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# Reconnaissance Study on the Implementation of Case-based Payments

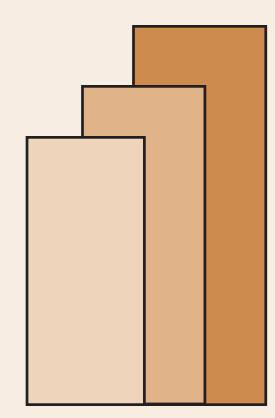
Godofreda Dalmacion, Noel Juban, and Zenith Zordilla

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# December 2014

For comments, suggestions or further inquiries please contact:

The Research Information Staff, Philippine Institute for Development Studies

5th Floor, NEDA sa Makati Building, 106 Amorsolo Street, Legaspi Village, Makati City, Philippines

Tel Nos: (63-2) 8942584 and 8935705; Fax No: (63-2) 8939589; E-mail: publications@pids.gov.ph

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**Reconnaissance Study on the Implementation of Case-Based Payments** 

Dr. Godofreda Dalmacion Dr. Noel R. Juban Dr. Zenith Zordilla

Philippine Institute for Development Studies

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# List of Abbreviations

CBPCase Based PaymentCF2Claim Form 2DOHDepartment of Health
DOH Department of Health
DPC/PDPS Diagnosis Procedure Combination Per-Diem Payment System
DRG Diagnosis Related Group
DSWD Department of Social Welfare and Development
FFS Fee For Service
GDP Gross Domestic Product
GOCC Government Owned and Controlled Corporation
ICD 10 International Classification of Diseases - 10
LGU Local Government Unit
NBB No Balance Billing
OECD Organization for Economic Cooperation and Development
OOP Out-of-Pocket Expenditure
PF Professional Fees
PHIC/PhilHealth Philippine Health Insurance Corporation
USAID United States Agency for International Development
WHO World Health Organization

#### Abstract

To improve PhilHealth's benefits framework, enhance hospital services and to achieve one of the Universal Health Care's thrust, greater financial protection, the case-based payment (CBP) scheme was implemented in 2011. CBP is a provider payment scheme initially implemented with rates for the 23 most common medical and surgical cases. This study investigates what has happened with CBP after its nationwide implementation through the perspectives of the following stakeholders such as PhilHealth, administrators of health facilities and health care providers. This also concerns operational aspects of the implementation not an assessment whether CBP helped achieve Universal Health Coverage for the Philippines. The approach used in this study is a mix of qualitative methods including desk review of the legal framework of health financing, administrative orders related to CBP, key informant interviews, and survey on health care providers. Areas of implementation were thematically grouped into four categories based on the results of interviews and survey, namely: 1) administration and system, 2) human resources, 3) medical integrity, and 4) financing.

Overall, CBP needs improvement on the turnaround time for reimbursements to both health providers and hospitals, electronic updating of claims, membership directory and physicians' accreditation statuses, shifting of policies from different implementing agencies, transparency and impact evaluation processes for health outcomes.

Keywords: case-based payment, financial protection, PhilHealth

#### **Executive Summary**

Managing scarce resources and health care efficiently is crucial in health system management and in ensuring the overall sustainability of any resulting improvements in health outcomes. The Department of Health and the Philippine Health Insurance Corporation (PHIC) after a series of consultations crafted the 2010-2020 Health Care Financing strategy whose overarching direction is to safeguard all Filipinos from the financial risk of poor health. A goal commonly referred to as Universal Health Coverage. One of its strategies is for PHIC to shift the provider payment mechanism (PPM) from fee-for-service (FFS) to case-based payment (CBP) system in order to provide greater financial protection to their members, improve its benefits framework and enhance hospital capacity and capability. It is now time to investigate what has happened with CBP after its nationwide implementation in 2011 from the viewpoint of the following stakeholders: PHIC itself, the Health Facilities represented by their Administrators and the Health Care Providers. Our study will only be concerned with the operational aspects of implementing CBP from one year of its adoption. It will not be able to assess whether CBP helped achieve Universal Health Coverage for the Filipinos or has provided quality health care.

A mix of qualitative methods was used by the study team. They include desk review of the legal framework underpinning health financing, review of the administrative orders related to CBP released by PHIC and DOH, Key Informant Interviews (KII) among purposively selected hospital administrators and Survey questionnaire among health care providers. The team collected data from three level-4 DOH-retained hospitals, one level-4 private hospital, one level-2 private hospital, and one level-4 LGU-operated hospital. Areas of implementation were thematically grouped into four categories based on results of the interviews and survey questionnaire, namely: 1) administration and system, 2.) human resources, 3.) medical integrity, and 4.) financing. These categories apply to both the Implementing Agency, PHIC and the Health Care Providers, represented by the hospital administrators and Phyisicans.

Key findings:

#### I. Administration and System

#### A. PHIC

i. PHIC did not implement new administrative changes to cope with the CBP. Plans are yet underway to send emails to update providers on their claims. PHIC also plans to create a directory of accredited physicians to allow sufficient time for doctors to renew 6 months before expiration of their accreditations and for those whose accreditation has expired to apply for renewal immediately. PHIC has adopted the "no accreditation, no reimbursement policy" yet has been so much delayed in processing accreditations.

ii. There is a lack of a monitoring and evaluation system for CBP by both hospital and PHIC.

# B. Hospital Facilities

- i. Administrative changes to cope with the implementation of the CBP were in the extremes. It ranged from no new changes to aggressive computerization of claim submissions, reformatting hospital admission records to jive with the PHIC CF2, strengthening staff support by hiring more evaluators and sharing payments with peripheral health providers such as the nurses and other hospital workers.
- ii. Hospitals established a more routine schedule for following up reimbursement claims and hired a point persons only to handle PHIC related concerns
- iii. Most of the administrators and health care providers were not sufficiently informed of the program until it was due for implementation. This suggests that there is a greater need for PHIC to engage more stakeholders in planning any programs
- iv. CBP was significantly beneficial to PHIC which did not have to review claims for each medicine/supplies and diagnostics tests . However, PHIC shifted the burden to the hospitals to pay their providers which can be very delayed for local government hospitals whose payments are received not by the facilities but by the Local Government.
- v. Overall, administrators perceive that CBP "needs to be improved" as far as administration and system of implementation is concerned.

# C. Health providers

- i. CBP has increased the efficiency of paying claims by shortening turnaround time for hospital reimbursement but not for doctor's reimbursement.
- ii. PHIC has not provided an efficient feedback system for physicians to correct deficiencies in completing the CF2
- iii. CBP needs to be improved both in coverage and rates of reimbursement

# II. Human Resources

# A. PHIC

- i. PHIC claimed to have consulted with specialty societies and to have adequately prepared the physicians and hospitals to the CBP
- ii. There was difference of perception between PHIC and health providers on how cases should be managed or paid reflecting lack of consultation and logical deliberation by PHIC
- iii. Other stakeholders did not appreciate any efforts from PHIC to the augment or increase its staff to cope with the CBP

# B. Hospital Facilities

i. 2 DOH-retained hospitals strengthened PHIC staffing by increasing the number of their medical evaluators. The private hospitals strengthened the function of their already existing PHIC liaison officer

# C. Health Care Providers

i. A doctor-owner of a private hospital learned to use MSExcel to track her

reimbursements and take a proactive role in following up claims

- ii. Doctors from private health facilities do not really care about PHIC reimbursement since they can charge out of pocket for the extra payment not covered by PHIC
- iii. Very few doctors were trained on ICD-10

# III. Medical Integrity

# A. PHIC

- i. No initiatives to regularly review treatment guidelines
- ii. PHIC claimed it consulted with specialty societies on which drugs or treatment are appropriate for the cases. This was not affirmed by physicians.
- iii. PHIC is more concerned with trivialities such as late accreditation, ineligible signature and incomplete entries which are not crucial to quality of care.

# B. Hospital Facilities

i. No quality indicators were set by both PHIC and hospitals. Sole marker for monitoring was turn around time for reimbursement.

# C. Physicians

- i. Positive behaviors observed from providers with the adoption of CBP were: more rational use of medicines and shortening of hospital stays. Although there are no data on re-admissions.
- ii. An adaptive behaviour which can be considered as negative of physicians was the upcoding of cases. It was evident especially for the following cases: Dengue, Diarrhea and Pneumonia

# IV. Financing

# A. PHIC

i. There was lack of transparency from PHIC on how rates were calculated.

# B. Health Facilities

- i. CBP imposed additional burden to most finance officers especially those without adequate support staff, of separating reimbursement of doctors from hospitals. Most of them received the brunt of anger from patients following up their much delayed reimbursements.
- ii. LGU run hospitas can not hire additional staff to manage additional accounting tasks resulting from CBP. The decision to hire and pay salary for extra hand comes from the Local Government Unit and not the hospitals.
- iii. The administrative costs and tasks of paying providers on time shifted from PhilHealth to hospitals. Of note is the state of reimbursement in LGU-operated hospitals where level of bureaucracy has taken as long as 9 months ( time from submission of claim to release of check payment). The CBP was actually envisioned to shorten reimbursement time from 3 months to even 2 weeks, which of course never happened.
- iv. Unlike LGU- run hospitals, DOH-retained hospitals can mobilize unused payment to improve infrastructure and health services.

v. Inadvertently, if CBP shifted the administrative changes to the hospitals, it also shifted the burden to member- patients to pay for medicines, supplies and diagnostic tests not covered by the CBP.

The following are recommendations from the study based on categories of implementation:

# I. Administration and System

- For both PHIC and the hospital have to develop a consolidated and a more transparent approach to planning, communication and engagement of stakeholders, especially in the determination of rates for each case.
- For PHIC to create a Manual of Operations in time with the launching of a program. This will prevent any misunderstandings in the system especially during the first few months of implementation.
- For PHIC to perform quantitative studies looking into the effects of the casebased payment system in the health care system, particularly in cost containment, equitable health service ,rational treatment and efficiency.

## II. Human Resources

- Hospitals and clinicians should invest more energy in understanding resourcing decision, using historical data and clinical costing systems.
- PHIC must also have a corresponding effort to explore redevelopment of the CBP system to help better understand, from an administrator's point of view, the decisions and outcome requirement of the health providers.
- PHIC must develop a logical, centralized , accessible and transparent system for the monitoring and evaluation of the provision and application of CBP resources.
- For the private practitioners to become more participative and vigilant in the various PHIC programs
- Doctors should learn the ICD 10 code.
- For government hospital administrators to streamline the organizational structure and procurement process and lessen the problems brought about by the No Balance Billing Policy.

# III. Medical Integrity

- As Medicine is a continually evolving field, systems must be in place to adjust listing of procedures and cases and allow timely incorporation of updates from new clinical practice guidelines.
- Hospitals and physician groups should also monitor the clinical outcome from CBP such as rate of re admissions and quality of care instead of focusing merely on matters related to reimbursement.

# **IV. Financing**

- For the private hospital administrators to improve coordination with PHIC and health care providers to speed up payments, especially in the setting of LGU-retained hospitals.
- Institutionalize a scheme for dividing the PF for multiple referrals
- Both PHIC and hospitals must develop a system to monitor the pending and paid reimbursements for hospitals and physicians

• PHIC must be more sensitive to the problems encountered by health facilities in the implementation of the CBP. It should treat hospitals and health providers as partners.

The result of the study showed that CBP is fairly acceptable to the following stakeholders, hospital and physicians. However, there is still room for important improvements particularly concerning fairness and appropriateness of rates for the cases and procedures and the creation of a clear implementing guideline. PHIC must also realize that the central goal of any provider payment scheme whether CBP or FFS goes beyond the amount and time of reimbursement but rather to the more central concern of providing quality of health care at the cost it is willing to pay. A common sentiment shared by both physicians and hospital administrators is the need for more transparency and fair consultation of PHIC with their stakeholders prior to any new policy statement.

More importantly, the appropriate Provider Payment Mechanism may in fact be a mixture of different strategies. The overall recommendation is to create a partnership and not a mere financial arrangement among the CBP stakeholders by remembering to place at the center of this engagement, the health and welfare of the Filipino patients

#### **1** Introduction

Managing scarce resources and health care efficiently is crucial in health system management and in ensuring the overall sustainability of any resulting improvements in health outcomes. The use of purchasing as a tool to enhance public sector performance is well documented in other sectors of the economy, but the recent extension of this into the health sector is only being successfully applied in developing countries (Liu and O'Douherty, 2004). Purchasing is defined as the transfer of pooled funds to providers with purchasers acting as agents on behalf of the Government (World Bank, 2011). Strategic forms of purchasing allow purchasers to decide on which health care services should be purchased from providers, at what quantity and price, and how it will be purchased.

A Provider Payment Mechanism is defined as a "type of contract among two or more players - patient, providers, and payers - that creates specific incentives for the provision of health care and minimizes the risk of opportunistic behavior" (Maceira, 1998). Decisions on who to pay, for what and how much will create specific risks and incentives which in turn, will affect the type and amount of services offered. Market outcomes in health are largely determined by the incentives, as well as the cultural influences and professional ethics on the basis of which providers act. Payment and reimbursement criteria, in turn, are critical to determining those incentives, and that is why different payment mechanisms can lead to diverse outcomes, in terms of utilization of care, quality and cost of services offered within the health sector, and total health care expenditures (World Bank, 2011).

Payment schemes play a critical role in determining health system performance due to their influence on the supply and demand of health care (World Bank, 2011). The various formulated payment schemes employ different payment and reimbursement criteria that incentivize the type and number of services rendered by institutional and individual health care providers. This is where the Philippine Health Insurance Corporation (PhilHealth), being a payer, can influence the delivery and utilization of health care services.

Securing better access and financial protection against the cost of illnesses for Filipinos has been the focus of PhilHealth, a tax-exempt GOCC of the Philippines attached to the Department of Health. Its goal is to ensure a sustainable national health insurance program for all (PHIC, 2011) under the principles of universality, equity, effectiveness, cost sharing and cost containment (PHIC, 2013), as mandated in Republic Act No. 7875, or "The National Health Insurance Act of 1995 (which is now RA 10606, or "The National Health Insurance of Act of 2013").

Historically, PhilHealth's provider payment mechanism (PPM) has been Fee-For-Service (FFS), where services are unbundled and paid for separately. In later years, PhilHealth has also used capitation<sup>1</sup> and global budget<sup>2</sup> for the out-patient benefit packages for indigents and overseas Filipino workers (respectively). More recently however, PhilHealth has adopted the use of case-based payments (CBP).

In its Circular 31-2013, PhilHealth stated that FFS has "intrinsic constraints that limited the Corporation from fully realizing the intents of the aforementioned guiding principles. Globally, studies have shown that FFS has led to prolonged hospitals stays, overutilization of diagnostic procedure, and provision of unnecessary and inefficient health care services that insurances paid for without offering any additional value to members (PHIC, 2013)." There was also note of inequity of support value for patients between private and government health care institutions. It is for these reasons that PhilHealth was motivated to change to a different PPM.

CBP is defined as a provider payment system in which "a hospital is reimbursed for each discharged inpatient at rates prospectively established for groups of cases, called case rates in the Philippines, with similar clinical profile and resource requirements (Telyukov, 2001)." This amount includes both the hospital fees and the professional fees of all accredited doctors who were involved in the treatment of the patient-claimant (PHIC, 2011). CBP was also implemented to varying degrees by governments in other countries to increase equity of care and cost containment (Cashin *et al.*, 2005).

CBP has both advantages and disadvantages that are worth noting. CBP increases financial protection by encouraging transparency in terms of prices of medical services. Administratively, it shortens the turn-around time for claims processing and reimbursements since itemization is eliminated (PHIC, 2013). However, as with any payment system, CBP also has its disadvantages, namely: an increase in hospital admissions; increase in readmissions; reduction in intensity of care and poor quality such as cost shifting; avoidance of severe cases or cases with a low payment rate; and recording of diagnoses that are reimbursed at higher rates than the actual diagnoses (upcoding) (Cashin *et al.*, 2005).

PhilHealth implemented the CBP system which features case rates that are inclusive of professional fees (PFs) of all doctors (30% of rate for a medical case and 40% of rate for a surgical case). Furthermore, in instances wherein the No Balance Billing policy applies, any OOPs made by patient-claimants are to be deducted against the claims of hospitals with corresponding sanctions or policies. Last September 2011, the top 23 most common diseases and hospital procedures in PHIC-accredited hospitals were reimbursed following the CBP, accounting for 49% of PHIC's total claims and covering 85% of hospital confinements in the Philippines.

<sup>&</sup>lt;sup>1</sup> Capitation is a payment method that allocates a predetermined amount of funds per year for each person enrolled with a given provider (usually a primary care provider, such as family physician) or resident in a catchment area.

<sup>&</sup>lt;sup>2</sup> Global budgets are allocated to health facilities and typically depend on the type of facility, historical facility budget, number of beds (for hospitals), per capita rates, or utilization rates, for past years.

CBP is expected to simplify the payment of claims and encourage transparency of prices for all related interventions such as medicines, procedures, and laboratory examinations. The prompt payment of hospitalization claims is hoped to optimize the delivery of health services. Thus, indirectly, CBP is envisioned to assist in the achievement of Universal Health Care in the country. For PhilHealth, however, the challenge remains in attaining the balance between maximizing benefits and creating measures to minimize disincentives.

There has been no previous local study conducted to describe hospitals' and physicians' perceptions of CBP. By looking into the CBP experience of local institutional and individual health care providers, PhilHealth may find opportunities for improving and streamlining their policies in preparation for the All-Case Rate system.

The overarching objective of this study is to survey the implementation of the CBP and describe the resultant experiences of the various stakeholders one year after its adoption. The term used in the term of reference is "reconnaissance" implying observation or survey which is more superficial in nature than evaluation. For clarity, implementation was described thematically into four broad categories, namely:

- a. Administration and hospital system
- b. Human resources
- c. Financial management
- d. Medical integrity

Administration entails the adjustments by both PHIC and Hospitals in their method of administering reimbursements and disseminating advisories and instructions to both patients, facilities and providers. It also involves changes in admission policies to meet the demands of the new provider payment mechanism. Human resources pertains to behavioural changes of providers and payers including adaptive behaviours and innovativeness. Financial management pertains to the collection, accounting and actual mechanism of payment to the servicing facilities by PHIC and subsequent payment to their health care providers/personnel. Lastly Medical Integrity means that the choice of reimbursement for a particular disease is reasonable and commensurate to what is essential to effectively manage and treat the patients .It should be enough to pay for the relevant diagnostic tests, pay a fair professional fee and cover the cost of hospitalization to achieve a good clinical outcome. Although equity is vital to the viability of an Insurance Company, rational therapeutics must not be sacrificed because re-admissions, relapses and disability will eventually burden not only the Insurer but society.

The end goal of doing reconnaissance of the CBP is to immediately address bottlenecks or problems that can deter its smooth implementation. The study has no intention to evaluate or suggest solutions to these problems but rather to document and describe what has been missed and what needs to be fixed.

#### 2 Review of Related Literature

#### Provider Payment Mechanism

Few rigorous studies exist to assess the overall performance of new provider payment mechanisms, particularly their impact on equity, with most of the evidence available from gray literature, retrospective studies, or relatively small-scale projects (Belli, 2004). Regardless, studies that have been done have identified the impacts of and issues related to PPMs (either in general or a specific PPM type).

Many issues, "due to a combination of government and market failures, are revealed in poor spending choices, distorted allocation of resources, provider unresponsiveness to clients, and in general poor quality of services, etc., and ultimately, the inability of the health care system to contribute to achieve better health outcomes" (Belli, 2004). Provider payment mechanisms as part of resource allocation and purchasing reforms have been developed in an attempt to respond to the issues of efficiency, quality, and equity plaguing health systems in several countries. The impact of PPMs on various aspects of health sector performance were determined by Preker *et al.* in 2001 (as cited in Liu and O'Douherty, 2004). Though both FFS and CBP were determined to have an equally positive impact on the quality of health services, FFS was determined to have a greater impact on access or financial protection, while CBP (or per case) was determined to have an even more pronounced impact on health sector efficiency. (See Table 1.)

		Possi	health sector pe	erformance		
Payment characteristics	Risk with	Access /financial protection	Quality	Spending volume	Efficiency	Administrative simplicity
Line item	Provider <sup>a</sup>	+	+	+++		+++
Salary	Purchaser	+	++	+++	+	+++
FFS	Purchaser	++	++			
Per Diem	Purchaser	++	+			+
Per Case	Provider	+	++	+	+++	
Global Budget	Provider		++	++	+	+
Capitation	Provider*	+	+	+++	+++	+
PRP	Purchaser	+	++	+	+	+

*Table 1. Impact of Selected Payment Mechanisms (taken from: Liu and O'Douherty, 2004).* 

a. Depends upon whether budget rules are "soft" or "hard."

Source: Preker, Jakab, Langenbrunner, and Baeza (2001).

It must also be noted that even well planned and implemented payment mechanisms and systems may fail due to other related factors in health care delivery. Unless these issues are addressed, impacts of change in resource allocation and purchasing will be diluted or neutralized. Langenbrunner and Liu (2004) identified 7 issue areas: fragmented public sector pooling and purchasing; low operational autonomy of providers; lack of timely information and routine information systems; poor complementarity of design; institutional impediments; technical capacity and management skills; and monitoring and quality.

Fragmented public sector pooling occurs when there are multiple sources of financing (which include direct government allocation and OOPs), which limits the push that payment incentives may have in changing behavior. Low operational autonomy of providers refers to the lack of flexibility that providers have in addressing purchaser demands (e.g., to increase or decrease capacity, borrow money, and take financial responsibility). This has been identified as an issue especially in countries where government pays for the bulk, if not all, health services, such as in the United Kingdom and Scandinavian countries. There is also a recognized need for timely information and routine information systems for PPMs, although investing in these would drive up the costs of health system transaction costs. In addition, different PPMs implemented simultaneously may result in poor complementarity (i.e. in design) such that one PPM drives up health care costs paid for through another, such as in the case of Croatia where an increase in hospital admissions and in-patient expenditures occurred brought about by capitation implemented at the primary care level and FFS at the specialist level and in spite of increased investments in primary health care. Finally, institution-level issues were identified included institutional impediments to change or reform, a lack of technical capacity and management skills to effectively deal with contracting and payment systems, and the underdeveloped capabilities of purchaser's to monitor quality of care.

Robinson (2001) was also able to identify problems associated with these sophisticated payment systems, such as higher administrative costs and an increased need for information and management systems. This is true for both purchasers and providers as the unit of payment increases and risk shifts more onto providers. Management information systems cannot always be designed and implemented immediately. For instance, the benefit of using DRGs in terms of transferring full and appropriate risk onto providers is simply not worth the administrative cost associated with this system. This is the case in the United States where private purchasers use FFS for primary care and do not use DRGs to reimburse hospitals, relying instead on bed days (Robinson, 2001).

There are also other problems associated with specific PPMs. Wellock (1995) and McCrone *et al.* (1994) examined the use of diagnosis groups as indicators of length of stay and resource utilization. Wellock (1995) compared the appropriateness of the Refined Group Number classification system for funding psychiatric discharges in Canada as compared to the US DRG classification. It was concluded that the system was still weak causing inequitable funding for psychiatric discharges. McCrone and colleagues (1994) analyzed the implications of a future application of a DRG-type mechanism to reimburse health care services in the United Kingdom. The investigators correlated the length of stay with diagnosis and determined that only 3 percent of the variation in length of stay was explained by the build diagnosis groups. It was determined in both studies that diagnosis groups served as poor indicators of length of stay and resource utilization.

#### **Global Practices on Provider Payment Mechanisms**

Many countries have experimented with various health care systems and payment systems that were devised to improve quality of care and equity while promoting the efficient use of resources (Cashin *et al.*, 2005). In some systems, part or all of the financial risk is transferred from the purchaser to the provider and patient. Imposing high co-payments undermines the support value to such systems and quickly erodes financial protection, especially in developing countries (Langenbrunner and Liu, 2004). This is why increasing the use of prepayment and rationalizing health expenditures are recommended in the current health financing strategy for achieving universal health care in the Asia Pacific Region.

#### Fee for Service

One of the most common payment mechanisms is fee for service. In this system, health facility services are paid for separately (i.e., each service has its corresponding fee). It is considered to be beneficial for providers' internal efficiency and bad for social efficiency from the consumer's point of view (Langenbrunner and Liu, 2004). In addition, there is also an associated high administrative cost in the long-run for both providers and insurers partly because every service and procedure is billed (Langenbrunner and Liu, 2004).

FFS is still one of the most widely used methods for paying private-sector hospitals and providers in developing countries and is used selectively in many OECD countries for priority services such as vaccinations. In many parts of Asia and Africa, it has been used as a start-up financing scheme for health care because little capacity is needed to develop and implement it. It has also been used to improve access and utilization in underserved areas in rural areas of such countries (Langenbrunner and Liu, 2004).

In a fee-for-service payment system the revenue facilities (and individual doctors) receive depends on the quantity and of the services they provide. Thus, countries such as the US and Europe, where FFS was more widespread, over time experienced a more pronounced growth in health expenditure, in absolute terms as well as a proportion of GDP. One stream in the US health economics literature has also underlined that, when reimbursement to providers is activity-and-cost-based (as in a fee-for-service system), there is no incentive to focus on technological progress that could lead to less costly treatments. Providers can gain by making use of ever more costly treatments and equipment, and even by inducing demand and supplying services above the level that would be clinically justified.

Other countries have also had similar experiences with FFS. In the 1990s, with the adoption of social health insurance systems, several countries, including the Czech Republic, Croatia, Slovakia, and Ukraine, moved from input-based payment to reimbursement by fee-for-service. In these countries, FFS quickly led to

increased activity levels and put financial pressures on purchasers, causing them to put ceilings on the total amount, negotiate volume contracts within a capped budget, or use prospective global budgets with activity caps (World Bank, 2011). In the Czech Republic, health care spending increased by 50% two years after the shift to a fee-for-service model (Massaro et al, 1994).

Cheng (2003) noted a similar experience in Taiwan. After the inception of the fee-for-service system of Taiwan's National Health Insurance (NHI) in 1995, there was an increase in outpatient surgery by 56.4%, inpatient surgery by 19.7%, and inpatient hospitalization by 18% during the period 2004-2010.

#### Case-Based Payment

The emergence of another provider payment mechanism called case-based payment started during the 1970s. CBP occurs when a single flat rate per case is paid, which can also be adjusted depending on the patient's risk and severity of his/ her disease. Each patient is classified in a specific "diagnostic group" according to his/her principal diagnosis and, correspondingly, a fixed reimbursement is given to the hospital for treating the patient (World Bank, 2011). Because it requires a system to define a diagnostic group, CBP is more technically complicated and requires substantial individual patient-level databases. Furthermore, it "needs to reflect historical costs of both individual and the entire network of hospitals (Telyukov, 2001)."

The most popular type of case payment is the DRG payment for hospital services (Langenbrunner and Liu, 2004). It was first introduced in the US Medicare system in 1983 and later on adopted in several other countries: Germany, Indonesia, Hungary, and Taiwan. In the past, case-based payment systems were adopted in several developing and former socialist economies to pay for inpatient care, such as in Brazil and Hungary. In some cases, countries have used the same classification system as the US, while others have used alternative classification systems such as the "Nosology-based" system used in several of the Former Soviet Republics. A number of middle-income countries such as China and Estonia have sought to experiment with case-based payment system based on simpler classification than the DRGs, due to a lack of data or to reduce administrative costs (World Bank, 2011).

Countries have implemented numerous variations of CBP and to varying degrees (Thomson *et al.*, 2012). See Table 2.

Country	Key Feature	Effects			
North America					
<ul> <li>United States</li> <li>Mix of nonprofit (~70% of beds), public (~15%), and forprofit (~15)</li> <li>Per diem and CBP (usually does not include physician costs)</li> <li>Objectives are to ensure fair compensation for services rendered, provide access to hospital services, monitor quality of hospital services, and contain costs</li> </ul>		<i>Positive:</i> Shorter hospital days <i>Negative:</i> Increase in number of hospital visits, preference for patients with mild symptoms at admittance			
	Europe	-			
Austria	<ul> <li>183 acute care hospitals (equivalent to 52,894 beds): 133 are public or private non-profit hospitals, 43 are private profit- making, and 7 are prison or military hospitals<sup>11</sup></li> <li>Objectives are to improve cost effectiveness and reduce lengths of stay, while guaranteeing quality of care<sup>11</sup></li> </ul>	<i>Positive:</i> Decrease in overall length of stay, long term trend of declining lengths of stay <sup>11</sup> <i>Negative</i> : Increase in hospitalization rates <sup>11</sup>			
Denmark	Almost all hospitals are public. Global budget + CBP (does not include physician costs) DRG initially introduced as an information system then used to monitor and improve hospital productivity	<i>Positive:</i> Decreased waiting times for patients scheduled for surgery <sup>3</sup> <i>Negative:</i> System introduced uncertainty in the budgetary system <sup>3</sup>			

Table 2. Provider Payment Mechanism in 10 Countries

France	Mostly public or private not-for- profit, some private-for-profit	<i>Positive:</i> Slight decrease for acute inpatient care in public hospitals
	Mainly CBP (includes physician costs) + non-activity grants	CBP considered better alternative to global budget since it reflects the cost and volume of services provided. <sup>4</sup> <i>Negative:</i> Annual growth rate in total hospital expenditure 2005- 2009 <sup>4</sup>
Germany	Public (~50% of beds); private nonprofit (33% of beds); private for-profit (~17%) Global budgets + CBP (includes physician costs) Objectives of CBP are to increase efficiency, improve quality of care, ensure fair allocation of resources across geographical areas, and improve documentation of internal processes	<i>Positive</i> : Decrease in length of stay <sup>4</sup> <i>Negative:</i> No change in the number of patients re-admitted <sup>4</sup>
Italy	Mostly public hospitals Global budget + CBP (does not include physician costs) Objectives of CBP are to control hospital costs and impose accountability over hospitals for their productivity	<i>Positive?</i> Decrease in ordinary hospital admissions, increase in day hospital admissions, and greater severity of illness among hospitalized patients <i>Negative:</i> Little or no change in mortality and readmission rates <sup>6</sup>
Norway	Almost all public Global budgets + CBP (includes physician costs)	<i>Positive:</i> CBP increases technical efficiency in terms of number of patients served per resource utilized. <sup>5</sup>

	Objectives are to encourage greater activity in hospitals and to use CBP as bases for funding	<i>Negative:</i> Significant and negative effect on cost-efficiency may be due to poor information on costs, production-oriented drive, tight market factors, and soft budget constraints <sup>5</sup> DRGs updated too late in terms of implementation of new medical practices <sup>10</sup>
	Asia	
Taiwan	Mix of public (35%) and private beds (65%)	<i>Positive:</i> Reduced length of stay in hospitals <sup>9</sup>
	Global Budget + CBP based on DRG	<i>Negative:</i> Average operating profit margin decreased, while inpatient revenues, net operating revenues,
	63% of physicians are salaried, others are paid on FFS basis	and operating expenses increased <sup>12</sup>
	Objective was to manage spending inflation <sup>9</sup>	
Japan	Private non-profit (~55% of beds) and public	<i>Positive:</i> DPC reduced length of stay by 2.29 days after risk adjustment <sup>7</sup>
	Case-based per diem payments or FFS (includes physician costs) wherein provider reimbursement is calculated based on a flat-rate per-diem fee based on the diagnosis group <sup>8</sup>	<i>Negative:</i> Mortality rate was unchanged, increased readmission rate <sup>7</sup>
	Objective is to optimize healthcare costs in the face of an aging population	
	Australia	
Australia	Public hospital (~67% of beds) Hospital payment: global budget	<i>Positive</i> : AR-DRG used to provide accurate means for internal benchmarking and comparisons
	+ CBP in public hospitals. Physicians in public hospitals	with peer groups <sup>2</sup>

	are salaried or paid on a per session basis Uses AR-DRG at national level; innovative by converting hospital inpatient episodes into units of hospital output	<i>Negative:</i> Costly maintenance but justified due to increased efficiency <sup>2</sup>		
<i>References:</i> 1. Thomson et al., 2012, 2. PriceWaterhouseCoopers, 2009; 3. Street et al., 2007; 4.0'Reilly et al., 2012; 5. Biorn et al., 2002; 6. Louis et al., 1999; 7. Hamada				
et al., 2012; 8. Ishii, 2012; 9. Lu and Hsiao, 2003; 10. The Directorate for Health and				

Social Affairs, 2007; 11. Busse et al, 2011; 12. Liu and Cheng, 2013

## Positive Provider Behaviors

Studies that have been done on CBP have revealed positive behaviors related mainly to gains in efficiency and quality assurance. Studies by Covaleski (1993) and Langenbrunner and Liu (2004) showed that efficiency was achieved mainly through the rationalization of resources required to treat patients, specifically in the reduction of required inputs. USAID's guide on CBP implementation in low- and middle-income countries also point to the same favorable effects. In the guide, the foreseen benefits are an increase in likelihood of motivating hospitals to practice cost efficiency measures, while rewarding the more efficient providers of hospital services.

Another effect of efficiency that benefits both provider and payers (specifically patients) is the optimization of hospital stays. Theurl and Winner (2007) noted a significant decrease in average length of stay among patients after a CBP scheme was instituted in Austria. In another study by Street *et al.* (2007), a reduction in waiting time in Norwegian hospitals was also noted. Finally, Jauss and colleagues (2010) investigated the effect of the CBP system instituted in 2004 among 37,396 stroke patients treated between 2003 and 2006 in the German state of Hesse. The study found a significant shortening of hospitalization days from 12.0 to 10.4, as well as lowered odds of patients discharged with severe outcomes in 2006 as compared to 2003 with an odds ratio of 1.378 (95% CI: 1.279-1.485).

The effects of the CBP system extend beyond efficiency gains. Encouraging activities of quality assurance have also been initiated with CBP implementation. Among the 30 coping strategies identified by Huang and colleagues (2005) in hospitals during the implementation of the Taiwanese National Health Insurance Program were the implementation of a discharge plan, clinical pathways, and periodic review of quality indicators, which are all important in improving the quality of health service provision.

## Adverse Provider Behaviors

CBP implementation has also given rise to adverse provider behaviors that affect patient care in one way or another. The system creates incentives to focus on "profitable" patients, to shorten lengths of hospital admission, to provide less care, and admit more patients. Such behaviors affect patients' admission to, stay in, and discharge from health facilities.

For one, it has been observed that CBP has resulted in an increase in hospital admissions and readmissions especially of profitable patients. Conversely, it also tends to decrease hospital admissions of severe cases or cases with low payment, the former requiring more resources on the part of provider but without sufficient compensation and the latter minimizing the potential income of the hospital. In fact, Lagenbrunner and Liu (2004) noted incentives to increase unnecessary admissions and readmissions in Hungary, Russia, and many other countries after a CBP system was introduced.

In addition, lengths of hospital stay and a decrease in the intensity and quality of care have also been noted. In a study by Normand (1994), incentives were noticed to result in hospitals either underproviding services or discharging patients from hospital prematurely. Patients are then referred to other services such as outpatient services, home service care, and nursing home care, with a resulting shift in costs as a consequence. Such practices interrupt the provision of health care, may even compromise its quality, and therefore decrease the effectiveness of such care.

Providers also resort to other methods of compensating for lost revenue. One mechanism by which this occurs is through cost-shifting where hospitals charge some patients, or classes of patients, more than others for the same services in order to recover unreimbursed costs from government and other payers. For example, Korean hospitals were noted to perform diagnostic procedures for patients prior to admission after the implementation of a CBP scheme (Kwon, 2003).

Upcoding and DRG creep<sup>3</sup> are other compensating mechanisms that have been noted. Ikegami (2009) describes the reclassification done by certain chronic care units in Japan. Lagenbrunner and Liu (2004) also noted similar problems in Croatia. Meanwhile in Norway, hospitals that implemented CBP recorded an increase from 17.4 percent to 30.4 percent of complicated cases registered during a three-year period (Street et al., 2007). More recently, Pongpirul *et al.* (2011) noted a need for more medical statisticians, certified coders, and experienced physicians in the Thai health care system to avoid a high proportion of wrongly assigned DRGs. These phenomena may not necessarily affect the quality of health care; however, they are important sources of excessive cost and inefficiency in the system (Lagenbrunner and Wiley, 2002).

<sup>&</sup>lt;sup>3</sup> A practice of reporting diagnostic and procedural codes that result in larger reimbursement for providers (Pongpirul and Robinson, 2013).

There are ways to counter these negative provider behaviors however. One way is through the development of measures for the purchaser to monitor and control the volume of admissions in the form of rationing elective cases above a certain level. Another measure involves denying unacceptable readmissions. In Israel, readmissions that occur within 7 days of discharge from hospital are not reimbursed. Another option is to dictate a minimum length of stay for hospital admissions, such as the 1996 US federal legislation's "Newborns' and Mothers' Health Protection Act" which mandated that group health insurance plans may not restrict benefits for hospital stays for new mothers and their infants to less than 48 hours after vaginal delivery or 96 hours after caesarean delivery. Finally, the US Medicare program has implemented a policy to discourage cost shifting, specifically of not reimbursing for diagnostic tests performed on an outpatient basis in the three-day period before hospital admission.

#### Provider Payment Mechanisms in the Philippines: Fee-for-Service

PhilHealth has utilized four types of provider payment mechanisms: fee-forservice, CBP, capitation, and global budget (Valera, 2009). Fee-for-service has historically been the only PPM used by PhilHealth. The Corporation, however, has more recently employed capitation and global budget payments for their out-patient benefit packages for indigents and OFWs. In 2011, PhilHealth launched its 23 case rates which it plans to expand eventually into an all-case rate system.

The fee-for-service system was carried over from its immediate predecessor, the Medicare system, a system adopted from its namesake in the US. Since the Medicare schemes, however, claims processing and audit methods have markedly improved. For instance, the complexity of claim submissions has been reduced. Beneficiaries are no longer expected to pay the hospital in full and then wait for an unreasonable period of time before receiving reimbursement of the covered amount from PhilHealth. In most cases, patients are only required to make the copayments directly to the care provider. Claims for the covered amounts are sent directly to PhilHealth by the provider and, after review, payments are made directly to the provider. However, Hindle *et al.* (2001) noted that the claims processing was still too complex, mainly as a consequence of weaknesses in PhilHealth's information systems.

In spite of these improvements, low utilization rates prevailed among the Philippine's indigent population which is in most need of health care. Hindle *et al.* (2001) suggested that this low utilization rate among indigents was due to the high copayments, low expectations, and a lack of knowledge about the program. A slower rate of uptake than expected was also noted for other segments of the population (i.e., those belonging to quintiles 2 to 5). This was probably a consequence of a lack of attractiveness (partly through poor marketing but also reflecting weaknesses of design and operation), poor infrastructure, and an inability to control care provision to a satisfactory degree (Feeley, 2004).

Providers have opposed certain directions of PhilHealth. When PhilHealth raised payments to reduce out-of-pocket costs and make scheme benefits more accessible for the poor, hospitals simply raised their prices and continued to collect the difference directly from the insured patients (Hindle et al., 2001). There has been less opposition with respect to any corresponding reduction in the scope of covered inpatient services. However, opposition has been particularly strong from hospitals and doctor predominantly involved in inpatient care and concerned about their lack of resources to change their practice patterns. They have tended to view the proposals as no more than a cost-cutting exercise, and to believe they are already being inadequately paid (Hindle *et al.*, 2001).

These issues with provider behaviors have been a challenge to PhilHealth. The World Bank (2011) has pointed out that the limited autonomy and flexibility that exists with FFS to respond to the financial incentives under mechanisms like capitation and activity-based payments can seriously hamper efforts to change provider behaviors (World Bank, 2011). Thus, new benefit packages must be engineered to respond more efficiently to Filipinos, especially the marginalized population.

In developing its benefit packages, PhilHealth is guided by the principles of universality, equity, effectiveness, cost sharing, and cost containment. These principles are enshrined in Republic Act 7875 or the National Health Insurance Act of 1995. Furthermore, DOH's Administrative Order No. 23, issued in 2005, emphasized the lead role of PHIC in effecting desired changes in all four major health sector reforms areas under Fourmula One for Health, namely health financing, health regulation, health service delivery, and good governance in health.

The 2010-2020 Health Care Financing Strategy for the Philippines (2010) identified inappropriate institutional structures and incentives at the facility level as one of the critical factors impeding the effective performance and responsiveness of the Philippine health systems for all Filipinos. The shift to new provider payment mechanisms from fee-for-service to per-case payment under a case-mix system by 2020 is envisioned to address these gaps.

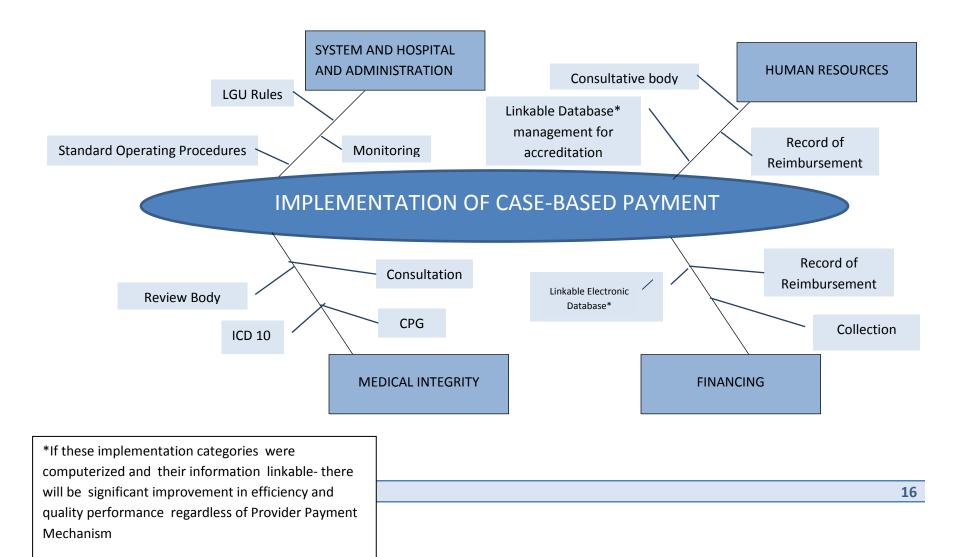
In its Board Resolution No. 1113 entitled "Leaping four(4)ward toward financial protection in 2010," PhilHealth declared its intention to shift to a new payment mechanism. Gradual implementation of the FOUR LEAPS strategy is intended to prioritize financial protection for members, improve benefit framework and design, and improve hospital capacity and capability. The case-based payment was selected as the most appropriate system to implement these objectives and is expected to reduce PhilHealth's inefficiencies in current claim processing arrangements and to provide more financial protection to its members. The effective implementation of CBP is hinged on the effective contracting of providers.

Under Department Order 2011-188, also known as "Kalusugan Pangkalahatan Execution Plan and Implementation Arrangements," the launch of a new inpatient benefit package with "No Balance Billing" has been set by the end of December 2012. Continued enhancement of said packages are also scheduled in the same Department Order set for the period 2014-2016.

# **3** Specific Objectives of the Project:

- a. Describe how conveniently sampled health facilities are adhering to the implementation of the CBP system of PHIC
- b. Document the facilitating factors and obstacles or difficulties experienced by the health facilities with the CBP
- c. Identify, document and classify the strategies and innovative practices of the health care facilities to effect implementation of the CBP
- d. Describe and document the experiences, perceptions and attitudes of health providers in the implementation of CBP in their hospitals.

### **4** Conceptual Framework



# **5 Methodology**

#### Study Design

The study design is qualitative using the following methods: desk review, survey using pre-tested questionnaire, and key informant interviews. As any qualitative design it was important to employ several methods to allow validation and triangulation of the different responses from the various stakeholders. Stakeholders are those directly affected by the change in provider payment scheme by PHIC, including the latter itself but not the patient.

### Study Population, Setting, and Sampling Design

Purposive sampling of health facilities using the frame of all accredited private and government hospital with updated PHIC accreditation was done. Key Informant Interview was conducted with the Hospital Administrators as respondents. Self-administered survey questionnaire was used for physicians who are the direct health providers. Physician-respondents from each hospital were identified and selected by the Hospital Administrator. To represent the National Insurer, the following PHIC Head of offices were selected based on their direct involvement and role in the implementation of the CBP: Vice-President of Health Policy Sector, Head of Benefits Development and Research Department, and the Chief for Standards and Monitoring Department.

## Study Procedures

## 1. Conduct of Desk Review

Desk review was done to obtain existing literature on the advantages and disadvantages of CBP over other Provider Payment Mechanism (PPM), journal articles on equity as a primal goal of National Insurer, tools to attain Universal Health Care and national schemes for Health Financing. Key Informant Interview was used because changes in PPM was initiated from top –down. Thus, the rationale of changing PPM can be better explained from the top but impact is better determined from the members. Choosing PHIC officers as Key informants is logical because they alone can provide the rational and the process by which the list of diseases were decided upon.

In addition, a systematic search on the legal framework and implementing rules and regulations for different PPM was done. Pivotal documents or transcripts responsible for catalyzing the adoption by PHIC of the CBP were also retrieved and reviewed. These documents ranged from Republic Acts to Circulars and Office Orders. Documents on financial and accounting information from each participating hospital were likewise obtained to validate claims by respondents on the efficiency of the CBP vis-a-vis FFS or lack of it. (Please refer to Annex A for the list of documents that were retrieved from participating hospitals.)

## 2. Administration of Survey and Conduct of Key Informant Interviews

Due to time constraint, the investigators decided that prospective participants for both the survey and key informant interviews will be selected from the same hospital. Specifically, seven (7) private and public hospitals were purposively selected. Prior to the site visits, copies of the questionnaires were already sent to the hospitals to prepare their physicians for the survey. Thus, at the time of hospital visits, both survey and a key informant interview were done.

Informed consent was obtained from the survey participants prior to the administration of the survey. The objectives of the study was clearly explained. For the Key Informant Inteviews, all Hospitals Administrators without prodding, ordered their Accounting or Financial Officer to be present during the interview. This proved to be efficient since perception of the respondents towards CBP was substantiated using hard data from their collection and accounting records.

### Data Collection Tool

### Survey Questionnaire

An interviewer-administered survey was developed for the study. It was decided by the investigators to focus on pre-implementation and implementation of CBP in hospitals.

The various factors that influenced the overall success of CBP implementation were classified according to the following categories:

- Administration and hospital system
- Human resources
- Financial management
- Medical integrity

The survey questionnaire was pre-tested on the following: 1 PGH administrator, 1 medical practitioner, and 1 surgical practitioner. The items in the questionnaire was then subsequently revised based on the feedbacks and comments from the pretest.. (Please refer to Annex B for the survey tool.)

## Data Analysis and Reporting

Thematic analysis was performed on the triangulated data obtained from the key informant interviews , survey questionnaire and review of secondary data.

#### 6 Results

#### Desk review results

The development of the Case-Based System in the Philippines began as early as 2008 in response to a call to improve the existing PPM. It appears from the result of the KI that the motive for doing so was not to increase financial protection but rather more to increase efficiency of reimbursement.

The estimation of fair rates for CBP was based on tariff rates (taken from 18 reference hospitals for the 23 most common cases admitted); average value per claim for preceding years; and a costing study from 6 participating hospitals (as a contracted project). Based on the responses of hospital administrators and physicians, it can be concluded that this method was not made transparent to the them. PHIC was also vague when asked to identify the 6 hospitals.

The costing study was performed from 2008 to 2009, involving 2 secondary public and one private tertiary hospitals and involving a total of 480 patient charts (Tsilaajav, 2009). Obviously the number of charts reviewed and the number of hospitals surveyed was very small to be made a basis for a country wide application. Participating hospitals were mostly public hospitals due to the observed reluctance of cooperation by private hospitals and lack of incentive to participate (Tsilaajav, 2009). The study drew on the unit cost figures of tertiary public hospitals using top-down<sup>4</sup> and bottom-up<sup>5</sup> approaches. The following were the unit costs noted:

Ward	Unit Cost per In-patient Discharge (PhP)		
Medical	9,499		
OB-Gyne	9,180		
Pediatrics	8,746		
Surgery	11,447		

Table 3. Comprehensive unit cost per discharge by inpatient specialties, in pesos (from Tsilaajav, 2009)

The average unit costs of cases at tertiary hospitals for the five most common diseases reimbursed by PhilHealth were the following:

<sup>&</sup>lt;sup>4</sup> The top-down approach allocated the total hospital cost for a given period to health services or products based on predefined set rules.

<sup>&</sup>lt;sup>5</sup> Bottom-up costing required recording of every service received by a patient and the converting these into costs.

Disease	Unit cost (PhP)
Pneumonia (organism unspecified)	8,047
Acute Bronchitis	5,834
Normal Single Delivery	5,316
Senile Cataract	14,319
Asthma	7,065

Table 4 Unit cost of selected disease categories, in pesos (from Tsilaajav, 2009)

PhilHealth's Office of the Actuary and BDRD carried out internal modelling to determine cost projections and applied percentage weights to each factor. From these projections, the highest computed rates for each disease were selected as PhilHealth's reference case rates. The basis of choosing the diseases was evidence-based but the decision of cost per treatment lacks validity since it is a known knowledge that there is no reliable cost of illness study in the country.

According to the Vice President of the Health Finance Policy Sector, PhilHealth, various avenues for communicating with the hospital administrators were employed to inform them of the new PPM prior to implementation. These included workshops, public fora, meetings, and pamphlets. Specifically, PhilHealth conducted workshops with PhilHealth Regional Officers and public fora in Cebu, Manila, Pampanga, and Cagayan de Oro. Meetings were also held with PHA, PHAPi, PMA, and its member societies. Finally, pamphlets called "Tamang Sagot" were made available on PhilHealth's website.

PhilHealth released Circular 11-2011, or the "New PhilHealth Case Rates for Selected Medical Cases and Surgical Procedures and the No Balance Billing Policy," in September 2011. Through this particular circular, PhilHealth announced the 23 diseases and hospital procedures that should be paid for through case rates. The cases were categorized into surgical and medical cases and they are as follows with their corresponding rates:

Cost	Surgical Cases	Cost
8,000	Radiotherapy	3,000
16,000	Hemodialysis	4,000
	-	
15,000	Maternity care	8,000
	8,000 16,000	8,000Radiotherapy16,000Hemodialysis

Table 5. PHIC list of 23 procedures and diseases under Case-based payment

(Moderate risk)			
Peumonia (High	32,000	Normal	8,000
risk)		spontaneous	
		delivery (NSD) in	
		Level 1 hospitals	
Essential	9,000	NSD in Level 2 to 4	6,500
Hypertension		hospitals	
Cerebral Infarction	28,000	Caesarian section	19,000
(CVAI)			
Cerebral	38,000	Appendectomy	24,000
hemorrhage (CVA			
II)			
Acute	6,000	Cholecystectomy	31,000
gastroenteritis			
Asthma	9,000	Dilatation and	11,000
		curettage	
Typhoid fever	14,000	Thyroidectomy	31,000
Newborn Care	1,750	Herniorrhaphy	21,000
package in			
Hospital sand			
Lying-in			
		Mastectomy	22,000
		Hysterectomy	30,000
		Cataract surgery	16,000

Identification of cases for reimbursement was based on the most common diseases or hospital procedures representing about 49% of PHIC's total claims and 85% of hospital confinements in the Philippines. Sharing of the PHIC reimbursement between hospital and health providers was commonly 60:40 in favour of hospital and 70:30 in one LGU hospital. The method utilized by PHIC in assigning rates to the cases was not clear to both administrators and health providers. For example, caesarean section which can become catastrophic and fatal to one or both mother and child is given a rate of 19,000PhP but herniorrhaphy which involves one patient and rarely can become fatal or catastrophic is given a rate of 21,000 PhP.

A pulmonologist or generalist taking care of an asthmatic is paid 40% of the 9,000 PhP or 3,600 PhP (3,240 PhP less tax). Thus, for uncomplicated asthmatics involving a visit of once or twice a day (or 10 times in 5 days) and several calls to the hospitals consuming mobile phone load, the doctor will likely get 648 Pesos per day. But bronchial asthma is a tricky disease involving titrating drugs with narrow margin of safety and adjusting electrolytes, fluids and blood gases. A doctor's visits and calls can be more frequent for severe conditions which are not within the provision of CBP.

For a particular Level 4 DOH-retained hospital for instance, 2,636 cases were

filed from January to March 2013 with a total value of claims amounting to more than 38 million PhP of which more than 32% were case rate reimbursements. This represents a significant portion of the hospital's reimbursement. Diseases and procedures not included in CBP were reimbursed using fee for service.

Case-based payment in the Philippines shares characteristics of similar mechanisms in other countries lending it vulnerable to disincentives. As a result, PHIC proactively released Clarificatory Guideline No. 1 (Circular 15-2011) that outlines the list of services that are included in the Newborn Care Package and the accompanying reductions in case of incomplete provision of services, and the exclusion of claims with death outcomes from the CBP from CBP. Of note is the provision for the Newborn Package that in case of facilities that will utilize other ancillary procedures in line with the current CPGs, no additional amount shall be paid to these hospitals. PHIC also released a Clarificatory Guideline No. 2 (Circular 20-2011) in December 13, 2011, addressing several anticipated consequences from CBP based on the experiences of other countries. It tackled the following specific concerns: making patients procure their own supplies and medications, having patients undergo diagnostic procedures outside of the hospital, and, lastly, no balance billing for sponsored patients. Such adverse provider practices were still identified by Domingo (2012) a year later: a propensity for increased hospital admissions, under-utilization of services, premature discharge of patients from hospital, and making patients purchase their own supplies and medications.

PhilHealth has made further efforts at strengthening CBP implementation through monitoring and evaluation and medical review. It has issued a monitoring and evaluation framework through PHIC Office Order 81-2011 ("Monitoring and Evaluation of Case Rates") and Office Order 09-2012 ("Guidelines on Medical Review for Case-Based payment [Post-Audit]"). Such guidelines outlined the conduct of the monitoring process into 3 phases (i.e., post-audit medical review, utilization review, and validation process) and tasked PhilHealth regional offices to perform the review. Every quarter, review reports are sent to the central office where the data is compared to baseline data of the fee-for-service system.

The medical review process involves evaluating cases in terms of the correctness of claim codes, consistency of the case rate condition claimed and the available medical information, under- or over-utilization of services, use of medicines outside of the Philippines National Drug Formulary, appropriateness of diagnostic procedures, and compliance to the No Balance Billing policy.

The utilization review that follows entails assessing the volume of claims, sponsored program to total case rate claims ratio, proportion of No Balance Billing claims, average value per claim, hospital recovery ratio, prevalence of out-of-pocket expenses, average length of stay, and readmission rates. An increase of more than 20 percent compared to baseline in any of the above-mentioned criteria alerts PhilHealth's Central Office. This alert prompts the Central Office to order for the disaggregation of data to the hospital involved to isolate and identify the aberrant

increase. Similar increases have been previously documented.

In one study by Mijares-Majini (2011) on "the monitoring and evaluation the implementation of case rates" in 3 hospitals, an average increase of 65% from 49% of posted claims was noted after the implementation of CBP. Once such increases have been identified and specific hospital data isolated, then validation of the data is done. Any hospital subject to such validation is not reimbursed until it is cleared from this process. This reaction may be harsh and inappropriate. Posted claims in the FFS system was low because of many disqualified claims. They were disqualified based on trivial reasons such as lack of date, illegible signature and expired accreditation. In fact, PHIC gained so much from doctors who were not paid based on technicalities but rendered services to members who paid premiums. An increase in posted claims may even be an indicator of just and efficient services to both members and providers.

## **Result of Key Informant Interviews**

# GENERAL DATA OF HOSPITAL ADMINISTRATOR RESPONDENTS

The team collected data from three Level 4 DOH-retained hospitals, one Level 4 private hospital, one Level 2 private hospital, and one Level 4 LGU-operated hospital. Hospital Directors and Administrators were interviewed as respondents from the health facilities (Annex C).

A total of 16 representatives of the Hospital Administration were interviewed. They were composed of 2 Chiefs of Hospital (government), 1 Medical Director (private), and 13 other administrators comprised primarily of Financial Officers and PHIC Officers. There were 5 male and 11 female administrators aged between 30 to 59 years. Roughly half of the administrators (7 of 16) were medical professionals, and have served as administrators in their respective hospitals for 4 months to 23 years.

## SYSTEM AND HOSPITAL ADMINISTRATION

PHIC and the various hospitals that participated in this study have noted the following changes in their system in response to the implementation CBP. These observations were subdivided into the following domains: Standard Operating Procedures, Monitoring, Contradicting Policies.

## Standard Operating Procedures

None of the respondents knew of a Manual of Operations that was released for CBP implementation. Hospitals encountering problems regarding case rates routinely ask the regional offices for advice.

#### Monitoring

In spite of the policy and guidelines released by PhilHealth on monitoring and evaluation (i.e., PHIC Office Order 0081-2011, "Monitoring and Evaluation of Case Rates" and PHIC Office Order 09-2012, "Guidelines on Medical Review for Case Payment (Post-Audit)"), none of the participant hospitals noted their implementation by PhilHealth. Likewise, none of the hospitals have developed their own internal monitoring and evaluation programs for CBP implementation in their facilities.

Monitoring for both PHIC and hospitals was solely on the basis of reimbursement. The table below summarizes the data on reimbursement of the LGU hospital. Thus payment received from PHIC on July 24,2012 was disbursed to the hospital after 2 months or September 20, 2012. DOH retained hospitals do not have the same problem because payments are directly coursed to them. PHIC apparently is insensitive to differences in accounting among hospitals and does not care about their implications. According to a PHIC official " that's not our problem anymore, as long as they are paid".

Total no. of claims	Median and range of days of confinement	Total duration between claim and check payment	Total amount paid	Income retained	Income deficit	Refunded to patient
444	5 days ; 2 to	5 - 10	958,932.3	106,309.9	4009.13	102,119.6
	17 days	months		(10.67%)	(3.7%)	(10.65%)

Table 6. Third Quarter Payment of PHIC to a Government Hospital in NCR

#### Contradicting Policies –LGU Rules

Additional processing of reimbursements by LGUs may result in delayed reimbursements for physicians and patients. The longest time for reimbursement of physicians was noted in one LGU-managed hospital, which took 180-270 days (6-9 months) before the payments could be processed. Being an LGU hospital, all PhilHealth payments received by that hospital are forwarded to the Provincial Treasurer, who in turn issues the reimbursement checks. However, the computation and voucher preparation for physicians and patients are performed by the inhospital PhilHealth employees and then submitted to the Treasurer's Office. In one instance, this process added an additional 2 months for reimbursement. In an inhospital PhilHealth Abstract for Hospital Checks Received as of July 2012, a LGU hospital received payment from PhilHealth on July 2012 for confinements in April and May 2012. Payments were also made to three patients who were confined as far

as November 2011. The checks were only made available from the Treasurer's Office on September 2012.

## HUMAN RESOURCES

In response to CBP, the following changes in the following domains were perceived by the hospital adminsitrators: consultative body, database management for accreditation, and record of reimbursement.

### Consultative Body

Despite various public fora and consultations performed by PHIC for the CBP, half of the administrators were unaware of the reasons for the shift in PPM from feefor-service to case-based payment. However, two noted that the reason for the change was to make payments to hospitals easier, three stated it was to shorten turnaround time, while another stated the change was to control the cost of health care. All of the stated reasons were in accordance with the CBP program objectives.

All interviewees representing the hospital administration agreed that the time given to prepare for the shift in PPM was inadequate. Less than one month was given to the hospitals to prepare for the shift, from the announcement of the case rates to the actual implementation.

Around half of the administrators also believed that they were not provided enough opportunities for further instructions and clarifications on how to implement CBP. Twelve interviewees noted that the circular was the only official communication received by their hospitals concerning the change of payment mechanisms. For three interviewees, they noted the conduct of a public forum prior to the implementation. However, one interview noted that the public forum appeared to be more of an announcement of the completed package for implementation rather than a venue for questions and concerns to be raised. None of the interviews recalled a public consultation and majority (13 of 16) felt that the there was nothing they could do but to follow the new payment mechanism. Still, there were a few interviewees that expressed their enthusiasm for the new program due to its purported benefits for ease of payment to hospitals and its members.

#### Database Management for Accreditation

One pre-requisite for reimbursement is the provision of services of an accredited institutional and individual health care provider. However, the system of accreditation remains to be manual. Thus, physicians in one level 2 private hospital south of Manila are required to attach their receipt as proof of accreditation for PHIC.

### Record of Reimbursement

The hospitals maintain their records of reimbursement through their inhouse PhilHealth officers. PHIC no longer maintains a separate account for physicians. The officers are also responsible for the payments for the physicians. Two hospitals have circulated a specific division of the PF in case of multiple referrals.

### Others

Majority of participant hospitals assigned existing staff members to handle all CBP-related cases. In fact, only 2 of 7 hospitals hired additional staff in preparation for the CBP system. One private hospital hired a contractual worker to perform the task of disbursing payments to doctors until such time that its Accounting Department became more adept with the new system. One DOHretained hospital opted for a more long-term solution to the additional workload by hiring additional permanent staff to handle PHIC-related concerns. In both instances however the additional staff members were hired to handle the additional workload brought about by the CBP system. For hospitals unable to finance additional human resources however, the only recourse is to assign the additional work to their regular staff. For example, one hospital assigned one of its regular staff members at the Billing Section to coordinate all PHIC-related concerns on top of his/ her regular work. For this particular hospital, it had taken 90 days (or 1 quarter) before the claims could be processed.

## FINANCING

In the initial months of the CBP implementation, all participating hospitals made use of their existing facilities to accommodate the new processes. None modified their physical structures (e.g., renovations or purchase of new equipment). Though one private hospital considered constructing a PhilHealth ward, this was determined to be too costly in terms of economies of scale.

The recent re-classification of hospitals by the DOH also presents as an additional burden for hospitals. Downgrading leaves hospitals unable to provide "higher-level" services. For example, one hospital that was previously classified as a "secondary care hospital" is no longer allowed to operate their other facilities such as their 4-bed ICU, dialysis machines, and 3 operating rooms due to requirements in the recent classification. The administrator of this particular hospital hoped that improved computation of case rates would result in better cash flow which could then facilitate their fulfillment of the re-classification requirements.

## Database

Gaps in the data management system can affect the financing of hospitals. Hospitals and health care providers commonly experience denials in reimbursement. According to PHIC, the three most common causes of denials of reimbursement are the non-eligibility of members for reimbursement; noneligibility of health care providers for claiming; and the submission of incomplete documents. These problems however have also been encountered with with the FFS system pointing to a problem in operational efficiency on the part of PHIC. This problem is largely administrative in nature, and involves the recording, documentation, retrieval of patient's data, and quick analysis of information in PhilHealth's database.

The most common cause of non-eligibility of members cited by the Vice President of the Health Finance Policy Sector, PhilHealth, was the exhaustion of the 45-day maximum hospital stay given to each member. This was most commonly encountered among chronically ill patients. Another cause cited was the irregularity of membership fee remittance. To counter this, PHIC has instructed hospitals and their PHIC offices to check their patients' statuses of membership and certificates of contribution prior to discharge or even upon admission. PHIC has also launched the Institutional Health Care Provider (IHCP) Portal that provides patients online access to information about their eligibility as Sponsored Members.

#### Record of Reimbursement

Any delays in payment in the hospitals are also delays in payment to physicians. Adminstrators also receive complaints regarding the lack of convenient manner to monitor pending and paid reimbursements to physicians.

## Collection

Majority (11 of 16) of interviewed administrators perceived no changes in the reimbursement process, with only 4 interviewees stating that the submission process was harder. One administrator perceived the application for reimbursement to be simpler however, requiring less documentation. For instance, the only attachments required for each claim are the laboratory results and a discharge summary of the case. Itemization of charges and receipts are no longer required since provider payments are based on the case and not on the each and every service given to the patient. This particular change was well received by all the PHIC staff from the private hospitals.

All hospitals noted a significant reduction in the time for reimbursement (from claim submission to check generation) with the CBP system as opposed to FFS. However, the reductions still resulted in varied rates of and experiences with reimbursements. There were a few hospitals that received their reimbursements within 15 to 30 days, while there was one particular hospital with a turnaround time of less than 60 days. The latter hospital, though still with an extended turnaround time, also experienced a dramatic reduction of 30 to 60 days. Still, reductions in the turnaround time for majority of the participating hospitals ranged from 15 to 30 days, usually resulting in a halving of the turnaround time under FFS.

PhilHealth also noted such an improvement, though their figures differ significantly from those provided by the hospitals in the study. According to Philhealth, the average turnaround time under CBP was 14 days, while the fastest time recorded for reimbursement was 6 days.

There have also been instances where these delays in reimbursement have caused significant problems for the participant hospitals, particularly in their dayto-day operations. One private hospital shared that it has currently been waiting for 30 days to receive more than Php 5 million in PhilHealth reimbursements. But in spite of this, the hospital is able to timely remit payments to their doctors, unlike a neighboring hospital that had been unable to reimburse their doctors for almost a year (which almost led to their doctors going on a mass strike).

Unlike PhilHealth's reimbursement to institutional providers, which has improved, reimbursement to physicians has notably lagged. Almost all the hospitals interviewed noted an increase in the overall time needed for the reimbursement from hospital to the physicians. This was more significant among government hospitals due to the No Balance Billing Policy and in instances where patients must paid out-of-pocket for medicines that were unavailable at the facility. In these cases, patients submitted the official receipts of their purchased medicines as part of the hospital's requirements for reimbursement. This additional requirement is also processed by the in-house PhilHealth officers in hospitals and has doubled the reimbursement process from 30 to 60 days in 2 government hospitals.

When asked to rate CBP from 1 to 10 (1 being most against CBP and 10 being most in favor of CBP) in term of reimbursement time, around half of administrators (6 of 10) showed a preference for CBP over FSS. One administrator declined to vote because a comparison could not be made between two flawed PPMs. (See Annex F) When asked to CBP (using the same rating system) in terms of fairness of compensation, half of the administrators (5 of 11) also felt that compensation under CBP (as compared to FFS) was unfair. (See Annex F) Finally, more administrators opined that the current CBP system needs to be improved (See Annex I).

### MEDICAL INTEGRITY

#### International Classificatio of Diseases - 10

Other new payment system requirements have been met with criticism. A number of difficulties were identified in completing Claim Form (CF) - 3, a new form introduced by PhilHealth which is highly similar to a clinical abstract form in most hospitals. Some (5 of 16) administrators expressed that the CF3 represented additional paperwork and was therefore burdensome. One participant also shared that there was an initial difficulty in ascertaining the correctness of the diagnosis, and the appropriateness of laboratory exams ordered or the medications given for a particular case. This was further compounded by the unavailability of their resident

doctors to make the necessary corrections. Finally, the new requirements necessitated additional skills or resources. One administrator noted that the new form requires that in-hospital PhilHealth employees learn the ICD 10 and that copies of the laboratory test results be included in the submission.

## Consultation

The respondent administrators had no recollection of a consultation performed among the medical specialty societies regarding the standard of practice for the 23 case rates.

### Review Body

The respondent administrators had no recollection of a regular review of the case rates in terms of updates for diagnostics and therapeutics.

## CPG vs PhilHealth Guidelines

Another important consideration is the discrepancy between the PhilHealth guidelines for treatment and the current Clinical Practice Guidelines, as observed by two administrators. Both administrators represented teaching hospitals. Resident physicians were advised to follow the CPG instead of the PhilHealth Guidelines. This causes denial of reimbursements in some hospitals

## Facilitating Factors and Difficulties

The following are the various facilitating factors and difficulties in the acceptability of CBP as observed by the various hospital administrators:

## FACILITATING FACTORS

The most important factor that facilitated the compliance to CBP was the simpler Form 2 which was easy to fill up. Compared to FFS, CBP has allowed three DOH-retained hospitals to set-up their own PhilHealth wards using the unused payments and improve health services. A more detailed description of the results may be found in the section on *Innovative Practices*. Lastly, a dedicated personnel that acts as liaison between PHIC and facilities proved to be one of the most effective facilitating factor. The presence of Philhealth CARES composed of nurses who can assist PHIC members concerning their membership and benefits has also been one of the facilitating factor for two sampled government hospitals.

#### DIFFICULTIES

The most commonly cited difficulties as perceived by the administrators in the first few months of CBP implementation were the increase in "return-tohospital" claims due to denials in reimbursement (e.g., incomplete documents), and complaints from physicians due to long reimbursement time and small fees. Other difficulties are listed in Table 5. No changes were noted in the kinds of difficulties encountered even after a year of implementation.

Table 7. Frequency of scores among administrators and their difficulties encountered (n=16)

Difficulties encountered	Frequency
increased number of "return-to-hospital" claims due to the incomplete documents and denials of reimbursement	10
many complaints due to long period for reimbursement to physicians	4
many complaints due to small fees	3
discrepancy between current CPG guidelines and PhilHealth guidelines	2
increased logistics on the part of the hospital to reimburse out-of-pocket expenditures under the No Balance Billing clause	2
filing of claims by patients that are non-members or patients with exhausted funds	2
need for increased manpower due to the added CBP on top of FFS	1
filing of claims under non-accredited physicians	1

## **Innovative Practices**

Several innovative practices were instituted by hospitals in response to CBP implementation to facilitate their compliance with the new system requirements. Many of these practices have resulted in efficiency gains for the hospital. However, such operational improvements have a positive effect not only on the facilities' revenues but also on the provision of health services. The following paragraphs describe these practices and strategies.

## SYSTEM AND ADMINISTRATION

One participating government hospital automatically enrolls patients who are not yet PHIC members, having around 5 point-of-care enrollees per day. This point-of-care enrolment is also being piloted in another participating DOH-retained hospital. An admitted patient that is suspected of being indigent is immediately referred to a DSWD social worker for an assessment of indigency. Once his or her indigency is ascertained, PHIC will enroll said patient and will pay the Php 2,400 premium contribution that is good for 1 year. The LGU is then obligated to continue paying the member's premium contributions after the first year.

One government health care facility has also been operating multiple PHIC wards for their PHIC patients. Though the amount reimbursed per PHIC patient is small compared to private patients, this is compensated by the larger volume of patients. This has proven to be key in this particular hospital's operational success. With the bulk of PHIC patients they serve and an efficient processing and submission system of claims, this hospital is assured of reliable funding for the improvement of services for the whole facility. From these funds, the hospital has been able to set-up a dialysis center housing 56 units and running two shifts. Furthermore, the hospital has been able to improve the facilities for their PHIC patients. All PHIC wards are air-conditioned.

One DOH-retained hospital in Mindanao uses simple technology to facilitate the processing of claim forms. It regularly submits around 800 PHIC claims per week, so to lessen payment delays, the Billing section reminds their health care providers via SMS 4 times per week of pending signatures on the forms. Notices are also sent to the department secretaries.

To help ease the documentary requirements and reduce the return-tohospital claims, PhilHealth implemented the PhilHealth CARES (Customer Assistance, Relations, and Empowerment Staff) Project last January 2012. Trained nurses were assigned to government hospitals to address any inquiries of PhilHealth members. As of 2011 there were 1840 hospitals recorded in the Philippines. Only 513 government hospitals and 203 private hospitals have PhilCARES. Thus, roll out of PhilCARES covered only 39% (716/1840) of hospitals. As previously mentioned, PhilCARES was mentioned as a facilitating factor by hospitals for complying with PHIC schemes.

Regarding the aggregate manner of payment, one Internal Medicine practitioner makes a manual listing of all payables and performs weekly follow-up meetings with the in-hospital PhilHealth Office to determine which cases have been paid. PHIC is currently trying to remedy the said situation by piloting a program where enrolled health care providers will be emailed every Wednesday to inform them of the release of their checks and an accompanying paid patient list.

The launch the Institutional Health Care Provider (IHCP) Portal that provides patients online access to information about their eligibility as Sponsored Members is another innovation introduced under CBP.

### FINANCING

Aside from improving facilities, other hospitals have used the additional funds to address their other needs (e.g., stocking pharmacies). This is being done by

a level 4 hospital in Mindanao where a portion of hospital shares in the reimbursement is used for stocking up its pharmacy with essential medicines, lessening the need for out-of-pocket spending by the patients. The hospital also ensures a constant supply of the materials and medicines for patients by authorizing emergency purchases in nearby pharmacies, thus further preventing additional out-of-pocket expenditures.

One government health care facility has also recently set up a PHIC ward where all PHIC members are admitted. The facility anticipates an improvement in efficiency in claims processing since staff assigned to that particular ward will only process PHIC documents. In addition, a consignment pharmacy dedicated to PHIC patients has also been put up. Part of the PHIC's reimbursement to the hospital funds the operations of the said pharmacy, but there are still some problems in procuring all the medicines needed. However, this particular set-up ensures a sustainable source of medicines for patients and minimizes their out-of-pocket expenses.

### HUMAN RESOURCES

Other hospitals have also capacitated themselves to handle an anticipated increase in patient load and consequently in claims processing. One government hospital in Mindanao has increased its original PHIC staff from 10 to 40 (albeit mostly contractual workers). Included in the additional staff are three physicians who serve as medical evaluators to check the correctness of the forms prior to submission to the regional PHIC office. This was initiated to minimize delays in the processing. In August alone, the claims for said hospital amounted to Php 36 million. To further ease the process of submission, the hospital also plans to launch an electronic records system for PHIC patients. Innovatively, the Medical Director patterned the hospital's forms after PHIC's forms to facilitate this process.

Other hospitals have invested in additional training for its staff to better implement CBP. Two hospitals in particular held training sessions on CBP. One Level 4 private hospital within Manila specifically requested for training for its employees from the Regional PhilHealth Office, while another level 4 government hospital northeast of Manila conducts annual training for its resident physicians on the proper completion of forms.

Experiences, thoughts and attitudes of individual health care providers during CBP implementation

## GENERAL INFORMATION OF INDIVIDUAL HEALTH CARE PROVIDER RESPONDENTS

A total of 20 physicians were interviewed: 10 from the surgical field and 10 from the medical field. Eleven were male and 9 were females within the age range of

30-60 years. A consolidated list of their responses may be found in Annex D.

### Administration and Hospital System

PHIC maintains a manual submission and processing of claims. Delays in processing occur in the following situations: incomplete documents due to missing signatures of the attending physician, incomplete or non-reimbursable diagnosis, or incomplete laboratory results. Such delays reach the 60-calendar-day grace period for claims. After 60 days, PHIC requires an additional letter of appeal and motion for reconsideration to the Claims Division for processing. Most health care providers will no longer reimburse their claims. From these unclaimed professional fees, PHIC is sitting on an untapped gold mine. With CBP, we may expect to see less and less of this happening since hospital charges are tied up with doctor's professional fees, hospitals will make sure that the forms are properly completed before submitting them for reimbursement.

There are issues related to PHIC's reimbursement policies, specifically of denials in reimbursement which are still common even with the implementation of CBP. For example, PHIC's policy on the 45-day maximum hospital stay for each member remains the same, even if this is the most common problem resulting in non-eligibility of members (especially those who are frequently ill). According to one health care provider, this is more commonly encountered among indigent pediatric patients who repeatedly suffer from acute gastroenteritis. Thus suggesting the need to strengthen outpatient benefit package and for government to not forget preventive and primary health care.

Another reason for denial in reimbursement is the non-renewal of membership of physicians. Again, this is perceived by physicians to have not been addressed even with CBP implementation. Renewal of accreditation is done every 3 years, but this renewal process is likewise wrought with inefficiency on the part of PHIC. For one, physicians are required to submit proof of their good standing in several societies and payment of their PHIC membership (good for 3 years), both of which, participating physicians have remarked, are not real evidence of their competency as physicians. Physicians feel that PHIC treats its partner health providers with a great deal of mistrust and derision. Furthermore, a 4-month lead time exists between the payment of renewal of accreditation and its corresponding update in PHIC's system.

PHIC argues that providers have been advised to renew 3 or 4 months before due date of their re-accreditation. Date of renewal is dependent on health provider's birthday and not on a common period.\_Thus, submitting requirements 3 or 4 months before expiration of accreditation is not a logical solution to timely processing of renewal application. It must be addressed by improving IT efficiency. To mitigate this problem, official receipts of the health care providers' fee accreditation renewal are attached to each claim. This will allow processing of claims by the hospital for reimbursement. Nevertheless, an updated IT system in PHIC is more vital to avoid these denials of reimbursement simply based on administrative inefficiency.

## HUMAN RESOURCES

## Awareness and Acceptability of CBP System

Majority of the physicians understood the concept of the CBP system. Among the descriptions that were provided by the physicians to explain the CBP, the most common term used (9 out 20 physicians) used was "fixed" (rates). One described it as a way to "equalize the standards of payment," while another described it as "a way to guarantee that poor patients enrolled to PhilHealth have access to hospital services." Five (5) out of twenty physicians mentioned the division of PhilHealth payments between the hospital and the physician. One physician goes so far as to describe it as "government's new gimmick."

A few individual health care providers lacked awareness of the program until it was already due for implementation. Majority of the physicians (17 of 20) that were able to attend a pre-implementation meeting had done so through their specialty society events, while 3 said that they did not receive any news of the CBP through any meeting, workshop/orientation, forum, or circular prior to the implementation of the program. PhilHealth confirmed that all concerned specialty societies were asked to give time for the CBP presentation during their scheduled events.

Some physicians were also unaware of the additional required form for CBP. In fact, only 9 were aware of the new CF3 form to be submitted, three of which remembered that an orientation was held for them on how to complete the form. This orientation however was done after the implementation of the CBP.

Few participating physicians accepted the CBP system, with only four physicians stating that they had no complaints. Of those with issues with CBP, 2 decided to send a letter to PhilHealth to complain about their denied reimbursement. According to these physicians, they have yet to receive a response from PHIC. (See Table 8) Four (4) out of 2 physicians preferred that the payment mechanism be reverted back to FFS. There were also a few physicians that wanted curtained packages to be removed (e.g., normal delivery and newborn care packages).

All physicians interviewed noted that the time from the announcement of the CBP up to implementation was too short to prepare them for the new system. There was also a common misconception that they could no longer charge additional fees to their private patients. However, these were clarified in the course of the meetings

and public hearing that were set by the hospitals and medical societies for private practitioners. Similar sessions were not held for government physicians. None of the physicians interviewed (n=20) have been part of the PhilHealth consultations done for the professional fee rates.

When asked to rate the submission process from 1 to 10 (1 being most against and 10 being most in favour), more physicians appeared to be against CBP. Ten (10) physicians were against CBP, 6 were in favour, and 4 were ambivalent towards the system. (See Annex F)

Majority physicians interviewed were unhappy with the length of time for reimbursement under the CBP system. One Internal Medicine specialist stated, "Dapat talaga maibalik sa dati, kasi paano naman kakain ang pamilya namin kung tatlong buwan na hindi kami nababayaran?" (How can our families eat if we are not paid for three months?) (See Annex G). In fact, 9 out of 20 physicians stated that the reimbursement of professional fees was slower, although there were 5 physicians that said that the length of time of reimbursement was the same as the FFS mechanism. Three (3) stated that there was faster payment with the CBP system. While another three (3) stated that they did not know because there is no mechanism to find out which patients PhilHealth had paid for through their ATM accounts.

#### Changes in Provider Behaviors

With the implementation of the CBP, some changes in practices were reported by the health providers in order to adapt to the changes in the payment mechanism.

Majority of physicians noted no change in the way they admitted their patients (i.e., neither admitting more nor admitting less patients). However, one Family Medicine physician shared that he/ she would directly refer a PHIC patient for admission to a specialist so that the PF would no longer be shared between him/ her and the specialist. For one Obstetrician the decrease in her patients admitted for actual delivery was not attributable to her. Rather, her patients appeared to prefer having their pre-natal check-ups done with her but then opted to shift to lying-in clinics for the actual delivery. The obstetrician acknowledged that lying-in clinics charge significantly less than hospitals for deliveries.

#### Positive Individual Health Care Provider Behaviors

Although majority of the participating physicians did not perceive any change in the way they prescribed medications, there were a few who did note changes in their prescribing habits. However, these changes appear to have been made for the benefit of their patients. One Obstetrician has become more conscious in ordering medications for her patients, while one Pulmonologist tries to minimize the cost of medicines she orders due to the fixed rates. However, one pediatrician pointed out that regardless of the PPM, physicians generally try to minimize the health care costs of their patients saying, "*Dahil sa hirap ng buhay, kahit wala pang* case rate, *nagtitipid ka na para sa pasyente*."

There were more physicians (6 of 20) however that noted a change in the way that they order diagnostics. Such practices were done to either economize for the patient or to ensure that cases are reimbursable. For instance, one pediatrician no longer orders pulse oximetry even for her very young asthmatic patients just to economize on the fixed rate. And to ensure that the case was compensable, one Internal Medicine specialist would delay the CT scan of a patient for 24 hours just to make sure that there would be a significant findings on that scan, saying "Alam naman nating duktor na a lot of the strokes do not show (in the CT scan) within 24 hours, kaya maniguro ka na. Para maka-reimburse ang pasyente mo." Another Internal Medicine specialist added that even in instances wherein clinical features are sufficient to diagnose a disease, he/ she is still forced to perform ancillary tests for the cases to be compensable.

Only one Internal Medicine specialist noted shortening of hospitals stays with the implementation of CBP, and depending on the clinical condition of the patient. Based on his experience with his practice, a patient is more likely to shorten his/ his hospital stay if he/ she relies on PhilHealth. He clarifies this observation by saying, "Syempre kailangan bago mo i-offer yung option na umuwi, alam mo na kaya na ng pasyente, may magbabantay sa kanya, at saka makaka-follow-up kaagad."

#### Negative Individual Health Care Provider Behaviors

Aside from the positive behaviors adopted by individual health care providers, negative behaviors were also observed. These behaviors were of upcoding of cases. In particular, two physicians noted personal cases of upcoding performed for their indigent patients.

Upcoding occurs when a higher ICD10 code is assigned to a case, thereby meriting a higher reimbursement. Participating physicians viewed upcoding as a way to help patients lessen their out-of-pocket expenses or cover for unexpected expenditures. One pediatrician noted a personal experience with upcoding, wherein a 3-month-old patient diagnosed with acute gastroenteritis (AGE) with mild dehydration was upcoded to AGE with moderate dehydration. Because the child was very young, malnourished, and born to indigent parents, the physician admitted the child to preempt a worsening of his/ her condition and to improve the child's chances of survival. The physician explained his/ her intentions as such: *"Hihintayin mo pa ba na lumala ang pasyente mong bata* (Would you wait for the child's condition to worsen)?" However, the same health care provider goes on to suggest including AGE with no signs of dehydration and AGE with mild signs of dehydration in the CBP scheme of PhilHealth at a reimbursement rate of Php 1,000 - 1,500.

Other cases of upcoding were also noted by a Medical Director in a DOH-

retained hospital east of Manila. In a private hospital, the amount reimbursed through the CBP system is not enough to cover all health care expenses, let alone room and board. Therefore, upcoding is done to increase the amount of funds available for diagnostics.

Regarding the submission of incomplete documents, PHIC employees observed that most health care providers are not aware of the appropriate ICD code of the conditions they have managed. For example, based on PHIC guideline, a case is dengue only if platelet count is less than 100,000. However, doctors in private hospitals opt to hospitalize patients as dengue even if platelet count is higher since it will be catastrophic if the condition progresses to Hemorrhagic fever which is never predictable. The claims for PHIC will need the physician's justification for admission at CF-3. There may be a need to review the clinical guidelines to better facilitate such cases in gray areas.

#### **FINANCE**

The case-based system has simplified payments by PHIC because reimbursements cover payments to both the hospital and the attending physician/s. For each payment, sixty percent (60%) is given to the hospital and the remaining forty percent (40%) to the various medical/surgical specialists who attended to the PHIC member. This scheme, while favorable to PHIC and the hospital, has been met with many complaints from the various health care providers interviewed. There has been no set distribution for the 40% allotted to the attending physician. For instance, a surgical procedure such as an appendectomy with Php 24,000 reimbursement will have Php 9,600PhP divided among all the doctors who attended the case. This would include a surgeon, an anesthesiologist, and maybe an internist (should the patient need cardio-pulmonary clearance). In one hospital, its medical staff organization initiated and arranged a meeting for its doctors to decide on how to divide the reimbursed amount for any case. PHIC has not commented on this issue.

### MEDICAL INTEGRITY

Many participating physicians believed that PHIC's guidelines on clinical management of diseases need to be revisited because they infringe upon the physicians' autonomy. For example, one Family Medicine practitioner suggested that a regular review of the guidelines be performed in line with the changing guidelines for a particular disease. In his/her training hospital, residents adhere to the current guidelines, choosing not to limit themselves to the drugs indicated in the Philippine National Drug Formulary.

A similar sentiment was shared by an administrator from a DOH-retained hospital when he stated that physicians preferred a "free hand" in the management of their patients and warned against instituting clinical guidelines in certain cases. For complex cases, he recommended a system similar to a "sliding scale," wherein case rates could be shifted to fee-for-service. Such an example would be a patient admitted for community-acquired pneumonia who later develops hospital-acquired pneumonia. However, the administrator recognized the possibility that physicians may abuse this sliding scale system through upcoding, but noted that total PHIC reimbursements covered the complicated cases for his/her hospital.

There were also those physicians that experienced difficulties in reconciling PHIC guidelines and CPGs. For example, 3 physicians had questions regarding the completion of forms due to a conflict between what they knew (i.e., recommended treatment from a CPG) and what was in the PhilHealth Guideline, and had to seek help from the in-hospital PhilHealth Office to settle the problem. One Internal Medicine practitioner explained, "ang mga residente namin nalilito kung ano ang susundin, ang CPG (clinical practice guidelines) ba na tinuturo sa kanila, o ang PhilHealth na magbabayad para sa pasyente?"

A number of physicians also felt that other common medical/ surgical cases should have been assigned case rates in the CBP system. One general surgeon expressed interest in the case rate inclusion of hemorrhoids with a Php 5,464 reimbursement and fistula-in-ano with its reimbursement amount dependent on the severity of the case. These two cases are noted to be common among surgical cases and more PHIC patients would benefit with the inclusion of these two cases. Another surgeon suggested including nosocomial infections and trauma cases. According to him/her, nosocomial infections complicate the management of patients and would thus need more funds, while trauma cases are almost always emergencies with patients who do not have adequate funds for all the diagnostics and treatment required. Finally, a Family Medicine physician recommended that non-communicable diseases (such as Hypertensive Urgency/Emergency, Diabetic Ketoacidosis and Hyperosmolar Hyperglycemic State) be included in the CBP system. His/her suggested rates were Php 25,000 and Php 50,000, respectively.

One government health care facility administrator commented that for PHIC members to sense the value of the case-based payment, the reimbursement must be at least half of the usual amount when professional fees are charged to private patients. The difficulty involved in each case varies and the corresponding technical expertise required should be reasonably compensated.

Majority of the participating physicians believed that their compensation under the CBP system was inappropriate or unreasonable and needed improvement. One private general surgeon remarked that doctors invest a significant proportion of their families' fortunes on their training. One Internal Medicine specialist also raised the issue of the lack of discernment by PhilHealth between physicians who are certified diplomates of specialty societies and those with no such qualifications, in that both are being paid the same amount in compensation. She opined that there would be a lack of incentive on the part of physicians to seek further training because of this. On the part of a Medical Director of a Level 2 private hospital north of Manila, whose small hospital does not get a lot of complicated cases, the division of the professional fees has not yet become a significant issue for them. It was observed however that, physicians being referred prefer that the reimbursement from PHIC is small since they may be paid in cash by their patients.

Only one physician however, a pulmonologist, stated that the amount of compensation was appropriate. Please see Annex J.

A proportion of health providers find the reimbursement amount too small to deem PHIC accreditation important to them. In fact, if not for the sake of their patients, most doctors would not bother at all with PHIC reimbursements. This is true for private practitioners in hospitals catering to patients belonging to the upper socio-economic classes. Because of the low reimbursement for some cases such as Cesarean Section, practitioners would just conveniently increase their professional fees to cover for the losses. Even patients are surprised to learn that PHIC pays only a very small portion of the total professional fee.

Triangulation of data revealed areas wherein participants' responses were in agreement of disagreement. These points of agreement and disagreement among the PhilHealth Program Managers, Hospital Administrator and staff, and health care providers are listed in Table 6. Annex E lists the future plans of PHIC for the CBP.

Table 8. Points of Agreement and Disagreement among Respondents						
Agreement	Disagreement					
Hospital Administrators, PHIC hospital staff, and health care providers agree that there was no ample amount of consultation done regarding the formulation of the CBP system	PHIC Program Managers for CBP disagree in that they have given stakeholders ample time to participate in the consultations <i>"We have given them enough time to</i>					
"We were informed of the Case rates. Pero by that time, it was already due to implementation, napirmahan na." - Administrator, Level 4 private hospital in Manila	prepare. Prior to implementation, workshops were conducted with PhilHealth Regional Officer, public fora conducted at Cebu, Manila, Pampanga, Cagayan de Oro. Meetings were also with PHA, PHAPi, PMA and					
"Less than two weeks lang nang dumating yung circular." - Administrator, Level 4 DOH retained hospital east of Manila "Binigay na lang ng secretary ko (copy of	member societies. Pamphlets as "Tamang Sagot" are posted online in the PhilHealth website."					

circular) nung na-implement na" - pediatrician, Level 4 private hospital in Manila	
Hospital Administrators, PHIC hospital staff, and health care providers agree that little or no preparation was done in the initial implementation of the new system "Pag may problema kami katulad nyang maraming diagnosis, anung susundin, kailangang pang itatawag sa Regional (office)." - Administrator, Level 4 DOH retained hospital northeast of Manila "There is a certain learned helplessness, among doctors: o, may bago na namang program ang PhilHealth, sunod ka na lang."	PHIC Program Managers for CBP noted that the system did not have a manual of operations at the start of implementation that would have helped the institutions in easing into the program <i>"Hindi nagawa ang Manual of Operations in time for the implementation ng September 1, 2011.</i> <i>Pero meron kaming clarificatory guidelines na in-issue."</i>
Six out of seven hospitals agree that processing time for the claims were initially faster then becoming slower. One hospital observed consistently fast processing time for claims Nung una ok, pero nitong mga nakaraang buwan, bumabagal na uli Administrator, level 4 private hospital in Manila	PHIC Program Managers for CBP maintain that turn-around time from receipt of reimbursement request to check generation is consistently fast. "the turn-around time has really improved, in fact, our shortest time is 6 days."
All surgical health care providers interviewed consistently noted very small PF "for the effort put into the techinical difficulty of the case, the amount for case rates should be increased" - surgeon, DOH- retained hospital east of Manila.	Depending on the case, medical health care providers have varying opinions regarding compensation in terms of fairness "Marami po talagang may ayaw sa surgical case rates. pero sa medical ok lang." "there is no problem with private patients because they can co-pay. With
	indigent patients, dati nga charity patients sila so wala talagang makukuha. With case rates they will

	get paid a certain fee."
All health care providers agree that the payments are slow "Ikaw ba namang doctor, sa dami ng pasyente mo, pupunta ka pa ba sa baba (PhilHealth Office) para isa-isahin kung sino ang nagbabayad sa yo? Kami ang nagdadala ng kita ng hospital, pinapahirapan kami." - surgeon, level 4 private hospital in Manila paano naman kakain ang pamilya namin kung tatlong buwan na hindi kami nababayaran? - Internal Medicine, private hospital south of Manila	PHIC Program Managers for CBP have no comment
Four out of five government owned hospitals have noted difficulties in following the NBB "ibalik na lang ho sa dati (FFS) - administrator, level 4 hospital east of Manila "tanggalin na lang lahat (all case rates)" administrator, level 4 LGU operated hospital north of Manila. "Hindi po kasi maiiwasang mag-out-of- pocket (expenditure) lalo na't ang pharmacy laging out-of-stock" - Administrator, level 4 DOH hospital northeast of Manila	PHIC Program Managers for CBP have no comment
All hospital Administrators, PHIC hospital staff, and health care providers agree that the CBP system needs to be improved "Maraming pang kailangang ayusin sa programa" - Administrator, DOH retained hospital in Mindanao	n/a

## 7 Discussion

Overall, there has been full implementation in all the PHIC-accredited health facilities of the CBP since health facilities and health care providers are legally bound to accept whatever payment schemes PHIC decides to adopt. Likewise, it is the legal right of all PHIC members to claim reimbursement of their hospital bills and professional fees from PHIC. However, the basis and method used by PHIC to calculate for the different rates was not transparent and valid.

CBP can not be equated with "no balanced billing" especially among private hospitals where orders for diagnostic tests and pharmaceutical treatments are not confined to what can be covered by CBP. In some government hospitals, whose pharmacy often run out of stocks, the burden to buy medications beyond what the CBP can afford to pay falls heavily on the shoulders of the patients. In effect, out-ofpocket payment continues to thrive or has even increased.

Additionally, the way CBP has been considered effective in achieving financial protection for their members depended on their financial independence. Thus, LGU hospitals were not too happy with CBP because of their dependence on the local government. But, private hospitals who can use the surplus from unused reimbursement were able to beef up their support staff and facilities. This helped tremendously in the smooth implementation of the CBP. However, increasing the administrative support of the hospitals improved efficiency of reimbursement to the hospitals but not necessarily to Physicians. The time it takes for the finance officer to separate payment of the provider from the hospital is an altogether different matter. As the system now shifts to all case rates, attention must now be shifted to improve the time from check generation to actual payment of the professional fees so that all stakeholders would benefit. There is no electronically accessible information on reimbursement from all hospitals that can also be electronically linkable with PHIC members' registry status. In terms of the 4 themes, there is obvious deficiencies in administration and financing of CBP of all sampled health facilities.

## **Facilitating Factors and Difficulties**

A simpler and provider friendly Form 2 and a dedicated liaison officer for PHIC were effective facilitating factors. PHIC regional offices are recognized as frontline administrators for the CBP. However, for this study the investigators focused on the hospitals and physicians who are the main implementers for the CBP. The presence also of Philhealth CARES Customer Assistance Relations Empowerment Staff) set up by PHIC itself has also been helpful. However, only two hospitals had Philhealth CARES in their reception areas. As of June 2013, only 715 hospitals have Philhealth CARES in their facilities. As of September 2011, there are approximately 1800 hospitals in the Philippines, of 41% are government hospitals.

The unused fees from PHIC reimbursement provided an opportunity for

funding the renovation, improvement or construction of new wings of the PHIC accredited hospitals. The immediate creation of PhilHealth wards in some hospitals is a facilitating factor in that 1) the patients could immediately feel the effect of the CBP, 2) it can be a kind of pilot ward where the lessons learned from its management could be trickled down to the rest of the hospital.

The various difficulties have been discussed in the appropriate domain.

### **Innovative practices**

Most of the innovative practices have been identified in one hospital. The administration have seen CBP as a great opportunity to effect changes in their hospital and immediate community. The deep level of involvement of hospitals to planning and implementation has been instrumental to the changes in their health care delivery. Improvement of infrastructure (reimbursement time) and human resources was also critical in minimizing the complaints of health care providers. Nothing could be done regarding the small fees but at least said fees are paid on time. And if more patients are treated, more funds will be collected.

## Experiences, thoughts and attitudes of health providers with CBP

## Positive and Adverse Provider Behaviors

Among the respondents interviewed, CBP has created opportunities for providers to practice rational medication use and shortening of hospital stays. The challenge of engaging more providers to follow this example remains.

McIntyre and colleagues analyzed the difference in acceptance of providers in the DRG systems implemented in several countries (2013). Discontent in the amount of provider payments in Nigeria and India were noted. There is evidence that some doctors refuse to see Rashtriya Swasthya Bima Yojana (RSBY) – the insurance scheme for the poor – patients due to the small fees. In contrast, Thailand has been able to secure the support of providers to being paid on a capitation and DRG basis for outpatient and inpatient care, respectively.

Two key factors that may have contributed to these different experiences. Firstly, providers in Thailand have little choice but to accept payment in forms other than fee-for-service due vast majority of the population that are paid for via capitation and DRGs. In Nigeria and India, however, the majority of patients are outside of the schemes using such payment mechanisms and it is more feasible to refuse to treat patients using this scheme or lobby for a change. This is a key benefit of having considerable purchasing power concentrated in a single purchaser, or a few large ones. Second, it is important that the capitation and DRG rates are fair and regularly updated. In Nigeria, the capitation rate has not been increased in six years, whereas in Thailand rates are adjusted annually (McIntyre et al., 2013). The problem of upcoding is a serious issue. The health care provider interviewed does not see it as a grave matter. It is seen as a means of helping a patient. Thus, providers need to be informed of the consequences of gaming the system and its effect in the overall efficiency of the program.

#### 8 Limitations of the Study

The study only covered 2 regions, namely, NCR and Mindanao less Visayas, which was part of the original targeted sites. From each region, one government and one private hospital were sampled. The devastating typhoon that hit the Visayas and part of Mindanao during the tail end of the study deterred us from conducting the study in the region. Nevertheless, the responses we obtained from the two regions were almost similar to each other overcoming the potential lack of generalizability in the absence of Roxas City, one of the targeted sites. Other limitations of the study brought about by the nature of a reconnaissance study versus an evaluation study, is the incomplete picture it portrays. The study does not include the following: impact on PHIC patient-members, fairness of professional fees, evidence of improvement in clinical outcome, actual financial impact and who really benefited from the payment scheme.

# 9 Recommendations and Conclusions

The following is a reiteration of important key findings based on the four themes that evolved from the reconnaissance study:

# I. Administration and Hospital System

- a. Administrative changes to cope with the implementation of the CBP were in the extremes. It ranged from none to one Hospital Administrator in Mindanao to computerizing claim submissions in order to jive with the PHIC CF2, strengthening staff support by hiring more evaluators and sharing payments with peripheral health providers such as the nurses and other hospital workers, i.e. attendants.
- b. PHIC did not implement new administrative changes to cope with the CBP. Plans are yet underway to send emails updating providers on their claims and to create a directory of physicians with updated accreditation to allow sufficient time for them to renew 6 months before expiration and for those with expired accreditation to apply for renewal immediately. There is a "no accreditation, no reimbursement policy" by PHIC.
- c. There is a lack of a monitoring, quality indicators and evaluation system for CBP.
- d. Hospitals established a routine schedule for following up reimbursement claims. It also identified a point person for PHIC-related concerns.
- e. Most of the administrators and health care providers lack awareness of the program until it was due for implementation. This suggests that there are greater need for PHIC to be transparent and to engage more stakeholders in planning any programs.
- f. CBP has increased efficiency in claims payment by shortening turn-around time for hospital reimbursement but not doctor's reimbursement.
- g. CBP was significantly beneficial to PHIC who did not have to review reimbursement claims. However, PHIC was insensitive to the effect of CBP on LGU-run hospitals.
- h. Overall, administrators and health care providers alike have no strong objections to the CBP but believe it "needs to be improved."

# II. Human Resources

- a. Hospitals conducted rapidly prepared orientation on the CBP.
- b. PHIC claims to have consulted with specialty societies and adequately prepared the physicians and hospitals to the CBP.
- c. One hospital in Mindanao and one hospital northeast of Manila increased the number of their medical evaluators and strengthen PHIC staff. The private hospitals strengthened the function of their PHIC liaison officer.
- d. A doctor-owner of a private hospital learned to use MS Excel to track her reimbursements and took a proactive role in following up claims.
- e. Among the positive behaviors observed by providers with CBP are: rational use of medicines and shortened hospital stays.
- f. A negative behavior observed by providers with CBP is upcoding.
- g. There is a need for physicians to learn the ICD 10.

# **III. Medical Integrity**

- a. There were no initiatives to regularly review treatment guidelines by both PHIC and Hospitals.
- b. Upcoding of diagnosis by physicians was observed in some hospitals not to increase their fees but essentially to prevent patients' condition from deteriorating to a severity which will qualify for PHIC reimbursement. This was evident especially for cases of Dengue, Diarrhea and Pneumonia.

# **IV. Financing**

- a. The Finance Officer of one hospital north of Manila felt extremely burdened by the CBP. In addition to its current duty of accounting hospital finances, she was given the additional task of un bundling reimbursements so doctors can be paid. She also received the brunt of anger of patients following up their reimbursement.
- b. There is a shifting of the administrative costs from PhilHealth to hospitals causing delays in reimbursements to providers. Of note is the state of reimbursement in LGU-operated hospitals where levels of bureaucracy causes delays of 9 months for reimbursements (claim submission to check generation for health care providers and patients).
- c. DOH-retained hospitals utilized their unused payments to improve infrastructure and health services.

The following are the recommendations from the study based on categories according to parameter to investigate CBP of assessing implementation:

# I. Administration and Hospital System

- For PHIC to use these inputs from the study to develop a consolidated and a more transparent approach to planning, communication and engagement of stakeholders to facilitate improvement in the system, especially in the determination of rates for each case.
- For PHIC to create a Manual of Operations in time with the launching of a program that will clear any misunderstandings in the system especially during the first few months of implementation.
- For the PHIC to perform quantitative studies into the effects of the casebased payment system in the health care system, particularly in the monitoring and evaluation of the program.

# II. Human Resources

- As hospitals and clinicians are investing more energy in understanding resourcing decisions through detailed data and clinical costing systems, PhilHealth must also have a corresponding effort to explore redevelopment of the CBP system to help better understan, from an administrator's point of view, the decisions and outcome requirements at the clinician level. Also, they PHIC must develop a centralized system for the monitoring and evaluation of the provision and application of CBP resources that will serve as basis for fine-tuning the current system.
- For the private practitioners to become more participative and vigilant in the various PhilHealth programs

• For government hospital administrators to streamline the organizational structure and procurement process lessen the problems brought about by the No Balance Billing Policy.

# **III. Medical Integrity**

- As medicine is a continually evolving field, systems must also be in place to adjust the current system, incorporating the changes from new or updated clinical practice guidelines.
- For the private hospital administrators to improve coordination with PHIC and health care providers to speed up payments.

# **IV. Financing**

- For the private hospital administrators to improve coordination with PHIC and health care providers to speed up payments, especially in the setting of LGU-retained hospitals.
- For PHIC to institutionalize a scheme for dividing the PF for multiple referrals.
- For PHIC to develop a centralized system to monitor pending and paid reimbursement for hospitals and physicians.

# Conclusion

The remaining important questions that Philhealth has to address in the implementation of CBP is whether the rates they have decided for the different cases and procedures are fair and just to both their health care providers and members. They must seriously go beyond investigating the efficiency of their reimbursement to providing quality of care. Further investigations are needed to quantify the effectiveness of CBP in attaining improvements in equity of access to healthcare, improving clinical outcomes and providing financial protection.

The inclusion of more hospitals in future studies and the performance satisfaction of PHIC members to CBP are strongly recommended to create a more robust and generalizable insights to CBP. PHIC regional offices may also be included in future investigation as the frontline administrators. Finally, choosing which PPM to adopt appears not only anchored on what is right for health but on what the Insurer can afford and what is politically acceptable. For example, CBP is the same as " no balance billing " in government hospitals because physicians receive salaries. But no way can CBP at the rates they are paying for reimbursements be the same as "no balance billing" in private hospitals where doctors are not salaried and patients demand the state of the art diagnostics and treatment modalities.

In conclusion, the appropriate payment schemes may be a combination of several strategies responsive to the Philippine setting instead of choosing only one.

#### ANNEX A. List of Reviewed Documents

Department of Health. Administrative Order 2010-0036. The Aquino Health Agenda: Achieving universal health care for all Filipinos [Internet]. 16 December 2010 [cited 16 January 2014]. Available from:

http://www.doh.gov.ph/sites/default/files/Aquino%20Health%20Agenda%20-%20Universal%20Health%20Care.pdf

Department of Health. Toward financial risk protection: health care financing strategy of the Philippines 2010-2020. Health Sector Reform Agenda Monograph No. 10. 15 July 2010.

Department of Health. Department Order 2011-0188. Kalusugan Pangkalahatan execultion plan and Implementation Arrangements. 03 August 2011 [cited 02 March 2014].

In-hospital PhilHealth report for the number of admissions and amount claimed under case based payment first quarter 2013 (Level 4 DOH-retained hospital northeast of Manila)

In-hospital PhilHealth report for the amount of receivables from PhilHealth for the first quarter 2013 (Level 2 private hospital south of Manila – no physical copy)

In-hospital PhilHelath report for the amount of receivable from PhilHealth for second quarter 2013 (Level 4 DOH-retained hospital in Mindanao – no physical copy)

In-hospital PhilHealth Abstract for the amount of reimbursement for patients and payments to physicians for (sic) of July 24, 2012. (Level 2 private hospital north of Manila)

Mijares-Majini MCC. Technical assistance to develop capabilities of PhilHealth to monitor and evaluate the implementation of policies on case rates for selected medical cases and surgical procedures and No Balance Billing on selected public and private hospitals. GIZ-MIPSS Component 3 (Social Health Insurance) and Philippine Health Insurance Corporation; September 2012. 2 Volumes

Philippine Health Insurance Corporation. PhilHealth Circular 11, 011-A, 011-B s.2011. New PhilHealth Case Rates for Selected Medical Cases and Surgical Procedures and the No Balance Billing Policy. [Internet] 2011 [cited 28 November 2012]. Available from: http://www.philhealth.gov.ph/circulars/2011/archives.php

Philippine Health Insurance Corporation. PhilHealth Circular 15, s.2011. Clarificatory Guidelines No. 1 to PhilHealth Circulars Circular 11, 11-A, 11-B, s.2011. [Internet] 2011 [cited 28 November 2012]. Available from: http://www.philhealth.gov.ph/circulars/2011/archives.php

Philippine Health Insurance Corporation. PhilHealth Circular 20, s.2011. Clarificatory Guidelines No. 2 to PhilHealth Circulars Circular 11, 11-A, 11-B, s.2011. [Internet] 2011 [cited 28 November 2012]. Available from: <u>http://www.philhealth.gov.ph/circulars/2011/archives.php</u> Philippine Health Insurance Corporation. PhilHealth Circular 02-2012. Guidelines on the Implementation of Institutional Health Care Provider Portal.

Philippine Health Insurance Corporation. PhilHealth Circular 12-2012. Guideline for hospitals covered by PhilHealth CARES Project.

Philippine Health Insurance Corporation. PhilHealth Circular 31-2013. Governing Policies in the Shift of Provider Payment Mechanism from Fee-for Service to Case-based Payment. [Internet] 2013 [cited 09 January 2014]. Available from <u>http://www.philhealth.gov.ph/circulars/2013/circ31\_2013.pdf</u>.

Philippine Health Insurance Corporation. PhilHealth Office Order 0081-2011. Monitoring and Evaluation for Case Rates.

Philippine Health Insurance Corporation. PhilHealth Office Order 09-2012. Guidelines on Medical Review for Case Payment (Post-Audit) 2012

Sarol J, Sto. Nino OVS. 2012 survey of support values in three selected hospitals in Eastern Visayas. GIZ-MIPSS Component 3 (Social Health Insurance) and Philippine Health Insurance Corporation; February – August 2012. 2 Volumes.

Tsilaajav T. Costing study for selected hospitals in the Philippines. Technical Assistance to the Health Sector Policy Support Programme in the Philippines. European Commision and the Government of the Philippines. 2009 March.

ANNEX B. Interview	ANNEX B. Interview Results for PHIC Program Manager Respondents					
Questions	PHIC Program Manager Respondents					
When was CBP officially disseminated to the health providers and facilities?	The PhilHealth Circular No. 11-2011 was signed by Dr. Rey Aquino on August 5, 2011 and was for immediate dissemination since the implementation was on September 1, 2011. It was posted over the PhilHealth website. Various orientation / seminars were also conducted to various hospitals.					
Please discuss the circular on the CBP and who was then PHIC administrator?	VP: prior to implementation, workshops were conducted with PhilHealth Regional Officer, public fora conducted at Cebu, Manila, Pampanga, Cagayan de Oro. Meetings were also with PHA, PHAPi, PMA and member societies. Pamphlets as "Tamang Sagot" are posted online in the PhilHealth website					
Why was the payment from fee for service shifted to CBP?	To improve the turn around time for reimbursements, improve efficiency in the delivery of services, and control reimbursement					
How long was the health providers and health facilities prepared?	The Circular was signed August 5, 2011 and was for implementation on September 1, 2011					
What is the basis for selecting the diseases?	PhilHealth selected the 23 most commonly reimbursed cases in their claims database for the year 2006-2007					
What are the bases for deciding the amount of payment for each case?	<ul> <li>PhilHealth used these parameters:</li> <li>1.) 50% from a costing study from 5 participating hospitals in a contracting project 30% from the average value per case from PhilHealth's reimbursed cases.</li> <li>2.) 20% from a case-mix tariff from 18 reference hospitals for the 23 most common cases</li> </ul>					

	An internal modeling for cost projection from the Office of the Actuary and BDRD
Why was the payment from fee for service shifted to CBP?	To improve the turn around time for reimbursements, improve efficiency in the delivery of services, and control reimbursement
How long was the health providers and health facilities prepared?	The Circular was signed August 5, 2011 and was for implementation on September 1, 2011
What is the basis for selecting the diseases?	PhilHealth selected the 23 most commonly reimbursed cases in their claims database for the year 2006-2007
What are the bases for deciding the amount of payment for each case?	<ul> <li>PhilHealth used these parameters:</li> <li>3.) 50% from a costing study from 5 participating hospitals in a contracting project</li> <li>30% from the average value per case from PhilHealth's reimbursed cases.</li> </ul>
	<ul> <li>4.) 20% from a case-mix tariff from 18 reference hospitals for the 23 most common cases</li> <li>An internal modeling for cost projection from the Office of the Actuary and RDRD</li> </ul>
What were the usual complaints encountered in the CBP	and BDRD Denial of reimbursement due to: 1.) incomplete form 2.) Non-reimbursable diagnosis 3.) Non-eligibility of member
	from VP: denial of reimbursement due to

	<ul> <li>1.)non-accredited MD</li> <li>2.)submission of labs not part of CPG</li> <li>3.)non-reimbursable diagnosis</li> <li>no balance billing issues</li> <li>delay in releasing of PF to MDs by hospitals</li> </ul>
Was there a change in admission rate?	yes, from 49% to 65% of cases admitted under CBP
What changes in the way medications are prescribed	yes, lower number of antibiotics used
What changes in the way diagnostic procedures are ordered	n/a
Change in readmission rate	n/a
Change in the length of hospitalization	n/a
Opinion regarding the amount of compensation for the current case rates	n/a
change in processing time for PF	faster as part of amount released to hospital

Questions	Level 4 private hospital located in the heart of Manila district	Level 4 DOH- retained hospital located east of Manila.	Level 4 DOH- retained hospital located northeast of Manila	Level 4 DOH- retained hospital located in Mindanao	Level 3 private hospital located south of Manila	Level 2 private hospital north of Manila	Level 4 LGU hospital north of Manila
When was CBP officially disseminated to the health providers and facilities? Please discuss the circular on the CBP and who was then PHIC administrator?	Hospital requested for a separate seminar for health care providers conducted by the PhilHealth NCR Office	PhilHealth staff were only made aware of the new circular through the website. No prior seminars were given. A public forum was conducted when the program was already being implemented Administrators were made aware through the various	< less than one month dissemination through a circular, forum and training for residents Administrator became aware through society forums conducted re CBP	< 1 month, circular was received, a public forum was also conducted	Received circular and disseminated to consultants	Received circular and disseminated to consultants	Received circular and disseminated to consultants
		seminars in the other private hospitals where they practice.					

Why was the payment from fee for service shifted to CBP?	To reduce cost	To control provider's reimbursements	To lessen administrative work of PhilHealth in reimbursement	to shorten payment time of PhilHealth to hospitals	to shorten payment time of PhilHealth to hospitals	to improve enjoyment of benefits of patients, to facilitate payment	shorten turn- around time for payment of hospitals
		To lessen administrative work of PhilHealth in reimbursement			To control provider's reimbursements	of institutions due to ease of processing	
		to fast track processing of claims and payment to health				assure quality assurance and efficiency	

		provider					
How long was the	Les than one month	15 days before	< one month	< one month	< one month	< one month	< one month
health providers and		implementation			sone month	sone month	
health facilities							
prepared?							
What were the	none	none	CF3	CF3	none	CF3	CF3
changes in the			attachment of			attachment of	attachement of
submission process			laboratory results	ICD 10 training		laboratory results	laboratory results
compare the	fast payment	faster payment	faster payment	faster payment	same speed in	faster payment	faster payment
promptness of		from PhilHealth to	from PhilHealth to		payment from	from PhilHealth to	from PhilHealth to
reimbursement in		hospital, slow	hospital, slow		PhilHealth to	hospital (1 month	LGU, very slow
the CBP system		payment from hospital to patient	payment from hospital to staff		hospital, slow payment from	to 2 weeks), slow payment from	payment from LGU to staff
		due to NBB			hospital to staff	hospital to staff (3	
						months)	
What was the	felt that the time from	initially thought	system gave	just accepted the	just accepted the	just accepted the	initially thought
initial reaction of	notice to	the the system	them little time	new guidelines	new guidelines	new guidelines	the the system
the re the CBP?	implementation was too short to prepare	would be easier	to prepare				would be easier

How is the reinbursement divided among the staff?	60% to hospital, 40% to MDs	60%-40% for surgical cases and 70%-30% for medical cases	60%-40% for surgical cases and 70%-30% for medical cases	60%-40% for surgical cases and 70%-30% for medical cases	60%-40% for surgical cases and 70%-30% for medical cases	60%-40% for surgical cases and 70%-30% for medical cases	60%-40% for surgical cases and 70%-30% for medical cases
what were the reasons for denial of reimbursement	incomplete form lab results fail to match the diagnosis	lab results fail to match the diagnosis not a PhilHealth member	lab results fail to match the diagnosis	incomplete form lab results fail to match the diagnosis	incomplete form lab results fail to match the diagnosis	PhilHealth cannot be claimed due to recent hospital re- classification and patients need to pay in cash.	incomplete form lab results fail to match the diagnosis
What were the usual complaints encountered in the CBP	Incomplete form resulting in denial of reimbursement Very small professional fee	Incomplete form resulting in denial of reimbursement Small professional fee	non-PhilHealth members clinicians want more free hand in their management	Small professional fee	clinicians want more free hand in their management ill feelings of consultants due to small and late payments	the need to fulfill the diagnostic requirements; need to consult specialty society regarding diagnostics and management	the need to fulfill the diagnostic requirements; need to consult specialty society regarding diagnostics and management
	Long reimbursement time More disadvatageous for	Additional workload to PhilHealth staff	deviation of management by PhilHealth vs clinical practice			ill feelings of consultants due to late payments	ill feelings of consultants due to late payments

	patient because they pay out of pocket for procedures or medicines that covered by the package. Most favorable for the hospital. Doctors also complained because of the low fees paid for certain cases that can manifest in many ways and forms		guidelines			payments to surgical cases became smaller	
Was there a change in admission rate?	not covered by the package.	upcoding	none	none	none	none	none
What changes in the way medications are prescribed	none	none	none	none	none	none	none
What changes in the way diagnostic procedures are ordered	none	none	none	none	none	follow the diagnostics even if clinically the diagnosis is apparent	none
Change in readmission rate	none	none	none	none	none	none	none

Change in the length of hospitalization	none	none	none	none	none	none	none
Opinion regarding the amount of compensation for the current case rates	Unreasonable unclear basis of fees No public hearing	Needs to be improved					
change in processing time for PF	initially faster but recently getting slower	slower	slower	slower	slower	slower	slower

Questions	Level 4 private hospital located in the heart of Manila district	Level 4 DOH- retained hospital located east of Manila.	Level 4 DOH- retained hospital located northeast of Manila	Level 4 DOH- retained hospital located in Mindanao	Level 3 private hospital located south of Manila	Level 2 private hospital north of Manila	Level 4 LGU hospital north of Manila
When was CBP officially disseminated to the health providers and facilities?	Hospital requested for a separate seminar for health care providers conducted by the PhilHealth NCR Office	No prior seminars were given. Only circular	< less than one month dissemination through a circular and forum	< 1 month, circular was received, a public forum was also conducted	Received circular	Received circular	Received circular
Why was the payment from fee for service shifted to CBP?	To reduce cost	To control provider's reimbursements to fast track processing of claims and payment to health provider	To reduce cost	to fast track processing of claims and payment to health provider	To reduce cost	to fast track processing of claims and payment to health provider	to fast track processing of claims and payment to healt provider

How long was the health providers prepared?	Less than one month	15 days before implementation	Less than one month	Less than one month	Less than one month	Less than one month	Less than one month
What were the changes in the submission process?	filling up of CF3 making it more difficult	They did not know	filling up of CF3 making it more difficult	They did not know	They did not know	They did not know	They did not know
What were the changes in the processing time of PF?	longer; as aggregated payment, they do not know from which patients they received their payments	longer	longer	faster	longer payment, they do not know from which patients they received their payments	longer payment, they do not know from which patients they received their payments	longer
What were the usual complaints encountered in the CBP	Incomplete form resulting in denial of reimbursement Very small professional fee doctor opt to charge more on top of PhilHealth ca	Incomplete form resulting in denial of reimbursement Small professional fee Additional workload to PhilHealth staff	What if the admitting diagnosis becomes more complicated and no longer under case rate?	slow payments small PF for surgical cases CPG changes that are no longer compatible with PhilHealth guidelines for diagnosis and	slow payments doctor opt to charge more on top of PhilHealth ca Doctor opted to upcode diagnosis so as requested by indigent patient could be admitted	small PF for surgical cases doctor opt to charge more on top of PhilHealth case rates	small PF for surgical cases slow payment from LGU

			management	could have	
			management	reimbursement	
Long re	eimbursement denied			rembursement	
time	reimbursements				
time	due to lab results				
	that do not fulfill				
More	the criteria set by				
disadva	PhilHealth for a				
	t because they	e			
	t of pocket for				
	lures or				
	nes that				
covered	d by the				
	e. Most				
	ble for the				
hospita	al.				
Doctors					
	ained because				
	low fees paid				
	tain cases that				
	anifest in many				
	nd forms not				
	d by the				
packag	e.				
	tegories for				
	agnosis is not				
the san	ne as in the				

	CPG						
Was there a change in admission rate?	explains to patient that the case is not reimbursable to PhilHealth and it is the patient's choice if he/she will push through with the admission	upcoding practiced to admit indigent patient	Family Medicine specialist automatically transfers admissible patient to the care of a sub-specialist to maximize PF of doctor	none	upcoding done	none	none
What changes in the way medications are prescribed	yes minimize cost of medicines	minimize cost of medicines	none	none	none	none	none
What changes in the way diagnostic procedures are ordered	forced to perform more rational use of diagnostics to minimize cost pediatrician no longer uses pulse oximeters to minimize cost although it is helpful for managing pedia patients	none	none	none	need to request diagnostics even of cillinically your know the patient has a particular disease	need to request diagnostics even of cillinically your know the patient has a particular disease	none
Change in readmission rate	none	none	none	none	none	none	none

Change in the length of hospitalization	none	none	none	none	early discharge with close follo-up with indigent patients	none	none
Was consultation done by PhilHealth regarding the amounts to be reimbursed?	none	none	none	none	none	none	none
Are there any diseases you would like to add to CBP	bronchoscopy, thoracentesis neurologic cases such as CNS infections, TB	AGE with mild dehydration. AGE with no dehydration for pediatric patients fistula-in-ano, hemorrhoids	trauma and nosocomial infections	hypertensive urgency/ emergency, DKA/ HONK	none	none	none
Are there any diseases you would like to remove?	none	none	none	none	All (revert to FFS)	none	none
Opinion regarding the amount of compensation for the current case rates	Unreasonable	very unreasonable and inappropriate	needs to be improved	needs to be improved	needs to be improved	needs to be improved	needs to be improved

Annex E. Future	Plans for CBP
Target group	Future plans
Health provider	Review the amount
	Provide an online means to determine eligibility of PHIC member for reimbursement
	Piloting a weekly update via email for paid reimbursements to providers
Health facility	Provide a Manual of Procedures for a smooth implementation
	Enable hospitals to reimburse patients of their out-of-pocket expenditures on the day of discharge
	Provide an online means to determine eligibility of PHIC member for reimbursement through the IHCP
	Removal of laboratory attachments
	Provide support for patient and hospitals through the PhilHealth CARES Project

ANNEX F. Rating scores regarding reimbursement time (n=10) and fairness in compensation (n=11) by hospital administrators

10	9	8	7	6	5	4	3	2	1	Score
1	0	0	2	2	1	0	0	0	4	Reimbursement time
0	0	1	1	1	3	0	0	0	5	Fairness in compensation

ANNEX G. Rating scores among health care providers regarding the CBP submission process (n=20)

10	9	8	7	6	5	4	3	2	1	Score
0	0	1	5	0	4	0	4	2	4	Submission Process
0	0	0	0	3	8	1	3	1	4	Reimbursement time

ANNEX H. Rating scores on the various experiences of health care providers (n=20) under the CBP

Frequency	Difficulty Encountered
6	Discrepancy between CPG and PhilHealth Guidelines
5	Denial of reimbursement
5	Slow payment
3	Small PF
3	Aggregated manner of payment
2	Miscoding / upcoding
1	No differentiation between specialist and non-specialist
1	MD not informed of denial of reimbursement

# ANNEX I. Rating scores among hospital administrators regarding the CBP (n=10)

(**	10)			
Score	Very Reasonable and Appropriate	Reasonable and Appropriate	Needs to be Improved	Very Unreasonable and Inappropriate
Frequency	4	0	6	0

# ANNEX J. Rating scores among physicians (n=20) regarding the amount of compensation under CBP (n=20)

	npenbation anael			
Score	Very Reasonable and Appropriate	Reasonable and Appropriate	Needs to be Improved	Very Unreasonable and Inappropriate
Frequency	0	1	13	4

#### Annex K. Questionnaires

# Questionnaire for Health Care Facility Administrator

Reconnaissance Study on the Implementation of Case-Based Payments

# **Respondent Identification**

Name:		
Last Name	Given Name	Middle Name
Sex: <sup>o</sup> Female <sup>o</sup> Male		Age:
Medical School:		Year Graduated:
Residency Training Institution:		Year Graduated:
Specialization:		
Major Area of Practice :		No. of Years in Practice:
Rural Urban		
Name of Hospital/s:		No. of Years as Health Facility Administrator:

1.	What do you think were the reasons for changing the payment scheme from fee-for- service to the case-based payment system (CBP)?
2.	How long has your institution implemented the CBP system (in months)?
3.	Can you recall the chronology of events for the CBP implementation? <ul> <li>No</li> <li>Yes</li> <li>a. When did you receive the notice from PhilHealth?</li> </ul>

- b. When were you able to implement it? \_
- c. What is the interval between the notice and implementation (in months)?
- d. What was your reaction/feeling/opinion about the new rule?\_\_\_\_\_

4. Was there any of the following conducted by PhilHealth to explain the CBP system?
O Workshop
Public forum
Other: Please specify: \_\_\_\_\_
Please list down the things you remember from the meeting.

□ No orientation

5. Was there a pamphlet provided by PhilHealth to explain the CBP system?  $\hfill \label{eq:system}$   $\hfill \hfill \hfi$ 

 $\hfill\square$  Yes. If yes,

Please list down the things you remember from the pamphlet.

6.	Kindly list down new forms created, e.g. discharge slip, as a result of the CBP system. a b c	Did this change/these changes make the new system easier or more difficult? • Easier • No change • Difficult • More difficult
7.	Was training conducted on how to use the new forms? • No • Yes	Who was the target audience?
8.	What changes in the physical structure in you hospital were needed for the new system, e.g. new computer stations?	Did this change make the new system easier or more difficult? <ul> <li>Easier</li> <li>No change</li> <li>Difficult</li> <li>More difficult</li> </ul>
9.	What were the changes in the submission process for claims to PhilHealth?	Did this change make the new system easier or more difficult? <ul> <li>Easier</li> <li>No change</li> <li>Difficult</li> </ul>

	O More difficult
10. What were the additional requirements when the CBP payment scheme was implemented?	Did this change make the new system easier or more difficult? <ul> <li>Easier</li> <li>No change</li> <li>Difficult</li> <li>More difficult</li> </ul>

11.	Compare the promptness of submission of claims of your hospital to PhilHealth before and after the institution of CBP (in days).	Before: After:
12.	Compare the promptness of reimbursement of PhilHealth before and after the institution of CBP (in months).	Before: After:
13.	What was the initial reaction of the hospital employee claims processing, physicians, or claimants re the CBP	-
14.	Please describe in your own words how the hospital d hospital, for medication and supplies, and physicians f the CBP system.	

15. Is there a point person who you may contact when encountering problems with the CBP system? □ No • Yes. If yes, who is it? \_\_\_\_\_\_ 16. What were the difficulties you How did PhilHealth If no assistance was encountered during the provide you assistance provided, how did you implementation of CBP? Please for this problem? cope? rank 1 as the most important problem and no. 3 as the least important. 1. 2.

		1
3.		
3.		
17. Almost a year after in	nplementation, what are the current	What suggestion can
-	counter with CBP? Please rank [a] as	you make to address
	problem and [c] as the least	this problem?
important.		- r - r
a.		
b.		
С.		
When did you achiev	e 100% implementation?	Date:
	eved, please rate the degree of	%
implementation to da		
18. Were all cases	If no, what was the percentage of cas	es that were not
reimbursed?	reimbursed?%	
□ No	What were the reasons for denial of r	reimbursement?
□ Yes		

19. What were the changes made in the way you prescribe medication under the CBP system, e.g. shift from parenteral to oral medication, branded to generic?	Was the change favorable to your patient? □ No □ Yes
20. What were the changes made in the way you order diagnostic procedures?	Was the change favorable to your patient? • No • Yes
21. Was there a change in the rate of in-patient admission for therapy to file for PhilHealth claims?	□ No □ Yes
22. Was there a change in the readmission rate for those diseases included under the SBP system?	□ Higher □ Same □ Lower
23. Was there a change in the length of hospitalization for patients admitted under the CBP system?	<ul><li>Longer</li><li>Same</li><li>Shorter</li></ul>

□ No	□ Yes
Did you your facility set up its own monitoring system? Please describe in brief.	If yes, kindly describe briefly the monitoring system.

25. Prior to the implementation of CBP, was the hospital $\circ$ Noconsulted by PhilHealth regarding the reimbursement $\circ$ Yesamounts? $\circ$							
26. Please cite the diseases or procedures that hav	e been included in the CBP system?						
27. Are there any diseases or procedures you want to add to the CBP system?	How much should be the reasonable amount for reimbursement for such diseases?						
a.							
b.							
С.							
28. Are there any diseases or procedures you want a.	t to remove from the CBP system?						
b.							
С.							
29. Overall, was the CBP system better then the fee length of time from patient discharge to payme being strongly against the CBP system, and nur CBP system?	ent? Kindly rate with number [1]						
Against < <sup>0</sup> <sup>0</sup> <sup>0</sup> <sup>0</sup> <sup>0</sup>	Agree						

1	. 2	3	4	5	6	7	8	9	10	

compensa	30. Was the CBP system better then the fee-for-service system in terms of a fair and just compensation? Kindly rate with number [1] being strongly against the CBP system, and number [10] as strongly agree with the CBP system?									
Against										Agree
<	0	0	0	]	]0-	0-	0		>	
1	2	3	4	5	6	7	8	9	10	
31. Overall, co	mmen	t on hov	v you f	eel abo	out the	CBP cc	mpen	sation	as cor	mpared to the
fee-for-ser	fee-for-service system?									
Very real	• Very reasonable and appropriate									
Reasona	• Reasonable and appropriate									
	<ul> <li>Needs to be improved</li> </ul>									
Very unr	-		l inapp	ropria	te					

#### **Questionnaire for Health Care Provider**

## **Reconnaissance Study on the Implementation of Case-Based Payments**

#### **Respondent Identification**

Name:				
Last Name	Given Name	Middle Name		
Sex: <sup>D</sup> Female <sup>D</sup> Male		Age:		
Medical School:		Year Graduated:		
Residency Training Institution:		Year Graduated:		
Specialization:				
Major Area of Practice :		No. of Years in Practice:		
Rural Urban				
Name of Hospital/s:		No. of Years as Health Facility Administrator:		

- 1. Do you know about the case-based payment of PhilHealth?
  - □ Yes

If yes, how did you learn about the case-based payment system (CBP)?

Was there any of the following conducted by PhilHealth to explain the CBP system?
 Workshop
 Public forum
 Other: Please specify: \_\_\_\_\_

Please list down the things you remember from the meeting.

□ No orientation

3. Was there a pamphlet provided by PhilHealth to explain the CBP system?  $\hfill \Box$  No

□ Yes

If yes, please list down the things you remember from the pamphlet.

- 4. Please list down in your own words what you understand about the CBP system.
- 5. Please cite the diseases or procedures that you know are included in the CBP system?

6. How long have you been receiving payment under the CBP system (in months)?

7.	Were there new forms for the physicians to fill up in the new system? • No • Yes	If yes, was there an orientation or prior notice given to physicians on how to use the new form? • No • Yes	How did the system change the reimbursement of the professional fee payment? • Easier • No change • Difficult • More difficult
8.	What were the changes in th for claims to PhilHealth?	Did this change/these changes make the new system easier or more difficult? <ul> <li>Easier</li> <li>No change</li> <li>Difficult</li> <li>More difficult</li> </ul>	
9.	Has there been an effect on tax returns? • No • Yes	Did this change make the new system easier or more difficult? <ul> <li>Easier</li> <li>No change</li> <li>Difficult</li> <li>More difficult</li> </ul>	
	Were you asked to attach a documents in your claims u	□ No □ Yes	

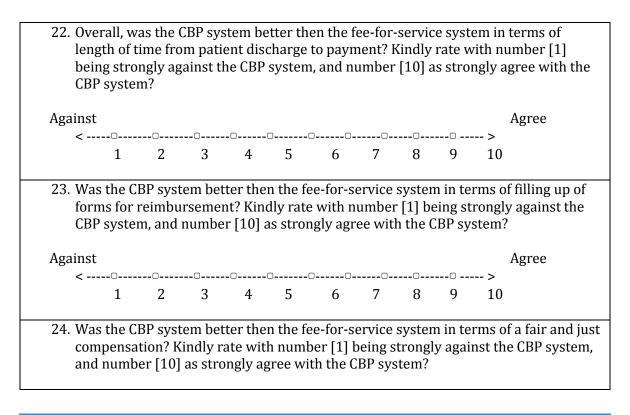
10. Were there changes in the in the processing time for professional fees of the attending physician?

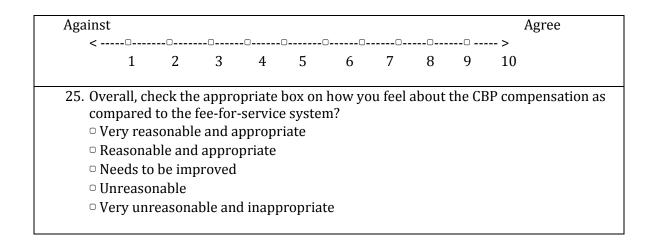
- FasterSame
- Slower

11. Please describe in your own wor	ds how the hospital divide	s the shares for
physicians form the pool of fund		
12. Is there a point person who you CBP system?	may contact when encount	ering problems with the
□ No		
□ Yes		
If yes, who is it?		
<ul> <li>13. What were the difficulties you encountered during the implementation of CBP? Please rank 1 as the most important problem and no. 3 as the least important.</li> <li>1.</li> </ul>	How did PhilHealth provide you assistance for this problem?	If no assistance was provided, how did you cope?
2.		
3.		
14. What were the changes made in medication under the CBP system parenteral to oral medication, br	n, e.g. shift from	Was the change favorable to your patient? O No O Yes
15. What were the changes made in diagnostic procedures?	the way you order	Was the change favorable to your patient? • No • Yes

16. Was there a change in the rate of in-patient admission for	□ No
therapy to file for PhilHealth claims?	□ Yes

17. Was there a change in the readmission rate for	those Digher
diseases included under the SBP system?	□ Same
	Lower
18. Was there a change in the length of hospitalization	tion for 🛛 🗆 Longer
patients admitted under the CBP system?	□ Same
	Shorter
19. Prior to the implementation of CBP, were you c	consulted by 🛛 🗆 No
PhilHealth regarding your professional fee?	□ Yes
20. Are there any diseases or procedures you	How much is the reasonable
want to be compensated using the CBP	amount for reimbursement for such
system?	diseases?
a.	
a.	
b.	
С.	
21. Are there any diseases or procedures you want	removed from the CBP system?
a.	
b.	
С.	





## **Questionnaire for PHIC Program Manager**

## **Reconnaissance Study on the Implementation of Case-Based Payments**

### **Respondent Identification**

Name:				
	Last Name		Given Name	Middle Name
Sex:	Female	Male		Age:
Design	ation:			

	hat was the rationale for changing the payment scheme from fee-for-service to the se-based payment system (CBP)?
	_
33. Pl —	ease describe how did you determine the diseases that you will cover with CBP?
34. Pl 	ease describe how did you decide on the amount of payment for each case?
	in you recall the chronology of events for the CBP implementation by PhilHealth? No Yes
e. f. g.	Who were responsible for the implementation? How did you reach all the regions? Describe the dissemination strategy if present?
h.	If there was none, why?

36. Was there any of the following conducted by PhilHealth to explain the CBP system?
□ Workshop
□ Public forum

Other: Please specify: \_\_\_\_\_

 $\hfill\square$  None of the above

37. Was there a pamphlet provided by PhilHealth to explain the CBP system?

□ Yes	
38. Kindly list down the new forms created, e.g. discha system.	rge slip, as a result of the CBP
39. Was training conducted on how to use the new forms?	Who was the target audience?
□ No □ Yes	
40. What changes in the physical structure in the hosp system, e.g. new computer stations?	ital thatwere needed for the ne
41. What were the changes in the submission process	for claims to PhilHealth?
<ul> <li>42. What were the additional requirements when the original implemented?</li> </ul>	CBP payment scheme was
43. Compare the promptness of submission of claims of hospitals to PhilHealth before and after the	of Before: After:

44. Compare the promptness of reimbursement of PhilHealth before and after the institution of CBP (in months).	Before: After:
45. What was the initial reaction of the hospital administration of the CBP system?	rators, physicians, or claimants
<ul> <li>46. Is there a point person that hospitals may contact whe with the CBP system?</li> <li>No</li> <li>Yes</li> <li>If yes, who is it?</li></ul>	en encountering problems
47. What were the complaints encountered by hospitals/	How did PhilHealth

health care providers / patients during the implementation of CBP? Please rank [a] as the most important problem and [c] as the least important.	provide assistance?
a.	a.
b.	b.
С.	с.
48. Almost a year after implementation, what are the current problems you still encounter with CBP? Please rank [a] as the most important problem and [c] as the least important.	What is being done by PhilHealth to address this problem?
a.	a.
b.	b.
С.	С.
Were there more complaints received under CBP system than the FFS system?	□ No □ Yes

When did you achiev	ve 100% impleme	ntation?	Date:
If 100% was not ach	ieved, please rate	the degree of	%
implementation to d	· •	0	
49. Were all cases	If no, what was	the percentage of case	es that were not
reimbursed?	reimbursed?	%	
□ No			
□ Yes	What were the r	easons for denial of r	eimbursement?
50. Was there a CBP mo	nitoring system se	et up by PhlHealth?	
□ No		□ Yes	
		Kindly describe brie	efly the monitoring
		system.	
Was the monitoring	system helpful?		
□ No			
□ Yes			
Can't tell			
somehow			

JI. Fleas	e con	iment	If PhilH	ealth a	chieve	d the go	bals of	the CB	P.		
JZ. UVEL	all. vva	15 1115 (									
	numt	oer [1]	5	trongly	/ agains	st the C					
with	numt	oer [1]	being s	trongly	/ agains						
with stron Against	numt gly ag	oer [1] gree wi	being s ith the (	trongly CBP sys	7 agains stem?		BP sys	tem, a	nd nur	nber	[10] as

#### **References**CB

AbouZahr C, Boerma T. Health information systems: the foundations of public health. Bulletin of the World Health Organization [Internet] 2005 August [cited 17 January 2014];83(8). Available from: <u>http://www.scielosp.org/scielo.php?pid</u>= S0042-96862005000800010&script= sci\_arttext&tlng=pt

Acuin CS, Lasco PGD, Lim BAT. Universal health care for Filipinos: Introduction. Acta Medica Philippina. 2010; 44(4):14-21.

Appleby J, Harrison T, Hawkins L, Dixon A. Payment by results: How can payment systems help to deliver better care? London: The King's Fund; 2012. 48 p.

Averill RF, Goldfield N, Hughes JS, Bonazelli J, McCullough EC, Steinbeck BA, Mullin R, Tang AM, Muldoon J, Turner L, Gay J. All patient refined diagnosis related groups (APR-DRGs) version 20.0 Methodology Review. Murray, Utah: 3M Health Information Systems, 2003.

Belli PC. Health, Nutrition and Population Discussion Paper: The impact of resource allocation and purchasing reforms on equity. Washington, DC: The World Bank, Washington, 2004 September.

Biorn E, Hagen TP, Iversen T, Magnussen J. The effect of activity-based financing on hospital efficiency: A panel data analysis of Data Envelopment Analysis efficiency scores 1992-2000. Working Paper 2002:8. Oslo: Health Economics Research Program, University of Oslo, 2002 April 30 [cited 18 January 2014]. Available from: http://www.med.uio.no/helsam/forskning/nettverk/hero/publikasjoner/skriftserie/2002 /HERO2002\_8.pdf

Busse R, Geissler A, Quentin W, Wiley M. (Eds). Diagnosis-Related Group in Europe. Moving towards transparency, efficiency and quality in hospitals. Berkshire, England: Open University Press, McGraw-Hill House, 2011

Cashin C. Case-Based Hospital Payment Systems: Summary of Key Aspects of Design and Implementation. In Lagenbrunner JC, Cashin C, O'Dougherty S (Eds.). Designing and Implementing Health Care Provider Payment Systems: How to Manuals. [Internet] World Bank and United States Agency for International Development; 2009 [cited 28 November 2012] Available from: <u>https://www</u>. rbfhealth.org/library/doc/308/case-based-hospitalpayment-systems-summary-key-aspects-design-and-implementation.

Cashin C, O'Dougherty S, Samyshkin Y, Alexander K, Ibraimova A, Kutanov Y, Lyachshuk K, Zuys O. Case-based hospital payment systems: A step-by-step guide for design and implementation in low- and middle-income countries. [Internet]. United States Agency for International Development ZdravPlus Project. 2005 [cited 28 November 2012]. Available from: pdf.usaid.gov/pdf\_docs/PNADP211.pdf

Cheng, TM. Taiwan's new National Health Insurance program: Genesis and experience so far. Health Affairs. 2003 May [cited 13 January 2014];22(3):61-76. DOI: 10.1377/hlthaff.22.3.61

Covaleski MA, Dirsmith MW, Michelman JE. An institutional theory perspective on the DRG framework, case-mix accounting systems and health-care organization [Internet]. Accounting and Finance Faculty Publications Paper 1. 1993 [cited 27 March 2013]. Available from: http://digitalcommons.unf.edu/bacc\_facpub/1-

Department of Health. Administrative Order 2005-0023. Implementing Guidelines for Fourmula One For Health as Framework for Health Reforms. [Internet]. 30 August 2005 [cited 17 January 2014]. Available from: http://home.doh.gov.ph/ais\_public/aopdf/ao2005-0023.pdf

Department of Health. Administrative Order 2010-0036. The Aquino Health Agenda: Achieving universal health care for all Filipinos [Internet]. 16 December 2010 [cited 16 January 2014]. Available from:

http://www.doh.gov.ph/sites/default/files/Aquino%20Health%20Agenda%20-%20Universal%20Health%20Care.pdf

Department of Health. Department Order 2011-0188. Kalusugan Pangkalahatan execultion plan and Implementation Arrangements. 03 August 2011 [cited 02 March 2014].

Department of Health. Toward financial risk protection: health care financing strategy of the Philippines 2010-2020. Health Sector Reform Agenda Monograph No. 10. 15 July 2010.

The Directorate for Health and Social Affairs. Activity-based funding of health services in Norway. An assessment and suggested measures. Oslo: The Norwagian Directorate for Health and Social Affairs, 2007 July [cited 18 January 2014]

Domingo S. PhilHealth Reporting Requirements: Reducing Mistakes and Increasing Reimbursements. [Internet] 2012. [cited 09 January 2014]. Available from: http://www.slideshare.net/PhilipDoromal/case-rates-presentation-gen-rules

Feeley FG. Health, Nutrition and Population Discussion Paper / Caveat RAPtor: Regulation in resource allocation and purchasing. Washington, DC: The World Bank, Washington, 2004 September.

Fetter RB, Thompson JD, Mills RE. A system for cost and reimbursement control in hospitals. Yale J Biol Med. 1976;49:123-136.

Gosden T. Forland F, Kristiansen I, Sutton M, Leese B, Guiffrida A, Sergison M, Pedersen L. Capitation, salary, fee-for-service and mixed systems of payments: effects on the behavior of primary care physicians. Cochrane Database of Systematic Reviews 2000. Issue 3. Art. No.: CD002215. DOI: 10.1002/14651858.CD002215.

Gottlober P, Brady T, Robinson B, Davis T. Phillips s, Gruber A. Medicare Hospital Prospective Payment syste: How DGRS are calculated and updated. [Internet] 2001 August [cited 16 January 2014]; Office of the Inspector General, Office of Evaluation and Inspections REgion IX. OEI-09-00-00200. Available from: <u>http://oig.hhs.gov/ oei/reports/oei-09-00-00200.pdf</u>

Hamada H, Sekimoto M, Imanaka Y. Effects of the per diem prospective payment system with DRG-like grouping system (DPC/PDPS) on resource usage and healthcare quality in Japan. Health Policy [Internet]. 2012 October[cited 18 January 2014];107(2):194-201. doi:10.1016/j.healthpol.2012.01.002

Harding A, Preker AS. Health, Nutrition and Population Discussion Paper / Understanding Organization reforms: The corporatization of public hospitals. Washington, DC: The World Bank, 2000 September.

Health Systems 20/20. Health system approach: A how-to manual version 2.0. USAID: 2012 September. [Internet] Available from: http://www.healthsystems2020.org/content/resource/detail/528/

Henderson T, Shepheard J, Sundararajan V. Quality of diagnosis and procedure coding in ICD10 adminsitrative data. [Internet] [Abstract]. Medical Care. 2006 November [cited 17 January 2014];44(11):1011-1019. Available from: <u>http://www.jstor.org/stable/41219556</u>

Hindle D, Acuin L, Valera M. Health insurance in the Philippines: bold policies and socioeconomic realities. Australian Health Review. 2001;24(2):96-111.

Huang CC, Chung KP, Kuo NC, Hung CL. Effectiveness of coping strategies used by hospitals in response to implementation of a case-based payment system by the National Health Insurance Program. Journal Formosa Med Assoc. 2005 July [cited 19 April 2013]; 104(7):468-475. PMID: 16091822

Ikegami N. Games policy makers and providers play [Abstract]. Journal of Health Politics, Policy and Law [Internet]. 2009 [cited 19 April 2013]: 34(3):360-380. doi: 10.1215/03616878-2009-003

Ishii M. DRG/PPS and DPC/PDPS as prospective payment systems. JMAH [Internet]. 2012 [cited 18 January 2014];55(4):279-291. Available from: https://www.med.or.jp/english/journal/pdf/2012\_04/279\_291.pdf

Jauss M, Hamann GF, Claus D, Misselwitx B, Kugler C, Ferbert A. [Billing based on a casebased lump sum for stroke. Did this lead to discharge of patients in a worse clinical condition?] [Abstract] [Internet]. Nervenarzt. 2010 Feb [cited 9 April 2013];81(2):218-225. DOI 10.1007/s00115-009-2910-2.

Kutzin J. Health financing policy: A guide for decision-makers. Health Financing Policy Paper 2008/1. Copenhagen: World Health Organization Regional Office for Europe, 2008.

[cited 28 November 2012]. Available from: <u>http://www.euro.who.int</u> /\_\_data/assets/pdf\_file/0004/78871/E91422.pdf

Kwon S. Payment system reform for health care providers in Korea. Health Policy and Planning 18(1):84-92.

Langenbrunner JC, Liu X. Health, Nutrition and Population Discussion Paper / How to Pay? Understanding and using incentives. Washington, DC: The World Bank, Washington, 2004 September.

Lagenbrunner JC, Wiley MM. Hospital payment mechanisms: Theory and practice in transition countries. In - Hospitals in a changing Europe. European observatory on health care systems series. Ed. McKee M, Healy J. Open University Press. Buckingham. 2002. World Health Organization. pp. 150-176.

Louis DZ, Yuen EJ, Braga M, Cicchette A, Rabinowitz C, Laine C, Gonnella JS. Impact of a DRG-based hospital financing system on quality and outcomes of care in Italy. Health Services Research [Internet]. 1999 April [cited 18 January 2014];34(1 Pt 2):405-415. PMCID: PMC1089010

Liu YH, Cheng YC. Impact of the diagnosis related groups prospective payment system on the profitability of hospitals in Taiwan. Journal of Medicine and Health [Internet]. 2013 [cited 18 January 2014];2(2):23-34. Available from: <u>http://www</u>. hso.mohw.gov.tw/sso/paper/2013V02N02\_03.pdf

Liu X, O'Dougherty S. Health, Nutrition and Population Discussion Paper / How to Pay? Understanding and using incentives. Washington, DC: The World Bank, 2004 September.

Lu JFR, Hsiao WC. Does universal health insurance make health care unaffordable? Lessons from Taiwan. Health Affairs [Internet].2003 May [cited 18 January 2014];22(3):77-88. doi: 10.1377/hlthaff.22.3.77

Maceira, D. Provider payment mechanism in health care: Incentives, outcomes, and organization impact in developing countries. Bethesda, Maryland: Partnerships for Health Reform, 1998 August

Massaro TA, Nemec J, Kalman I. Health system reform in the Czech Republic: Policy lessons from the initial experience of the General Health Insurance Company [Abstract]. Journal of the American Medical Association. 1994 June [cited 13 January 2013];271(23):1870-1874. DOI:10.1001/jama.1994.03510470074038

Mathauer I, Wittenbecher F. DRG-based payment systems in low- and middle-income countries: Implementation experiences and challenges. Discussion Paper Number 1 – 2012. Geneva: World Health Organization 2012.

McIntyre D, Ranson K, Aulakh BK, Honda A. Promoting universal financial protection: Evidence from seven low- and middle-income countries on factors facilitating and hindering progress. Health Research Policy and Systems 2013;11:36. doi:10.1186/1478-4505-11-36.

McCrone P, Phelan M. Diagnosis and Length of Psychiatric Inpatient Stay. Psychological Medicine. 1994;24(4):1025-1030.

Mijares-Majini MCC. Technical assistance to develop capabilities of PhilHealth to monitor and evaluate the implementation of policies on case rates for selected medical cases and surgical procedures and No Balance Billing on selected public and private hospitals. GIZ-MIPSS Component 3 (Social Health Insurance) and Philippine Health Insurance Corporation; September 2012. 2 Volumes

National Statistical Coordination Board. Consumer Price Index for all income households and headline inflation rates January 2004 - December 2013 [internet]. 2014 [cited 16 January 2014]. Avaiable: <u>http://www.nscb.gov.ph/secstat/d\_price.asp</u>

National Statistical Coordination Board. Distribution of health expenditure by source of funds, 2009-2011. [Internet] 2013 Jun 6. [cited 28 August 2013]. Available ble from: http://www.ncsb.gov.ph/stats/pnha/2011/2011dataCharts/Tab4\_Health ExpendituresBySource.pdf

Normand C, Weber A. Social Health Insurance: A Guidebook for Planning, pp. 55-78. Geneva:World Health Organization, 1994

Ortiz E, Clancy CM. Use of information technology to improve the quality of health care in the United States [Internet] Health Services Research. 2003 April [cited 17 January 2014];38(2);xi-xxii. Available from: <u>http://www.scielosp.org/</u> scielo.php?pid=S0042-96862005000800010&script=sci\_arttext&tlng=pt

Philippine Health Insurance Corporation. PhilHealth Circular 11, 11-A, 11-B, s.2011. New PhilHealth Case Rates for Selected Medical Cases and Surgical Procedures and the No Balance Billing Policy. [Internet] 2011 [cited 28 November 2012]. Available from: http://www.philhealth.gov.ph/circulars/2011/archives.php

Philippine Health Insurance Corporation. PhilHealth Circular 15, s.2011. Clarificatory Guidelines No. 1 to PhilHealth Circulars Circular 11, 11-A, 11-B, s.2011. [Internet] 2011 [cited 28 November 2012]. Available from: <u>http://www.philhealth</u>. gov.ph/circulars/2011/archives.php

Philippine Health Insurance Corporation. PhilHealth Circular 20, s.2011. Clarificatory Guidelines No. 2 to PhilHealth Circulars Circular 11, 11-A, 11-B, s.2011. [Internet] 2011 [cited 28 November 2012]. Available from:<u>http://www.philhealth.gov.ph/circulars/2011/archives.php</u>

Philippine Health Insurance Corporation. PhilHealth Circular 31-2013. Governing Policies in the Shift of Provider Payment Mechanism from Fee-for Service to Case-based

Payment. [Internet] 2013 [cited 09 January 2014]. Available from <u>http://www.philhealth.gov.ph/circulars/2013/circ31\_2013.pdf</u>.

Okamura S, Kabayashi R, Sakamaki T. Case-mix payment in Japanese medical care. Health Policy. 2005 Nov;74(3):282-286. PMID: 16226139

O'Reilly J, Busse R, Hakkinen U, Or Z, Street A, Wiley M. Paying for hospital care: The experience with implementing activity-based funding in five European countries. Health Economics, Policy and Law 2012;7:73-101. doi:10.1017/S1744133111000314

Paterno RP, Herrera CE. Health financing. Acta Medica Philippina. 2010;44(4):58-70.

Pongpirul K, Robinson C. Hospital manipulations in the DRG system: A systematic review. Asian Biomedicine. 2013 Jun;7(3):301-310. doi: 10.5372/1905-7415.0703.180.

Pongpirul K, Walker DG, Rahman H, Robinson C. DRG coding practice: A nationwide hospital survey in Thailand. [Internet] BMC Health Service Research. 2011 Oct 31 [cited 9 April 2013];11:290. doi: 10.1186/1472-6963-11-290.

Robinson JC. (2001) Theory and Practice in the Design of Physician Payment Incentives. Milbank Quarterly 79(2):149-77.

Roger France FH. Case mix use in 25 countries: a migration success but international comparisons failure. [Internet] [abstract] International Journal of Medical Informatics. 2003 Jul [cited 9 April 2013];70(203);215-219. Available from: http://www.ncbi.nlm.nih.gov/pubmed/12909172. PMID: 12909172

Rosenberg MA, Browne MJ. The impact of the inpatient prospective payment system and Diagnosis-Related Groups: A survey of literature. North American Actuarial Journal. 2001;5:84-94.

Sarol J, Sto. Nino OVS. 2012 survey of support values in three selected hospitals in Eastern Visayas. GIZ-MIPSS Component 3 (Social Health Insurance) and Philippine Health Insurance Corporation; February – August 2012. 2 Volumes.

Smith HL, McNamee AH, Piland NF. Assessing hospital administrators' responses to prospective payment. A case study in New Mexico. [Internet] [abstract] Eval Health Prof. 1993 Jun [cited 17 January 2014];16(2):144-176. PMID:10125774

Telyukov A. Prospective case-based payment for hospitals: A guide with illustrations from Latin America. LACHSR Health Sector Reform Initiative, 2001 March.

Theurl E, Winner H. The impact of hospital financing on the length of stay: Evidence from Austria. [Internet] [abstract] Health Policy. 2007 Aug [cited 10 April 2013];82(3):375-389. PMID: 17166618.

Thomson S, Osborn R, Squires D, Jun M. Eds. International profiles of health care systems. The Commonwealth Fund, 2012 November.

Tsilaajav T. Costing study for selected hospitals in the Philippines. Technical Assistance to the Health Sector Policy Support Programme in the Philippines. 2009 March.

The World Bank. Payment: How are providers (hospitals, clinic, managers, physicians, nurses, etc.) paid? [Internet] 2011 [cited 10 January 2014] Available from: http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/

EXTHEALTHNUTRITIONANDPOPULATION/EXTHSD/0,,contentMDK:22516696~menuPK:6 485077~pagePK:148956~piPK:216618~theSitePK:376793~isCURL:Y,00.html#Case\_based

Valera M. Provider payment mechanism for health technology: Philippine case. 24 June 2009. [Internet] Available from: <u>http://www.ispor.org/councils/MDD/</u> <u>ProviderPaymentMechanismforHealthTechnology ByMV forwebsite.pdf</u>

Wellock M. Is a diagnosis-based classification system appropriate for funding psychiatric care in Alberta? Canadian Journal of Psychiatry,1995;40(9):507-513.

World Health Organization. Health financing strategy for the Asia Pacific Region 2010-2015. Geneva: World Health Organization, 2009. 43 p.