The Impact of PhilHealth Indigent Insurance on Utilization, Cost, and Finances in Health Facilities in the Philippines

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Prepared by:

Pia Schneider, PhD
Abt Associates Inc.

Rachel Racelis, PhD
Consultant
Abt Associates Inc.

PHRplus

Partners for Health Reformplus

Abt Associates Inc. ■ 4800 Montgomery Lane, Suite 600
Bethesda, Maryland 20814 ■ Tel: 301/913-0500 ■ Fax: 301/652-3916

In collaboration with:
Development Associates, Inc. ■ Emory University Rollins School of Public Health ■ Philoxenia International Travel, Inc. ■ Program for Appropriate Technology in Health ■ Social Sectors Development Strategies, Inc. ■ Training Resource Group ■ Tulane University School of Public Health and Tropical Medicine ■ University Research Co., LLC.

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- *Design and implementation of health information systems for disease surveillance.*
- *Delivery of quality services by health workers.*
- *Availability and appropriate use of health commodities.*

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Abstract

In the Philippines, the PhilHealth's Indigent Program (IP) is an insurance plan for the poor. The premium is subsidized by the local government budget, administered by mayors. The IP covers care in public rural health units (RHUs) and in hospitals. At present IP enrollment rates vary widely across the country. Because PhilHealth reimburses RHUs a capitation amount per IP enrolled household, revenue in RHUs increases with more IP members. PhilHealth reimburses hospitals on a fee-for-service basis. This study examines the effect of the PhilHealth IP on the delivery and financing of health care in RHUs, and eventual spillover effects in government hospitals in areas of high and low IP enrollment. The analysis uses monthly data collected in RHUs and hospitals to evaluate the financial situation in facilities; the availability of drugs and other medical supplies; utilization of medical and family planning serves; and recurrent costs of providing care in RHUs. Findings suggest that higher IP enrollment rates lead to a higher proportion of total provider revenue paid by PhilHealth, improved management of drugs and family planning, and higher utilization rates for IP insured. However, overall utilization rates in RHUs have remained on a very low level. Also, results from the econometric cost analysis suggest no association between total recurrent costs and IP visits in RHUs; rather, RHUs are operating under capacity, signifying wasted resources. The mayors of local governments, which own RHUs and are responsible for their financial management, could improve the financial situation in RHUs by decreasing average cost levels, by increasing the number of poor households in the IP and by informing IP members, and the uninsured about their right to use services.

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Acronyms

APIS	Annual Poverty Indicator Survey
BHS	Barangay Health Stations
CBHO	Community-based Health Organization
DHS	Demographic and Health Survey
DOH	Department of Health
FFS	Fee-for-service
FP	Family Planning
GDP	Gross Domestic Product
IP	Indigent Program of PhilHealth
IRA	Internal Revenue Allottment
IUD	Intrauterine Device
LGU	Local Government Unit
NGO	Nongovernmental Organization
NHIP	National Health Insurance Program (PhilHealth)
NSCB	National Statistical Coordination Board
NSO	National Statistics Office
OLS	Ordinary Least Square
OPB	Outpatient Benefits
PHIC	Philippine Health Insurance Corporation
PHR*plus*	Partner for Health Reform*plus* Project
RA	Republic Act
RHU	Rural Health Unit
USAID	United States Agency for International Development

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Executive Summary

Introduction

This study evaluates the impact of the Philippine National Health Insurance Program's (NHIP's), Indigent Program (IP) on the delivery and financing of health care in rural health facilities (RHUs) and eventual spillover effects in government hospitals. The IP policy of the NHIP, more commonly called "PhilHealth," was designed specifically to provide health insurance coverage to the poor by subsidizing IP premiums through the local and national government budget, a process that is administered by local government units. In 2003, IP enrollment rates varied considerably throughout the country.

The government is the main financing source for the provision of care in public health facilities. RHUs are officially free of charge; however, staff may ask patients to pay donations to help fund the facility. Despite care being officially free, utilization levels in RHUs are very low. Increasing the number of IP insured could leave utilization levels unchanged or could increase utilization. The effect on ultilization will depend on issues such as the requested donation and on how insurance affects other factors that limit utilization, such as quality of care. For example, insurance coverage provides no new financial incentive to use care if the insured did not previously pay a donation, or if the RHU continues to charge a donation to insured patients. Utilization might increase under certain scenarios. For example, if government funding previously was inadequate to ensure availability of drugs in RHUs, then it could be hypothesized that higher IP enrollment rates – and the payments to RHUs that are associated with enrollment – will provide RHUs with revenue they could use to purchase drugs. This regular availability of drugs will in turn attract more patients. In hospitals, uninsured hospital patients pay user fees; hence, increasing the number of IP insured is expected to lead to higher utilization as insurance coverage lowers the out-of-pocket amount paid by hospital patients.

Health insurance changes the way providers are paid. This change creates new financial incentives to providers. PhilHealth reimburses RHUs a capitation amount per IP-enrolled family while hospitals are paid by fee-for-service (FFS) for care provided to IP-insured patients. Under both payment systems (and assuming a reimbursement level that providers find reasonable), hospitals and RHUs both have an interest in PhilHealth increasing the number of insured. FFS gives hospitals a financial incentive to admit more insured patients and to increase the number of services provided to insured patients. Capitation payment per IP-insured family gives local governments, which own RHUs, the financial incentive to increase IP membership, since RHUs benefit financially with each family enrolled. Capitation also offers the incentive for the RHU to provide care more efficiently; because the payment mechanism shifts the financial risk of insurance from PhilHealth to RHUs, providers have an interest in controlling costs. They can do this in part by providing preventive care to keep members healthy. However, capitation may also encourage RHUs to undersupply care to IP patients, and too readily refer them to hospitals.

These anticipated insurance and provider payment effects suggest that the extent to which the IP influences health facility utilization and financial resources will depend on the level of IP enrollment in the facilities' catchment areas. Therefore, this study has four objectives:

- To examine and compare the impact of the PhilHealth IP on revenues, resource management, utilization of care including family planning (FP) services, and cost in RHUs by areas of low and high IP enrollment
- To identify in a hospital case study eventual spillover effects of the IP from RHUs on service use and financing in hospitals
- To identify institutional and behavioral factors which explain differences in health facility performance in low and high IP enrollment areas
- Based on findings, to derive policy conclusions and recommendations for decision makers in PhilHealth, local governments, and at the Department of Health, with a special focus on IP enrollment and access to drugs and services in RHUs

The rationale underlying this analysis is that if local government units expect the quality of care their RHUs to improve with higher IP enrollment in PhilHealth, then they will be more likely to use the local government budget to subsidize IP premiums. It is expected that with higher insurance enrollment levels, RHU financing from insurance will increase. As a result, providers might use this additional revenue to purchase and ensure the availability of drugs and services, including FP supplies in public health facilities, thus encouraging greater utilization.

The implementation of the IP, particularly outpatient benefits in RHUs, is very recent, and there is still much to be learned about how to make the program an effective means for improving access and utilization of quality health care by the poor. Thus, the information gained through this study may serve the Philippine government to improve the implementation of IP to ensure access to medical care for the poor, thus contributing to reaching the goal of universal health insurance coverage in the Philippines.

Methodology

PHR*plus* conducted this study in collaboration with a Philippine study team. Data collection took place from August to October 2003. A total of 46 RHUs were surveyed in the provinces of Capiz, Misamis Occidental, and Pangasinan. The selection criteria for RHUs were as follows: (i) at least six months of accreditation by PhilHealth; (ii) geographical location in one of the health sector reform areas; (iii) willingness to participate in study; (iv) availability of data; and (v) geographic accessibility for data collectors. Seven PhilHealth-accredited hospitals, identified as referral hospitals to the 46 RHUs, were included as case studies for the analysis of spillover effects.

Questionnaires were developed to collect monthly routine data from RHUs for a six-month period and hospitals for a one-year period on the activities provided in those facilities, the resources available (infrastructure, equipment, staff, medicine, and supplies), utilization levels, revenues from different payers, and recurrent expenditures. The data collectors interviewed facility managers, provincial and municipal government officials, and the Philippine Health Insurance Corporation.

The catchment city or municipality of each sample RHU was assigned as either high or low IP enrollment area, with a cut-off rate of 35 percent of indigent population enrolled in the IP. The analysis compares the performance of RHUs and hospitals in areas of high and low IP enrollment.

Results

Facility Revenues

The main financing source for RHUs and hospitals remains the local governments. As expected, RHUs with higher IP enrollment receive a considerably higher proportion of their total revenue from PhilHealth. Similarly, having more insured patients in hospitals in high enrollment areas has led to higher growth rates in PhilHealth revenues (166 percent versus 39 percent in low enrollment areas for a six-month period) and higher revenue shares from PhilHealth (55 percent) than in low enrollment areas (32 percent).

Resource Management

The capitation fund in RHUs has mainly been used to purchase medicine (62 percent) and equipment/supplies (on average abut 20 percent) in both high and low enrollment areas. In high enrollment areas, this has resulted in better stocks of drugs and other supplies in RHUs. RHUs in low enrollment areas report considerably more days of drug stockouts. So far, the stocks of FP products in RHUs has not been a problem in either type of area. Only a few RHUs experienced stockouts of FP products and for only a few days (highest is 12 days for injectables) in a six-month period. So far, capitation funds have not been used to purchase FP supplies and fund managers seem uninformed about the possibility of using capitation funds to ensure FP supplies.

In the case of hospitals, all reported being out of stock for three to four types of drugs at some point during the one-year period. However, the average number of days of stockouts for all drugs queried was 35 days in high enrollment areas and 180 days in low enrollment areas.

Utilization of Facility Services

In high IP enrollment areas, IP members reported significantly higher per capita visit rates in RHUs than members in low enrollment areas (4.9 versus 2.5 per 100 IP members). Utilization of various types of services is slightly, but not significantly higher in high enrollment areas. Overall, utilization rates are generally on a extremely low level, suggesting idle capacity in RHUs and that RHUs have almost no impact on anybody's health.

Hospitals in both types of area report similar number of discharges (about 10 discharges per 100 inhabitants for a one-year period) and referrals (about 80 per hospital per year). However, the proportion of IP insured among hospital discharges in high enrollment areas has increased from 15 percent in 2002 to 25 percent in 2003. This proportion is considerably higher than in hospitals in low enrollment areas where the increase was from 13 percent in 2002 to 16 percent in 2003.

Health Facility Cost

Findings from the cost analysis suggest that there is tremendous idle capacity in RHUs in both types of area, and no association between total recurrent costs and the number of IP visits in RHUs in high and low enrollment areas. Also, the study found no significant difference in cost per service and productivity indicators in RHUs in the two types of area.

Spillover Effects on Hospitals

Results on the performance differences in hospitals in high and low enrollment areas combined with similar referral rates from RHUs to hospitals do not indicate any negative spillover effects in the

form of adverse reactions to the provider payment. Rather, the above results (e.g., increased revenue shares from PhilHealth, better drug management, and higher shares of IP discharges in term of total discharges in hospitals in high IP enrollment areas) are more likely related to improved access to hospital care for the poor and the provider payment effect caused by FFS reimbursement of hospitals.

Institutional and Behavioral Factors

Other factors that may have contributed to the above differences include better staff quality and management capacities leading to higher use rates and better resource management in high enrollment areas. However, better quality and management in high enrollment areas would lead all service use to be higher and not just the visit rate of IP-insured members. It could also be that IP insured in high enrollment areas were simply sicker during the interview period or generally better informed, which might have contributed to higher use rates. In hospitals, the increasing trend of discharges for IP insured correlates with increasing IP enrollment rates, suggesting that there is a positive relation between insurance enrollment and service use over time.

Recommendations

Following the USAID decision to phase out delivery and financing of FP products in the Philippines, this study examined whether PhilHealth's insurance program for indigent groups is a means to improve access to care and contribute to the availability and use of FP products and services in RHUs and selected hospitals. Findings suggest that the PhilHealth IP only contributes to the supply, financing, and increased use of health care and FP products if (i) mayors use their budget allottment to insure the uninsured in PhilHealth's IP; (ii) providers use PhilHealth disbursements to purchase and provide FP products and services; and (iii) if providers and PhilHealth inform IP members about their rights to use the entire PhilHealth benefit package, including FP products and services.

This leads to six recommendations:

- Increase the IP enrollment in low coverage areas.
- Make PhilHealth policy guidelines on the use of the IP capitation fund more "provider friendly" and transparent to ensure that capitation funds are used to purchase drugs and FP products in RHUs.
- Promote the use of preventive and curative care services in RHUs to increase the very low utilization rates in RHUs.
- Implement a performance-based capitation component for RHU staff to set incentives for and reward increased service use, better quality of care, and timely reporting of routine data.
- Implement a national health information system in the health sector to monitor and evaluate service and drug use and financing for insured and uninsured patients in RHUs and hospitals.
- The Department of Health and PhilHealth should examine the reasons for very low use rates in newly accredited and well-equipped and staffed RHUs.

1. Introduction

This study evaluates the impact of National Health Insurance Program (NHIP or PhilHealth) Indigent Program (IP) on the delivery and financing of health care in rural health facilities (RHUs) of the Philippines, and eventual spillover effects in government hospitals. The PhilHealth IP policy was specifically designed to provide health insurance coverage to the poor by subsidizing IP premiums through local and national government budgets; the process that is administered by local government unit (LGUs). In 2003, IP enrollment rates varied considerably throughout the country.

The government is the main financing source for the provision of care in public health facilities. RHUs are officially free of charge; however, staff may ask patients to pay donations to help fund the facility. Despite care being officially free, utilization levels in RHUs are very low. Increasing the number of IP insured could leave utilization levels unchanged or could increase utilization. The effect on ultilization will depend on issues such as the requested donation and on how insurance affects other factors that limit utilization, such as quality of care. For example, insurance coverage provides no new financial incentive to use care if the insured did not previously pay a donation, or if the RHU continues to charge a donation to insured patients. Utilization might increase under certain scenarios. For example, if government funding previously was inadequate to ensure availability of drugs in RHUs, then it could be hypothesized that higher IP enrollment rates – and the payments to RHUs that are associated with enrollment – will provide RHUs with revenue they could use to purchase drugs. This regular availability of drugs will in turn attract more patients. In hospitals, uninsured hospital patients pay user fees; hence, increasing the number of IP insured is expected to lead to higher utilization as insurance coverage lowers the out-of-pocket amount paid by hospital patients.

Health insurance changes the way providers are paid. This change creates new financial incentives to providers. PhilHealth reimburses RHUs a capitation amount per IP-enrolled family while hospitals are paid by fee-for-service (FFS) for care provided to IP-insured patients. Under both payment systems (and assuming a reimbursement level that providers find reasonable), hospitals and RHUs both have an interest in PhilHealth increasing the number of insured. FFS gives hospitals a financial incentive to admit more insured patients and to increase the number of services provided to insured patients. Capitation payment per IP-insured family gives local governments, which own RHUs, the financial incentive to increase IP membership, since RHUs benefit financially with each family enrolled. Capitation also offers the incentive for the RHU to provide care more efficiently; because the payment mechanism shifts the financial risk of insurance from PhilHealth to RHUs, providers have an interest in controlling costs. They can do this in part by providing preventive care to keep members healthy. However, capitation may also encourage RHUs to undersupply care to IP patients, and too readily refer them to hospitals.

The purpose of this analysis is to examine differences in financial, resource, and service performance in RHUs in areas of high and low IP enrollment. The argument is that if LGUs expect their RHU performance to be better with higher IP enrollment in PhilHealth, then they might more likely subsidize IP premium for indigent households. With higher insurance enrollment levels, the total amount of finances received from insurance is expected to increase. As a result, in a resource-poor setting, providers might use additional financial sources to purchase and ensure the availability

of drugs and services, including FP supplies in public health facilities, which may have a positive effect on utilization in hospitals and eventually in RHUs.

This analysis takes place in the broader context of the United States Agency for International Development (USAID) phasing out of the supply of family planning (FP) commodities in the Philippines, leaving the supply responsibility with the government. Therefore, the analysis focuses on the extent to which health facilities use insurance revenues to purchase FP supplies and whether the availability of FP supplies is related to the PhilHealth IP enrollment rate.

The implementation of the IP, particularly RHU outpatient benefits in RHUs, is very recent, and there is still much to be learned about how to make the program an effective means for improving access and utilization of quality health care by the poor. Thus, the information gained through this study may serve the Philippine government to improve the implementation of IP to ensure access to medical care for the poor, which will contribute to reaching the universal health insurance coverage goal in the Philippines.

1.1 Family Planning in the Philippines

The Philippines is a Pacific Island group in Southeast Asia. The country has a highly unequal income distribution and reports the highest Gini among the countries of ASEAN (Association of Southeast Asian Nations). In 1997, the Gini index was 0.49 in the Philippines, while it ranged from 0.30 to 0.39 for Lao PDR, Viet Nam, Cambodia and Indonesia. The Gini coefficient in the Philippines had remained largely unchanged in the preceding 40 years (Racelis and Cabegin, 2001.)

In 2000, total population was 75.6 million with an average household size of about five. Since 1980, annual population growth has remained at around 2.35 percent, much higher than population growth in Southeast Asia as a whole (1.5 percent). Similarly, the Philippine crude birth rate of 27 per 1000 in 2001 is one of the highest, next only to Cambodia and Lao PDR. The Philippine population is still predominantly young, with age groups 14 years old or younger constituting 40 percent of the population (Gwatkin et al., 2000a).

According to Demographic and Health Survey (DHS) data (Gwatkin et al., 2000a), population growth is highest among the poor, which seems to be linked to low income groups' limited use of modern contraceptives and resulting high fertility rates. Table 1 shows two FP indicators for the Philippines and Bangladesh, a country with similar population issues (Gwatkin et al., 2000b). Results suggest that the poorest Philippine women are three times more likely to give birth than their richest compatriots. The use of modern contraception is generally low across socio-economic quintiles, but lowest among the poorest women. Philippine women in the poorest socio-economic quintile reported almost twice as many deliveries as Bangladeshi women in the same quintile. In addition, these women are only half as likely to use modern contraception as Bangladeshi. Clearly, in the Philippines, fertility rates and contraceptive service use strongly depends on women's socio-economic background, which is not necessarily the case in Bangladesh. This finding raises concerns about equity in utilization and financing of FP services and products in the Philippines.

Table 1: Familiy Planning in Philippines and Bangladesh, by Socio-ecomomic Quintile

Family Planning Indicators	Poorest Quintile	Second Quintile	Middle Quintile	Third Quintile	Richest Quintile	Population Average
Total Fertility Rate (Number of births per woman age 15-49)						
Philippines (1998)	6.5	4.7	3.6	2.9	2.1	3.7
Bangladesh (1996/7)	3.8	3.8	3.5	3.1	2.2	3.3
Use of Modern Contraception (% of currently married women using a modern method)						
Philippines (1998)	19.6	26.1	32.7	32.7	29.2	28.0
Bangladesh (1996/7)	38.8	40.8	43.7	38.8	48.5	42.1

Sources: DHS data reported in Gwatkin, et al. 2000a and 2000b.
Note: year in bracket is DHS reporting year.

The low use rate of modern contraceptives among the poor in the Philippines has been attributed to reasons that include advocacy for natural methods by political and religious leaders; providers not informing patients about the availability of FP services; limited reimbursement of FP procedures by health insurance; insurance members not knowing what is covered in the insurance benefit package; and geographic and financial barriers restricting access to health care among the uninsured, who constitute about 50 percent of the population. These limiting factors, combined with a growing number of poor families, raise concerns about whether the Philippines can reduce its fertility rate, which is among the national objectives for health (1999-2004).

On the supply side, procurement of FP commodities and drugs has so far been fully donor funded, with USAID ensuring about 90 percent of supplies to public facilities and selected clinics. However, USAID has announced its plans to completely phase out the supply of FP commodities in 2004, leaving the responsibility with the Philippine government. During this transition phase, USAID aims to ascertain that policies and financing mechanisms are established that ensure the supply of contraceptives (USAID Intermediate Result 4.1); and that policies are in place to mobilize financing and resources for key services (Intermediate Result 4.3), including contraceptives.

Reaching this objective may be challenged by a number of factors: (i) the limited availability of financial resources in the public health sector to purchase FP supplies; (ii) operational barriers that limit the effectiveness of logistics and management systems in the health sector; (iii) organizational and financial changes in the public health sector; and (iv) the exclusion of FP commodities from insurance coverage. Section 1.2 discusses the first three points in greater detail; the latter issue is presented in an overview on PhilHealth (Section 1.3).

1.2 Financing Care in the Philippine Health Sector

In 2001, total national health expenditure was 3.5 percent of gross domestic product (GDP) (National Statistical Coordination Board [NSCB], 2003a). Two major health policy developments in the preceding decade had had major implications on the availability of and access to publicly provided care by the poor, and may also have affected the availability of FP services and products. The decentralization of the public health care delivery system took place as a result of the passage of Republic Act (RA) 7169, The Local Government Code of 1991; and the expansion of the coverage of the country's national health insurance program was mandated by RA 7875, or the National Health Insurance Act of 1995. (The latter is described in Section 1.3.)

The shift of health care financing from an out-of-pocket user fee system to national health insurance with an ultimate goal of universal health insurance coverage by 2010, as mandated by law under the National Health Insurance Program (NHIP), is one of the reform activities included in the Health Sector Reform Agenda (HSRA) 1999-2004 of the Department of Health (DOH).

Starting in 1992, the implementation of the Local Government Code involved the transfer of the financial management and operations of rural health units, barangay health stations (BHSs) and several government hospitals from the DOH to local government units. The transfer of health and several other functions was accompanied by a national government block grant to LGUs, the Internal Revenue Allotment (IRA). However, the IRA was allocated independent of need and capacity to raise local revenues and no portion of the IRA was earmarked for health service provision. Lacking commitment and with a limited budget to draw from, many LGUs underfund health care; this threatens the supply of drugs, services, and FP products in RHUs and BHSs and leads to under provision of care and informal fees charged by providers (Mason, Racelis, and Russo, 2002).

RHUs do not officially charge fees for medical consultation services, and for drugs and FP contraceptives (if these are available). However, patients pay fees to RHUs for laboratory services and they must buy prescription drugs from private pharmacies if the drugs are not available at their RHU; many RHUs also ask for a donation in return for care. With continuing drug shortages in RHUs and the phasing out of free contraceptives from international donors, RHUs are expected to implement fees for drugs and contraceptive supplies.

In addition to government funding and revenue from user fees, hospitals receive support from charities to provide care for the poor; however, access to this care is limited by an insufficient number of charity beds. Also, charity does not pay for drugs and other supplies that patients often must obtain from outside pharmacies.

To pay for care, poor households borrow money from family, friends, pawnshops and informal moneylenders; sell assets; or they request assistance from the local government Social Welfare Office or the mayor's office (Herrin and Racelis; 1994).

1.3 PhilHealth

National Health Account (NHA) data from 2001 reveal that 54 percent of total health expenditures is financed by private sources, which includes three different health insurance mechanisms: (1) PhilHealth, the social health insurance, covers services in the public and private health sector; (2) private health insurance for the wealthier who prefer care in the private sector; and (3) a small number of community-based health financing organizations (CBHOs) that cover a limited benefit package on a local level for a relatively small population group (NSCB, 2003a).

Medicare was the national health insurance program prior to the National Health Insurance Act of 1995 and limited to formal private and government sector workers and their dependents. Enrollment was compulsory, and the employees and their employers shared the cost of the premium. Benefits mainly hospital inpatient care.

PhilHealth, the new national health insurance program, is managed by the Philippine Health Insurance Corporation (PHIC). PhilHealth has expanded coverage beyond formal sector employed to include: (i) retirees and pensioners, (ii) self-employed individually paying individuals, and (iii) the poor, under the IP. The range of benefits has also been expanded to include selected outpatient health services. Retirees and pensioners who enroll in PhilHealth while they are formal sector employees

and pay premiums for at least 10 years continue to be covered at zero premium cost after retirement. Membership for the self-employed in PhilHealth's Individually Paying Program is voluntary, and the premium is paid in full by the individual. All PhilHealth members enjoy the same package of benefits except for a special outpatient benefit (OPB) package for IP members provided in accredited RHUs.

The IP program and its impact on public health facilities is the focus of this report. By mid-2002, PhilHealth had about 39.7 million beneficiaries enrolled, including about 6 million individually paying individuals. About 50 percent of the population was uninsured, among them mainly low income and indigent groups. As of August 2003, 1.5 million indigent families (about 7 million individuals) were enrolled in the IP, corresponding to about 30 percent of the 4.3 million poor households in the Philippines (www.philhealth.gov.ph).

The law and its implementing guidelines specify: (i) who pays what shares of IP premium; (ii) the benefits; and (iii) provider payment mechanisms.

(i) Section 12 of RA 7875 states that households enrolled in the IP are exempted from paying premiums for PhilHealth benefits, and Sections 25 and 29 further specify that contributions of P1,200 per annum be covered by LGU subsidies (a maximum of 50 percent of the IP premium) while the balance is paid by the national government. The LGU share varies depending on municipalities' socio-economic classification. Poorer cities and municipalities (4th to 6th class) have to pay only 10 percent of the total premium of the poor enrolled in IP during the first year of enrollment (this gradually increases to a maximum of 50 percent by the sixth year). Again, the national government pays the balance, 90 percent in the first year, gradually declining to 50 percent in the sixth year. To qualify for subsidized PhilHealth, families have to be identified as poor in an individual means test survey, conducted by the LGU.

LGUs have both a financial and political interest to subsidize IP premium for the poor: LGUs gain financially when the insurance reimbursement to local health facilities exceeds the LGU share of the premium paid to PhilHealth. Politically, subsidizing PhilHealth cards for the poor is the most visible action politicians can make to connect with a large component of the Philippine voting population. Despite these advantages, LGUs are concerned about the future availability of financial resources to subsidize insurance for an increasing number of IP members. Alternative contribution-sharing mechanisms for indigents are currently being studied, including indexation of specific taxes that are levied on tobacco products, as well as financing the premium through the private sector.

(ii) Rule VII of the Implementing Guidelines lists the inpatient hospital and limited OPB package to which IP and all other PhilHealth members are entitled.[1] In addition, IP members are entitled to a special OPB package provided through accredited RHUs including: outpatient consultation with physicians, preventive services, and laboratory services.[2]

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[1] Inpatient benefits include: room and board; services of health professionals; laboratory and other diagnostic examinations; prescription drugs; and surgical and FP procedures. Regular outpatient benefits include: chemotherapy; radiography; hemodialysis; cataract extraction; and TB-DOTS.

[2] Preventive services include: visual ascetic acid screening for cervical cancer; regular blood pressure measurements; annual digital rectal examinartion; periodic clinical breast examination; and dietary counselling. (Other preventive services, including immunization and prenatal and postnatal care, continue to be paid by the government.) Diagnostic examinations include: chest x-ray; CBC; fecalysis; urinalysis; and sputum microscopy.

(iii) PhilHealth reimburses a fee-for-service payment to hospitals for inpatient and regular outpatient services provided to all insured members. PhilHealth pays to RHUs a capitation amount per IP family for the special OPB package. Capitation payment can be defined as a fixed amount of financing paid to a provider for each insured family for a particular time period. The current capitation amount paid to RHUs is P300 per year for every IP enrolled household in their catchment area. Hence, RHU revenue from PhilHealth increases as IP enrollment increases. In hospitals, revenue from PhilHealth increases with more services provided to IP-insured patients, which depends on the number of members in the IP.

These three IP features come with financial incentives for local decision makers and providers. If LGUs expect RHU performance to improve with higher IP enrollment in PhilHealth, then they are more likely to use the local government budget to subsidize IP premiums. It can be hypothesized that higher IP enrollment levels will increase the proportion of total RHU revenue from PhilHealth. It is expected that providers use additional revenues from insurance to purchase and ensure the availability of drugs and services, which may lead to higher utilization levels in health facilities.

1.4 Results from Previous Studies

A number of studies in the Philippines have examined the performance of public health facilities and health insurance. The studies of interest to this research were undertaken mostly in the early to mid-1990s as part of the effort to strengthen information and research-based decision making at the DOH, and in preparation for setting the agenda for health sector reform. More recent studies are doctoral dissertations that basically used the data generated by the DOH in the earlier studies. Some findings particularly from hospital studies are listed below (Alabastro, Solon and Alba, 1994; Zingapan, 1992; Herrin, Solon, Racelis and Taguiwalo, 1996; De la Paz-Kraft, 1997; Gertler and Solon, 1998; Alabasto-Quimbo, 2000).

Results from hospital cost function analysis indicate:

- There are no systematic differences in variable costs among hospitals of different facility levels, ownership, or provincial location.
- Regarding admissions and outpatient visits, only the latter is found to have a statistically significant although small influence on costs in government hospitals.
- Costs are driven by hospital inputs and less by the volume of services.

Results from an analysis of factors that affect hospital fees (pricing) suggest:

- Larger hospitals, measured by bed capacity, charge higher prices for inpatient care.
- Wage increases translate to fee hikes in private hospitals, but not in government hospitals.
- Benefit ceilings do not impinge on price-setting decisions of PHIC-accredited hospitals or professionals, because health care providers are allowed to bill the difference between the actual charge and pre-set ceilings.
- There is tendency to prefer use of prestige technologies with expansion in insurance coverage in health care markets where suppliers have adequate market power.

- There is limited investment in medical technology in rural areas because of lack of effective demand, since patients in rural areas are generally poorer (richer patients seek care in urban areas) and growth in third-party financing is slow.

- There is no empirical evidence that Philippine hospitals use profits from insured patients to cross-subsidize the provision of care to indigent patients in either private and public hospitals.

- An increase in the number of insured patients paves the way for larger mark-ups in private hospitals and greater subsidization in government hospitals.

Results from regression analysis of patient hospital bills imply:

- In public hospitals, insured and uninsured patients are charged similarly.

- In private hospitals, patients who are insured or who use private room accommodation are charged a 20 percent mark-up.

Results from utilization patterns analyses indicate:

- Facilities with a higher number of physicians per bed have higher occupancy rates.

- The farther a regional hospital is from locations with better government and private hospitals, the higher is the occupancy rate.

These studies focused on the impact of overall insurance in hospital. The impact of one specific insurance component, the IP, on RHU care has so far not been examined.

1.5 Objectives

The focus of this analysis is the PhilHealth Indigent Program and its impact on the delivery and financing of health care in RHUs and selected hospitals. Based on routine data collected in RHUs and hospitals, the analysis aims to identify the extent to which the IP affects service and financial performance in health facilities and the provision of contraceptive services for low income groups.

The study has four specific objectives:

- To examine and compare the impact of the PhilHealth IP on revenues, resource management, utilization of care including FP services, and cost in RHUs in areas of low and high IP enrollment

- To identify in a hospital case study eventual spillover effects of the IP from RHUs on service use and financing in hospitals

- To identify institutional and behavioral factors which explain differences in health facility performance in low and high IP enrollment areas

- Based on findings, to derive policy conclusions and recommendations for decision makers in PhilHealth, local governments, and at the Department of Health

It is important to acknowledge that factors other thans higher IP enrollment may influence the performance of RHUs and hospitals. Such institutional and behavioral factors include provider-specific characteristics like the level of quality of care, as well as external influences such as the socio-economic situation in the study area, and actions of governmental and other agencies. They will be included in the discussion of findings.

The analysis involves three steps: (i) Delivery and financing of health care including FP services is analyzed for indigent groups; and results are compared for health facilities in areas with high and low PhilHealth IP enrollment rates. (ii) Results are discussed in the context of universal coverage objectives and USAID phasing out of providing FP supplies. (iii) Based on findings, activities are proposed to increase FP utilization in the Philippines.

The study asked the following research questions:

1. What is the difference in health facility performance (e.g. service use, resource management, cost, and productivity) in areas with high and low IP enrollment?

2. Does higher IP enrollment lead to increased use of care including FP products?

3. What are the incentives and constraints facing RHUs and hospitals under a mixed provider payment system?

4. What characteristics of health facilities, the institutional environment, and production are associated with performance differences in RHUs and hospitals?

5. How can results be used as an advocacy tool to develop a strategy to increase the number of indigent members in PhilHealth and increase their use of FP services?

2. The Study Area

2.1 Socio-economic and Demographic Situation

The Philippine economy suffered two major setbacks in the last decade, experiencing negative real GDP growth in 1990-1991 and 1997-1998. The per capita GDP was $1,000 in 2002. Its annual growth rate of 1.4 percent from 1992 to 2002 was the lowest in Asia. Accordingly, the incidence of poor families increased slightly, from 28.1 in 1997 to 28.4 percent in 2000. The major types of employment are agriculture and fishing (37 percent); community and personal services including government service (22 percent); wholesale, retail, and repair trade (18 percent); and manufacturing and construction (15 percent). About half of the population resides in urban areas (World Bank, 2003).

The study area includes three of the total 78 provinces: Pangasinan in Luzon (north), Capiz in the Visayas (central), and Misamis Occidental in Mindanao (south). Table 2 presents an overview on selected socio-demographic and economic indicators for the entire country and the three provinces included in the study.

Table 2: Socio-economics in Provinces, Average Values

Indicator, Year	Philippines	Study Area		
		Capiz	Misamis Occidental	Pangasinan
Population, 2000	76.5 million	654,000	487,000	2,434,000
Number of households, 2000	15.3 million	128,000	100,000	478,000
Annual population growth	2.35%	1.00%	1.27%	2.40%
Per capita poverty threshold, 2000 (in pesos)	11,605	12,220	9,655	12,427
Median household income, 2002 (in pesos)	43,280	32,257	27,520	38,150
Poverty incidence, 2000	28.4%	51.0%	43.4%	30.9%
% of indigent households enrolled in PhilHealth IP	35%	24%	80%	35%

Sources: Population and poverty data are from NSCB, 2003b. Median household income data were tabulated from the 2002 Annual Poverty Indicator Survey. IP enrollment data as of August 2003 are from PHIC.
Note: PhilHealth denotes the country by regions. Capiz is Region 6; Misamis Occidental is Region 10; and Pangasinan is Region 1.

Pangasinan has the largest provincial population in the country and reports a growth rate that is slightly above the country average. Growth is much lower in Capiz and Misamis. Households are classified by their local government unit (LGU) as indigent if their annual income is below the poverty threshold income. The per capita poverty threshold is comparable across provinces and the national average. A median household income in the three study provinces that is below the national

median causes the poverty incidence in the three provinces to be above the national rate. The three provinces are located in PhilHealth membership regions where IP enrollment rates among indigent households vary widely.

Based on the 2000 Family Income and Expenditure survey, the incidence of poor families was 28.4 percent or about 4.3 million families, corresponding to 26.5 million persons at an average family size of about six individuals. Compared to health sector resources where the poor seek care, on a national level there are about 660 indigent persons per government hospital bed and 14,000 indigent persons per RHU.

2.2 Health Sector: Organization, Delivery, and Financing

A range of private and government facilities provide health care services in the Philippines.

The private sector includes secondary and tertiary hospitals, small hospitals and maternity centers, employer-based outpatient facilities, health management organizations, diagnostic laboratories, physicians/dentists in solo or group practice, pharmacists, chiropractors, traditional birth attendants, and other indigenous healers. The modern private sector concentrates on curative and rehabilitative care. There were 1,068 private hospitals with 39,000 bed capacity and about 19,000 drug distributors and outlets in 2001 (NSCB, 2003b.) Other private providers registered in 2000 included 92,000 physicians, 39,000 dentists, and 44,000 pharmacists.

Government health care facilities are operated based on a referral system. Primary health care facilities operated by the LGUs consist of barangay health stations, staffed by a midwife, and rural health units, usually staffed by a doctor, nurse, and midwives. On the next level are district or provincial hospitals and DOH-retained hospitals to which complicated cases identified in RHUs and BHSs are referred.

Table 3 presents the numbers of these facilities in 2001 for the Philippines and the three provinces included in the study area (NSCB, 2003a).

Table 3: Health Faclities in Provinces, Average Values

Facility/Indicator	Philippines	Study Area		
		Capiz	Misamis Occ	Pangasinan
Private hospitals (total bed capacity)	1,068 (39,242)	3 (250)	24 (573)	41 (932)
Government hospitals (bed capacity)	640 (40,202)	6 (235)	7 (275)	14 (810)
RHUs and city health centers				
- Total	1,879	17	18	68
- Included in the study sample	46	14	11	21
BHSs	15,107	161	98	414
Population-to-hospital* bed ratio	1,000	1,300	600	1,400
Population-to-RHU ratio	40,000	38,000	27,000	36,000

Sources: NSCB, 2003b; DOH, 2004 for facilities by province.
*Hospital bed ratio includes private and government hospitals.

The three provinces show a similar mix of available health care facilities as the national level, and Capiz and Pangasinan have similar population-to-health facilities ratios as the national ratios. Misamis Occidental differs from the other two provinces in two respects: it has significantly higher bed capacity of private hospitals relative to government hospitals; and much lower population-to-health facilities ratios. This may be a manifestation of or response to the generally high PhilHealth coverage in Misamis Occidental (IP alone is close to 100 percent); hence, making provision of private hospital care is feasible/profitable. Because it is not easy to expand public facilities, it is the private sector that has responded more quickly to the incentive PhilHealth presented.

The 46 RHUs included in this study constitute about half of the total number in the three provinces. They were accredited by PhilHealth before the study period (January to June 2003). The RHUs provide primary care services and, in the presence of doctors, minor outpatient surgical procedures.

BHSs provide preventive health care services; administer nutrition supplements; supply previous clients with FP commodities and other medications; provide prenatal and postnatal care; do preliminary examination of sick/injured to determine need to refer patient to the RHU or the hospital; and administer treatment to simple cases. Primary hospitals are expanded clinics with 5-10 beds. Secondary hospitals have limited surgical capability. Tertiary provincial and regional hospitals have at least four specialty services and, in some cases, teaching/training capabilities. Tertiary medical centers provide highly specialized health care and have teaching and research capabilities.

The DOH contributes substantial amounts of drugs and other medical supplies to local health facilities to support priority health programs including family planning. Except for DOH-retained hospitals, all government health facilities receive budget allocations from either the municipality/city or provincial governments. Hospitals are financed by provincial governments and derive revenues from user fees and health insurance such as PhilHealth.

Before the implementation of the PhilHealth IP, RHUs and BHSs were financed solely by municipal budgets. As of 2001, PhilHealth-accredited RHUs receive additional resources coming from the PhilHealth IP Capitation Fund, depending on the number of IP members enrolled by their LGU in a PhilHealth IP. The capitation is released on a quarterly basis, subject to prior payment of IP premiums by the LGU and submission of required reports by RHUs and the LGU. BHSs continue to be financed solely by municipal budgets.

For the implementation of the IP in a city or municipality, the Philippine Health Insurance Corporation (PHIC) enters into a Memorandum of Agreement with the LGU, in which the role of each party is specified. The PHIC's role basically constitutes releasing the capitation to the RHU through the LGU, monitoring the implementation of the package and providing technical support for the implementation of the program. The LGU's responsibilities are to upgrade the local health facility to conform to accreditation standards, pass an ordinance to legally set up a PhilHealth Capitation Fund into which the capitation amount is released, ensure delivery of services to IP members, and submit reports as required by the PHIC.

The Philhealth Capitation Fund is managed by the LGU through the muncipality or city health office and its disposition is governed by rules set by the PHIC. Two sets of rules are articulated in the PHIC implementing guidelines for the IP special outpatient benefits package, regarding the use of funds and disbursement process. On use, only drugs that are listed in the Primary Medical Care Drugs of the Philippines National Drug Formulary, medical supplies and equipment, referral fees, and IP administration cost (not exceeding 20 percent of the fund) may be charged to the fund. A separate

book of accounts is maintained for the fund. Disbursement of the fund is in accordance with government accounting and auditing regulations.

Operationally, the medical officer at the municipal or city health office decides which items to purchase with the capitation payment. The request is submitted to the local treasurer's office; it goes through proper channels (mayor's office and, in some cases, the *Sangguniang Bayan*, or local council for approval; and, upon approval, the local government procurement office proceeds with the purchase. In cases when the IP-OPB implementing guideline is not sufficiently explicit about whether the requested items can be charged to the Philhealth Capitation Fund, queries are sent and answers sought directly from the nearest PHIC office. The general rule followed by PHIC on the matter is to allow the purchase of commodities for as long as these are needed in health service provision or in the implementation of priority health programs in RHUs.

2.3 Utilization of Health Care by the Poor in the Philippines

The government directly provides hospital and primary health care to ensure access for the poor. Health care services (except for laboratory services) in RHUs are provided for free regardless of the income status of the patient. Some RHUs accept donations. Government hospital inpatient services are free to charity patients (determined by a means test), but others have to pay the prescribed user fees. Medical consultation in the outpatient departments of government hospitals is also provided for free to all patients.

Despite care free of charge in government facilities, there are differences in utilization of care for poor and higher-income groups. This is shown in Table 4, first for government and then for private facilities. Indicators are computed from the 1999 Annual Poverty Indicator Survey (APIS) of the National Statistics Office (NSO).

Table 4: Use of Care by Poorest and Richest Income Groups, 1999

Health Facility Type/Indicator	Bottom 3 Income Deciles	Top 7 Income Deciles
Government		
Percent used RHU in past month	6.4	4.0
Percent used government hospital in past month	2.5	2.5
FP users who obtained services from public health facilities	88	70
Pregnant women who sought prenatal care from public health facilities	91	75
Private		
Percent used private clinic in past month	1.8	3.7
Percent used private hospital in past month	0.9	2.1
FP users who obtained services from private health facilities	12	30
Pregnant women who sought prenatal care from private health facilities	9	25

Source: Tabulations from the 1999 APIS

In 1999, low income groups used government health facilities more often than private facilities. They also tended to seek health care from public facilities at a higher rates than did high income groups. While consultation services in RHUs and the outpatient departments of government hospitals, and charity ward confinements are ostensibly free, the utilization of these services by the poor remains limited. The 1999 APIS showed that among individuals belonging to the three poorest income deciles and who reported illness in the past month, about 21 percent did not seek care. This proportion was slightly lower (15 percent) among the higher seven deciles.

3. Methods and Data

Two approaches were adopted to investigate issues of health facility performance and how they relate to different IP enrollment rates: first, a quantitative analysis of RHU performance; and second, a case study of selected hospitals which would provide information on eventual spillover effects of increased IP enrollment on hospital revenue, utilization, and cost.

3.1 Provinces, Health Facilities, and Hospitals Included

Following a quasi-experimental design, a comparable number of RHUs were selected from areas with high and low enrollment rates in the PhilHealth IP. The resulting cutoff for the two areas was 35 percent of the indigent population enrolled in the IP. Table 5 shows the main difference between high and low IP enrollment areas. The latter reports a larger population per RHU catchment area and a larger proportion of indigent households despite a considerably lower poverty threshold income. This suggests that low IP enrollment areas could have overall more poor and also poorer households than areas with high IP enrollment.

Table 5: Average Values per RHU in High and Low IP Enrollment Areas

Socio-economics on RHU level	High IP Enrollment	Low IP Enrollment
Number of RHUs included in each enrollment area	24	22
Total population per RHU (estimated NSO data)	34,048	53,014
Estimated average household size	4.77	4.81
Number of households (estimated NSO data)	7,115	11,040
Number of indigent households (estimated NSO data)	2,561	4,588
% of total households who are classified as indigents	37.3%	42.5%
Poverty threshold income used to define indigent in municipality	15,114 pesos	8,738 pesos
Total uninsured indigent households	530	3,877
Total IP-insured indigent households	2,031	711
Total number indigent households (estimated NSO data)	2,561	4,588
% of indigent enrolled in IP	87.8%	16.6%

Table 6 lists the number of RHUs in each province, stratified by enrollment.

Table 6: RHUs in Study, by Province and IP Enrollment Area

Province	High IP Enrollment Area	Low IP Enrollment Area	Total
Capiz	2	12	14
Misamis Occ.	8	3	11
Pangasinan	12	9	21
Total RHUs	22	24	46

The RHUs surveyed were limited to those that have been accredited by PhilHealth to provide a special OPB package of services to IP patients and that receive capitation funds. The selection criteria for RHUs to be included in the survey were: (i) at least six months accreditation by PhilHealth; (ii) geographical location in one of the health sector reform areas; (iii) willingness to participate in study; (iv) availability of data; and (v) geographic accessibility for data collectors. All RHUs in the three provinces that fulfilled these criteria (46) were included in the analysis.

For the hospital case study, eight hospitals were identified as referral hospitals for the 46 RHUs. One hospital had to be excluded, as it was not accredited in 2002. National hospitals were excluded from the survey as they are financed by national sources and not by LGUs. Table 7 shows the number of hospitals included in the case study.

Table 7: Hospitals in Case Study, by Level of Specialization and IP Enrollment Area

Level of Specialization	High IP Enrollment Area	Low IP Enrollment Area	Total
Primary/secondary	3	2	5
Tertiary	-	2	2
Total hospitals	3	4	7

The same information was collected in hospitals as in RHUs. The survey collected data over a one-year time period (2002) with an additional six-months of data for selected variables.

Table 8 describes the catchment areas of the hospitals included in high and low IP enrollment areas. The four hospitals in low IP enrollment areas serve larger catchment areas and have a larger number of PHIC accredited beds.

Table 8: Hospitals in the Study

Item Description	High IP Enrollment Areas	Low IP Enrollment Areas
Range of IP enrollment rates in cities or municipalities where hospitals are located	50-100%	6-25%
Average number of households enrolled in IP in city or municipality	2,000	1,100
Number of hospitals included	3	4
Hospital type	primary/secondary district or municipal hospitals	secondary/tertiary provincial hospitals
Average PHIC accredited beds*	17	60
Average population of city or municipality where facility is located	22,000	97,000

* Hospitals define the number of PHIC accredited beds based on the category of hospital (i.e., primary, secondary, tertiary) and number of medical staff. Number of PHIC accredited beds may be less than but cannot exceed DOH-licensed authorized number of beds.

3.2 Data Collection

To respond to the study objective and questions outlined in Section 1.5, a questionnaire was developed to collect information from RHUs and hospitals. A particular focus was on family planning services and services provided to IP-insured patients. From August to October 2003, monthly routine data were collected from existing data sources in RHUs, documenting a period of six months (January 2003–June 2003); and in hospitals of 12 months (January 2002–December 2002). Information includes utilization levels, resources available (infrastructure, equipment, staff, medicine, and supplies), revenue from different payers, and recurrent expenditures in RHUs and hospitals.

Table 9 presents the structure of the routine data collection tool in RHUs and hospitals.

Total and indigent population data were obtained from the National Statistics Office and insured indigent members data from PhilHealth. The poverty threshold income used to define indigent households in municipalities was gathered in the survey from municipality representatives.

The questionnaires were developed and implemented by staff of the Partners for Health Reform*plus* project (PHR*plus*) and local consultants. Data collectors interviewed facility managers, and representatives from municipalities and PhilHealth. Data were collected from patient logbooks and monthly summary reports completed in RHUs and hospitals. Data entry was done by PHR*plus* using MS Excel computer software. Analysis was conducted in STATA8.

Table 9: Structure of Data Collection Tool in RHUs and Hospitals

Revenue	Resource Management	Utilization	Expenditures
Revenue data from the following payer categories: National government Provincial government Municipal government Donors Nongovernmental organizations User fees and donations from patients PhilHealth insurance	Information collected on management of resources in facilities includes: Periodicity of receipt of capitation funds from PhilHealth Use of capitation fund by cost category Days out of stock during 6 months of drugs most frequently used and of FP products (condoms, Intrauterine Device [IUD], pills, injections). In Hospitals: Beds accredited by PhilHealth to treat IP-insured patients	Information on the number of services provided to patients in RHUs and hospitals was collected. Services in RHUs provided to IP insured: ▲ Curative outpatient Services in RHUs provided to all patients (independent of insurance status): ▲ Curative outpatient ▲ Laboratory ▲ Prenatal care ▲ Postnatal care ▲ Deliveries ▲ FP new acceptors and continuous users, categorized by methods. ▲ Referrals to hospitals Service in hospitals provided to all and PHIC patients: ▲ Admissions and discharges ▲ Average length of stay ▲ Referrals received	Information collected on total recurrent fixed and variable costs in RHUs include: Personnel cost: Number of staff in categories (MDs, nurses, midwives, technologists, dentists, other) Monthly salary cost including benefits Facility expenditures for purchase of drugs, equipment, and operational cost (i.e., gas, electricity, communication). Cost information was categorized by payer category (e.g., staff cost paid by national government, or drug donations valued at the current market price) Total investment cost to become PhilHealth accredited.

3.3 Data Analysis

It was anticipated that the revenue share coming from PhilHealth would increase with increasing IP enrollment rates. Hence the hypothesis was put forward that RHUs and hospitals in high enrollment areas with a higher revenue component coming from PhilHealth would have better performance results with respect to utilization, cost, and resource management than facilities in low enrollment areas. This is further described for each of the four dimensions in the following subsections. Thereafter, limitations of the analysis are presented (section 3.3.5).

Accordingly, two approaches served to analyze the performance of key variables:

- The comparison between RHUs in high/low IP enrollment areas aimed to identify performance differences in RHUs between these two areas (see Table 6). RHU performance is compared for the period January–June 2003.

- Hospital performance was compared in a case study over two time periods of six months (half-year 2002 versus January–June 2003) to identify eventual changes in utilization with changes in revenues (see Table 7 for hospitals).

Performance analysis was conducted with respect to revenue, resource management, utilization of services, and cost. This is further described in the following subsections. Then, limitations of the analysis are presented.

3.3.1 Revenue Analysis

Total revenues in RHUs and in hospitals were computed by summing up for each facility the total amounts received from PhilHealth capitation funds, donors, the national, provincial and municipal governments; and NGOs. This includes cash amounts received as well as amounts received in the form of salaries, drugs, and payments of overhead expenditures. Donations were valued at the market price. Total revenue variables were expressed over six months for RHUs and 12 months for hospitals unless otherwise indicated.

The following revenue performance indicators were computed and compared across facilities in low and high enrollment areas. Average revenues per RHU by IP enrollment areas was computed by dividing total revenues in all RHUs by the total number of RHUs included in the area. Average amounts were disaggregated by sources to compare (i) the revenues received by source on average for each of the two areas and (ii) the respective share of revenue from each source in percent of the total revenue.

It is anticipated that RHUs in areas with higher IP enrollment rates receive larger capitation amounts, which – other revenues remaining equal – translates into PhilHealth IP reflecting an increasing proportion of total revenue.

3.3.2 Resource Management

Differences in resource management were assessed in the two areas by comparing the use of capitation funds (in RHUs), as well as the number of days of stock outs for the most frequently used drugs and FP products across RHUs and hospitals. It was anticipated that RHUs in areas with higher IP enrollment rates receive larger capitation amounts, which are used to buy medicines, causing fewer days out of stock for drugs. Thus, to assess resource management, the following performance indicators were computed and compared across enrollment areas.

The capitation funds paid by PhilHealth to the LGU are administered jointly by the municipal mayor and health officer. Funds are generally used to pay for medicine, honoraria, equipment, and supplies. The total and average amounts allocated to these expenditure categories were compared across the two areas.

The number of days out of stock for the six months interviewed was compared for RHUs across the two types of areas for the most frequently used drugs: Amoxicillin, Paracetamol, Cotrimoxazole, Oresol and other drugs; as well as for FP products, including condoms, pills, Intrauterine Devices (IUDs), and injectables.

It is expected that USAID will supply FP products until 2004. Hence, it was analyzed whether LGU decision makers know that they may use the PhilHealth capitation funds to purchase FP products and whether they have started doing so.

3.3.3 Utilization of Services

Several performance indicators for service use were examined. In RHUs service use was assessed for IP-insured individuals and all patients over the six-month interview period. Due to the generally very low use rates, rates were reported by 100 individuals of the corresponding group. For example, IP visit rates were computed for each area by dividing total IP visits during six months by the total number of IP insured, multiplied by 100. Total use of other services like laboratory, hospital referrals, pre- and postnatal deliveries, and FP services were computed by dividing the total number of services by the total population of the target area times 100. Values were compared across e6rollment areas.

The use of different family planning methods was reported for new and continuing users and compared across the two areas.

Discharges from hospitals were reported for IP-insured and all patients across e6rollment areas.

3.3.4 Recurrent Expenditures in Health Facilities

The cost analysis assesses the expenditure structure in RHUs and examines whether there is a relationship between the level of IP e6rollment and RHU expenditure. First, mean values are compared for different cost measures in RHUs with high and low IP e6rollment; thereafter, a short-run cost function will be estimated using a log-linear form.

The survey questionnaires identified operating expenses for health facilities. Expenses include staff (salaries), overhead (water, electricity, gas, etc.), drugs purchased at the pharmacy, and supplies. Then, the amounts paid by the different financing sources (government, PhilHealth, donors) for these expenses were identified. Donations were valued at the current market price. The sum of total expenses reflects total recurrent cost per facility. In each e6rollment area, this amount was summarized for all RHUs and divided by the number of RHUs per area to report total recurrent cost per RHU. These values were compared for areas of high and low IP e6rollment to assess facility performance.

Performance was further compared by computing ratio measures, such as total cost per service provided and total services provided per staff member in RHUs, and drug expenditures per discharge and staff cost per discharge in hospitals.

Then, a cost model with a multi-product cost function was developed to examine the effect of different services and the IP e6rollment rate on provider costs. This cost function separates payer-specific outputs for all services and for IP-insured services, allowing payer-specific marginal and average costs to be calculated. The general form for the cost function is given in equation (1). A short-run cost function was estimated because the survey did not provide the data on capital expenditures necessary to calculate total long-run cost.

(1) Short-run recurrent costs = f (IP curative visits, all curative visits, laboratory tests, prenatal visits, postnatal visits, FP new, FP continuous, IP enrollment rate)

In addition to the traditional determinants of cost, such as different visits and family planning service use, the IP enrollment rate was included as an independent variable. The IP enrollment rate is a proxy to identify whether RHUs with smaller IP pools suffer from adverse selection leading to higher RHU costs. Based on cost theory it is expected that, as utilization levels increase, total variable cost as a component of recurrent costs should increase. Therefore, the coefficients for visits and FP services should be positive. It is expected that the financial risk caused by adverse selection becomes less of an issue with growing IP enrollment rates. As a result, the association between cost and IP enrollment is expected to be negative, and to provide an additional argument to increase membership in IP insurance.

The log-linear form of the Cobb-Douglas model was used to estimate the cost function. The final form of the generalized function is shown in equation (2).

(2) $\ln \text{Recurrent Cost} = a + b_1 \ln(\text{IP visit}) + b_2 \ln(\text{curative}) + b_3 \ln(\text{FP new}) + b_4 \ln(\text{FP old}) + b_5 \ln(\text{\% indigents enrolled in IP})$

The RHU was the unit of analysis. The dependent variable was total recurrent costs in RHUs. Explanatory variables were limited to the number of IP visits, curative consultations for all patients, total FP consultations for new acceptors, total FP consultations for continuous users, and the IP enrollment rate in the RHU target population. Too many explanatory variables will decrease the degrees of freedom, which is problematic in this analysis given the already small sample size of RHUs.

The values of all variables used are given in Table 10. Prices for wages and drugs are excluded as it can be assumed that they are uniform for all RHUs. Multi-collinearity is a problem in the cost function between prenatal and postnatal visits and FP service use; as well as between laboratory test and curative consultations. However, ordinary least square (OLS) remains the best estimator. Estimation of residuals did not indicate major problems with heteroskedascity or misspecification. Marginal costs were estimated based on regression coefficients and corresponding average costs.

Table 10: Descriptive Statistics of Variables

Variable label	Variable	Obs	Mean	Std. Dev.	Min	Max
Visits IP members	totvisip	46	318.6	518.1	0	2,256
Curative consultations	curative	44	2,953.2	3,223.7	597	17,710
Laboratory tests	lab	46	684.0	1,940.9	0	13,021
Prenatal visits	prenat	46	501.4	482.4	80	2,427
Postnatal visits	postnat	46	427.9	355.9	0	1,875
FP new visits	fpnewall	46	354.4	330.9	28	1,382
FP continuing users	fpoldall	46	1,720.4	1,589.2	237	8,335.0
% of indigents enrolled in IP	ip_enrr	46	0.5	0.5	0	1.9

3.3.5 Limitations

Several limitations exist. The timeframe of data collection in RHUs is limited to six months due to the late accreditation of most RHUs (most RHUs were only accredited in December 2002). There is no central health information system and RHUs disaggregate reporting of services statistics only by IP and all patients. There is a lack of data on the quantity of drugs prescribed by insurance status, and on the amount of revenues collected from "donations" of patients in RHUs. Also, RHUs do not keep records of supplies received from donors and the LGU procurement office. Hence, some expenditure data were based on estimates of municipal and provincial health officers.

While total population and household data are available at the municipality level, the number of indigent households data are not. Therefore, this number was computed based on province-level poverty incidence rates. RHU service records of IP patients and the IP outpatient benefit summary report forms submitted by RHUs to PhilHealth do not report IP member usage of FP and other primary care services. Hence, FP and other primary care service statistics were collected only for all patients.

In hospitals, the data collection was limited by the lack of breakdown by detailed insurance status. Also there is no central health information system and no information on the quantity of drugs prescribed by patients' insurance status.

Considering these constraints and the stratification of RHUs, the analysis aims to identify and discuss the relevance of other factors that may have contributed to the performance results in both areas.

4. Results in RHUs and Hospitals

Results are presented for RHUs and hospitals by comparing areas of high and low IP enrollment. The comparisons are made on financing of health facilities; on resource management; utilization of care; and recurrent cost of providing care. Institutional and behavioral factors that might have contributed to performance differences are discussed. Findings and policy implications are presented in Section 5.

4.1 Financing of Health Care

This section presents the health financing situation in RHUs and hospitals in areas with high and low IP enrollment rates. The hypothesis is that RHUs in areas with higher IP enrollment report better performance with respect to capitation revenues.

4.1.1 Financing of Health Care in RHUs

The main financing source for RHUs remains the local government, independent of IP enrollment rates. The capitation amount paid by PhilHealth to RHUs is fixed per household enrolled in the IP. Table 11 shows that the contribution of PhilHealth is substantially higher and reflects 7.6 percent of total revenues in areas with high IP enrollment rates.

Generally, PhilHealth pays capitation funds on a quarterly basis; however, one province, Capiz, with mainly low enrollment RHUs has not received capitation funds for longer than one year due to administrative delays within PhilHealth. Hence, it is assumed that the 0.7 percent share of PhilHealth reported in Table 11 would have been higher if PhilHealth had disbursed capitation funds to providers on time.

Donations or fees paid by patients are miniscule in both high and low enrollment areas. To some extent this may be related to non-tracking of cash revenues from patients in RHUs. RHUs in high IP enrollment areas report less total revenue. Revenue in RHUs also differs markedly with respect to public funds from LGUs and the national level. Low IP enrollment areas generally are large, urban, and high income, and their LGUs have greater capacity to pay for health care services; hence these LGUs pay a larger share of RHU revenue and less support comes from the national government. On the other hand, high IP enrollment areas generally have populations with lower incomes and the health budget requires more support from the national government.

Table 11: Revenue in RHUs, January–June 2003, Average per RHU and Distribution

Revenues Sources:	High IP Enrollment Area		Low IP Enrollment Area	
	Average per RHU (pesos)	Distribution	Average per RHU (pesos)	Distribution
PhilHealth IP Capitation	116,498	7.6%	17,389	0.7%
Donors	19,976	1.3%	58,814	2.3%
National Gov	152,594	9.9%	78,438	3.1%
LGU	1,243,899	81.1%	2,395,456	93.9%
Donations	1,033	0.1%	92	0.0%
Total revenue	1,534,001	100.0%	2,550,189	100.0%

As hypothesized, the total capitation amount from PhilHealth and its relative proportion in terms of total RHU revenues is considerably higher in high enrollment areas. This can be explained by higher IP enrollment as well as eventually more delays of capitation disbursement in low enrollment areas (Table 6 shows that most Capiz RHUs are in low enrollment areas).

This information on revenue in RHUs will be put in context when comparing utilization of care in Section 4.3.

4.1.2 Revenue in Hospitals

PhilHealth reimburses hospitals a fee for services provided to insured patients. Hence, hospital revenues from PhilHealth are expected to increase with more insured patients and more services provided per patient. This is confirmed in Table 12. The three hospitals in high IP enrollment areas report that 55 percent of their total revenues comes from PhilHealth, whereas this percentage is 32 percent in the four hospitals with low IP enrollment. These proportions are considerably higher than in RHUs, suggesting that hospitals are more dependent on PhilHealth revenues than are RHUs. From 2002 to 2003, high IP enrollment hospitals have reported considerable increases and higher revenues from PhilHealth than their counterparts in low enrollment areas.

Table 12: Revenues in Hospitals, 2002

Revenue from PhilHealth	High IP Enrollment Area	Low IP Enrollment Area
Percent hospital revenue collections coming from PhilHealth	55%	32%
Growth of PhilHealth reimbursements to hospitals (half-year 2002 revenues vs. January–June 2003 revenues)	166%	39%

4.2 Resource Management: Capitation Fund, Drugs, and FP Products

This section describes the management of resources, including capitation funds, drugs, and FP products, in health facilities. The hypothesis is that RHUs use their capitation payment to purchase drugs and other supplies and as a result report fewer days out of stock. Hence, in areas of high IP-enrollment, RHUs are expected to report better resource management performance.

4.2.1 Resource Management in RHUs

Since PhilHealth reimburses RHUs by quarterly capitation payment, the analysis focused on how RHUs spend these funds and whether any differences in the performance of resource management can be identified in areas of high and low IP enrollment. Two variables were examined: the number of days of stockouts reported for (i) the most frequently used drugs and (ii) family planning products.

Table 13 presents results on the use of capitation funds. In areas of high IP enrollment, RHUs received a capitation amount that on average is almost four times higher than RHUs in low IP enrollment. In both types of areas, RHUs reported to use capitation mainly to purchase drugs, followed by purchase of equipment/supplies and payment of salary top-ups (honoraria) for employees. So far, funds have not been used to purchase family planning products, supposedly because RHUs can still get USAID supplies.

Table 13: Use of Capitation Funds in RHUs, January–June 2003

Capitation Used to Pay for:	High IP Enrollment Area		Low IP Enrollment Area	
	Average per RHU (pesos)	Distribution	Average per RHU (pesos)	Distribution
Drugs	75,053	62%	22,954	62%
Honoraria	9,819	8%	5,869	16%
Equipment/supplies	31,163	26%	4,951	13%
FP products	0	0%	0	0%
Other	5,159	4%	3,185	9%
Total	**121,194**	**100%**	**36,959**	**100%**

Since RHUs use capitation funds to purchase medicines and this has happened to a larger extent in high enrollment areas, it would thus be expected, that RHUs in high enrollment areas report fewer days of drug stockouts. Table 14 shows the proportion of RHUs that did not have enough drugs or FP products during the six months studied. More than half of all RHUs lacked drugs, and this was slightly more likely to happen in low IP enrollment areas. About one-fifth of facilities reported a lack of FP products, suggesting that USAID supplies of FP products may still be sufficient in about 80 percent of RHUs. This similar pattern for drugs and FP products in high and low enrollment areas suggests that, so far, the capitation payment did not lessen the problem of stockouts in RHUs.

Table 14: Proportion of RHUs with Stockouts of Drugs and FP Products, January–June 2003

Out-of-Stock Item	% of RHUs	
	High IP Enrollment Area	Low IP Enrollment Area
Drugs	55%	63%
FP products	18%	21%

In the questionnaire, RHUs were asked to report the drugs they most frequently used as well as the number of days they have been out of stock of these drugs. Table 15 presents responses. Although they cater to a larger group of IP insured, RHUs in high IP enrollment areas reported considerably fewer days out of stock for the most frequently used drugs. This better drug management may be because these RHUs use a considerably larger amount of their capitation funds to purchase drugs. Perhaps in the future, capitation funds will give RHUs extra cash that they can use to fill drug supplies more quickly. As a result, more drugs will be available to treat patients.

Table 15: Number of Days Out of Stock for Most Frequently Used Drugs, January–June 2003

Drugs	Days Out of Stock	
	High IP Enrollment Area	Low IP Enrollment Area
Amoxicillin	9	47
Paracetamol	19	30
Contrimoxazole	19	30
Cefalexin	0	0
Oresol	2	0
Other drugs	65	80
Total days	114	187

RHUs were asked whether they knew that they could use the capitation fund to purchase FP products. As shown in Table 16, only about one-third of them responded affirmatively. This suggests that not knowing about the ability to use capitation funds to purchase FP products may contribute to stockouts of FP products in RHUs. To ensure future availability of FP products in RHUs in light of USAID's decision to phase out its supplying them, it is important that RHUs know about – and use – capitation funds to purchase FP products. This may require special information campaigns by PhilHealth.

Table 16: Proportion of RHUs that Use Capitation Funds to Purchase FP Products, January–June 2003

	High IP Enrollment Area	Low IP Enrollment Area
% of RHUs that use capitation fund to purchase FP products	38%	33%

Although most RHUs do not know about using capitation funds to purchase FP products, only few days out of stock for FP products have been reported, though slightly more in high enrollment areas: This may be related to low demand for FP services, an issue outside the bounds of the current study.

Table 17: Number of Days Out of Stock for FP Products, January–June 2003

FP Products	Days out of stock	
	High IP Enrollment Area	Low IP Enrollment Area
Condoms	2	1
IUD	1	2
Injectables	12	1
Pills	8	2
Total days	23	6

In sum, the above results suggest that higher IP enrollment leads to higher revenues in RHUs due to the additional revenue received from the PhilHealth capitation fund. As a consequence, RHUs have more money to purchase drugs and other products, and they more likely report better resource management including fewer days when they are out of stock for most frequently used drugs. The following section examines whether the same pattern can be observed in hospitals.

4.2.2 Resource Management in Hospitals

Similar to RHUs, the seven hospitals in the case study reported the average number of drugs and the respective number of days out of stock during the one-year interview period. Table 18 shows responses. While hospitals in both high and low enrollment areas reported a similar number of drugs out of stock, the four hospitals in low enrollment areas reported on average considerably more days out of stock than did hospitals in high enrollment areas.

Table 18: Drugs Out of Stock in Hospitals, 2002

Drugs Out of Stock	High IP Enrollment Area	Low IP Enrollment Area
Average number of drugs out of stock	3	4
Average number of days out of stock across all drugs mentioned	35 days	180 days

This finding supports the hypothesis that higher revenue shares from PhilHealth due to higher IP enrollment leads to better drug availability in hospitals. It also suggests that a larger number of IP patients in RHUs and hospitals has not caused any drug availability problems in hospitals. Rather, the three high enrollment hospitals may have used the additional money received from insurance to stock up on drugs.

However, it could still be that hospitals and RHUs report better drug availability in high enrollment areas because they underprescribe drugs or underserve IP-insured patients. An examination of this hypothesis would require data on the quality of care in high and low IP enrollment areas.

4.3 Utilization

This section examines the extent to which utilization of care has changed among IP insurance members. Standard health insurance theory suggests that because insurance lowers out-of-pocket expenditures at the time of service use, the demand for medical care increases among insurance members. In the present case, however, where care in RHUs is free of charge to patients, IP members were expected to report similar visit rates as the non-insured.

If utilization rates in RHUs are low because of a lack of drugs and supplies, then the following can be hypothesized. If IP capitation funds were used to improve the availability of drugs and medical supplies, then service use will increase. Thus, it is expected that in RHUs with higher IP enrollment rates and therefore more capitation money, utilization rates will be higher. This is supported by insurance theory, where due to adverse selection into an insurance pool, higher utilization rates would be expected. But since RHUs are free of charge, adverse selection is less of an issue here.

And increased utilization might be driven by improved availability of drugs and supplies, but this requires a caveat. It could be that RHUs in high IP enrollment areas are generally better performing RHUs and have always had higher visit rates and better resource management. In this case it would be expected that, independent of higher IP enrollment, these RHUs have generally higher use rates for IP-insured and other patients.

The following subsections examine utilization of different services by insurance status, first for RHUs and then for hospitals. The absence of longitudinal data for RHUs makes it impossible to document eventual changes over time.

4.3.1 Utilization in RHUs

This study confirmed that utilization of care in RHUs is generally extremely low, irrespective of IP enrollment level. Table 19 presents the average number of curative visits per RHU by IP insured and visit rates for curative care per 100 IP members, during the six-month interview period[3] and for areas of high and low IP enrollment.

RHUs in high enrollment areas report on average five times more visits than those in low enrollment RHUs, suggesting that in low enrollment areas, IP has not had an impact on RHU utilization. Similarly, IP members in areas with high IP enrollment report a significantly higher visit rate in a six months period (4.9 visits per 100 IP members) compared to members who live in low IP enrollment areas (2.5 visits per 100 IP members) ($t=2.079$; $p<0.05$). Although significantly higher in RHUs in high IP enrollment areas, these visit rates are very low and raise concern about access to care in RHUs.

[3] Results could be multiplied by two in order to be annualized. However, this would ignore seasonality in service use and therefore should not be used for comparison with annualized values calculated on the basis of 12 months of routine data.

Table 19: Number of IP Curative Visits in RHU, January–June 2003

Service Use in RHUs by IP Enrolled	High IP Enrollment Area		Low IP Enrollment Area	
	Average Number of Visits per RHU	Visits per 100 IP PhilHealth Members	Average Number of Visits per RHU	Visits per 100 IP PhilHealth Members
IP curative visits	545.2	4.9	110.9	2.5

Note: IP visits per capita equals total IP visits times 100, divided by total IP PhilHealth members.

Table 20 presents results for utilization of care in RHUs for all population groups, independent of their insurance status. Curative visit rates for all patients per 100 inhabitants are higher in high enrollment areas (8.1 compared to 5.6 visits per 100 in six months), though the difference is not significant ($t=1.788$; $p>0.05$). These curative visit rates for the entire population are twice as high than the visit rates reported by the IP-insured members in Table 19, indicating that IP enrollment does not improve access to care in RHUs for the low income groups that it targets.

In both areas, rates per 100 inhabitants for laboratory tests and hospital referrals are equally low. Hence, there is no indication that RHUs with higher IP enrollment and higher use rates are withholding laboratory tests or referring a larger share of patients to more expensive hospitals. (See discussion of incentives in Section 1.)

Table 20: Service Use by All Patients in RHU, January–June 2003

Service Use in RHUs by All Patients	High IP Enrollment Area		Low IP Enrollment Area	
	Average Number per RHU	Services per 100 Inhabitants	Average Number per RHU	Services per 100 Inhabitants
Curative care visits	2,557 (n=21)	8.1	3,315 (n=23)	5.6
Laboratory tests	860.5	1.3	522.3	1
Hospital referrals	11.2	0.04	29.9	0.05

Note: Indicators are divided by multiplying the respective service by 100 and then dividing by it by the total population (insured and uninsured). In each group, one RHU did not report the number of total curative care visits; hence the total number of RHU in the sample decreases to overall 44 for the curative care indicator.

In summary, all of the above utilization rates in RHUs for IP insured and the general population are extremely low, implying that RHUs have almost no impact on anybody's health.

The present survey also asked about reproductive health service use, and findings mirror those of the 1998 Demographic and Health Survey (DHS); this contributes to concerns about inequitable access to care. According to DHS results, the percentage of women who deliver with the assistance of a medically trained person is considerably lower among women classified in the poorest wealth quintile (21 percent) compared to women in the richest quintile (92 percent). Similarly, pregnant women in the wealthiest quintile are considerably more likely to have an antenatal visit (98 percent) than women in the poorest quintile (72 percent).

Table 21 presents for several reproductive health care services, including family planning and deliveries, (i) average number of visits per RHU and (ii) visit rates per 100 inhabitants, independent of insurance status. To some extent these low utilization rates may also be related to insufficient reporting by providers in RHUs, indicating the need for better data collection in Philippine health facilities.

Table 21: Number of Reproductive Health Visits in RHUs January–June 2003

Service Use in RHUs	High IP Enrollment Area		Low IP Enrollment Area	
	Average Number of Visits per RHU	Visits per 100 Inhabitants	Average Number of Visits per RHU	Visits per 100 Inhabitants
New FP acceptors, all methods	250.8	0.8	449.4	0.8
Continuing FP users, all methods	1,191.0	3.7	2,205.7	4
Deliveries	145.6	0.4	153.3	0.3
Prenatal visits	462.6	1.4	537.0	1
Postnatal visits	376.1	1	475.4	0.9

Tables 22 and 23 report details on the different kinds of FP services used in high and low IP enrollment areas, independent of insurance status. Table 22 shows utilization of different FP methods for new acceptors; Table 23 presents results for existing users who continue to use FP services over time. In both high and low enrollment areas, utilization rates for all FP methods are very low among both new acceptors and continuing users. This is in support with findings from the 1998 DHS where considerably lower use of modern contraception was identified (see Table 1in Section 1.1).

The two tables also indicate that the natural method is most frequently used among new acceptors, and continuing users mostly use pills.

Table 22: New Acceptors to Family Planning in RHU, January–June 2003

FP Method	High IP Enrollment Area			Low IP Enrollment Area		
	Average per RHU	In % of Total	Per 100 Population	Average per RHU	In % of Total	Per 100 Population
Condom	18.0	7%	0.1	42.3	9%	0.1
IUD	8.5	3%	0.0	38.0	8%	0.1
Injectables	36.6	15%	0.1	78.3	17%	0.1
Pills	67.2	27%	0.2	113.2	25%	0.2
Other modern	11.0	4%	0.0	12.8	3%	0.0
Natural methods	109.6	44%	0.3	164.8	37%	0.3
Total	**250.8**	**100%**	**0.8**	**449.4**	**100%**	**0.8**

Table 23: Continuing Family Planning Use in RHU, January–June 2003

Method	High IP Enrollment Area			Low IP Enrollment Area		
	Average per RHU	In % of Total	Per 100 Population	Average per RHU	In % of Total	Per 100 Population
Condom	108.2	9%	0.3	250.5	11%	0.5
IUD	90.5	8%	0.3	303.9	14%	0.6
Injectables	130.1	11%	0.4	272.3	12%	0.5
Pills	673.6	57%	2.0	997.1	45%	1.9
Other modern	17.8	1%	0.1	157.9	7%	0.3
Natural methods	184.7	16%	0.5	264.3	12%	0.5
Total continuing	**1,191.0**	**100%**	**3.7**	**2,205.7**	**100%**	**4.0**

Note: Continuing FP Users are "stock" figures; reported above are "average stock" number of users for the 6-month period (i.e. we took the average of monthly data on continuing users)

In sum, these findings on utilization of RHUs imply that, with the exception of a significantly higher visit rate for IP insured in RHUs with higher IP enrollment, service use is generally extremely low in RHUs and this is independent of IP insurance enrollment. Thus, RHUs in high IP enrollment areas might report better drug availability than in low enrollment areas because the earlier use IP capitation funds to improve their drug stocks; however these are not used because people do not seek care in RHUs and the load of IP insured is too small to have an impact. This finding questions whether the purpose of RHUs and of IP PhilHealth in the Philippines is ensuring access to medical care. Rather, it seems that patients are seeking care elsewhere, for example in hospitals even though they pay user fees.

4.3.2 Utilization in Hospitals

Since PhilHealth reimburses RHUs by capitation and hospitals by fee-for-service reimbursement, it could be expected that hospitals might respond to the financial incentives of fee-for-service and increase the number of services provided to indigent insured patients. Similarly, RHUs might respond to the incentives associated with capitation payment that were discussed earlier: just cash the capitation payment and refer IP-insured patients to hospitals instead of treating them at the RHU. This would lead to an increase in the hospital use rate.

Table 24 shows results for hospital discharges over two time periods and for areas of high and low IP enrollment. High enrollment area hospitals report that discharges of insured individuals grew from 15 percent to 25 percent of total discharges. Discharges of insured also increased in areas of low IP enrollment but the increase was much less (from 13 percent to 16 percent). The increase in high enrollment areas can be attributed to a considerable increase in PhilHealth IP discharges (from 4 percent to 13 percent of total discharges). This is considerably more than in low enrollment areas, where the share of IP-insured patients in terms of all patients increased from 2 percent to 4 percent only.

Table 24: Hospital Discharges, January - December 2002 and January–June 2003

% of Discharges Who Are PhilHealth Insured	High IP Enrollment Area		Low IP Enrollment Area	
	2002	2003 (January–June)	2002	2003 (January–June)
All PhilHealth insured	15%	25%	13%	16%
- IP coverage	4%	13%	2%	4%
- Other PhilHealth coverage	11%	12%	11%	12%

Combining these findings of higher IP discharge proportions and higher hospital revenues from PhilHealth suggests that the IP insurance policy does affect hospital care. However, similar low IP referral rates from RHUs to hospitals (see Table 20) do not indicate adverse affects from RHUs to hospitals as could eventually be expected under mixed provider payment (FFS for IP insured in hospitals and capitation in RHUs). Rather, IP-insured patients might self-refer to hospitals, where they no longer have to pay user fees, instead of going to RHUs.

4.4 Cost Analysis

The above analysis on utilization suggests idle capacity in RHUs, that is, RHUs are providing care at less than capacity level.

This section presents findings on recurrent costs in RHUs. It aims to identify whether there is a relationship between total recurrent cost and the financial mix in RHUs, utilization of care, resource management, and increased IP enrollment.

4.4.1 Cost Analysis in RHUs

RHUs reported total recurrent expenditures paid by different financial sources. They include expenses for staff, drugs, and FP products, as well as overhead expenses including water, electricity, and communication. Table 25 presents a breakdown of total recurrent expenditure in RHUs in high and low IP enrollment areas. First, average costs are shown per facility; the second column shows the corresponding distribution in percentages; then total costs are presented per service.

On average, RHUs in low enrollment areas report considerably higher costs per facility. In both high and low enrollment areas, staff accounts about 70 percent of total recurrent cost, followed by drugs and FP products (about 25 percent of total recurrent cost). Because of their lower total recurrent costs, RHUs with high IP enrollment report lower cost per service provided; however this is an insignificant difference in cost per service between the two enrollment areas ($t=1.45$; $p=0.15$).

Table 25: Cost Structure in RHUs, January–June 2003

Cost	High IP Enrollment Area			Low IP Enrollment Area		
	Average per RHU (pesos)	% of Total	RHU Cost per Service (pesos)	Average per RHU (pesos)	% of Total	RHU Cost per Service (pesos)
Total staff cost	1,041,816	70%	219	1,751,990	69%	255
Total variable cost (drugs, FP)	354,233	24%	57	669,005	26%	79
Total overhead cost	85,377	6%	13	124,338	5%	20
Total cost	**1,481,426**	**100%**	**289**	**2,545,332**	**100%**	**355**

Note: Total service in high enrollment areas = 6,487 and in low enrollment areas = 7,919. Total services for all patients provided in RHUs includes curative visits non-IP, curative visits IP, referrals to hospital, deliveries, all FP continuing users, all new FP, postnatal care visits, prenatal care visits, and laboratory tests. Observations with missing values are excluded.

RHUs in low IP enrollment areas have higher staff costs due to more staff, including nurses, midwives, and other personnel. The number of midwives in an RHU is set in proportion to the population living in the catchment area. Table 26 shows that RHUs in areas of low IP enrollment have almost twice as many midwives compared to RHUs in high enrollment areas. However, having more midwives has not translated into higher rates for deliveries and other reproductive health services in RHUs in low enrollment areas, was shown in Table 21.

Table 26: Staff Composition per RHU, January–June 2003

Average Number of Staff per RHU	High IP Enrollment Area	Low IP Enrollment Area
Medical doctors	1.2	1.9
Nurses	1.8	3.2
Midwives	7.5	11.8
Medical technologists	0.8	1.0
Dentists	0.5	0.9
Other (dental aides, sanitary inspectors)	3.9	7.5
Total personnel	**15.7**	**26.3**

Two staff productivity indicators are shown in Table 27 for the interview period of six months: total services divided by staff; and total RHU cost divided by staff. RHUs in both areas operate on very low productivity levels, producing about three services (including all visits and laboratory tests) per staff per day. Although high IP enrollment RHUs report higher service/staff ratios, the difference between the two areas is insignificant ($t=1.83$; $p=0.07$). The ratio of total RHU cost per staff hired is similar in both areas.

Table 27: Productivity in Average RHU, January–June 2003

Staff Productivity	High IP Enrollment Area		Low IP Enrollment Area	
	Per Six Months	Per Day	Per Six Months	Per Day
Ratio total services per staff	443 services	3.4 services	304 services	2.3 services
Ratio total RHU cost per staff	97,736 pesos	752 pesos	97,963 pesos	753 pesos

Note: The six-month interview period comprised 130 workdays.

These findings suggest that RHUs in both areas are highly under-utilized or over-staffed. As a consequence, the current staffing in RHUs should be adjusted by reducing overstaffing or by drastically increasing the number of patients.

4.4.2 Results from Econometric Cost Analysis in RHUs

An econometric cost function is estimated to address three questions:

- Do services provided to the IP-insured and all patients influence RHU total recurrent cost?
- Does a higher IP enrollment rate affect total recurrent cost in RHUs?
- What are the marginal costs of providing one additional service at RHUs?

Table 28 presents the OLS estimation of the cost equation (2). Marginal cost figures derived from these estimates are presented in Table 29. All variables enter the equation in their logarithmically transformed form.

The coefficients help to respond to the above questions. They show elasticity of cost with respect to changes in utilization and enrollment variables, i.e., how much total RHU costs change if there is a 1 percent increase in the respective variable. Only two coefficients are significant: curative consultations and continuous FP use for all patients.[4] None of the other variables, including IP visits, FP new acceptors, or IP enrollment rate, is significantly related to RHU cost, indicating that under capitation payment increased IP membership does not influence cost in RHUs. Hence, so far, a higher IP enrollment rate does not seem to affect total recurrent costs in RHUs.

Results show that based on the Breusch-Pagan and the RESET test the hypotheses of homoskedascity and correct model specification cannot be rejected. However, the overall explanatory power of the model is rather low. The R-square value is 0.42, meaning that the variables included explain 42 percent of the variation in total costs. Hence, cost predictions based on this model will not be that accurate, which is problematic because calculations of marginal costs will be based on coefficients. It also suggests that, at the current production level, changes in output will generally not yet result in higher costs, which supports the above result on low productivity levels (Table 27).

[4] It suggests that RHU recurrent cost will increase by 0.4 percent if there is a 1 percent increase in curative consultations, and cost will increase by 0.7 percent if the number of continuous FP users increases by 1 percent.

Table 28: Log-linear Cost Function

lnTC	Coef.	Std. Err.	t	P>|t|
lg_IPvis	-0.094	0.092	-1.020	0.315
lg_curcons	0.371	0.157	2.360	0.024
lg_fpnew	-0.295	0.184	-1.600	0.119
lg_fpold	0.723	0.254	2.850	0.007
lg_ipenrr	0.039	0.178	0.220	0.827
_cons	8.369	1.344	6.230	0.001

N = 39 R-sq=0.42; adj R-sq=0.33; F(5, 33) = 4.8
Breusch-Pagan for heteroskedasticity:
Chi2(1) = 0.85; p>chi2 = 0.36
RESET: F(3, 30) = 1.01; p>F = 0.4

Marginal costs are computed by multiplying the coefficients from Table 28 by the mean cost values of respective significant variables. Results are presented in Table 29. Average costs per curative visits are higher than for FP visits. As expected, marginal costs for curative care visits and continuous FP users are considerably less than average costs, suggesting that RHUs are operating on the downward-sloping part of their average cost curve. This indicates that RHUs are operating under capacity, and high fixed costs mainly caused by staff are distributed over relatively few patients. This idle capacity in RHUs is a waste of resources. RHUs could decrease their average cost levels by increasing their number of patients. This can be done by increasing the number of IP insured, as they report higher visit rates in higher enrollment areas (see Table 19), and by informing IP members about their right to use services.

Table 29: Average and Marginal Costs of Services in RHUs

Visit	Coef.	Average Cost per Visit (pesos)	Marginal Cost of Visit (pesos)
Curative consultation	0.371	2,953	1,095
FP visit old acceptors	0.723	1,720	1,244

4.4.3 Cost in Hospitals

Hospitals in high and low enrollment areas report similar average amounts of drug cost per discharged patient as well as labor costs per discharge. This finding supports the above statement that it might be too early to identify any cost-related spillover effects of the IP program from RHUs on hospitals with the exception of the increased revenues caused by more IP discharged. Rather, this result suggests that admitting more paying patients to hospitals increases hospital revenue and contributes to using idle resources.

Table 30: Cost per Hospital Discharge, January–December 2002 (in pesos)

Type of Cost	Cost per Discharge	
	High IP Enrollment Area	Low IP Enrollment Area
Average expenditures on drugs	600	550
Labor	2,200	2,600

5. Discussion of Findings

The objective of this study was to evaluate and compare the performance of service and financing in health facilities in areas in the Philippines that have more than 35 percent or less than 35 percent of indigent households insured through PhilHealth indigent program. The areas surveyed include each 22 to 24 RHUs. The study examined whether higher IP enrollment would be associated with improved availability and higher use rates of health facilities in terms of overall services as well as family planning services and products. It also looked at the financial implications of the IP with capitation payment in RHUs.

Socio-economic data suggest that low IP enrollment areas have overall more poor and poorer households than do areas with high IP enrollment. Hence, the Philippines government might want to examine whether poorer LGUs are generally less likely to insure their indigents as well as the underlying reasons for low enrollment. For example, does the IP lose out to other competing services for the poor that are paid from the LGU budget, such as food or housing.

This study on the impact of the PhilHealth IP on revenues, resource management, utilization of care including FP services, and costs in RHUs suggests the following: RHUs with higher IP enrollment receive a considerably higher capitation amount and a higher proportion of their total revenue from PhilHealth. In both areas, the capitation fund was mainly used to purchase medicine and equipment/supplies and has translated into better availability of drugs and FP products in health facilities in high IP enrollment areas. IP insured in high IP enrollment areas reported significantly higher visit rates in RHUs than their counterpart in low enrollment areas. This suggests that having a higher rate of IP insured in a given area makes the population more confident or better informed about their right to use care in RHUs, perhaps because members talk about it. Also, IP utilization rates in RHUs are lower than overall use rates, indicating that insurance did not improve access to RHU care. Overall and IP utilization rates have remained on a very low level, suggesting idle capacities in RHUs. This is confirmed by findings from the cost and productivity analysis. On average, staff performs about three services per day. RHUs in high IP enrollment areas report slightly lower total recurrent cost per service and higher staff productivity. However, this difference is insignificant.

Based on findings from the econometric cost analysis, no association could be identified between total recurrent costs in RHUs and capitation payment or IP visits. However, cost results point to overcapacity and tremendous idle capacity in RHUs. This can be improved by decreasing the number of staff or increasing the number of patients, for example, by insuring more indigents in IP PhilHealth and by informing them about the importance of using health care and FP products.

Adding capitation payment to RHUs that are predominantly financed by LGU funds and the national government sets various incentives. Instead of becoming more efficient, RHUs could try to shift costs to other financing sources or to hospitals. Results from the hospital case study on eventual spillover effects of the IP program from RHUs indicate that, in areas with higher IP enrollment, a higher proportion of hospital discharges can be attributed to the IP insured. Hence, the attractiveness of the IP package for indigent groups seems to consist of improved access to hospital care and to a lesser extent of RHU coverage, which would be free of charge in any case. Under fee-for-service

reimbursement, this has led to increased and higher revenue shares from PhilHealth than in hospitals in low enrollment areas. However, the higher RHUs referrals that were hypothesized were not detected that could have been caused by the incentives set through the mixed provider payment system. Nonetheless, this highlights the importance of monitoring and evaluating the provision and quality of care in RHUs and hospitals to prevent eventual adverse reactions by providers.

If the PhilHealth IP is supposed to lead to higher use of medical and FP services in RHUs, then insured IP members need to know where to use care, their benefits, and their right to claim them. Currently, the very low use rate among insured and uninsured groups in RHUs suggests that IP PhilHealth coverage has not significantly improved access to care and FP services for low income groups. Hence, PhilHealth and providers should actively inform IP members about using preventive and curative care and FP services in RHUs at zero co-payment.

Other factors, including institutional and behavioral components may explain differences in health facility performance in low and high IP enrollment areas and may have contributed to the above results. These factors may have not been captured by the data. For example, better staff quality and management capacities may have contributed to higher use rate and better resource management in high IP areas. However, if this were the case, it would be expected that better quality and management would lead all service use to be significantly higher in high IP areas and not just the visit rate of IP-insured members. This does not appear to be the case as the difference identified in Table 20 is not significant. Also, Table 11 implies that even if high IP enrollment areas are in jurisdictions where the LGU has greater revenue, those RHUs do not receive a larger health budget, which could explain the better supplies, larger staff, and higher use rates. It could be that IP insured in high IP enrollment areas simply were sicker during the interview period or generally better informed, and this contributed to higher use rates. Or it could be that patients prefer to seek care in the private or the traditional sector instead of going to RHUs; though this could be the preferred choice in both areas. Also, the increasing trend of hospital discharges for IP insured correlates with increasing IP enrollment rates, suggesting that there is a positive relation between these two variables.

These results may be used as an advocacy tool to show LGU decision makers that there is a return on using non-earmarked budget allotments to subsidize enrollment of indigent groups in the PhilHealth IP. Insuring the uninsured income groups and providing them access to health care and modern contraceptives could contribute to several objectives in the Philippines: firstly, the national objective for health of reduced fertility rates by 2004; second, universal health insurance coverage by 2010 as mandated under the NHIP; and, third, implementation of financing mechanisms that are used by providers to ensure the supply and availability of contraceptives and drugs in health facilities. In addition, the return on LGU investment includes better financial results in RHUs owned by the LGU, improved availability of drugs and equipment in RHUs, and better access to care for IP members. In addition, adding more insured patients to the current workload in RHUs would contribute to productivity and the use of idle capacity in health facilities. However, these objectives are hard to achieve as long as IP enrollment rates remain low and IP-insured member do not use care and FP services in RHUs.

Based on these findings, the following section presents conclusions and recommendations for decision makers in PhilHealth, local governments, and at the Department of Health.

6. Conclusions and Recommendations

Following the USAID decision to begin the phase-out of delivery and financing of FP products in the Philippines, this study examined whether PhilHealth's insurance program for indigent groups is a means to improve access to care and contribute to the availability and use of FP products and services. The study had four objectives:

- To examine and compare the impact of the PhilHealth indigent program on revenues, resource management, utilization of care including FP services, and cost in rural health facilities (RHU) in areas of low and high IP enrollment.
- To identify in a hospital case-study eventual spillover effects of the IP program from RHUs on service use and financing in hospitals.
- To identify institutional and behavioral factors which explain differences in health facility performance in low and high IP enrollment areas.
- Based on findings, to derive policy-conclusions and recommendations for decision-makers in PhilHealth, local governments and at the Department of Health (DOH).

Findings suggest that the total capitation amount from PhilHealth and its relative proportion in terms of total RHU revenues is considerably higher in high enrollment areas. Similarly, hospitals in high IP enrollment areas have reported considerable increases and higher revenues from PhilHealth than do their counterparts in low enrollment areas. Although RHUs in high IP enrollment areas cater to a larger group of IP insured, they report considerably fewer days out of stock for most frequently used drugs. Only few days out of stock for FP products have been reported, which may be related to low demand for FP services. Service use rate in RHUs is strikingly low. Hospitals reported higher IP discharge proportions in high enrollment areas. However, similar low IP referral rates from RHUs to hospitals (see Table 20) do no indicate adverse spillover effects from RHUs to hospitals as this could eventually be expected under mixed provider payment. Cost findings indicate that RHUs are operating under capacity, and high fixed costs mainly caused by staff are distributed over relatively few patients. RHUs could decrease their average cost levels by increasing their number of patients. This can be done by increasing the number of IP insured and by informing IP members about their right to use services in RHUs.

Hence, the PhilHealth IP program only contributes to the supply, financing, and increased use of curative care and FP services if mayors use their budget allotment to enroll the uninsured in PhilHealth IP; if providers use PhilHealth disbursements to purchase and provide FP products and services; and if providers and PhilHealth inform IP members about their rights to use the PhilHealth benefit package, including FP products and services, in RHUs.

This leads to six recommendations:

- Increase the IP enrollment in low coverage areas.
- Make PhilHealth policy guidelines on the use of the IP capitation fund more "provider friendly" and transparent to ensure that providers know that IP funds can be used to purchase drugs and FP products.
- Promote the use of preventive and curative care services in RHUs. This includes informing IP-insured members about the benefits of their IP PhilHealth membership card (such as free care and drugs at the RHU and a limited benefit package at the hospital) with the objective of increasing utilization of services among the IP insured.
- Implement a performance-based capitation component for RHUs to set an incentive for and reward increased service use, better quality of care, and timely reporting of routine data. Also, RHUs should play a gatekeeper role for hospital care, implying that IP insured need a RHU referral before visiting a hospital as a precaution against hospitals taking advantage of fee-for-service reimbursement.
- Implement a national health information system in the health sector to monitor and evaluate service and drug use and financing by insured and uninsured lines of business. This study could have done much more but it was limited by the lack of routine data in health facilities. Routine collection of data on service use and financing by insurance status can serve to examine eventual implications of capitation payments in RHUs and related spillover effects on hospitals.
- The Department of Health and PhilHealth should examine the reasons for very low use rates in newly accredited and well-equipped and staffed RHUs. Results may helps to define interventions to ensure that the poor seek care in RHUs when insured.

Annex A: RHUs Sampled for Study

Province	Municipality / RHU	Population	Total House-hold	Total Indigent House-hold	IP Enrollment Rate	Poverty Line Income
Capiz	Roxas City	148,469	30,773	15,694	8.3%	15,000
Capiz	Cuartero	31,867	6,605	3,369	15.6%	4,500
Capiz	Dao	32,460	6,728	3,431	34.0%	12,543
Capiz	Dumalag	32,083	6,650	3,391	18.1%	10,518
Capiz	Jamindan	43,444	9,005	4,592	14.2%	5,000
Capiz	Maayon	33,974	7,042	3,591	40.2%	4,057
Capiz	Mambusao	41,449	8,591	4,382	15.4%	8,500
Capiz	Panay	44,877	9,302	4,744	28.2%	12,600
Capiz	Panitan	35,693	7,398	3,773	11.6%	5,000
Capiz	Pontevedra	43,486	9,013	4,597	16.1%	1,000
Capiz	President Roxas	26,733	5,541	2,826	38.1%	12,000
Capiz	Sapi-an	24,571	5,093	2,597	21.3%	3,000
Capiz	Sigma	29,116	6,035	3,078	14.6%	12,543
Capiz	Tapaz	40,558	8,407	4,287	11.0%	12,600
Misamis Occ	Oroquieta City	62,214	13,312	5,778	17.3%	2,400
Misamis Occ	Ozamiz City	115,734	24,764	10,748	15.2%	.
Misamis Occ	Tangub City	32,570	6,969	3,025	41.7%	6,000
Misamis Occ	Tangub City	19,052	4,077	1,769	41.8%	6,000
Misamis Occ	Bonifacio	27,947	5,980	2,595	172.9%	9,867
Misamis Occ	Calamba	18,686	3,998	1,735	160.5%	4,010
Misamis Occ	Clarin	31,686	6,780	2,943	89.7%	9,867
Misamis Occ	Jimenez	24,342	5,209	2,261	0.0%	-
Misamis Occ	Lopez Jaena	21,228	4,542	1,971	189.3%	1,000
Misamis Occ	Plaridel	29,364	6,283	2,727	110.0%	3,500
Misamis Occ	Tudela	23,155	4,955	2,150	162.8%	9,867
Pangasinan	Dagupan City	141,558	29,315	9,058	60.7%	2,471
Pangasinan	Agdao	35,759	7,405	2,288	20.7%	12,617
Pangasinan	Aguilar	35,703	7,394	2,285	36.1%	14,435
Pangasinan	Alaminos City	76,543	15,851	4,898	16.3%	9,062
Pangasinan	Alcala Rural Health Unit	36,212	7,499	2,317	43.2%	8,000
Pangasinan	Anda	34,222	7,087	2,190	87.7%	12,141
Pangasinan	Asingan	52,244	10,819	3,343	22.4%	500
Pangasinan	Bani	41,294	8,552	2,642	41.4%	12,141
Pangasinan	Basista	28,652	5,934	1,833	27.3%	-

Pangasinan	Bolinao	62,176	12,876	3,979	33.2%	12,421
Pangasinan	Bugallon Municipla	57,472	11,902	3,678	38.1%	12,421
Pangasinan	Dasol	29,399	6,088	1,881	91.4%	12,141
Pangasinan	Labrador	19,672	4,074	1,259	0.0%	12,421
Pangasinan	Laoac	28,542	5,911	1,826	35.2%	-
Pangasinan	Mabini	22,207	4,599	1,421	194.6%	15,000
Pangasinan	Mangaldan	87,533	18,127	5,601	11.7%	14,000
Pangasinan	Natividad	20,085	4,159	1,285	155.6%	12,141
Pangasinan	San Manuel	40,435	8,374	2,587	19.3%	12,141
Pangasinan	Sto. Tomas	13,479	2,791	863	57.9%	15,482
Pangasinan	Sual	24,491	5,072	1,567	41.9%	14,490
Pangasinan	Urdaneta City	118,967	24,637	7,613	6.6%	12,619

Annex B: Description of Variables

Descriptives of Variables Used in RHU Analysis

Variable name	Variable Label	Obs	Mean	Std. Dev.	Min	Max
Province characteristics						
prov	Province	46	2.2	0.9	1.0	3.0
muni	municipality name	0				
facilno	Facility Number	46	8.7	5.4	1.0	21.0
RHU_ID	RHU identification number	46	224.0	88.6	101.0	321.0
pop1	population size 1 (as reported by RHU in survey)	46	42,574.0	29,996.0	13,479.0	143,445.0
pop2	population size 1 (as estimated using NSO data)	46	43,943.5	31,226.8	13,479.0	148,469.0
hhtot	number of households (estimated using NSO data)	46	9,163.4	6,496.3	2,791.0	30,773.0
ypovtres	poverty threshold income used to define indigent in municipality	45	11,855.5	15,821.2	-	95,482.0
hh_ind	number of indigent households (using NSO data)	46	3,618.9	2,673.6	863.0	15,694.0
hh_ip1	total number of indigent households in catchment area enrolled in PhilHealth (using PhilHealth data)	46	1,416.9	1,248.4	324.0	5,499.0
indigpop	Indigent population (individuals)	46	17,341.6	12,823.7	4,167.8	75,718.1
hhsize	average household size	46	4.8	0.1	4.7	4.8
pr_indhh	% of total households who are indigents	46	0.4	0.1	0.3	0.5
PhilHealth IP characteristics						
hh_ipenr	total number of indigent households in catchment area enrolled in Philhealth	46	1,342.3	1,181.9	-	5,499.0
IPmembpop	IP individual members	46	6,397.3	5,584.9	-	26,553.9
non_IPhh	number uninsured indigent households	46	2,276.5	2,830.1	(1,893.0)	14,394.0
ip_enrr	% of indigents enrolled in IP	46	0.5	0.5	-	1.9
ip35p	-/+ 35% of indigents enrolled in IP	46	0.5	0.5	-	1.0
lg_ipenrr	log of IP enrollment rate	44	(1.1)	0.9	(2.7)	0.7

RHU characteristics						
accrdmo	month of accreditation with PhilHealth	46	5.7	3.5	1.0	12.0
accrdyr	year of accreditation with PhilHealth	46	1,958.5	295.2	-	2,003.0
capitmo	month RHU first time received IP capitation fund	46	5.4	3.9	-	12.0
capityr	year RHU first time received IP capitation fund	46	1,566.9	834.9	-	2,003.0
stafftot	total number of personnel	46	21.2	15.6	6.0	88.0
stmd	number of doctors	46	1.6	1.8	-	11.0
stnurse	number of nurses	46	2.5	2.6	1.0	13.0
stmidw	number of midwives	46	9.8	4.6	3.0	21.0
stmedtec	number of medical technologists	46	0.9	0.7	-	4.0
stdentis	number of dentitsts	46	0.7	1.0	-	6.0
stother	number of other personnel (dental aides, sanitary inspectors, etc.)	46	5.7	7.4	-	34.0
stnatlpd	labor cost paid by national government	46	65,240.5	214,701.8	-	1,421,834.0
stprovpd	labor cost paid by provincial government	46	44,441.5	62,728.8	-	214,218.0
stmunipd	labor cost paid by municipal government	46	1,298,951.0	1,282,194.0	-	6,644,936.0
stprojpd	labor cost paid by projects (local or foreign funded)	46	3,708.0	25,148.9	-	170,568.0
xdrugs	total expenditures: drugs	46	495,382.3	861,261.6	3,200.0	5,526,903.0
xfpsupp	total expenditures: FP supplies	46	23,079.3	21,975.3	-	126,384.0
RHU expenditures paid by different payers						
xdnatl	expenditures for drugs by: national government	46	48,547.9	79,627.4	-	303,659.0
xdprov	expenditures for drugs by: provincial government	46	467.4	3,170.0	-	21,500.0
xdlgu	expenditures for drugs by: municipal government	46	396,298.7	850,308.2	-	5,488,403.0
xdfacilrv	expenditures for drugs by: facility revenues	46	-	-	-	-
xdphic	expenditures for drugs by: PhilHealth	46	35,531.2	67,302.8	-	273,439.0
xdngo	expenditures for drugs by: NGOs	46	-	-	-	-
xdproj	expenditures for drugs by: projects (local and foreign)	46	13,945.3	66,497.5	-	434,800.0

xfpnatl	expenditures for FP by: national government	46	22,532.8	22,062.8	-	126,384.0
xfpprov	expenditures for FP by: provincial government	46	-	-	-	-
xfplgu	expenditures for FP by: municipal government	46	26.0	176.3	-	1,196.0
xfpfacilrev	expenditures for FP by: facility revenues	46	-	-	-	-
xfpphic	expenditures for FP by: PhilHealth	46	-	-	-	-
xfpngo	expenditures for FP by: NGOs	46	-	-	-	-
xfpproj	expenditures for FP by: projects (local and foreign)	46	-	-	-	-
oxnatl	overhead expenditures (office supplies, utilities, etc.) by: national goverenment	46	115.7	784.4	-	5,320.0
oxprov	overhead expenditures (office supplies, utilities, etc.) by: provincial government	46	5.0	33.6	-	228.0
oxlgu	overhead expenditures (office supplies, utilities, etc.) by: muncipal government	46	104,521.5	124,294.1	1,254.0	494,553.0
oxfacilrev	overhead expenditures (office supplies, utilities, etc.) by: facility revenues	46	541.9	2,296.7	-	14,187.0
oxphic	overhead expenditures (office supplies, utilities, etc.) by: PhilHealth	46	467.3	1,968.8	-	11,194.0
oxngo	overhead expenditures (office supplies, utilities, etc.) by: NGOs	46	-	-	-	-
oxproj	overhead expenditures (office supplies, utilities, etc.) by: projects (local and foreign)	46	53.3	361.2	-	2,450.0
expnat	total RHU expend paid by national gov	46	113,904.0	235,873.6	-	1,511,276.0
expLGU	total RHU expenditure paid by LGU	46	1,844,711.0	1,836,082.0	62,495.0	8,829,841.0
expPhilh	total RHU expend paid by PhilHealth	46	35,998.5	67,588.3	-	273,439.0
RHU revenues						
revdonor	total RHU revenue from donors	46	40,239.4	76,785.7	-	479,102.0
revfees	total RHU revenues user fees	46	541.9	2,296.7	-	14,187.0
revphic	revenues from: PhilHealth	46	64,789.0	142,371.4	-	673,050.0
revother	revenues from: other	46	12,474.6	50,817.2	-	316,326.0
totreven	total RHU revenue	46	2,064,186.0	1,870,185.0	102,332.0	8,829,841.0

RHU revenue per capita						
pc_donrev	donor revenue p/cap pop	46	0.0	0.0	-	0.2
pc_Phrev	PhilHealth revenue p/cap pop	46	2.3	5.7	-	25.1
pc_othrev	other revenue p/cap pop	46	0.1	0.4	-	2.1
pc_donfee	total user fee revenue p/cap pop	46	0.0	0.1	-	0.4
pc_LGUrev	total LGU revenue p/cap pop	46	41.0	18.2	2.2	114.3
pc_natrev	total national revenue p/cap pop	46	3.5	7.6	-	47.7
pc_totrev	total RHU revenue p/cap pop	46	47.7	20.1	3.6	115.3
RHU revenue per visit						
pvisLGUrev	total LGU revenue p/IP visit	42	48,684.8	75,820.0	181.5	353,027.3
pvisnatrev	total national gov rev p/IP visit	42	1,774.0	6,446.2	-	40,450.0
pvisfeerev	total user fee p/IP visit	42	48.6	312.7	-	2,026.7
pvisdonrev	donor revenue p/IP visit	42	835.8	1,826.0	-	9,981.3
pvisPhrev	PhilHealth revenue p/IP visit	42	876.9	3,933.5	-	25,333.3
pvisothrev	other revenue p/IP visit	42	165.8	565.6	-	3,438.3
pvistotrev	total RHU revenue p/IP visit	42	52,220.0	83,554.8	555.5	393,518.0
RHU cost						
totstaco	total staff cost	46	1,412,341.0	1,251,212.0	-	6,644,936.0
totvarco	total variable cost (drugs, FP)	46	518,461.5	868,043.5	20,232.0	5,589,868.0
tot_ohead	total overhead cost paid by diff sources	46	105,704.6	123,604.7	1,254.0	494,553.0
totrhuco	total RHU cost	46	2,036,508.0	1,865,431.0	76,196.0	8,829,841.0
costpstaff	total RHU cost per staff	46	97,854.5	51,368.6	7,619.6	360,479.8
lgRHUco	log of total RHU cost	46	14.3	0.7	11.2	16.0
Use of capitation fund						
invtot	total investment to become PhilHealth accredited	46	64,022.1	172,664.3	-	800,500.0
capfreq	periodicity of receipt of capitation	46	2.5	0.5	2.0	3.0
capmeds	capitation expenditures for: medicine	46	47,871.3	89,698.6	-	420,000.0
caphonor	capitation expenditures for: honorarium	46	7,758.2	17,429.1	-	105,000.0
capnwstf	capitation expenditures for: new staff	46	-	-	-	-
capequip	capitation expenditures for: equipment/supplies	46	17,487.0	71,952.9	-	481,093.0
capfp	capitation expenditures for: FP	46	-	-	-	-
capother	capitation expenditures for: other	46	4,129.1	14,284.7	-	72,129.0
totcapexp	total capitation expenditures	46	77,245.5	121,644.7	-	525,000.0
usecapfp	whether can use capitation for FP purchase	45	0.4	0.5	-	1.0

Resource management						
outstkdg	ever had drugs run out of stock?	46	0.6	0.5	-	1.0
outstkfp	ever had FP supplies run out of stock?	46	0.2	0.4	-	1.0
day_amox	total days out of stock in 6-month period, drug1 amoxicillin	46	29.0	50.2	-	208.0
day_para	total days out of stock in 6-month period, drug2 paracetamol	46	21.4	39.4	-	166.0
day_cotr	total days out of stock in 6-month period, drug3 contrimoxazole	46	24.6	51.5	-	265.0
day_cefa	total days out of stock in 6-month period, drug4 cefalexin	46	-	-	-	-
day_ores	total days out of stock in 6-month period, drug5 oresol	46	0.7	4.4	-	30.0
day_oth	total days out of stock in 6-month period, drug6 other	46	72.8	112.1	-	456.0
num_oth	number of drugs included under drug6, other	46	1.6	2.1	-	7.0
day_cond	total days out of stock in 6-month period: condom	46	1.3	6.7	-	42.0
day_iud	total days out of stock in 6-month period: IUD	46	1.5	5.9	-	28.0
day_inj	total days out of stock in 6-month period: injectables	46	6.3	29.6	-	181.0
day_pil	total days out of stock in 6-month period: pills	46	5.0	27.0	-	181.0
Utilization of care in RHUs						
totvisip	total IP member visits	46	318.6	518.1	-	2,256.0
IPvis_pc	Indigent visit per capita	44	0.0	0.0	-	0.2
lab	number of visits: laboratory tests	46	684.0	1,940.9	-	13,021.0
prenat	number of visits: prenatal	46	501.4	482.4	80.0	2,427.0
postnat	number of visits: postnatal	46	427.9	355.9	-	1,875.0
fpnewall	number of visits: FP new acceptors, total	46	354.4	330.9	28.0	1,382.0
fpnewcon	number of visits: FP new acceptors, condom	46	30.7	38.4	1.0	177.0
fpnewiud	number of visits: FP new acceptors, iud	46	23.9	58.4	-	297.0
fpnewinj	number of visits: FP new acceptors, injectables	46	58.3	65.9	-	330.0
fpnewpil	number of visits: FP new acceptors, pills	46	91.2	87.6	5.0	401.0
fpnewoth	number of visits: FP new acceptors, other modern	46	11.9	27.4	-	150.0

fpnewnat	number of visits: FP new acceptors, natural methods	46	138.4	169.5	-	719.0
fpoldall	average number of continuing users per month, all	46	1,720.4	1,589.2	237.0	8,335.0
fpoldcon	average number of continuing users per month, condom	46	182.4	212.0	7.0	1,072.0
fpoldiud	average number of continuing users per month, IUD	46	201.8	459.6	-	3,029.0
fpoldinj	average number of continuing users per month, injectables	46	204.3	173.0	-	959.0
fpoldpil	average number of continuing users per month, pills	46	842.4	750.7	140.0	3,290.0
fpoldoth	average number of continuing users per month, other modern	46	90.9	193.4	-	949.0
fpoldnat	average number of continuing users per month, natural methods	46	226.2	253.9	-	1,070.0
delivris	number of deliveries	46	149.6	260.4	-	1,268.0
referal	number of referrals	46	21.0	46.5	-	192.0
prenv_p100	prenatal visit per 100 pop	46	1.2	0.7	0.2	4.3
postnv_p100	postnatal visit per 100 pop	46	1.0	0.5	-	2.8
fpnew_p100	FP new visit per 100 pop	46	0.8	0.6	0.1	2.7
fpold_p100	FP old visit per 100 pop	46	3.8	1.7	1.2	10.2
lab_p100	lab tests per 100 pop	46	1.1	1.6	-	9.2
deliv_p100	deliveries per 100 pop	46	0.3	0.4	-	1.3
refer_p100	referals per 100 pop	46	0.0	0.1	-	0.4
lg_IPvis	log of total IP visits	42	4.8	1.6	1.1	7.7
lg_lab	log of total lab tests	38	5.8	1.2	3.8	9.5
lg_prenat	log of prenatal visits	46	5.9	0.7	4.4	7.8
lg_postnat	log of postnatal visits	45	5.8	0.7	4.7	7.5
lg_fpnew	log of new FP visits	46	5.4	1.0	3.3	7.2
lg_fpold	log of old FP visits	46	7.2	0.7	5.5	9.0
lg_deliv	log of deliveries	24	5.2	1.0	2.4	7.1
curative	number of curative consultations in 6 months	44	2,953.2	3,223.7	597.0	17,710.0
lg_curcons	log of curative consultations	44	7.6	0.8	6.4	9.8
cur_p100	curative consultations per 100 pop	44	6.8	4.8	1.7	21.4
totserv	total services in RHUs	44	7,235.4	6,564.4	1,945.0	31,887.0

Productivity ratios						
servpstaff	total services per staff in 6 months	44	370.5	256.0	102.4	1,377.3
servpst_d	number of services per staff per day	44	2.1	1.4	0.6	7.7
stacopserv	staff cost p/service	44	237.8	117.1	-	581.5
varcopserv	variable cost p/service	44	68.8	82.3	5.0	552.1
oheadpserv	overhead cost p/service	44	16.8	19.7	0.3	94.3
costpserv	total RHU cost per service	44	323.4	151.5	12.9	712.1

Annex C: Questionnaires RHU and Hospitals

Survey of RHUs in Philippines
January–June 2003

Name of RHU Facility: _____

Municipality: _____ Province: _____

Provincial Health Officer Name:_____

Municipal Health Officer Name:_____

Municipal Treasurer/Budget Officer Name:_____

Municipal Social Welfare Officer Name: _____

Total population living in catchment area (e.g. municipality) of facility:_____

Total number of indigents living in catchment area of facility: _____ households/individuals

Poverty threshold income in Municipality:_____

Total number of indigents in catchment area who are enrolled in PhilHealth IP:_____ households/individuals

Date of accreditation with PhilHealth for IP contract:_____

Date first time received IP capitation fund: _____

Date lying-in clinic accredited:_____

Enumerator Name: _____

Dates of visits:

Visit1____

Visit2____

Etc.

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Section 1: Availability of personnel resources: (January–June 2003) Report for 6-month period: To be obtained from the Municipal Treasurer

Num	Name	Professional position (e.g. nurse, physician, etc.)	Employment status: Permanent or Casual/ Contractual	Base salary and social benefits? (Pesos per month)	Other premiums and income (on-call, over-time, honorarium, other)?(Pesos per month)	Who pays? . National, Province, Municipal, . Health facility revenues . Local organization or NGO---- . External organization or NGO- . Other donors, explain
01						
02						
03						
04						
05						
06						
07						
08						
09						
10						

Observations: Report here time allocation of personnel working in more than one RHU, and name of RHU

_____

_____

_____

Section 1: Availability of personnel resources: (January–June 2003) Report monthly amounts

Num	Name	Start date (since when working at RHU)	Professional position (e.g. nurse, physician)	Base salary and social benefits? (Pesos per month)	Other premiums and income (on-call, over-time, honorarium, other)?(Pesos per month)	Who pays? . National, Province, Municipal . Health facility revenues . Local organization or NGO------ . External organization or NGO--- . Other donors, explain
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

Instructions:

- *Before visiting any health facility, the data collection team should obtain information from the administrative services of the Provincial, Municipal or City Health Office.*
- *At the level of each health facility, the information will be verified and completed with the head of the health center and the staff involved.*
- *For voluntary workers, do not report one person per line. Just report the number of voluntary workers and the average honorary amount paid per voluntary worker.*

Section 2: Expenditures on Pharmaceutical and Other Products: January 2003 – June 2003 report for total 6 months

- *Obtain the drugs/medicines data from Central Supply Unit /DOH Representative at the Provincial level – determine the allocation criteria across the different health units.*

- *Obtain the contraceptive supply information from the Contraceptive Delivery and Logistics Management Information Services (CDLMIS) Inventory Report (obtain this report from the Central Supply Unit /DOH Representative at the Provincial level)*

Code	Name of product or supply (drugs, contraceptives, vaccines, IEC, etc.)	Date and month received	Quantity received	Unit price	Total value	Who paid?
001						
002						
003						
004						
005						
006						
007						
008						
009						
010						
011						
012						
013						
014						
015						
016						
017						
018						
019						
020						
021						
022						
023						
024						
025						

026						
027						
028						
029						
030						
031						
032						
033						
034						
035						
036						
037						
038						
039						
040						

Section 3: Expenditures on Pharmaceutical Products: Medications and Pharmaceutical Products (PHP): January–June 2003

Report the total amount pesos spent by different sources for the 6 months: January–June 2003

Payers:	National Goverm	Province	Municipality	Health facility donations	PhilHealth capitation	NGOs	Health projects (loc/FAP)	Donors	Other _____
Drugs and medicines									
Contraceptives Condoms									
IUD									
FP injectables									
FP pills									
Vaccines									
Others									
IEC materials									
Others									

Instructions:

- *The information in this table needs to be verified with the health administration and the organizations who paid for these products.*
- *Get expenditure data on drugs and medicines from the municipal treasurer.*

Section 4: Expenditures on Consumable Goods and Non-Medical Services (PHP):

Report the total amount pesos spent by different sources from January–June 2003 based on the tally-sheet in Section 4a.

Payers:	National Goverm	Province	Municipality	Health facility donations	PhilHealth capitation	NGOs	Health projects	Donors	Others
Office supplies									
Maintenance products									
Other supplies									
Cleaning									
Other									
Total									

Instructions:

- *- The information in this table needs to be verified with the health administration and the organizations who paid for these products.*
- *- If the municipal treasurer does not report disaggregated information on the distribution of office supplies expenses by the health station, then please estimate the amounts paid by the different payers.*

Section 4a: Tally sheet for consumable goods by month from January–June 2003:

This is a tally-sheet to report for Section 4

Code	Name of consumable supply (office supplies, cleaning, etc.)	Date and month arrived at RHU	Quantity received	Unit price	Total value	Who paid?
001						
002						
003						
004						
005						
006						
007						
008						
009						
010						
011						
012						
013						
014						
015						
016						
017						
018						
019						
020						
021						
022						
023						
024						
025						
026						
027						
028						
029						
030						
031						

Section 5: Expenditures on Utilities (PHP):

Report the total amount pesos spent by different sources for the six months: January–June 2003

Who paid how much for what?	National Goverm	Province	Municipality	Health facility donations	PhilHealth capitation	NGOs	Health projects	Donors	Others
Water									
Electricity									
Tel/fax									
Gas									

Instructions:

- *- For the spending on utilities that is not covered by the health facility, collect information from the company providing these services (Water, Electricity, Telephone). Get the vouchers for electricity, water, telephone, etc for the health station from the municipal treasurer.*

- *- Report estimates per health facility if utilities expenses are lumped for the whole municipality office and not disaggregated for the health station.*

Section 6.1: Total number of services provided per month per health facility to IP-insured patients

IP-insured patients Services Provided	2003					
	January	**Feb**	**March**	**April**	**May**	**June**
Curative consultations						
Total visits						
Prenatal and post-natal care consultation:						
Pre-natal						
Post-natal						
Other services						
Lab test						
X ray						
Family Planning new cases						
FP condom						
FP IUD						
FP injectables						
FP pills						
Other modern						
Consult natural methods						
Family Planning continuing cases						
FP condom						
FP IUD						
FP injectables						
FP pills						
Other modern						
Consult natural methods						
Inpatient admission for delivery						
Admission						
Number of days of hospitalization						
Delivery without admission						
Delivery						
Referral to Hospital						
Referrals						

Instructions:

- *Note: fill in tally-sheet for curative consultations in Section 11*
- *For family planning data: From the OPB Form 1 daily service record or indigent log-book,, check out patients obtaining FP. Pull out individual envelopes and determine which method used, whether continuing user or new acceptor.*

Section 6.2: Total number of services provided per month per health facility to ALL patients

ALL insured patients Services Provided	**2003**					
	January	**Feb**	**March**	**April**	**May**	**June**
Curative consultations						
Total visits						
Prenatal and post-natal care consultation:						
Pre-natal						
Post-natal						
Other services						
Lab test						
X ray						
Family Planning new cases						
FP condom						
FP IUD						
FP injectables						
FP pills						
Other modern						
Consult natural methods						
Family Planning continuing cases						
FP condom						
FP IUD						
FP injectables						
FP pills						
Other modern						
Consult natural methods						
Inpatient admission for delivery						
Admission						
Number of days of hospitalization						
Delivery without admission						
Delivery						
Referral to Hospital						
Referrals						

▲ *Use FHSIS or log-book to tally and fill up summary in questionnaire. See tally-sheet for curative consultations in Section 12*

Section 7: Total Revenue received per month, in pesos, January–June 2003

Revenue 2003	January	Feb	March	April	May	June
Donation from patients						
Capitation IP from PhilHealth						
Other						

Instruction:

- *Obtain data from the municipal treasurer*

Section 8: Quality of care

To get accredited, what did you have to do? Who paid for it? How much?

Date	Intervention/activity/investment	Who paid?	Total Pesos paid

Instruction:

- *Intervention/ and who paid can be answered by Doctor.*
- *For amt paid, need to retrieve requisition forms for equipments, etc. or trace this from the Municipal Treasurer's office*

Section 9: Allocation of IP capitation fund

Obtain this from Municipal Treasurer. Rephrase 9.2.

9.1. What is the periodicity of the receipt of the IP capitation fund? _____

9.2. To municipality treasurer: Describe any problems occurred in the transfer of the capitation fund from PhilHealth to Municipality:

_____

_____

9.3. To RHU: Describe any problems occurred in requesting items paid by the capitation fund:

_____

_____

9.4. To the Municipality treasurer: So far, on what have you spent the capitation fund?

Date	Investment	Amount

9.5. Can you use your capitation fund to buy contraceptives? _____

9.6. On what items can you NOT spend it? _____

9.7. To the Municipality treasurer: Are there other improvements/investments done, other than the once needed for accreditation? For example, other foreign assistance projects financing investment or improving specific health programs, such as FP.

Date	**Intervention/activity done**	**Who paid?**	**Total Pesos paid**

Section 10: Stocking of Medicaments and Contraceptives

10.1. Have you ever run out of stock in drugs or contraceptives from January–June 2003? _____Yes ; _____No

10.2. For the 10 drugs that are most frequently out of stock, please report number of days that they were out of stock in each month:

Drug	Is this a frequently used drug?	January	Feb	March	April	May	June
1	Yes No						
2	Yes No						
3	Yes No						
4	Yes No						
5	Yes No						
6	Yes No						
7	Yes No						
8	Yes No						
9	Yes No						
10	Yes No						

10.3. For contraceptives, please report the number of days that they were out of stock in each month:

Contraceptive	January	Feb	March	April	May	June
Condoms						
IUD						
Pills						
FP injectables						

Instructions:

- *Obtain this information from the RHU.*

Section 11: Tally sheet for curative consultations IP, 2003

	January	February	March	April	May	June
Child Diseases CARI-						
Total						
VSD						
SP						
P						
NP						
CDD						
Total						
<1 Year						
1-4 Years						
TB/NTP						
Sputum Exam						
Carry-overs						
Initiated Treatment						
Rabies Cases						
Leprosy						
Drop-in						
Contact Exam						
School Exam						
Referral						
Skin-slit Smear						
MDT-MB-Carry Over						
-New Cases						
MDT-PB-Carry Over						
-New Cases						

Smear Exams						
Presumptive Test						
Radical Treatment						
API<5/1000						
API<5-9/1000						
API<10/1000						
Stool Exam						
Cases Treated						
Total						
STD						
Clinic Visits						
Treat 4 Gonnorhea						
Treat 4 Syphillis						
Treat 4 Others						
Gen. Med. Services						
Dermatology						
Gastro Intestinal						
EENT						
Endocrine						
Genito-urinary						
Neuroligic/Psychiatric						
Cardiovascular						
Respiratory						
Musculo Skeletal						
Gynecology						
Dressings/Injections						
Minor Surgery/Injuries						
Physical Exam/PE						

BP Monitoring						
Other Infect. Dis.						
Nutri./Vit. Def.						
House Calls						
Others						
Dental						
Total						
Oral Exams						
Care-Curative						

Section 12: Tally sheet for curative consultations ALL patients, 2003

	January	February	March	April	May	June
Child Diseases CARI-						
Total						
VSD						
SP						
P						
NP						
CDD						
Total						
<1 Year						
1-4 Years						
TB/NTP						
Sputum Exam						
Carry-overs						
Initiated Treatment						
Rabies Cases						
Leprosy						
Drop-in						
Contact Exam						
School Exam						
Referral						
Skin-slit Smear						
MDT-MB-Carry Over						
-New Cases						
MDT-PB-Carry Over						

-New Cases						
Smear Exams						
Presumptive Test						
Radical Treatment						
API<5/1000						
API<5-9/1000						
API<10/1000						
Stool Exam						
Cases Treated						
Total						
STD						
Clinic Visits						
Treat 4 Gonnorhea						
Treat 4 Syphillis						
Treat 4 Others						
Gen. Med. Services						
Dermatology						
Gastro Intestinal						
EENT						
Endocrine						
Genito-urinary						
Neuroligic/Psychiatric						
Cardiovascular						
Respiratory						
Musculo Skeletal						
Gynecology						

Dressings/Injections						
Minor Surgery/Injuries						
Physical Exam/PE						
BP Monitoring						
Other Infect. Dis.						
Nutri./Vit. Def.						
House Calls						
Others						
Dental						
Total						
Oral Exams						
Care-Curative						

Section 13: Tally sheet for FP IPpatients, 2003

Year: 2003 Family planning Tally Sheet	January	February	March	April	May	June
1) Condom						
Continuing						
New Acceptors						
2) IUD						
Continuing						
New Acceptors						
3) Injectables						
Continuing						
New Acceptors						
4) Pills						
Continuing						
New Acceptors						
5) Other Natural Methods						
Continuing						
New Acceptors						

Section 14: Tally sheet for FP ALL patients, 2003

Year: 2003 Family planning Tally Sheet	January	February	March	April	May	June
1) Condom						
Continuing						
New Acceptors						
2) IUD						
Continuing						
New Acceptors						
3) Injectables						
Continuing						
New Acceptors						
4) Pills						
Continuing						
New Acceptors						
5) Other Natural Methods						
Continuing						
New Acceptors						

Section 15: Tally sheet Laboratory Services IP Patients, 2003

Lab	January	February	March	April	May	June
Urine						
Blood						
Fecal						
Sputum						
Others						
X-ray						

Section 16: Tally sheet Laboratory Services ALL Patients, 2003

Lab	January	February	March	April	May	June
Urine						
Blood						
Fecal						
Sputum						
Others						
X-ray						

Survey of HOSPITAL, Philippines
January – December 2002

Name of HOSPITAL: _____ **Primary / Tertiary hospital**

Provincial / District hospital

Municipality: _____ Province: _____

Chief of Hospital Name:_____

Respondent(s) Name(s) and Position: _____Department:_____

Respondent(s) Name(s) and Position: _____Department:_____

Total population living in catchment area (province or district) of hospital:_____

Total number of indigents living in catchment area of hospital: _____ households/individuals

Poverty threshold income used to define the indigent population: PhP _____

Total number of indigents living in catchment area who are enrolled in PhilHealth IP:_____ households/individuals

Date of accreditation with PhilHealth:_____

Enumerator Name: _____

Dates of visits:

Visit1____

Visit2____

Etc.

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Section 8:	Contribution of other factors and projects

Section 1: Resources: (January – December 2002)

Report average number per month in 2002

Resources	Total
PHIC Accredited beds	
Authorized bed capacity	
Actual/Implementing beds	
Occupancy rate	

PERSONNEL	**Total**
CLINICAL	
Medical Specialist/Consultant	
Surgeon	
Physician	
Psychiatrist	
Psychologist	
NURSING	
Nurses	
Nursing Aides	
Midwives	
Ancillary (Med Tech, Dental, etc)	
Others	

Instructions:

- *. Before visiting any health facility, the data collection team should obtain information from the administrative services of the hospital and the Provincial Health Office.*
- *. At the level of each health facility, the information will be verified and completed with the head of the hospital.*

Section 2: Expenditures on Pharmaceutical and other Products (PhP): January – December 2002

Report the total amount pesos spent by different sources in January – December 2002

Payers:	National Gov	Province	Municipality	Out-of-pocket	PhilHealth reimburse-ment	NGOs donations	Health projects (loc/FAP)	Donors	Other _____
Medications									
Contraceptives Condoms									
IUD									
FP injectables									
FP pills									
Others									
IEC materials									
Equipment									

Instructions:

- *Please make an estimate of the donations received by the hospital from different sources*

Section 3: Expenditures on Salaries and Utilities (PhP) from January – December 2002:

Report total amount spent on line items during 2002

Line item	Total Pesos in 2002
Total personnel expenditures: Salaries and benefits	
Water	
Electricity	
Communication	
Gas/Fuel	
Office supplies	
Maintenance products	
Other supplies	
Cleaning	

Instructions:

- *Expenditures on Personnel and detailed MOOE can be obtained from Statement of Allotment, Obligations and Balances.*
- *Check the hospital expenditure report data for this information.*

Section 4.1: OB/GYN: Total number of services provided per month to all patients (2002):

Services	January	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
Inpatient admissions for OB/GYN													
FP surgical (BTL)													
Deliveries NHIP													
Deliveries Non-NHIP													
All deliveries													
C-sections NHIP													
C-sections Non-NHIP													
All C-sections													

Section 4.2: Discharges by type of NHIP Beneficiary for the year 2002:

Summary of Discharges and Out-Patient Services	Total for 2002
Total Discharges (including deaths) Charity/Indigent	
Total Discharges (including deaths) Philhealth	
Total Discharges (including deaths) Paying:	
Average number of in-patients per day	
Average length of hospitalization	
Total number of out-patients attended	

If available please report discharges by insurance status per month:

Discharges by Beneficiary Type	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
a. NHIP												
1. Employed												
1.1Government Member Dependent												
1.2 Private Member Dependent												
2. IP Member Dependent												
3. Indigent												
4. Pensioners												
b. Non-NHIP												

Section 4.3: Referrals from RHUs and other hospitals for the year 2002:

Referrals:	**Total number in 2002**
Referrals from : RHU Other hospitals/center	
Referrals by type of beneficiary: NHIP Non-NHIP	

Section 5: Total Revenue received per month, in pesos, January – December 2002

Revenue	January	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
OOP from user fees												
PhilHealth												

Instructions:

- *To obtain this data from Philhealth and the hospital accounting department*

Section 6: Quality of care: Stocking of Drugs and Contraceptives Supply 2002

6.1. Have you ever run out of stock in drugs or contraceptives from January – December 2002? _____Yes ; _____No

6.2. For the 10 drugs that are most frequently out of stock, please report number of days that they were out of stock in each month:

Drug	Is this a frequently used drug?	January	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Oct
1	Yes No												
2	Yes No												
3	Yes No												
4	Yes No												
5	Yes No												
6	Yes No												
7	Yes No												
8	Yes No												
9	Yes No												
10	Yes No												

6.3. For contraceptives, please report the number of days that they were out of stock in each month:

Contraceptive	January	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Condoms												
IUD												
Pills												
FP injectables												

Instructions:

- *Obtain this information from the hospital.*

Section 7: PhilHealth Reimbursement

9.8. How often do you submit claims to PhilHealth? _____

9.9. What is the average waiting time for reimbursement? _____

Section 8: Contribution of other factors and projects

8.1. In the year 2002, were there foreign assistance projects or national government projects that affected the availability of drugs, supplies and equipments?

Date	Intervention/activity done	Who paid?	Total Pesos paid

Other observations:

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