determined significantly if measured simultaneously. Then we can present this model of voluntary PhilHealth enrolment of individuals belonging to the three (3) lowest WIQ in Mindanao as

$$E_i = g(D_i, Y_i, H_i, P_i) + e_i \quad (\text{Eq. 7})$$

where e_i is the stochastic error term.

Null Hypotheses of the Study

To answer the study's objectives, the null hypotheses presented are divided into two (2) parts: 1) hypotheses in determining any eligible household member's socio-demographic profile, economic status, health and health-related factors, and PhilHealth-related variables that cannot significantly explain the probability of enrollment to PhilHealth-IPP; and 2) hypotheses in determining significant factors contributing to negative likelihood of enrollment by any eligible household members. The null hypotheses (H_0) presented are based on the categorization of the variables into: 1) socio-demographic; 2) economic; 3) health and health-related; and 4) PhilHealth-related categories.

Factors to Enrollment.

1. The following socio-demographic variables have no significant effect on the probability of enrollment to PhilHealth-IPP by any eligible household member:
 - a. head is male;
 - b. share of household members between 21-59 years old, as well as members aging 60 years old and above;
 - c. head is below 21 years old;
 - d. head completed no grade and has primary education;
 - e. household size;

- f. household is in urban area; and
 - g. household is residing in Sarangani.
2. The following economic status variables have no significant effect on the probability of enrollment to IPP:
- a. household is in the poorest and poor WIQ brackets;
 - b. lot is rent-free with consent of the owner; and
 - c. lot is rent-free without consent of the owner.
3. Each of the following health and health-related factors has no significant effect on the probability of enrollment of any eligible household member's to IPP:
- a. knowledge on traditional healing practices;
 - b. utilization of traditional healing;
 - c. knowledge on alternative modalities; and
 - d. utilization of alternative modalities.
4. Each of the following PhilHealth-related variables has no significant effect on the probability of any eligible household members' enrollment to IPP:
- a. household members who availed services have number of reasons for dissatisfaction with the service; and
 - b. household members who availed services have number of reasons for nonutilization of benefits.

Significance of the Study

This study is significant on the following reasons:

1. A formal health insurance market in Region XII is still non-existent. PhilHealth, therefore, is the most (but relatively) effective mechanism of household's access to health services of their choice from both public and private health care providers through risk pooling. It is also the best financial protection against out-of-pocket burden of illness. This analysis on enrollment decision of members of households belonging to the three (3) lowest WIQ in Region XII can help PhilHealth-PRO XII in the design of a scheme that will boost up enrollment rate on this sector. Readers from institutions who would regard this study useful and relevant to their operation, could come up with specific policy targets, especially the poor;
2. Because the 2003 NDHS data used in this study includes new variables that directly feature PhilHealth programs' benefits and reasons for non-utilization, this study will determine reasons that causes eligible household members' dissatisfaction which subsequently affect their enrollment decision. Moreover, the determination of the effect of specific factors contributing to failed utilization of PhilHealth services to enrollment decision of eligible household members is equally important. With this, PhilHealth can specifically target the programs' shortcomings based from eligible populations' perspective; and

3. The government becomes increasingly serious in their health sector reform efforts—the Health Sector Reform Agenda (HSRA)—which includes the health financing system. The reform's partial outcomes are confronted by serious and actual issues. However, Obermann et al. (2006 pp. 3182) mentioned the limited information about SHI system in the Philippines despite the fact that “the country has one of the longest experiences with SHI in a low-middle income country”. This study, therefore, will hopefully add to the existing but few body of literature serving as baseline references to social health insurance market analysts and researchers.

Scope and Limitations of the Study

This is an explanatory study which aims to determine the factors affecting enrollment to PhilHealth-Individually Paying Program (IPP) of household members belonging to the three (3) lowest WIQ in Region XII from 1998-2003. The study's focus on the IPP membership is according to the statement of Jowett (2006) in his conference presentation entitled "Group Enrollment into SHI in the Philippines: The Conceptual Framework" that contributions to IPP is low and constitute the gap in the general SHI contribution in the Philippines. The

enrollment gap poses as one of the barriers to the universal coverage objective of the PHIC as stated in the 2003 *A Review of the Health Sector Reform Agenda (HSRA) Implementation Progress*.

The three (3) lowest WIQ came out as another sectoral focus in this study. This is on the assumption that variance in enrollment decision is present in this sector of the population. The assumption of variance was based on the findings of Trivedi's (2002 pp. 15) study on "Patterns of Health Care Utilization in Vietnam" that insurance decision is insensitive to income for households in the lowest income quartile and greater sensitivity for those in the middle quartiles. As income is usually being regarded as a significant factor in voluntary enrollment, this study has been expected to either affirm or deny the abovementioned findings. In case of affirmation of Trivedi's findings, then the greater need to conduct this study to determine the factors affecting enrollment given that the effect of income has of lesser significance.

The time scope of this study which is from 1998 to 2003 is because of the time scope also of the data used. A secondary data, the 2003 National Demographic and Health Survey (2003 NDHS), was used. The 2003 NDHS was made possible by the collaborative effort of the National Statistics Office (NSO), the United States Agency for International Development (USAID) and ORC Macro. It is the eight in a series of demographic surveys in the Philippines since 1968 and the third survey conducted under the auspices of the Demographic and Health Surveys. The 2003 NDHS is conducted with five (5) years interval. Thus,

the 2003 NDHS was the most recent in a series of demographic and health surveys conducted by NSO when the study was proposed. It is worth mentioning that the survey tool has the most comprehensive tool with regard to PhilHealth-related variables.

The explanatory variable in this study is the enrollment to PhilHealth-IPP of eligible members in a household that belong to the three (3) lowest WIQ in Region XII.

Definition of Terms

1. PhilHealth enrollment refers to the households' membership in PhilHealth's Individually-Paying Program
2. Socio-demographic profile refers to male headship, share of household members base on age bracket category, age of the head of the household base on age bracket category, household size, head of the household's educational attainment base on levels of education, households reside either

in urban or rural area, households' province of residence in Region XII, and class of province of households residence;

3. Economic status refers to the households' category of wealth index quintile income bracket, access to electricity, and tenure status of house and lot;
4. Health and health-related variables refer to the number of facility (ies) visited by any member of the household in the last 6 months, number of household member(s) who visited each of the given facility(ies) in the last 6 months, household members' knowledge about non-communicable and infectious diseases, and household members' knowledge and utilization of traditional healing practice and alternative health care modalities.
5. PhilHealth-related variables refer to household members' who use PhilHealth benefits, household members who availed inpatient or outpatient services from a PhilHealth-accredited facilities, household members who availed the service(s) of a PhilHealth-accredited facility(ies) as a member or as a dependent, household members' satisfaction with the availed services, reasons for dissatisfaction by household members who availed the services of a PhilHealth-accredited facility (ies).