Philippine Institute for Development Studies

Review of the Cheaper Medicines Program of the Philippines

Botikang Barangay, Botikang Bayan, P100 Treatment Pack, and the Role of PITC Pharma, Inc. in Government Drug Procurement

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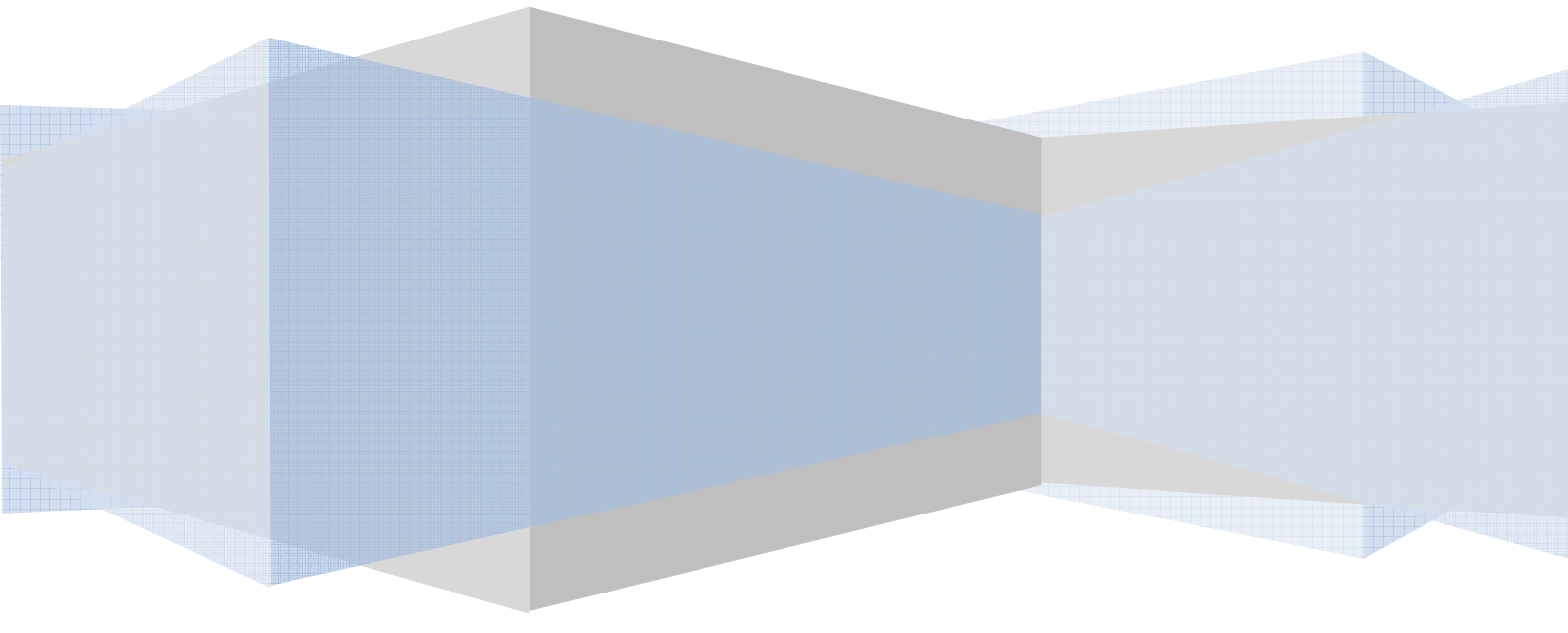

Abbreviations and Acronyms

AO – Administrative Order
BFAD – Bureau of Food and Drugs
BnB – Botikang Barangay
BNB – Botikang Bayan
CHD – Center for Health Development
COBAC – Central Office Bids and Awards committee
DOH – Department of Health
EO – Executive Order
FDA – Food and Drug Administration
GMAP – Government Mediated Access Price
LGU – Local Government Unit
LTO – License to Operate
HAI – Health Action International
ILHZ – Interlocal Health Zone
MeTA – Medicines Transparency Alliance
MRP – Maximum Retail Price
NCPAM – National Center for Pharmaceutical Access and Management
NGO – Nongovernmental Organization
P100 – the Php 100 Drug Regimen Program
PHIC – Philippine Health Insurance Corp.
PhilHealth – The social health insurance program managed by the PHIC
PITC – Philippine International Trading Corp.
PDI – Parallel Drug Importation
Php – Philippine Peso
PPI – PITC Pharma, Inc.
RA – Republic Act
VAT – Value Added Tax
WHO – World Health Organization

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Chapter I. Introduction

A. Objectives of the Study

This study forms part of about a dozen assessments of specific policy and programmatic interventions that the Department of the Budget and Management (DBM) commissioned to the Philippine Institute for Development Studies (PIDS) in February 2011. The analyses are intended to be used as background papers for the possible restructuring and budget allocations of these government programs.

This study aims to assess three discrete government programs designed to lower the cost of medicines in the Philippines: the Botikang Barangay (BnB), the Botikang Bayan (BNB), and the P100 treatment pack programs, and the mandate and role of the Philippine International Trading Corp. (PITC) in these programs.

These interventions form part of a muchbroader Cheaper Medicines Program (CMP) of the government which consists of a range of policies and regulations designed to lower the cost of medicines and improve people's access to them.In chronological order, the DOH has formulated the following relevant CMP policies and regulations:

- The Generics Act of 1988 (R.A. 6675) aimed to promote, require, and ensure adequate supply, distribution, use and acceptance of drugs and medicines identified by their generic names.Subsequently, DOH issued the implementing guidelines for the exclusive use of generic terminology in all prescriptions and orders in all DOH hospitals (A.O. 169, s. 2004).

- E.O. 49, s. 1993 directed the mandatory use of the Philippine National Drug Formulary (PNDF) as the basis for the procurement of drug products by the government. A.O. 18, s. 2006, contained the implementing guidelines for the PNDF system.

- R.A. 7581, the Price Act, mandated the DOH as the lead agency in identifying essential drugs as basic necessities and in monitoring their corresponding prices. Following this law, DOH issued the guidelines for DOH retained hospitals to engage in wholesale procurement and distribution of essential drugs (A.O. 10, s. 2005);the guidelines for drug consignment in government hospitals (A.O. 145, s. 2004); and the revised policies and guidelines for the institutionalization and decentralization of the DOH drug consignment system.

- A.O. 9, s. 2006 provided the guidelines for institutionalizing and strengthening the Essential Drug Price Monitoring System (EDPMS);the use of the Drug Price Reference Index as a guide to rational drug selection and drug prices; and the use of the Reference Index as the basis for reimbursing drugs and medicines in hospital claims.

- D.M. 98, s. 2004 provided the guidelines for enhancing the informational transparency on the transactional visits of sales and medical representatives in all DOH facilities.

- R.A. 9502 of 2008, the Cheaper Medicines Act, is intended to achieve universally accessible and cheaper and quality medicines by pursuing an effective competition policy in the pharmaceutical sector. The President subsequently issued an executive order requiring maximum retail prices for a number of drugs.

- R.A. 9711 of 2008created the Food and Drug Administration from the former Bureau of Food and Drugs, and conferred upon it much broader regulatory powers.

B. Scope and Organization of the Report

This study focuses only on the operations of the BnB, BNB, and P100 treatment pack programs. It does not assess the much larger policies on parallel drug importation (PDI) and the generics drugs law on which these programs depend. It also does not assess the impact of the Government Mediated Retail Price (maximum retail price) of drugs and the subsequent voluntary price reduction of pharmaceutical companies, done in the wake of the enactment of the Cheaper Medicines Act. These issues require more intensive scrutiny beyond the scope of this study.

The study involved a review of published and unpublished literature. Fortunately, there already exists a wealth of data from studies produced in recent years, especially from the Medicines Transparency (MeTA) coalition. No primary survey for this study was involved. The study should not be viewed as an impact evaluation, but only a policy and program review. The study also involved selected interviews with key informants in Metro Manila. Due to time limitations, only a limited number of them were interviewed. No visits to actual BnB, BNB, and P100 sites were made.

The report is organized as follows. This chapter provides the introduction.Chapter II situates the assessment in the Philippine pharmaceutical context. Chapter IIIreviewsthe Botikang Barangay program.Chapter IVreview the Botikang Bayan program.Chapter Vreviews the P100 treatment pack program.Chapter VI reviews the PITC Pharma system supporting government drug procurement. Finally, Chapter VIIreviewsthe mandate and performance of PITC in drug procurement. The conclusions and operational recommendations are contained in the separate chapters, rather than pulled together in a separate chapter.

The report incorporates the comments of the DOH-NCPAM staff on an earlier version of the study.

The research assistance provided by Ms.LeilaniBolong is appreciated.

Chapter II. Pharmaceutical Sector Context

A. Overwhelming Role of the Private Sector

Sales of pharmaceuticals in the Philippines are conservatively estimated at Php100 billion annually, with 70 percent being accounted for by multinational firms (Pablico, 2006). According to PHAP data (Ball, 2010), about 80 percent of the sales are in drug stores, 10 percent in hospitals, and 10 percent in other retail outlets. Out of total sales, 63 percent comes from a major pharmaceutical chain, 17 percentcomes from the combined sales of all other small independent pharmacies, 7 percent comes from private hospitals, 2.5 comes from public hospitals, 10 percentcomes from other private outlets, and 0.5 percent comes from other public outlets. Thus, the private sector as a whole holds an inordinate share of the market (more than 90 percent), while the public sector is a very minor financier and purchaser.

Drugs are a requirement for almost all modern health care. Drugs account for about half of household health spending among Filipinos. Although pharmaceutical reimbursements of the social health insurance program (PhilHealth) remain small relative to its members' needs, they already account for 30 percent of its total payouts.There remains a large unmet need for drugs which has not been quantified (NCPAM, n.d.).

B. Country of Expensive Drugs

Drugs in the Philippines are more expensive than in other countries in Asia, and in countries of similar economic status. This has been repeatedly shown in studies, e.g., Business Meridian International, as cited in BIZCLIR (2009) in Table 1 and Lavado (2011) in Table 2. Drug prices of brand names in the Philippines are anywhere from 5 to 30 times more expensive than similar brand names of similar manufacturers in India and Pakistan. This is the strongest factor that impelled the government to institute a parallel drug importation policy under the Cheaper Medicines Program.

Table 1. Price Comparison (in Peso Equivalent) of Three Selected Drugs in the Philippines, India, and Pakistan, 2008

Brand Name	Manufacturer	Price in the Philippines (a)	Price in India (b)	Price in Pakistan (c)	Ratio (a/b)	Ratio (a/c)
Norvasc	Pfizer	45.00	5	n/a	9.0	-
Ventolin	GSK	315.00	123.00	62.00	2.6	5.1
Immodium	Jansen	10.00	3.00	1.80	3.3	5.6

Source: Business Meridian International, as cited in BIZCLIR (2009).

Table 2.Price Comparison (in Peso Equivalent) of Four Selected Drugs in the Philippines and India, 2010, 2010

Brand Name	Manufacturer	Price in the	Price in	Ratio

		Philippines (a)	India (b)	(a/b)
Buscopan, 10 mg/tab	Boehringer	15.83	1.92	8.2
Ponstan, 500 mg/tab	Pfizer	25.77	2.96	8.7
Adalat Retard, 20 mg/tab	Bayer	43.45	1.44	30.2
Bactrim, 400 mg/80 mg tab	Roche	18.16	0.56	32.4

Source: Lavado (2011), based on Online MIMS Philippines 2010, http://www.mims.com/index.aspx; CIMS India 2010, http://www.mims.com/index.aspx

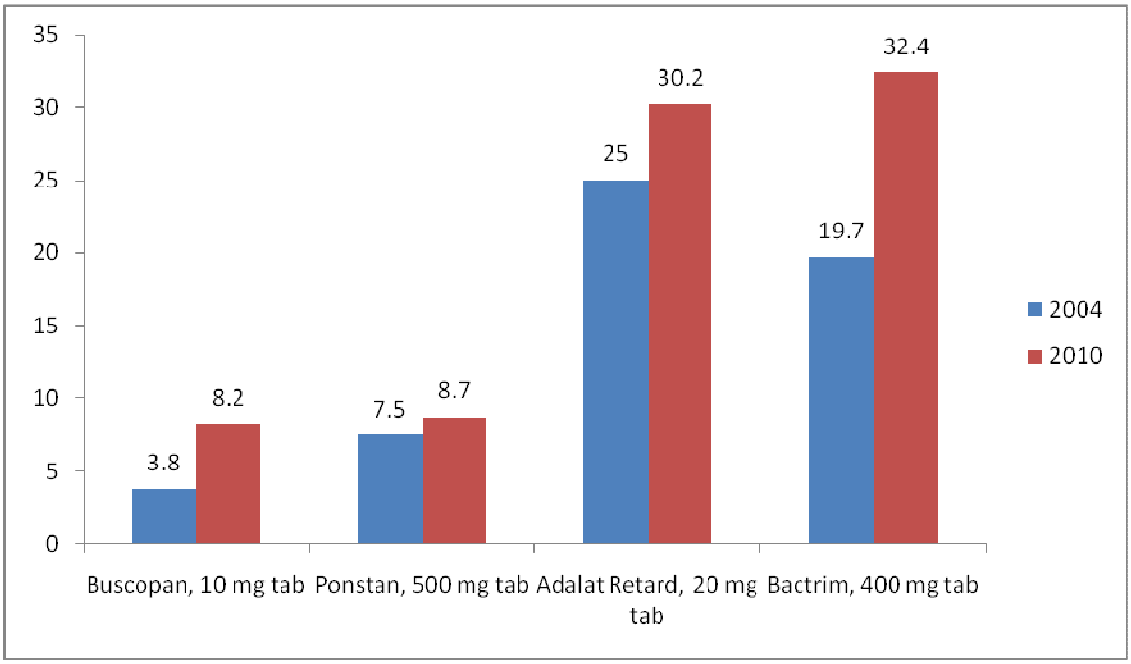
More disturbingly, the trend is not improving; in fact, it is worsening, at least until after the imposition of the Government Mediated Access Price (GMAP) in 2010. As Table 3 shows, the ratio of local median prices to international reference prices especially for innovator (or originator) brands, in both public and private sectors, rose in most of the past decade. Indeed, the ratios of Philippine price to India price for all the four branded drugs considered in Figure 1 rose from 2004 to 2010.

Table 3. Median Medicine Price Ratios for Innovator Brands and Their Generic Equivalents in the Philippines, in Public and Private Sectors, 2002, 2005, and 2008/09

Type	Sector	2002	2005	2005	2008/09	2008/09
Innovator Brand	Public	18.24	15.31	14.19	30.23	26.33
	Private	15.95	17.28	-	37.10	-
Generic Equivalent	Public	-	6.40	5.14	9.78	7.97
	Private	8.36 – 17.76	5.64	-	10.76	-

Source: 2002 data are from Health Action Information Network (2002) and 2005 data are from the Institute of Philippine Culture (2005), as cited by Batangan and Juban (2009).

Figure 1. Ratio of Philippine Price to India Price for Selected Medicines, 2004 and 2010



Source: Lavado (2011)

Gains have been achieved in the production and consumption of generic drugs, following the enactment of the Generics Act in 1988. In the first-ever Generics Summit held in September 2008, as many as 28 generic-drug companies were given quality seals for good manufacturing practices; the number of Good Manufacturing Practice (GMP) compliant firms has since increased to 53, though a larger number of firms continues to operate without having yet complied with GMP standards. Nonetheless, the larger firms manufacturing prescription drugs now meet GMP standards.

Today, it is claimed that 5-6 out of 10 Filipinos now purchase generic drugs. As Table 4 shows, an increasing proportion of Filipinos are now buying cheaper generic drugs, and the proportion of households who did not buy medicines (for any reason) has declined significantly.DOH has mandated all government health workers to use only generic terminologies in drug purchasing, prescribing, dispensing, and reimbursement. Reports indicate that generic manufacturers now sell at prices 55-80 percentlower than their branded counterparts.

Table 4.Percent of SWS Surveyed Filipino Households Who Reported the Purchase of Generic and Branded Medicines, 2003 and 2008

Type of Medicines	2003	2008
Generic medicines	47	55
Branded medicines	36	38
Did not buy medicines	17	7

Source: Social Weather Stations.

However, even the cheapest generics in the Philippines still sell at a high multiple of international reference prices. The case is even worse for originator drugs. Thus, affordability of drugs remains a serious problem. The WHO survey of patients in health facilities in 2009 defined affordability as the number of days' wages that the lowest-paid government employee needs to purchase standard treatments for selected conditions. The results, shown in Table 5, indicate that drugs remain prohibitive for the lowest-earning households; this means that drugs are even more prohibitive for the unemployed and indigent.

Table 5. Number of Days that a Lowest-Paid Government Employee Needs to Work to Purchase One Day's Worth of Generic Medicine, by Type of Condition, 2009

Condition	Generic Medicine	No. of Days' Work
Adult respiratory infection	Amoxicillin	0.3 days
High cholesterol	Simvastatin	1.4 days
Hypertension	Atenolol	0.8 days
Hypertension	Captopril	1.1 days
Ulcer	Ompeprazole	> 1 day
Pediatric respiratory infection	Ceftriaxone	>1 day

Source: Batangan and Juban (2009)

In a separate WHO household survey in 2009, it was found that the average cost of a prescription for acute illness was Php 485, and the monthly cost of medicines for chronic diseases was Php 946. Health insurance penetration among the surveyed households was very low, and even among those with health insurance, pharmacy for outpatient care is not usually covered (Batangan and Juban, 2009).

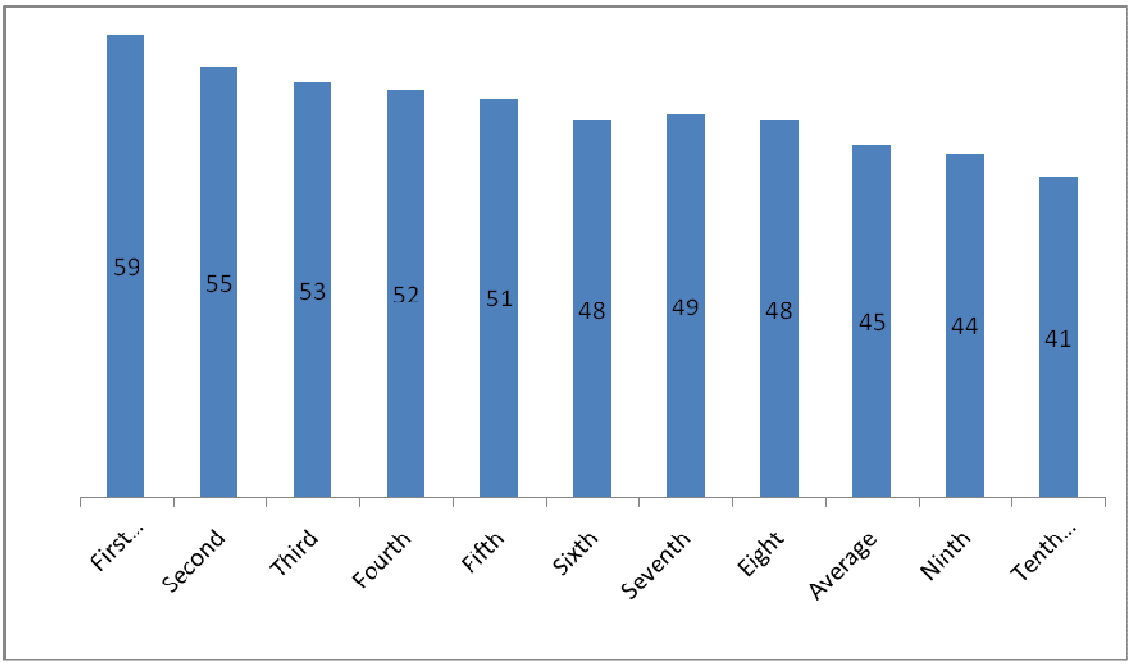
To economize on going to the doctor or other health worker, Filipinos commonly resort to self-treatment or self-prescription. In the WHO household survey, over half of the medications taken in acute illness were self-prescribed or prescribed by a non-health professional. Of course, this practice of self-treatment creates its own problems, including possible improper medication, and drug resistance in the case of use of antibiotics.

The household affordability of medicines is particularly acute for sufferers of chronic and debilitating illnesses requiring maintenance drugs. A study on diabetes care in the country (Higuchi, 2008) showed that there are very few sustainable measures for the maintenance of regular medications of diabetics because of personal cost constraints, which leads to irregular treatment leading to more expensive complications and hospital admissions later.

C. TheOnus of Payment for Drugs is on Households

Households spend a significant percentage of medical care on drugs, and poorer households tend to spend a larger share of their medical care costs on drugs than richer households do (Figure 2). During the year, the poorest households spend on average more than half (59 percent) of their medical care costs on drugs. For the richest households, this proportion is only 41 percent. Thus, relative to their income and medical care costs, the poor bear a heavier load on drug costs than do richer households.

Figure 2. Percentage of Household Cash Spending on Drugs to Total Household Spending for Medical Care, in Income Deciles, 2006



Source: Family Income and Expenditures Survey 2006, as cited by Banzon (2010).

Why do drugs take up a large proportion of household medical care costs, especially among the poor? A primary reason is the absence or weakness of risk pooling. Many of the poor, especially those in the informal sector, are not in any health insurance risk pool, such as PhilHealth, private health insurance, or community, LGU, or other micro-insurance programs (see Table 6.)Moreover, even if they were in a risk

pool, outpatient drug purchases are typically not a covered benefit in such risk pools, including PhilHealth.

Table 6. Urban and Rural Poor Households With and Without Health Insurance Based on Data Derived from Proxy Means Test

Type of Health Insurance	National Capital Region Urban Poor	Rural Poor
Philhealth or other social health insurance	25.0	20.5
HMO insurance	0.2	0.2
Cooperative health insurance	0.2	0.6
Other health insurance	4.0	4.0
No health insurance	70.0	75.0

Source: Cited by Banzon, 2010

As for inpatient PhilHealthdrug benefits, poor purchasing practices (especially in government hospitals) often lead to bloated costs. The absence of drugs in many government hospitals also forces households to buy in private pharmacies as out-of-pocket spending. Thus, the two long-standing problems related to this issue are:

- No capitation for primary care. The lack of a capitation system to pay for primary care providers is a severe shortcoming as 89 percent of pharmacy sales are made on outpatient settings.

- No case-based payment for hospital care. Under fee-for-service (itemized billing) system of paying providers, private hospitals and physicians have little incentive to use cheaper drug alternatives (such as generics) because the higher their value of claims, the more reimbursements they obtain, and the better off they would be.

D. Factors Affecting Drug Prices

Most drug ingredients in the Philippines are imported. Most local drug manufacturing is through a toll system, a version of contract manufacturing where production is outsourced by an originating company to third parties. About 80 percent of toll manufacturing by multinational companies is done by Interphil Laboratories, a sister company of ZuelligPharma, which itself accounts for about 80 percent of wholesale distribution (Pablico, 2006).

Another key factor in the local pharmaceutical market is the overwhelming share of branded medicines. Before the end of the previous decade, the overwhelming demand for drugs is for originator brands and “branded generics”; true generics accounted for a very small percentage (about 3 percent) of sales, whereas it accounted for as much as 50 percent of the U.S. market (Pablico, 2006). This is counter-intuitive in light of the already off-patent status of many of the essential drugs in the Philippines.

Lack of household knowledge of drugs, pervasive marketing and advertising, the strong role of medical representation in the sale of drugs, and the incentives given to prescribing doctors have been frequently cited as contributing to the persistence high drug prices and the high consumption of branded drugs in the country. But perhaps the most important factor is the sheer lack of supply of generic alternatives to households wanting them, a situation that persisted until past the middle part of 2000s when generics

finally emerged on their own, thanks in part to the initiatives that will be reviewed in this report (parallel drug importation, village pharmacies, drug franchises, drug treatment packs, and the like).

Ball and Tisocki (2009) undertook a study in three regions of the country to examine the price components for originator brands and a generic version of six medicines, namely: cotrimoxazole, coamoxiclav, atenolol, glibenclamide, amlodipine, and atorvastatin. The study covered public hospital pharmacies, chain and independent retail pharmacies, and village pharmacies (Botikang Barangay) in three regions. The selling price to patients was determined at each outlet and then the price was traced back through the supply chain through distributors to manufacturers or importers, using invoices and/or other documents from which validated data could be obtained. The results of the study indicate the following:

(1)Highly concentrated market structure and product segmentation – Richer Filipinos tend to use originator brands and "branded generics" sourced from private drugstores and hospitals, while poorer Filipinos rely to a greater extent on lower-priced generics sourced from public facilities and community outlets. Middle-class Filipinos tend to follow richer Filipinos' use of originator brands and "branded generics" but with greater use of public facilities.

The dominance of expensive originator brands and "branded generics" among upper-class Filipinos is due to a number of factors including strong marketing by dominant manufacturers and support of their products by prescribing physicians incentivized by medical representatives; lack of competition from public and NGO outlets which concentrate on provision of lower-priced generics to the poor; information imbalance among patients relying on physician advice and lacking knowledge of competing products; and inadequate assurance of quality of generics by the Food and Drug Administration (FDA, formerly BFAD) leading to popular doubts about the bioequivalence of generics to more expensive originator brands or "branded generics."

(2) High retailer markups – For generic products, markups ranged from 5 – 355 percent at the retailer level, and 18 – 117 percent at the distributor level. For originator brand products, markups were relatively lower (5-8 percent) at private retail pharmacies. However, a large chain pharmacy had markups that ranged from 2 – 60 percent.

(3)Cost-increasing value-added tax (VAT) – VAT is charged at a rate of 12 percent which the patient has to pay. The original VAT is incurred at the first stage of the supply chain, and distributors and retailers often charge their markup based on the VAT inclusive price rather than on the cost excluding VAT. This practice ratchets up the price paid for by the patient.

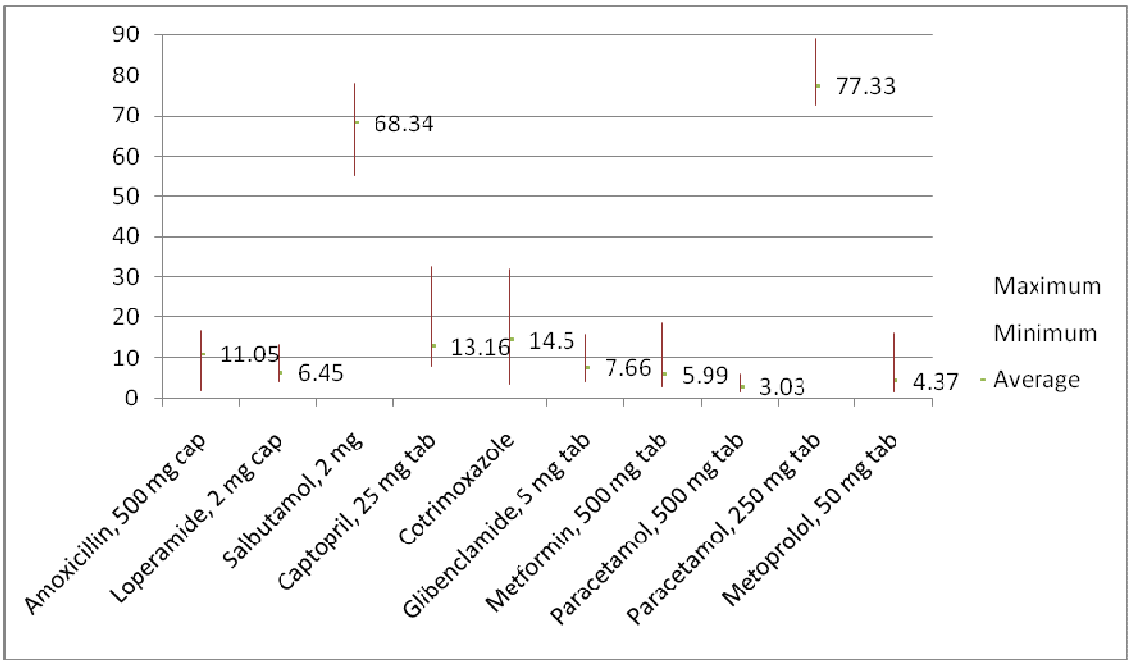
(4)Adverse effect of senior citizens' discounts – Senior citizens are eligible for a 20 percent discount on the retail price of medicines. While retailers could offset some of this cost (7 percent) through their VAT returns, there is no specific budgetary provision for this, so the remaining 13 percent has to be recouped by retailers through increased prices to all patients.

(5) Discount schemes – To promote their corporate image, pharmaceutical companies and retailers have resorted to loyalty cards that provide discounts and thereby incentivize customers to purchase a particular brand or to buy from a particular store. These programs are often accompanied by patient assistance schemes that in turn channel consumers to the promoted products. The discount programs of Pfizer and Mercury Drug have been the most visible in this regard. While there are certain positive

features in such programs, they also tend to irrational medicine selection by patients or their physicians, and could discourage them from looking at other (cheaper) alternative drugs.

Through a combination of the above factors, there is a noticeable large variation in the prices of fast-moving drugs in the Philippines, as shown in Figure 3 (Lavado, 2011). Some outlets charge as much as 2 or 3 times the price of similar drugs in other outlets.

Figure 3. Maximum, Average, and Minimum Prices of Selected Fast-Moving Drugs in the Philippines (in Php), May 26, 2010



Note: Only average prices were labelled.

Source: Lavado, 2011, based MIMS Philippines data retrieved on May 26, 2010.

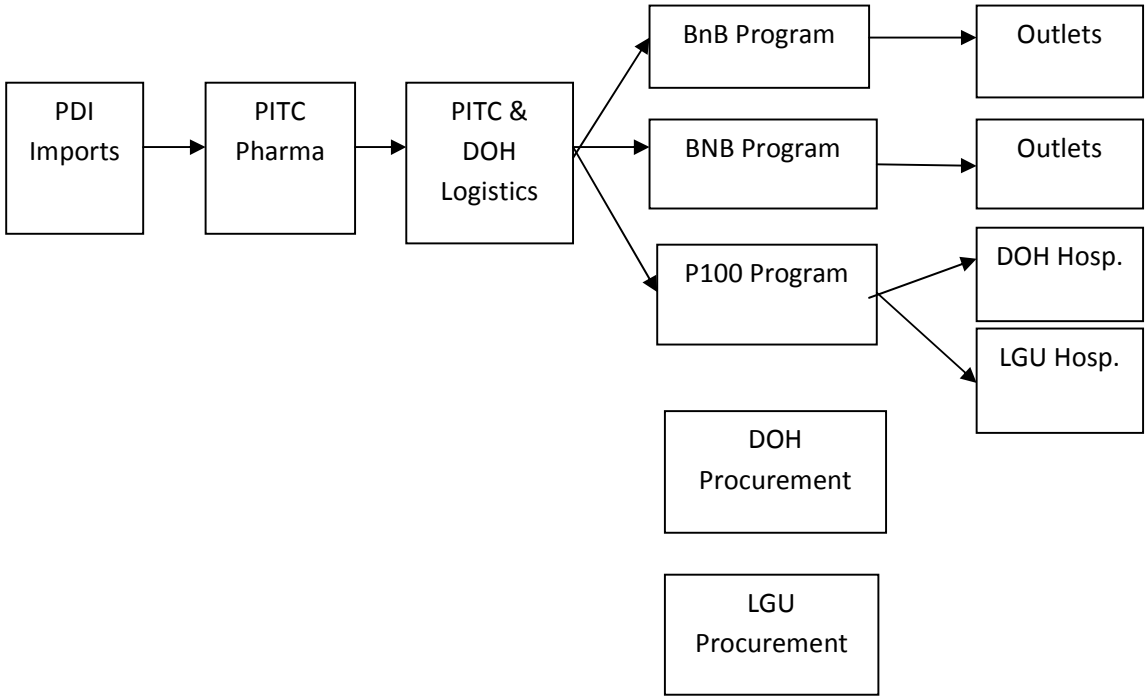
E. Recent Policies to Lower the Prices of Medicines

1. ***Parallel Drug Importation*** - The Botikang Barangay (BnB), the Botikang Bayan (BNB) as well as the P100 program rely crucially on the parallel drug importation (PDI). In 2000, the DOH initiated PDI as an innovative strategy to cut costs of medicines. PDI involves the importation into the country of a patented drug from a third country without the authorization of the patent holder (in a second country, usually the U.S. and European countries where many of these drugs were researched, developed, and patented). It is mainly used when the price in the third country is considerably lower than the price the patent holder charges in the country concerned. Figure 4 shows how the drugs imported through the PDI policy are retailed.

PITC imported the PDI medicines, mostly from India and Pakistan, and DOH distributed them under the GamotnaMabisa at Abot Kaya (GMA 50) Program in its 72 DOH-retained hospitals and three LGU hospitals in the Autonomous Region of Muslim Mindanao (ARMM). The DOH's Pharmaceutical

Management Unit claimed that PDI imports achieved an estimated average of 60.9 percent price reduction of drugs in 2004, much higher than the targeted 50 percent reduction by 2010. The prices of essential medicines further decreased by an average of 41 percent in 2005 and again in 2006 (David and Geronimo, 2008).

Figure 4.Retailing of Parallel Drug Imports in the Philippines



LGUs can also directly purchase PDIs. Indeed, in the early 2000s, the provinces of Capiz and Negros Oriental placed orders for PDIs. In the case of Capiz, the Provincial Government even became the market leader, forcing private drugstores to reduce their prices (MSH, n.d.).

When the BnB and BNB emerged in the mid-2000s, they became the primary retailers of PDI drugs. The Cheaper Medicines Act also allows the retailing of PDI drugs to the private sector, but in an assessment of the business climate in the health sector, BIZCLIR (2009) pointed out that PDI drugs are retailed only in BnB, BNB (and subsequently the P100 programs), not in private outlets. At that time, most BNBs were still NGO (non-profit) operations. Lately, however, there has been interest among for-profit business enterprises to become BNBs, and most BNBs are now for-profit private enterprises.

However, in hindsight, the overall size of PDI procurement has been very small relative to the total pharmaceutical sales in the Philippines. In the decade between 2000 and March 2010, the Philippine government imported only US$ 8.789 million of PDI drugs (or Php 377.9 million in today's current exchange rate of US$ 1.00: Php 43.00) (Table 7). This translates to a measly average yearly importation of US$ 799,000 (or Php 34.4 million)

Table 7. Value of Parallel Drug Imports, in US$ Million, 2000 to March 2010

Year	Annual Imports (US$ Million)
2000	0.420
2001	0.256
2002	1.499
2003	0.519
2004	0.578
2005	1.020
2006	1.540
2007	1.338
2008	1.473
2009	0.110
2010 March	0.036
Total	8.789

Source: PITC Pharma, May 2010.

2. ***Cheaper Medicines Law*** - The enactment in 2008 of the "Universally Accessible Cheaper and Quality Medicines Act" (R.A. 9502) and in 2009 of the "Food and Drug Administration Act" (R.A. 9711), were important milestones in laying the foundation for improving the quality and reducing the prices of medicines. The "Cheaper Medicines Act" confers on the President the authority to regulate the price of medicines and drugs and empowers the DOH Secretary to establish a drug price monitoring and regulation system. Pursuant to this Act, the President issued Executive Order (E.O.) 821 (made effective August 15, 2009) prescribing the maximum retail prices (MRP) – also known as government mediated access prices (GMAP) – for selected medicines that address some diseases which are common causes of morbidity and mortality in the country. The E.O. covered only five active pharmaceutical ingredients including some antihypertensive, antibiotics, and anti-neoplastics/anti-cancer.

At the same time, some manufacturers negotiated with the government to reduce prices of selected products voluntarily, rather than fall under mandatory price regulation. The DOH approved voluntary price reductions of up to 50 percent for 16 molecules (or 41 drug preparations) in August 2009, and a further 97 products in 2010. However, voluntary price reductions apply only to the products of participating manufacturers, not to alternative suppliers of generic substitutes. The DOH has established a process for monitoring and evaluation of the impact of these measures.

Initial feedback has identified a number of concerns: (i) the selection of products for price restraint does not follow rational selection principles (for example, not all first line treatments for hypertension or asthma are covered); (ii) the level of price reductions is arbitrary (surveys have found Philippines prices for originator brands to be over 15 times higher than international reference prices, and even lowest cost generics 5-6 times international reference prices); (iii) the scheme may reduce generic competition and publicize brand-name medicines (for many of the products there is a much cheaper, quality generic substitute available); (iv) PhilHealth cannot use voluntary price reductions in its reimbursement of

medicines because they apply to specific manufacturers only; and in aggregate, the medicines falling under the scheme account for a relatively limited share of the market.

Chapter III.Review of the Botikang Barangay Program

A. Program Description

The village drug outlethas had a checkered history in the Philippines. It was known as "Botikasa Barangay" in the 1970s; faded out of the scene in the 1980s and 1990s (Flores, Umenai, and Wakal, 2001); and was revivedduring the 12th Congress when former Pres. Gloria Macapagal Arroyo pledged in her state of the nation address (SONA) in July 2000 to lower the prices of drugs and medicines frequently bought by the poor by 50 percentduring her administration(DOH, 2003). This was part of her 10-Point Legacy Program.

Following this presidential pledge, the DOH entered into a Memorandum of Agreement with the Philippine Charity Sweepstakes Office (PCSO) and the Philippine International Trading Corp. (PITC) to purchase and distribute the drugs and medicines through the DOH networks of the renamed Botikang Barangay (BnB)and, later, the larger Botikang Bayan (BNB). PCSO earmarked Php 20 million to be transferred to PITC for the procurement of BnB drugs. The initial target was 800 BnB which will each be seeded with Php 25,000 worth of drugs. To operationalize this program, DOH issued A.O. 64, s. 2003 which contained the policy guidelines for the operationalization of BnBs by the regional Centers for Health Development (CHD).

The A.O. defined a BnB as a drug outlet of a proponent local government unit (LGU)[1]; selected by the CHD concerned; approved by the Pharma 50 Project which was purposely set up to manage the SONA pledge; and licensed by the Bureau of Food and Drugs (BFAD), now known as the FDA.All BnB drugs pass through the quality control and product registration standards of the FDA.

The BnBs were mandated to sell low-priced generic over-the-counter (OTC) drugs and, originally, 2 prescription drugs (amoxicillin and cotrimoxazole).Later, the number of drugs was increased, with each BnBbeing able to sell a selection from a list of around 35 OTC generic medicines and household remedies, and 7 prescription drugs. Today, BnBs can sell up to 40 essential OTC drugs and 8 prescription drugs (NCPAM, n.d.).

The rest of the DOH A.O. defines the general and specific guidelines with respect to: (a) handling procedure for the initial deliveries of drugs procured through the PITC; (b) BnB responsibilities of proponent LGUs; (c) stocks replenishment orders from the BnBs; (c) BnB supplier eligibility and accreditation; (d) BnB drug price determination for stock replenishments; (e) fund management conditions for the BnBs; (f) rational drug use; and (g) project monitoring.

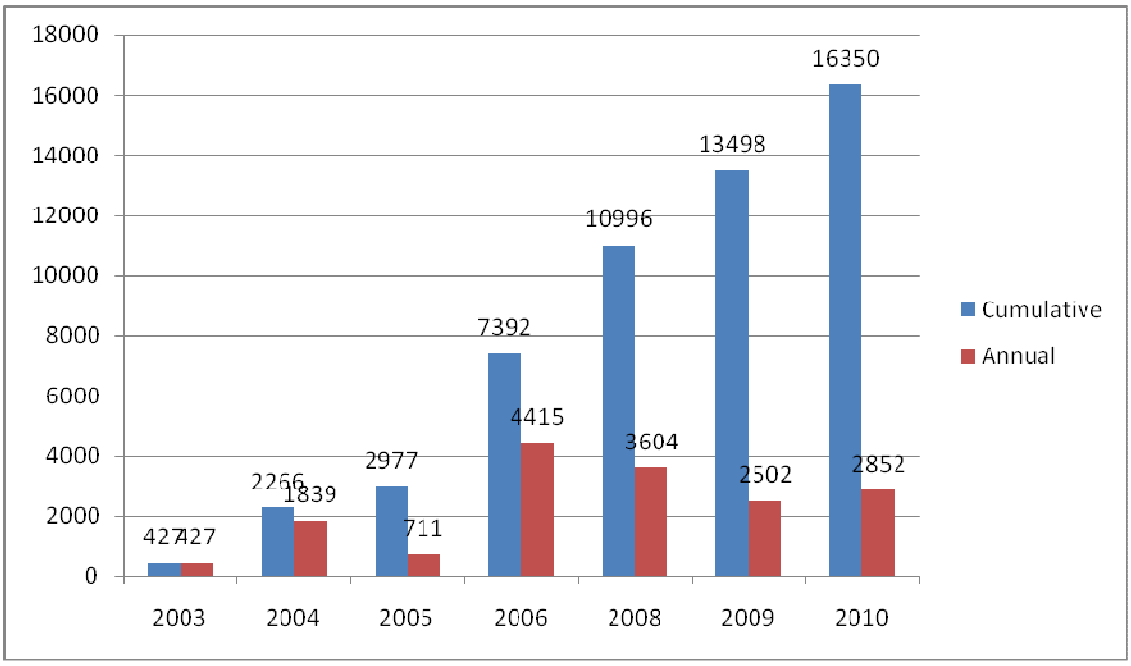
B. Program Performance

1. Extent of BnB and the poor's access to them – Figure 5 shows the impressive growth of BnBs since the program was launched. It has been estimated that a typical BnB serves around 500 people per month (NCPAM, n.d.). This means that the 16,350BnBs in existence by the end of 2010 serve about 8.2 million people a month, or about 8.7 percent of the country's population. It is difficult to estimate the

[1]This was the original intention, but as will be shown below, the BnBs have evolved such that most of the sponsoring organizations now are actually private entities.

number of Filipinos they serve each year, because some of the clients certainly will have repeat purchases throughout the year.

Figure 5.Annual and Cumulative Number of BnBs Established, 2003– 2010



Note: 2007 data were not available.

By the end of 2010, a total of 16,350 BnBshad been established nationwide, including those of two NGOs (106 of the KabalikatngBotikaBinhi and 473 of the National Pharmaceutical Foundation or Health Plus).Official reports show that the original target of 1 BnB per 3 barangays was achieved one year early (in 2009) (NCPAM, n.d.).

The new target has been set at 1:2 for all barangays. Based on this new target, a survey done under the auspices of the European Union's(EU) Health Sector Policy Support Program (Vreeke, et al., 2009) showed that 62 percent of 389 BnBs seen do serve 2 barangays, while 38 percent serve 1 barangay. In other words, the program target has been exceeded by more than 30 percent.

For the poorest of the poor barangays, the target is 1:1. In the Autonomous Region of Muslim Mindanao (ARMM) as well as geographically isolated and depressed areas, the target is also 1:1.

Results of the EU BnB survey showed that a third of the BnBs are found in residences in the barangay (Table 8). An additional half (49 percent) are found in barangay health stations, barangay halls, or sari-sari (variety) stores. More than half (55 percent) of them are within 5 minutes of walking distance to the nearest health facility (typically a rural health unit) while another 25 percent are within 30 minutes' walking distance. Only around 19 percent of the BnBs are an hour or more of walking distance from an RHU. On the basis of these findings, it can be concluded that the existing BnBs are accessible to their rural clients.

Table 8.BnBs by Site, 2009

Site	No. of BnBs	Percent
Residence	120	33
Barangay health station	68	19
Barangay hall	57	16
Sari-sari store	51	14
Rural health unit	9	2
Municipal hall	1	Negl.
Others	56	15
Total	362	100

Note: The 362 total represents only the functional BnBs.
Source: Vreeke, et al., 2009

Although there has been notable achievement in the growth of BnBs, their geographic distribution across the country has not been as equally impressive. Using population/BnB ratio, Table 9and Figure 5 show that the regions worst served with BnB also tend to be the poorer ones, e.g., ARMM (1 per 14,900), Bicol (1 per 14,000), Soccsksargen (1 per 10,700), and Mimaropa (1 per 9,000).

Provincial distribution is even more striking, with the poorest provinces such as Basilan, Sulu, Lanao del Sur, Tawi-tawi, Compostela Valley, Suquijor, Batanes, and Marinduque without BnB as late as 2009. The other poorly served provinces are Nueva Vizcaya (withonly 12 percent of its barangays having a BnB), Albay (10 percent), Sorsogon (5 percent), Siquijor (4 percent), and Catanduanes (3 percent) (Lavado, et al., 2011). Seven years after the program was initiated in 2001, 15 of the 40 poorest towns still do not have BnBs (Ragaza and Morales, 2009).

BnBs' inability to penetrate quickly into the poorest areas, which was the original intention of the program, is due to the fact that DOH is not directly involved in determining and setting up BnB outlets. BnBs are largely a local initiative of the LGUs and community organizations with support from the DOH's regional Centers for Health Development.

The absence of BnB in a poor locality may also be due to the scarcity of supervising pharmacist who wants to work in the area. According to DOH rules, only a supervising pharmacist is authorized to dispense prescription drugs. The Pharmacy Law also requires the presence of a pharmacist in a drugstore or retail outlet.

The continued supply of drugs after the initial stock has run out has been a major problem. CHD interviews indicate that while the BnBs were originally conceived to operate as drug revolving funds, with the funds managed at their respective CHDs, this business format has not been followed. Thus, there has been a weak reflow of funds. Moreover, each BnB has been left to itself to locate its own source of supply. In some instances, the BnBs have sourced their drugs from private distributors and retailers (even for-profit sources), thus increasing their costs, and the prices faced by consumers. The problem seems to be of economies of scale, i.e., individually, each BnB is too small to warrant a regular visit from a supplier, especially if the BnB is in a far-flung area.

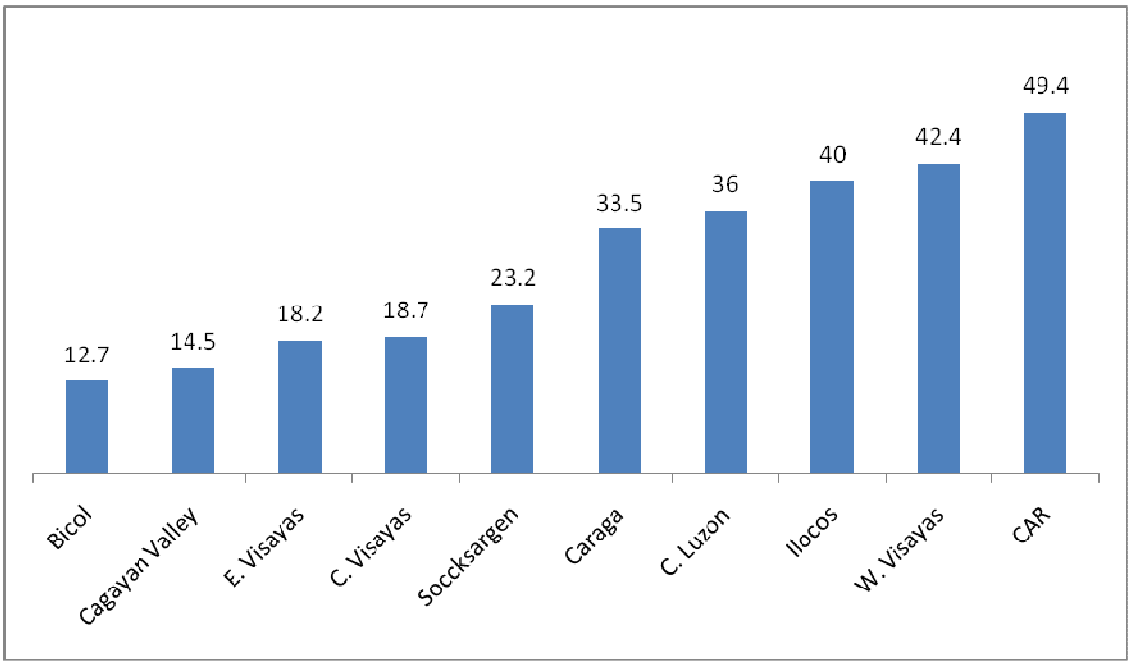
Table 9.Regional Distribution of BnBs and Population/BnBin Each Region, 2009

Region	Number of BnBs (2009)	Number of BnBs (2010)	Population in Mn (2007)	Population/BnB
I – Ilocos	1,019	1,713	4.6	4,461
CAR – Cordillera AR	436	702	1.5	3,488
II – Cagayan Valley	421	513	3.1	7,248
III – Central Luzon	1,625	1,823	9.7	5,982
NCR – Metro Manila	534	747	11.6	21,635
IVA – Calabarzon	1,304	1,614	11.7	9.0
IVB – Mimaropa	750	860	2.6	3,413
V – Bicol	363	532	5.1	14,077
VI – Western Visayas	1,548	1,632	6.8	4,421
VII – Central Visayas	519	595	6.4	12,329
VII – Eastern Visayas	673	995	3.9	5,814
IX – Zamboanga Peninsula	535	734	3.2	6,038
X – Northern Mindanao	822	1,073	4.0	4,808
XI – Davao	607	869	4.2	6,848
XII – Soccsksargen	357	346	3.8	10,726
Caraga	354	712	2.3	6,479
ARMM	277	311	4.1	14,877
Subtotal	12,144	15,771	88.6	7,294
KabalikatngBotikaBinhi	892	106	-	-
National Pharmaceutical Foundation	462	473	-	-
Grand total	13,498	16,350	88.6	6,562

Source of basic data: DOH (2009); Depano (2011); last column was calculated based on the raw data of DOH.

A system of pooling drug requirements to achieve economies of scale remains to be worked out. However, DOH-NCPAM staff opine that central pooled procurement will be difficult for the reorders because of (a) the large numbers of BnB and communication challenges; (b) the different procurement cycles of BnBs because of their variations in demand and sale patterns; and (c) the so-far non-existent IT technology needed that is able to respond quickly to the requirements of BnBs, securing orders, and delivering the products to them.

Figure 6. Percentage of Barangays With a BnB, by Region, as of May 2010



Note: This figure does not contain data for 7 regions as they are not available in the level of disaggregation (per barangay) needed.
Source: Lavado, 2011

2. Rational drug use – One BnB analyst has raised issue with the choice of drugs included in the BnB in relation to the burden of disease in the country. DOH uses the top causes of mortality and morbidity as basis for the choice of drugs. While this may seem acceptable at first blush, it does not have sound technical mooring as disease burden should be calculated based on disability adjusted life years (DALY), which is the globally accepted methodology. DALYs take account of the number of people who died or got sick of the disease (the usual mortality and morbidity data), as well as the period of time that people got sick (standardized in a year) and the severity of the disease. Very few DALY studies have been done in the Philippines, mostly as graduate theses. The DOH is just beginning to get into this type of analysis. In any case, while the burden of disease averted by BnB drugs looks large from a simple mortality and morbidity reckoning, it may not be so if reckoned in terms of DALYs.

Drugs sold by BnBs are all approved by FDA, but they stock only a small number of the list of products needed for public health. These include over the counter medications for minor illnesses such as diarrhea, dehydration, stomach acidity, coughs and dizziness. Two antibiotics were included when the program started (cotrimoxazole and amoxicillin). Five prescription drugs for chronic diseases were added in 2005: metformin and glibenclamide for diabetes; metropolol and captropil for cardiovascular diseases; and salbutamol for respiratory illnesses.

However, BnBs do not carry drugs for common diseases such as malaria and TB. These conditions are deemed more complicated and require professional consultation; the non-inclusion in the BnB drug list implies that self-treatment is not encouraged.

BnBs ought to be monitored regularly by a licensed pharmacist, but the lack of available pharmacy staff has turned this into a major problem (MeTA, 2010).The EU BnB survey noted that regulatory supervision by a supervising pharmacist is hardly taking place (Vreeke, 2009). Some deem the lack of regular pharmacist supervision and lack of linkage to primary care facilities as limiting most BnBs' potential to provide access to prescription medicines for chronic conditions. The linkage to an RHU, however, is not a physical-distance problem as they are close to most BnBs, but rather a coordination problem.

In any case, a significant proportion of BnBs (35 percent, according to the EU survey)had expired medicines at the day of the visit, indicating the gravity of the supervision and related problems. Moreover, the lack of control and information on prescribing behavior arising from the lack of supervising pharmacists (and the lack of up-to-date prescription registers) poses serious public health risk because of potential overuse of antibiotics.

A few BnBs have gone beyond their mandate by procuring their own stocks of prescription drugs which DOH prohibits them to sell. Ragaza and Morales (2006) reported that a 2006 Commission on Audit team discovered several BnB outlets inCaraga and Metro Manila selling unauthorized medicines – Alexan and Ambroxol, among others, because they were being demanded by patients suffering from bronchitis. As this is a COA report on a specific location, however, it cannot be ascertained whether the practice is widespread nationwide or not.

The biggest challenge that the BnB program has to face is how to situate the BnBs within the overall framework of the health care system. The BnB program appears to have started as a coping mechanism to the shortage of drugs in the late 1990s and early 2000s. It has succeeded in getting supplies to many areas that did not have access to drugs before, but certain poor areas remain without them. Moreover, supervision has loomed as a major problem. With the sudden upsurge of private generic pharmacy outlets everywhere, the BnB program certainly needs to be re-examined.

3.Costefficiency vis-a-visthe private sector– Comparing the efficiency of BnBvis-a-visalternative sources of retail drugs is fraught with difficulty. Firstly, the institutional structures and ownership of retail suppliers differ. Secondly, the importation modes vary: while BnBs rely on parallel drug importation with its inherent subsidy, others do not. Thirdly, BnBs also rely on the distribution system of DOH and CHDs, which is another form of subsidy; alternative suppliers do not. BnBs are also further out in rural areas, with their attendant higher transport costs. For these reasons, suppliers are not directly comparable, even if they may be selling similar pharmaceutical product lines.(There are also issues about bioequivalence between BnB drugs and private sector alternatives, which is a separate issue.) Despite these difficulties, it is important to compare BnB prices with alternative suppliers.

In mid-2000s prior to the rapid emergence of private retail pharmacies selling generic drugs, and prior to the implementation of the maximum Retail Price Law, Ramos (2006) compared the selling price of selected drugs between BnB and a leading private drugstore chain. The results, shown in Table 10, indicate that BnB prices were consistently lower than the comparator-supplier across all the drugs considered. The price reduction varies from 38 percent to 90 percent; on average, drugs are 62 percent cheaper than the alternative.

Note, however, that while the table shows price comparison, it is not really a true comparison of alternative pharmaceutical retail sources, since the BnBs enjoy implicit government subsidies that the

leading drugstore chain does not[2]. Thus, this table should only be used to compare the prices that the household faces in either BnB or the drugstore chain, not to compare economic efficiency of the two sources. This issue is discussed in the next section.

Table 10.Selling Price of Selected Drugs BetweenBnB and a Leading Private Drugstore Chain, June 2006

Generic Name and Dosage	BnB	Leading Drugstore Chain	Peso Savings	Percent Price Reduction
Amoxicillin, 250 mg	23.14	80.50	57.36	71
Amoxicillen, 500 mg	2.02	7.25	5.24	72
Cotrmoxazole, 800 mg	1.69	17.50	15.81	90
Loperamide, 2 mg	1.05	4.10	3.05	74
Mefenamic acid, 250 mg	0.88	3.00	2.12	71
Multivitamins for adults, 100/box	1.78	4.95	3.17	64
Multivitamins for children, 60 mL	27.11	58.65	31.55	54
Paracetamol, 500 mg	0.46	1.35	0.90	66
Povidone iodine 10% sol., 15 mL	24.35	39.25	14.90	38
Metformin, 500 mg	1.61	3.25	1.64	50
Glibenclamide, 5 mg, 100/box	0.62	5.90	5.28	89
Metoprolol, 50 mg	1.63	2.65	1.03	39
Captopril, 25 mg	4.28	8.15	3.87	48
Salbutamol, 2 mg	0.36	1.90	1.54	81
Salbutamol, 5 mL	19.83	42.25	22.43	53

Source: Ramos (2006)

PITC Pharma's own price comparison between BnB outlets (with an assumed 30 percentmarkup price) and The Generics Pharmacy or TGP (a private franchise retailer) in April 2010 also shows significant cost advantage of the BnB over TGP in almost all the drugs sold (Table 11). Note, however, that this comparison is based on listed prices, with the assumed 30 percentmarkup for BnB outlets – an assumption that often does not hold in reality, as will be shown in the next section.

Table 11. Price Comparison of Retail Prices Between the BNB and The Generics Pharmacy, as of April 2010

Generic Name	Dosage	PPI Selling Price to DOH	BnB Retail Price[3]	The Generics Pharmacy Price	Price Difference	
					Php	Percent
Aluminum Hydroxide + Magnesium Hydroxide	225 mg/200 mg per 5 ml suspension	20.55	26.72	45.00	18.29	41

[2]In the comments provided by DOH to the draft report, DOH staff themselves noted that these comparisons are not appropriate since the drug outlets already apply a significant margin at retail.

[3]At 30 percent markup.

Amoxicillin trihydrate	250 mg/5 ml powder/granules suspension	23.00	29.90	48.00	18.10	38
Amoxicillin trihydrate	500 mg tablet	230.80	3.00	3.00	0.00	0
Ascorbic Acid	500 mg tablet	95.00	1.24	1.60	0.37	23
Captopril	25 mg tablet	264.30	3.44	4.00	0.56	14
Cotrimoxazole	800 mg sulfamethoxazole/ 160 mg methoprim tablet/ capsule	125.00	1.63	2.50	0.88	35
Ferrous sulfate	Tablet equiv. to 60 mg elemental iron	42.00	0.55	1.00	0.45	45
Glibenclamide	5 mg tablet	70.45	0.92	1.10	0.18	17
Loperamide Hydrochloride	2 mg capsule	71.45	0.93	1.30	0.37	29
Mefenamic Acid	250 mg capsule/tablet	66.70	0.87	1.20	0.33	28
Metformin	500 mg tablet	90.00	1.17	1.70	0.53	1
Metoprolol	50 mg tablet	120.00	1.56	2.20	0.64	29
Multivitamins for children	Per 5 ml syrup	20.75	26.98	32.00	5.03	16
Multivitamins for adults	Capsule	128.60	1.67	2.10	0.43	20
Paracetamol	250 mg/5 ml syrup/suspension	19.65	25.65	27.00	1.46	5
Paracetamol	500 mg tablet	35.35	0.46	0.60	0.14	23
Povidone iodine	10% solution	17.50	22.75	n.a.	n.a.	n.a.
Salbutamol	2 mg tablet	33.50	0.44	0.50	0.06	13
Salbutamol	2 mg/5 ml syrup	14.30	18.59	25.00	6.41	26

Source: PITC Pharma, 2010

Another analysis compares the selling prices of selected drugs among BnBs and a range of private suppliers, namely: generic, branded generic, innovator drug equivalent, and discounted innovator drug equivalent (cited by Gloor, 2009). The results of this relatively more accurate comparison are shown in Table 12. Of the drugs considered, only four were reported for BnBs. Of these four drugs, BnBs can claim to have the lowest selling price only for one drug (metformin 500 mg, selling at Php 1.62 per tablet), and even their price advantage over the lowest generic (Php 1.70) is very small. In the other three drugs for which comparable data are available, the BnBs were outpriced by the lowest generic supplier. Indeed, the innovator drug discount price is even lower than the BnB price for felodipine and amlodipine. These data suggest that BnBs do not offer the lowest price in the market, even with the implicit subsidies they receive, e.g., parallel drug importation, logistics support from PITC and DOH, and supervision of CHD.

Table 12. Selling Price (Php) of Selected Drugs AmongBnB, Private Generic, Branded Generic, and Innovator Drugs, 2009

Selected Drugs	BnB	Lowest Generic	Branded Generic	Innovator Drug	Innovator Drug Discount[4]
Felodipine 10 mg	39.00	35.00	40.00	77.25	38.62
Amlodipine 10 mg	37.00	15.00	17.50	77.00	30.80
Clindamycin 300 mg	-	8.00	41.00	71.50	42.89
Budenoside	-	-	56.50	370.00	-
Montelukast 10 mg	-	40.00	38.75	51.50	46.30
Gliclazide 80 mg	11.60	5.80	4.25	8.25	-
Metformin 500 mg	1.62	1.70	4.50	11.00	-
Tamoxifen	-	-	30.75	61.00	-

Source: DOH (2009)

Why are BnB prices not the lowest in the market for comparable drugs? A MeTA study conducted by HAI Global in 2008 showed that BnBs had some of the highest mark-ups (25-355 percent) even though they are supposed to have a regulated 30 percentmarkup. The authors of this study contend that some of the high mark-ups were a result of the BnB having a minimum selling price of Php 1 per tablet/capsule – thus the high markups on medicines costing much less than this – and one BnB increased its price of fast-moving items to recover losses due to expiry of slow-movers. It must be noted that BnBs have no control over the range of products initially supplied and cannot return expiring products for a refund(HAI Global, 2008a).

The EU survey (2009) of BnBs re-affirmed the HAI study findings, citing operators' complaints that the 30 percentmarkup calculation do not seem to have taken into account the actual transport costs between the supplier and the BnB. The PHOs and CHDs interviewed as key informants also confirmed these findings.

Even as some BnB outlets outprice their private competitors, the wide variation in BnB prices means that some of them are really pricing way above the competition. The EU survey gathered the prices of three prescription drugs and the results are shown in Table 13. For amoxicillin, although the median price is Php 3.00, 70 percent of the BnBs surveyed sold it at a price higher than Php 3.00; indeed, 10 percent of them sold it as high as Php 7.00 or more. Similar patterns of pricing occurred for cotrimoxazole and metropolol.

Table 13. Price Variations of Three Prescription and Three Over-the-Counter Drugs in BnBs, 2009

Price Ranges	Amoxicillin 500 mg capsules (N=330)	Cotrimoxazole 800 mg/160 mg tablets (N=292)	Metoprolol 50 mg tablets (N=201)
Median price (Php)	3.00	2.50	2.50
Percent of BnBs with price below Php 2	4	19	16
Percent of BnBs with price between Php 2 and 3	26	33	20

[4]Price reduction program

Percent of BnBs with price between Php 3 and 4	28	21	12
Percent of BnBs with price between Php 4 and 5	21	9	6
Percent of BnBs with price between Php 5 and 6	8	4	6
Percent of BnBs with price between Php 6 and 7	3	1	0
Percent of BnBs with price between Php 7 and 8	10	13	14

Source: Vreeke, et al., 2009

To be fair, Gloor (2009) notes that the competition that BnBs/BNBs has brought to the domestic pharmaceutical market – aside from the MRP/GMAP-mandated price reduction – has brought down the local prices of drugs. Thus, the prices of innovator medicines have gone down through their generic counterparts in BnB/BNB, or sold by the private drugstores throughout the country. It is as if the BnBs/BNBs and private pharmacies selling generics have brought down the once-dominant sellers of innovator drugs, causing them to lower their prices dramatically. Now, the table is being turned, with discounted innovator drugs outpricing the BnB/BNBs. It must be noted at this point that the period 2009/2010 was marked by high instability in drug prices because of the combined effect of PDI, the sudden emergence of generic pharmaceutical franchising[5], and the implementation of the MRP/GMAP. Thus, the data in Table 13 must be treated with caution.

The BnBs' and BNBs' role in increasing the contestability of the local drug market is an important role that the government plays, even if BnBs/BNBs now have prices that may be a bit higher than alternative private suppliers. Some quarters fear that if BnBs/BNBs withdraw completely from supplying the local market, private suppliers may raise their prices again to "pre-contested" levels. This is a strategic consideration that should be taken into account about the future of BnBs/BNBs.

C. Program Sustainability

1. Sponsoring organizations and functionality– Although the BnB was originally conceived as an LGU initiative, the EU survey (Vreeke, 2009) (n=302) has shown that most (47 percent) of BnBs seen are actually sponsored by private entities or individuals (Table 14); an additional 11 percent are sponsored by the barangay health worker. The minority (42 percent) are sponsored by government entities. It appears that BnBs continue to receive support from the LGU after a change in administration, mainly because they are politically popular.

Table 14. Number of BnBs by Sponsoring Organization or Individual, 2009

Sponsor	Number	Percent
Private	142	47
Barangay council	57	19
Other LGUs	35	12
Barangay health worker	34	11
Other government related interests	34	11
Total	302	100

Source: Vreeke, 2009.

How many BnBs are functional? The EU survey (2009) defined functionality in terms of alternative indicators, and these are shown in Table 15:

[5] Such as The Generics Pharmacy.

(a) The BnB was open and the operator was present at the time of the survey. A high 87 percent of the 302 BnBs actually visited were still functional.Of the 34 BnBs that were no longer functional as of the date of the survey, the reasons for closure included no demand for products; resupply problems; and financial difficulties in keeping the business up. Political interference was cited by just one BnB operator.

Data from NCPAM-DOH show that since 2003 when the BnB program started, a total of 1,920 have closed (Depano, n.d.), representing 11.7 percent of all BnBs that have been established. The regions with the highest rates of BnB closure were ARMM (57.2 percent), Eastern Visayas (22.6 percent), Calabarzon (22.1 percent), and Central Visayas (16.3 percent).

(b1) Sales are over Php 18,000 per year, which is related to the use of the seed capital of Php 25,000 over 18 months. Less than a third (27 percent) meet this functionality definition.

(b2)Sales are over Php 12/person/year.Only a quarter (25 percent) meet this functionality definition.

(c) The main management tools of sales book, inventory register, and prescription register are available.Only 7 percent of the BnBs meet this functionality definition, and only 2 percent are up to date in their business data.

Table 15. Functionality of BnBs using Alternative Definitions, 2009

Indicator	Number	Percent
Open BnB and present operator		
- Functional BnBs	297	87
- NonfunctionalBnBs	34	13
- Total BnBs actually visited	302	100
Gross sales level		
- BnBs with annual sales >Php 18,000	104	27
- BNBs with annual sales <Php 18,000	136	35
- Not reported	149	38
- Total BnBs in the original + substituted sample	389	100
Per capita sales level		
- BnBs with annual per person sales >Php 12	97	25
- BnBs with annual per person sales <Php 12	130	33
- Not reported	162	42
- Total BnBs in the original and substituted sample	389	100
Operational management system		
- BnBs with annual sales >Php 18,000 + 3 registers present	26	7
- BnBs with annual sales >Php 18,000 + 3 registers present + up-to-date data	8	2
- Total BnBsin the original and substituted sample	389	-

Source: Vreeke, 2009

2. Financial condition–The NCPAM (n.d.) reports that the BNBs are earning, and some of the best-practice BnBs have Php 100,000 in their bank accounts. The typical BnB, however, is just struggling along (median sales of Php 14,000 per year), and about half of them reported undesirable sales figures. Out of the 240 BnBs with financial data analysed in the 2009 EU study, 54 percent are deemed acceptable or desirable, i.e., with sales of at least Php 24,000 per annum (Table 16). However, almost half (46 percent) of the BnBs have annual sales figures of Php 24,000 which is deemed undesirable.

Thus, economic viability remains precarious for many of the BnBs. Because of the large variance in sales, it has been suggested that the package of seed capital given to BnBs be customized to the market and catchment area of the BnB.

Table 16. Level of Gross Sales of BnBs, 2009

Sales Level	Number	Percent
Desirable - Sales Php 48,000 and above	33	14
Acceptable – Sales between Php 24,000 and 48,000	97	40
Undesirable – Sales less than Php24,000	110	46
Total	240	100

Source: Vreeke, et al., 2009

It is not clear whether the BnB sponsors had any training in financial management and related skills. Some observers note that the program should not expect Barangay Health Workers (BHW), who manage most BnBs, to be conversant with financial management, since admittedly their training has been on other skills. For this reason, it has been suggested that BnBs increasingly be focused on those with entrepreneurial skills and adept at financial management, such as sari-sari (variety store) owners.

Unlike BnBs which are supplied solely by PITC and must pay for every delivery they receive, The Generics Pharmacy does consignment for its franchisees, which can also get medicines from other sources. Under consignment, the supplier (consignor) provides an inventory of drugs to a retailer which pays only the items that it is able to sell. This is an important distinction between BnBs and for-profit franchisees which confers on the latter a distinct advantage. The Generics Pharmacy also tends to advertise more, thus attracting more customers.

The discount given to senior citizens (as called for under the law) is a key factor in the financial condition of BnBs. Senior customers are entitled to a 20 percent discount, but the markup enjoyed by BnB outlets is only 7-8 percent of the catalogue price of PITC. Thus, for each senior customer purchase, the BnB suffers an outright loss of 12-13 percent. The total loss can be considerable, especially at the startup period of the BnB, and more so if it is just a small or medium-sized outlet.

Observers claim that it is not profitable to run a BnB on a stand-alone basis. Its smallness works against efforts to make it sustainable. Indeed, sales are too low for many of them. To address this issue, it has been suggested that non-economical BnBs should be allowed to fold up, and an alternative approach utilizing already-existing structures (such as variety stores) as drug outlets should be pursued.

3. Market competition - The BnBs have had important demonstration effects. Realizing that low-cost retail of drugs can be profitable (as shown by the best BnBs), for-profit drug franchise operations have mushroomed quickly, most notably The Generics Pharmacy, the first generics retail pharmacy to franchise in the Philippines. It is now reputed to have 1,100 franchisees nationwide (as of June 2011) and is the fastest growing drugstore in the country. For-profit franchise upstarts that followed in its wake include K2 Drugs, Pharmaquick 24, Emmaflor, and Johnston Drugs. The Watsons Drugstore chain has also branched out rapidly, with 247 pharmacies nationwide. The BnB idea itself branched out to larger Botikang Bayan (BNB) which operates on the same franchise format as its private sector counterparts. Despite the still-precarious situation of BnBs, the Drugstore Association of the Philippines now views them as undue competition.

D. Overall Assessment and Operational Recommendations

The BnB program has rapidly grown in terms of number, but the systems requirements to make them effective, efficient and sustainable operations have lagged behind. In January 2011, the DOH has placed a moratorium on additional BnBs being established, until the systems problems are fixed. The following problem areas need particular attention:

(a) To stabilize the supply and prices of drugs in BnBs, the DOH is considering alternative options to pool procurements, impose order, and monitor drug quality. NCPAM, working in tandem with the CHDs, plans to identify and formulate a list of legitimate drug suppliers that will be allowed to supply quality drugs to BnBs at the prices set by DOH. BnB operators will not be allowed to obtain supplies outside of those in the list.

(b) New location strategies need to be formulated on account of emerging competition from the private sector. The BnBs should focus on really poor but viable areas, and the budget request for additional BnBs should reflect these concerns. Moreover, a new set of criteria should be set to determine the location of new BnBs, including the distance of the closest BnB, the location of other (private) retail outlets, population size in the catchment area of the BnB, and economic and poverty conditions in the area.

(c) Capacity building of BnB operators need to be given more prominence. Skills in basic drug retail management, pharmaceutical operations, stock and inventory management, and accounting and record-keeping should be given priority. DOH is partnering with the Philippine Pharmacists Association to provide training on "pharma-preneurship" and good pharmaceutical practices. NCPAM plans to come up with a standard training manual for BnB operators.

(d) CHD supervision is key in ensuring the viability of BnBs. Towards this end, the supervising pharmacists shall be required to monitor the income of the BnBs to help the regional CHDs target their assistance.

(e) The Administrative Order establishing the BnB program has to be revamped. NCPAM is now finalizing the revised guidelines for the BnB program, addressing such issues as drug re-supply, the need for pharmacist services, and other operational issues. NCPAM also needs to re-think the overall strategy for the BnBs given the changed market for pharmaceuticals with the recent entry of private local suppliers, the viability and long-term sustainability of BnBs, the cost-effectiveness of the traditional village pharmacy model, and alternative models that could be considered.

(f) For BnBs that have matured beyond their original mandate, and have good financial and operational management practices, NCPAM intends to assist them become licensed as regular pharmacies. The benchmark is that they should reach an income level close to the average income of a small private retail outlet.

Despite the current problems, the BnB program provides a strong signal from government of its commitment to pursue affordable and quality drugs. The role of BnBs and BNBs in reducing prices through competition is an important consideration. These outlets have helped ease the contestability of the local drug market, which used to be dominated by one large dominant chain store. There are well-founded fears that the drastic reduction, if not complete stoppage, of the BnB program could signal to the private sector to resume their high-price regimes since there is no longer competition.

The smallness of the BnB as an economic enterprise can be addressed if it is allowed to operate also as a sari-sari (variety) store. More to the point, the rural drug distribution should be re-strategized to tap already-existing rural stores, which can then sell over-the-counter drugs on the side. Along this thrust, a pooling or aggregator mechanism can be more easily employed to join together the resupply mechanisms of a group of sari-sari stores, following the logistics mechanism of the other products that they sell.

E. Proposal for Program Impact Evaluation

With existing data, it is impossible to isolate the impact of the parallel drug importation and the involvement of PITC in logistics on BnB operations, costs, and effectiveness. Current comparisons between BnBand alternative (private) retail sources of drugs are erroneous because they are comparing different drug importation modes, institutional structures, and subsidized and unsubsidized logistics and distribution systems. It is necessary to isolate the individual effects of these factors, and Table 17 proposes a method to do this.

Table 17. Proposed Design for an Impact Evaluation of BnB and BNB

Importation Mode	Institutional Structure	Owner	Dependent on DOH/CHD Distribution Logistics
Generics sourced via PDI (subsidized)	BnB	Government	Yes (subsidized)
	BnB	Private	Yes (subsidized)
	BNB	Non-profit	Yes (subsidized)
	BNB	For-profit	Yes (subsidized)
	Private retail pharmacy	For-profit	Yes (subsidized)
Generics sourced outside of PDI (unsubsidized)	Rural pharmacy	Government	Yes (subsidized)
	Town pharmacy	NGO	No (unsubsidized
	Private retail pharmacy	For-profit[6]	No (unsubsidized)

Source: This study

[6]Including franchise drugstores, such as Generics Pharmacy.

Chapter IV.Review of the Botikang Bayan[7]Program

A. Program Description

The Botikang Bayan (BNB) program aims to establish 1 BNB outlet per municipality, using the franchising business format. BNBs are flagship outlets of the Cheaper Medicines Program of the government. The eligible applicants are NGOs and cooperatives; trade and labor unions or employees' associations; corporate foundations and religious groups; senior citizens and women's groups; and sole proprietorships, partnerships and corporations.

Like the BnBs, BNBs rely on parallel drug importation, mainly from India and Pakistan, though they also carry local branded generic drugs. Most of the medicines being imported under this program are for asthma, hypertension, and diabetes.

Some special outlets under the BNB network are (BNB Secretariat, n.d.):

- BotikasaParokya, which are operated by the Social Action Centers of parishes. Funding for the initial stocks is provided by the Office of Religious Affairs of the Catholic Church through the Philippine Charity Sweepstakes Office. 8 as of end-2009.
- Coops for Christ. 14 as of end-2009.
- Military and Police outlets, which are operated respectively by the Armed Forces of the Philippines Commissary and the Philippine National Police Service Stores. 6 as of end-2009.
- Philippine Government Employees Association outlets. 9 as of end-2009.
- State Colleges and Universities outlet. 1 in Cavite as of end-2009.
- LGU outlets. 6 as of end-2009, in the provinces of Cavite, Mindoro Oriental, ZamboangaSibugay, and Sulu; and in the cities of Malolos (Bulacan), Ozamis (Misamis Occidental).

The requirements for prequalification are: valid and current registration as an institution (Securities and Exchange Commission, Cooperative Development Authority, Department of Labor, or other relevant agency); minimum revolving capital of Php 500,000[8] for the project as evidenced by a certification issued by an authorized bank; proposed location plan (floor area of at least 15 sq. m.) and vicinity map; and capability to comply with the documentation, technical and other requirements of FDA in the filing of application for a license to operate as a drugstore, including the availability of the services of a licensed pharmacist.

[7]This program is not explicitly included in the scope of work. This report includes it in order to provide a complete picture of the pharmaceutical retail initiatives under the Cheaper Medicines Program of the government.

[8]Minimum initial capital was originally set at Php 300,000 for 1st-5th class city or 1st class municipality; Php 200,000 for 6th class city or 2nd-4th class municipality; and Php 100,00 for 5th-6th class municipality.

The BNB proponent signs a memorandum of agreement with the PITC stipulating the following key terms and conditions:

- PITC will supply all drugs and medicines and other consumer products which will be sold in the BNB outlet. No other products will be sold by the BNB. The BNB outlet must maintain the following monthly purchase of drugs from PITC:

    - Php 10,000 for BNBs in 1st-5th class city or 1st class municipality;
    - Php 7,500 for BNBs in 6th class city or 2nd-4th class municipality; and
    - Php 5,000 for BNBs in 5th-6th class municipality.

- The BNB will sell the drugs at no more than the prescribed Maximum Retail Prices (or government mediated access prices). Violation of this condition will entitle PITC to revoke its accreditation of the BNB as participant in the program. BNB outlets will be required to provide qualified senior citizens with the standard price discount in accordance with existing laws.

- PITC will arrange to provide training support to the supervising pharmacist and other BNB personnel.

- PITC will arrange to make standard signages, collaterals, and product lists available for use in the retail outlets.

- PITC will provide BNB outlets with certificates of product registration as well as BFAD/FDA reports of analysis for all batches of drug supplies delivered.

- For all deliveries from PITC or its designated distributor, the BNB will pay in full through a thirty-day post-dated check. Late payments are subject to an interest rate of 2 percent per month. Failure to remit payments for previous deliveries entitles PITC to withhold processing of follow-up orders.

- Returns or exchanges of products delivered by PITC are allowed only within 7 working days from the date of the delivery. Returns are accepted only for defective or tampered packaging; inability of PITC to provide the required certificate or product registration or report of analysis of the batches or lots delivered; and the remaining shelf or usable life of the product is less than 6 months.

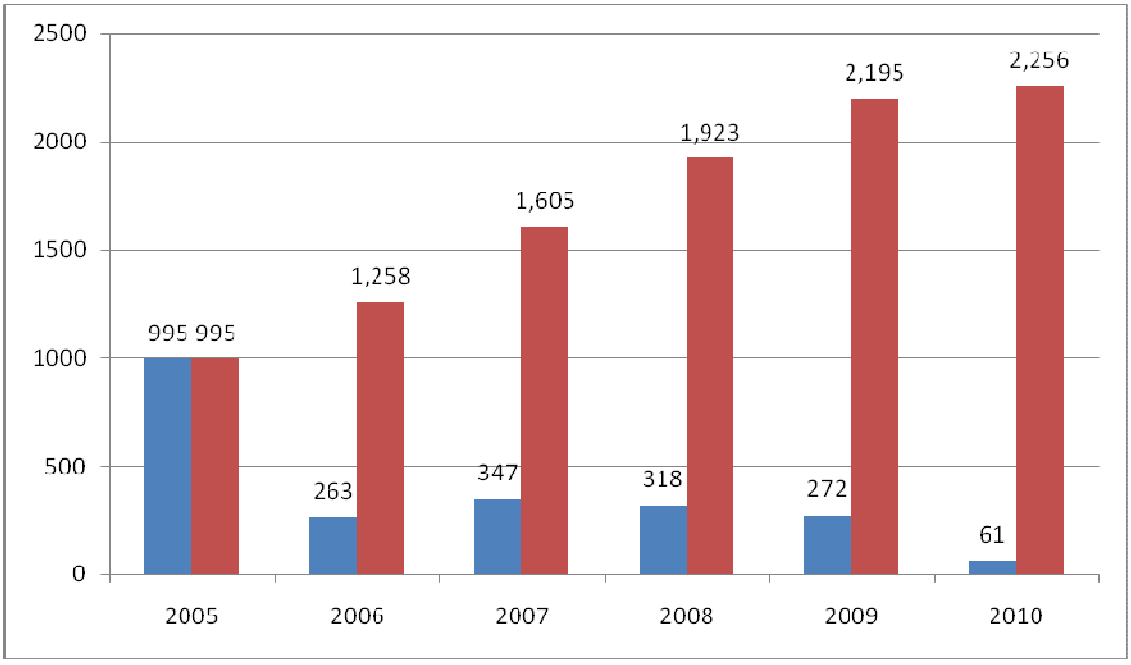
In turn, the BNB operator agrees to (a) provide the initial capitalization of the outlet and the inventory of medicines to be sold; (b) shoulder the overhead, manpower, legal and other expenses required to operate the outlet; (c) purchase the standard program signage and other collaterals from PITC for use in the outlet; (d) display, in a prominent location and within sight of consumers, the product list and MRPs, the license to operate, and the certificate of accreditation; (e) when requested, and subject to further negotiation, share in the expenses for marketing and advertising support for the program; and (f) comply with the reporting and monitoring requirements which may be instituted by PITC and DOH/FDA in connection with the program. Following the issuance of BFAD/FDA of the license to operate, the operator posts a surety bond of Php 500,000 in favor of PITC to guarantee faithful compliance with the terms and conditions of the program.

The BNB idea itself has evolved into a derivative format called BNB Express, which requires a smaller investment (Php 30,000) for the initial set of medical stocks. BNB Expresses are also privately run outlets. They are supervised by an institutional pharmacist or a territorial one who goes around simila BNBs.

B. Program Performance

1. Extent of BNBs – Since the program started in 2005, the cumulative number of BNBs has continued to rise, peaking at 2,256 in 2010 (Figure 7). However, the annual addition to BNBs has declined from a peak of 347 in 2007 to only 61 in 2010.

Figure 7.Annual and Cumulative Number of BNBs Established, 2005 – 2010 (End of Year)



Source: Botikang Bayan Secretariat, PITC. www.botikangbayan.com.ph

Do BNBs improve access? Table 18 shows the regional distribution of BNBs and the population/BNB by region. As expected, the regions with the densest concentration of BNBs are the National Capital Region (NCR) and the surrounding areas of Region III (Central Luzon) and IV-A (Calabarzon), which are also the most affluent regions. The regions with the next level of concentration are I (Ilocos), CAR, II (Cagayan Valley), IV-B (Mimaropa),and V (Bicol). The poorest regions (all of Mindanao and the Region VIII or Eastern Visayas) have expectedly the least concentration of BNBs.

Table 18. Number of BNB Outlets by Region and Population/BNB, 2010

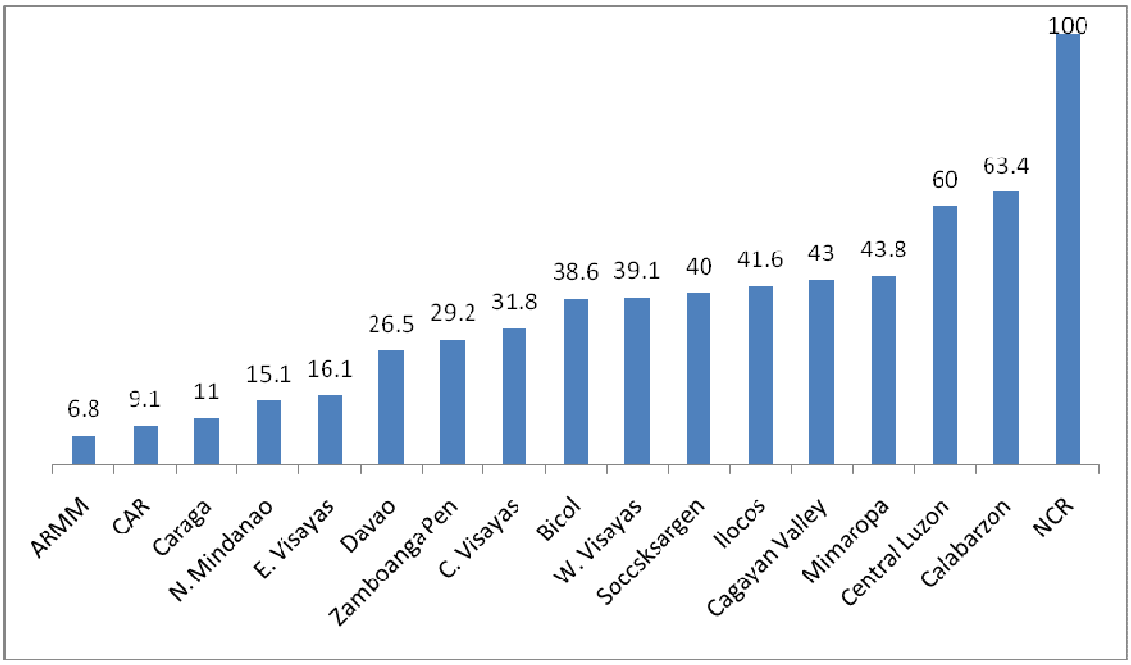
Region	No. of BNB (2010)	Regional Population in Mn (2007)	Population/BNB
I – Ilocos	142	4.6	32,394
CAR – Cordillera AR	42	1.5	35,714
II – Cagayan Valley	77	3.1	40,260

III – Central Luzon	251	9.7	38,645
NCR – Metro Manila	2,256	11.6	5,142
IV-A – Calabarzon	309	11.7	37,864
IV-B – Mimaropa	77	2.6	33,766
V – Bicol	88	5.1	57,955
VI – Western Visayas	149	6.8	45,638
VII – Central Visayas	101	6.4	63,366
VIII – Eastern Visayas	42	3.9	92,857
IX – Zamboanga Peninsula	41	3.2	78,049
X – Northern Mindanao	35	4.0	114,286
XI – Davao	53	4.2	79,245
XII – Soccsksargen	44	3.8	86,364
Caraga	22	2.3	104,545
ARMM	10	4.1	410,000
Total	2,256	88.6	39,273

Source of basic data: BNB Secretariat; Philippine Statistical Yearbook, 2010

The BNB target is to have 1 BNB for each city or municipality. Given this program target, Figure 8 shows the percentage of cities and municipalities in each region that has a BNB. As of end 2010, it is estimated that around 1,000 municipalities are not yet served by a BNB.

Figure 8. Percentage of Cities and Municipalities With BNB, by Region, as of May 2010



Source: Lavado (2011)

4. Rational drug use– The BNB drugs were also selected based on the most prevalent causes of mortality and morbidity, not on DALYs, which are the more accurate and appropriate basis for drug

selection. Nevertheless, because BNBs offer a wider selection of drugs (including curative and asymptomatic conditions), they seem more able to address the health conditions of their catchment populations far more than BnBs are capable of doing.

There are no data on the prescribing and dispensing behaviour of BNBs, but one can surmise the lack of supervising pharmacists is also a problem, especially for municipalities further out.

5. Cost efficiency vis-a-vis the private sector – No study has been done on the pricing of BNBs relative to other pharmaceutical suppliers.

C. Program Sustainability

1. Mortality rate – Table 19 shows the types of BNB and the number that have been closed. Out of the 2,256 BNBs that have been established, 137 have closed as of end-2010, for a total mortality or closure rate of 6 percent. Note, however, that BNBs are private businesses which can be sold. Indeed, cursory search in the Internet shows BNBs for sale in Bulacan and Davao. One is reported being sold for Php 130,000 (Davao).

Table 19. Types of BNB by Major Island Group and Number of BNB Which Have Closed, as of End-2010

Type	Luzon	Visayas	Mindanao	Closed	Pending Application	Total
Full	259	23	20	47	-	349
DSAP	466	93	62	27	34	682
NDSAP	777	176	120	63	73	1,207
Government Agency	7	-	3	-	-	10
Private Pharma Program	2	-	-	-	-	2
Military Camp	6	-	-	-	-	6
Total	1,515	292	205	137	107	2,256

Source: PITC Pharma

2. Financial condition of BNBs– Based on PITC's financial projections (Table 20), a typical BNB should demonstrate profit of Php 304,400 per year, out of total sales of Php 6 million. This is an idealized model, and little is known of the actual financial condition of BNBs.

Table 20. Estimated Annual Projected Marginal Statement of Operations, in Php

Sales		6,000,000
Variable Costs		
Cost of Sales	4,800,000	
Supplies expense	36,000	
Utilities	72,000	
Repairs	150,000	
Communications	25,000	
Taxes and licenses	27,500	
Advertising expense	30,000	
Miscellaneous	10,000	5,150,500
Contribution Margin		849,500
Fixed Costs		

Salaries and wages	216,000	
SSS, PHIC, HMDF	21,600	
Insurance expense	13,500	
13th month pay	18,000	
Security expense	96,000	
Lease expense	120,000	
Interest expense	60,000	545,000
Profit		304,400

Source: PITC Pharma, Inc.

D. Overall Assessment

The BNB format (franchise) is far more structured than the BnB. Its for-profit nature has built-in incentives for the owner to perform better; the owner can also sell the business, and there is a domestic market for such business sale. The BNB urban market is also more stable than the BnB rural market.

The supply replenishment of the BNB has been less of a problem than the BnB: there is an agreed-upon resupply of drugs under the franchise agreement with PITC Pharma, which the BnB agreement with CHD does not have.

Competition from the private sector is getting more keen; the future of the BNB will depend on how well PITC Pharma manages its franchise network.

BNBs are less of a budget concern since they are the responsibility of PITC Pharma as a government owned and controlled corporation.

Chapter V.Review of the P100 Treatment Pack Program

A. Program Description

The P100 treatment pack program solves two constraints in pharmacy prescription at the same time. On the one hand, compliance packaging helps address the need for patients to adhere to their medication schedule. This is a practice that has been in place in long-term care pharmacies in developed countries for years. On the other hand, "tipid" (thrift) packs have increasingly been used in the Philippines for the marketing of products such as shampoo, detergents, cooking oil, cell phone load, cigarettes, and alcoholic drinks. Thus, the P100 treatment pack combines these two concepts in an innovative marketing approach that takes into cognizance both the medical necessity of drug compliance as well as households' ability to pay for drugs.

The P100 treatment pack was patterned after the Walmart US$4 Prescription Program for Americans without health insurance. This program now has 300 drugs.

The DOH initiated the Php 100 Treatment Pack[9](P100 for short, and also known as the "Tipid" or Thrift Pack) Program in December 2008 to widen people's access to prepackaged generic drugs with an affordability limit of 100 pesos or lower. The intention is to encourage patients to take the full course of their drug treatment regimen (i.e., improve compliance), instead of patients buying them in individual tablets or capsules which end up being more expensive and often leads to discontinuance once the patient feels well enough. The drugs are packaged in a full set. Thus, the program meets two key pharmaceutical objectives at once: (a) improving the availability of quality-assured drugs at affordable prices, and (b) promoting the rational use of medicines. The program was piloted in 72 DOH retained hospitals and 28 LGU hospitals.

The program includes 24drugs most commonly used, including antibiotics, antihypercholesterolemia, antiarthritis, antiasthma, antidiabetes, and Vitamin C. Table 21 shows these medicines, their dosages and treatment course, and the common brand. Of the 17 brands in the P100 list, five are in the Essential Drug List, the prices of which have gone down dramatically following the implementation of the MRP/GMAP. In addition, 7 other drugs have since been included in the P100 list after the MRP/GMAP was implemented.

Table 21. Drugs Included in the P100 Programand Peso Savings Per Treatment Pack Relative to the Common Brand, 2010

Group	Drugs	Common Brand	Treatment Course	Quantity Per Pack
Anti-infectives (7)	Amoxicillin 500 mg cap	Amoxil	3x a day for 7 days	21

[9]It is now rebranded as the DOH Complete Treatment Pack Program, to take account of some drug packages that are priced higher or lower than Php 100 per pack.

	Co-amoxiclav[10] 625 mg tablet	Augmentin	2x a day for 7 days	14
	Cefalexin 500 mg cap	Keflex	3x a day for 7 days	21
	Ciprofloxacin 500 mg tab	-	2x a day for 7 days	14
	Clindamycin 150 mg cap	Dalacin C	4x a day for 7 days	28
	Cotrimoxazole 160 mg tab	Bactrim	2x a day for 7 days	14
	Metronidazole 500 mg tab	Flagyl	3x a day for 7 days	30
Anti-asthma (1)	Salbutamol 2 mg/2.5 mL nebules	Ventolin	3-4x a day or as needed	9
Anti-hypertensive (2)	Amlodipine 10 mg tab	Norvasc	1 tab once a day	6
	Felodopine ER 10 mg tab	Plendil ER	1 tab once a day	3
	Felodipine ER 2.5 mg tab	Plendil ER	1 tab once a day	7
	Felodipine ER 5 mg tab	Plendil ER	1 tab once a day	5
Anti-hyperlipidemic (1)	Simvastatin 10 mg tab	Zocor	1 tab once a day	15
	Simvastatin 20 mg tab	Zocor	1 tab once a day	18
	Simvastatin	Zocor	1 tab once a day	4
Gout preparation (1)	Allopurinol 100 mg tab	Zyloprim	1 tab once a day	30
Oral hypoglycemic (2)	Melformin 500 mg tab	Glucophage	3x a day	90
	Glibenclamide 5 mg tab	Daonil	1 tab once a day	30
Antacids and anti-ulcerants (2)	Omeprazole 20 mg capsule	Losec	1 tab once a day	15
	Ranitidine 150 mg tab	Zantac	1 tab once a day	28
Anti-hypertensive (3)	Amlodopine 5 mg tab	Norvasc	1 tab once a day	12
	Atenolol 50 mg tab	Tenormin	1 tab once a day	14
	Metropolol 100 mg tab	Betaloc	1 tab once a day	30
	Metropolol 50 mg tab	Betaloc	2x a day	90
Vitamins (1)	Ascorbic Acid 500 mg tab	Cecon	1 tab once a day	30

Source: DOH (2009)

B. Program Performance

1. Potential program benefits – In health care settings in developed countries where compliance packaging has been the norm for some time, the benefits of treatment packs include: effective treatment of a condition; establishing optimal dosing; incorporation of all medications (prescriptions and non-prescriptions); more effective communications between health professionals and patients; providing clarity and transparency of treatment expectations and objectives of the program; maximizing

[10]Special bonus package

drug utilization while minimizing waste; simplifying compliance with labelling and record keeping requirements; minimizing need to consult a physician for routine administrative matters; and appropriate handling and disposal of confidential material (OCP, 2011).No impact evaluation of the P100 program has been undertaken, and it would be useful to assess how far these potential benefits have been realized so far.

2. Cost comparison and savings to the patient – Table 22 shows the selling price of the common brand vis-a-vis the P100 for a complete treatment, and the associated savings for the purchase of the latter. Two data sets are available for analysis, and they show the following:

Table 22. Price Comparison of P100 Treatment Pack with Equivalent Common Brand in Oriental Mindoro Pilot and Overall DOH, 2009

Drugs	DOH, 2009			Oriental Mindoro, 2009		
	Selling Price of Common Brand Php (A)	P100 Selling Price Php (B)	DOH Php Savings (A-B)	Selling Price of Common Brand Php	P100 Selling Price Php	Savings Php
Allopurinol 100 mg tab	204.90	50.00	154.90	204.90	27.00	177.90
Amlodipine 10 mg tab	448.50	100.00	348.50	-	-	-
Amlodopine 5 mg tab	507.00	100.00	407.00	633.75	94.80	538.95
Amoxicillin 500 mg cap	214.20	70.00	144.20	-	-	-
Ascorbic Acid 500 mg tab	169.50	50.00	119.50	-	-	-
Atenolol 50 mg tab	403.90	70.00	333.90	-	-	-
Cefalexin 500 mg cap	561.75	100.00	461.75	-	-	-
Ciproflaxacin 500 mg tab	-	-	-	1,022.00	25.20	996.80
Clindamycin 150 mg cap	1,120.00	100.00	1,020.00	-	-	-
Cotrimoxazole 160 mg tab	382.20	25.00	357.20	-	-	-
Felodopine ER 10 mg tab	196.11	100.00	96.11	-	-	-
Felodipine ER 2.5 mg tab	198.80	100.00	98.80	198.80	80.50	118.30
Felodipine ER 5 mg tab	201.85	100.00	101.85	-	-	-
Glibenclamide 5 mg tab	306.00	25.00	281.00	306.00	16.50	289.50
Melformin 500 mg tab	733.50	100.00	633.50	733.50	81.00	652.50
Metropolol 100 mg	786.00	100.00	686.00	-	-	-

tab						
Metropolol 50 mg tab	1,377.00	100.00	1,277.00	-	-	-
Metronidazole 500 mg tab	591.00	50.00	541.00	591.00	28.50	562.50
Omeprazole 20 mg capsule	1,904.25	75.00	1,829.25	253.90	90.00	163.90
Ranitidine 150 mg tab	896.00	75.00	821.00	896.00	64.40	995.50
Salbutamol 2 mg/2.5 mL nebules	230.85	100.00	130.85	254.70	95.85	158.85
Simvastatin 10 mg tab	615.00	75.00	540.00	615.00	74.25	540.75
Simvastatin 20 mg tab	738.00	100.00	638.00	-	-	-
Simvastatin	164.00	100.00	64.00	-	-	-
Co-amoxiclav[11] 625 mg tablet	1,190	500.00	690.00	-	-	-

Source: DOH (2009)

- The wider DOH 2009 price comparison shows that the savings range from Php 64.00 to Php 1,829. For instance, ranitidine (brand name Zantac) costs Php 32 each. If needed for 28 days, the cost would be Php 896. But with the P100 pack, the regimen would only cost Php 100, saving for the patient Php 821.

- The 2009 price comparison for Oriental Mindoro, where the program was pilot-tested under the Provincial Health Office, shows that that the savings range from Php 158.85 to Php 995.50.

Since the P100 program was initiated, the market for generics drugs in the Philippines has boomed, with the rapid growth of the private-for-profit The Generics Pharmacy as well as similar generic compliance-pack initiatives of the private pharmacy chain Watson (using Pharex products) and Rite-Med branded generics (using Unilab products). Thus, price comparison of the P100 treatment pack should also be made with these newer initiatives.

3. Beneficiaries – The P100 packs are currently dispensed at DOH retained and selected LGU hospitals, which are mostly patronized by the poor and lower middle class. However, there has been poor record-keeping of those who actually obtained these treatment packs. If the program is to be targeted better, a tracking system needs to be put in place.

There have been allegations of leakage, with sporadic anecdotal accounts of "balikbayans" (returning Filipino expatriates) purchasing large volumes of P100 packs to be brought home. There are no available data on the volume of this leakage.

This program is being rebranded as the DOH Complete Treatment Pack Program, and beginning 2011, will branch out into three sub-programs with different sets of beneficiaries as explained below.

[11]Special bonus package

4. Rational drug use – The P100 treatment pack program was intended to improve adherence to medication. With its rebranding and re-launch as the DOH Complete Treatment Pack program, it is envisioned to be offered more widely to indigent Filipinos. Thus, medications for common acute infections and maintenance drugs for hypertension, diabetes, and high cholesterol will be provided for free to the poor CCT recipients, on the following conditions: (a) the patient consults with the RHU physician; (b) the patient has a DSWD ID number and/or PhilHealth number as being covered under the PHIC Sponsored Program; and (c) the patient adheres to the regimen prescribed by the RHU doctor and constantly does follow-up.

5. Delivery challenges – A major criticism of this program is its limited number of access points. So far, only DOH hospitals and a limited number of LGU hospitals are dispensing with P100 packs. Region VII is considering expansion of this program beyond the current access points; other regions may follow suit. However, with the expansion of the delivery network, stock availability needs to be improved. DOH and regional P100 coordinators will also be necessary. Stock inventory and delivery remain as major problems for this program.

Good P100 practices have been culled from the experience of Oriental Mindoro, and these may be worth disseminating. In this province, the P100 stocks are delivered through the Regional Store, using the Provincial Hospital Depot. The distribution outlets include all the government hospitals; the RHUs and BnBs are being eyed as potential outlets. Promotion is done through trimedia (press, TV and radio). Support is obtained from all government health personnel in hospitals, RHUs, and the interlocal health zones.

Finally, the drug list in the P100, so far, has been very limited. There is certainly scope to adding more drugs to this list.

DOH is rebranding and relaunching the program in late 2011 to deal with these delivery challenges. As has been mentioned, the intention is to scale up the program in three ways:

- Providing the treatment packs for free to poor, CCT-receiving families and/or families deemed indigent and enrolled under the PhilHealth Sponsored Program. DOH will provide these as a grant to the DSWD-identified 1,021 poor municipalities as part of the 4P/CCT (PantawidngPamilyang Pilipino Conditional Cash Transfer) Program. The municipalities' rural health units will be the program's access points.

- Selling the treatment packs in participating DOH and LGU hospitals, at allowed margins inclusive of all applicable discounts. This will ensure the availability of these drugs for non-poor patients. Government hospitals may stock these treatment packs in their pharmacies on a consignment basis. The program could be run as drug revolving funds at the respective government hospitals.

- Selling the treatment packs in private retail outlets. The NCPAM shall secure approval from the Department of Finance to allow these sales, exempting the treatment packs from special discounts and value added tax (VAT). Private hospitals may also stock these treatment packs in their pharmacies on a consignment basis.

6. Procurement of treatment packs– The initial supply system was limited to PITC Pharma. Restocking the hospitals was difficult because of variationsin demand/consumption patterns. PITC Pharma was also beset with operational issues and financial liabilities which affected its performance as a procuring

agency.With the relaunched treatment pack program, procurement will be done centrally at DOH-COBAC through one-time bidding.

C. Program Sustainability

1. Funding – DOH initially funded the program with Php 50 million. Additional technical and other support was initially provided by WHO, EU and GTZ.In Oriental Mindoro, the P100 budget is included in the annual procurement budget for medicines in the different satellite hospitals (Legaspi, n.d.).

The payment is done through fund transfers.The P100 project of Oriental Mindoro indicates that the treatment pack program can be sustainable. Data for the month of December 2008 alone show that sales at cost was Php 459,170 while sales at selling price was Php 530,610, yielding a net income of Php 71,440 (or an annualized net income of Php 857,280).

NCPAM is now accounting for the initial Php 50 million that seeded the program in 2008. DOH and LGU hospitals that fail to remit by September 2011 will not be allowed to participate in the rebranded and relaunched treatment pack program.

The rebranded and relaunched program certainly requires significant funding from DBM in the initial year. Table 23 lays out the potential funding sources of this program, as culled from the way it is described in the comments to this report provided by DOH/NCPAM. These ideas are elucidated in the last section of this chapter.

Table 23.Funding of Treatment Pack Program by Type of Recipients and Classification of Households

Classification of Households	Type of Recipients	Initial Funding for Treatment Packs	Subsequent Funding for Treatment Packs
Poor	4P/CCT recipients	DBM/DOH	DBM
	PhilHealth indigents and Sponsored Program members	DBM/DOH	PHIC capitation and/or Outpatient Benefit Package
Nonpoor	Public hospitals (DOH, LGUs)	DBM/DOH - Consignment	Drug revolving fund
	Private hospitals and clinics	DBM/DOH – Consignment	Drug revolving fund

Note: This table is for illustrative purposes only. No DOH administrative order or Philhealth circular has been issued with respect to the proposals contained in this table. The ideas in this table reflect those culled from the DOH/NCPAM staff comments on the earlier draft of this report.

Source: This study.

2. Systems support– Systems support was weak for the original P100 program, but public health potential is large. Current M&E system does not provide a unified and up-to-date information on the use of the initial Php 50 million that seeded the program. Only about Php 19 million have been remitted by participating hospitals after three years. The Commission on Audit is now going after these hospitals.

Supply replenishment by PITC Pharma also remainsa major problem. Part of this problem is the challenge of pooling the demand requirements among DOH and LGU hospitals for procurement purposes.

Under the new, rebranded treatment pack program, NCPAM plans to computerize the reporting and monitoring system from the RHUs by 2012. The program will be designed with clear reporting, monitoring and accounting procedures. The RHU physicians will be required to submit quarterly reports to the CHDs on their distribution and utilization of treatment pack medicines, as well as their current inventory levels. A patient registry will be required to provide information on patient name, DSWD and/or PhilHealth numbers, diagnosis, and medications given.

3. Need drug revolving funds– While the P100 program can be sustainable, it requires drug revolving funds (DRF) in health facilities for the program (and related fee-generating schemes such as PhilHealth reimbursements, private health insurance reimbursements, and user fees) to be truly institutionalized. Without such DRFs and an accompanying fee-retention policy at the local level, health staff would not be as encouraged to offer P100 treatment packs for sale. The problem is that not all LGU health facilities have established DRFs, and revenues for the P100 program are usually plowed back to the local treasury, reducing the incentive of health staff to collect payments.

This is an area that NCPAM and the CHDs need to focus on. Technical assistance, capacity building, and IT hardware and software support, and training are needed to see this through. As the relaunched treatment pack program is going to be nationwide, the scale of this effort is going to be large.

4. Use of treatment pack in PhilHealthcapitation – In 2009, PhilHealth in its Circular No. 20, extended the coverage of the P100 program for its Sponsored Members (indigents) to include their drug consumption outside the hospital (take-home drugs) so that the patient can complete the full course of treatment. For chronic illness, this often extends to a maximum of two weeks' supply of the appropriate P100 pack.

PhilHealth is also considering including the treatment pack as an outpatient benefit package which can be used by patients of Outpatient Departments, not only patients who were admitted. Indeed, PhilHealth should seriously plan for the roll-out of its capitation program, which should involve both government and private physicians as primary care providers (PCPs). This capitated PCP program could start with the planned roll-out of the rebranded treatment pack as its outpatient pharmacy benefit, both for once-off treatment and for chronic-care patients. The initial funding is expected to be provided by DBM, but PhilHealth capitation and OPB reimbursements should kick in in subsequent years.

A major issue that PhilHealth needs to resolve is the very limited amount that it currently pays government RHUs for patients under the Sponsored Program. While the program is deemed operating on a capitation basis, the current level of Php 300 is pitifully low that policy analysts have deemed it a "rebate" or "discount" as it is nowhere near the full amount of a capitated system, estimated to be around Php 1,200. Philhealth needs to accurately calculate this amount, taking into account the need to cover for the cost of the treatment packs that will be provided as a benefit under its Sponsored Program (for indigents) and for regular members (if and when it decides to extend the OPB to all its members under a capitation system).

5. Demonstration effects – Despite problems in the P100 program, the model has caused ripple effects in the private sector. Compliance pack marketing programs have been established by Unilab's Rite-Med and Watson's Pharex. Both of these private-sector programs, however, are still focused on the rich and middle-class.

D. Overall Assessment and Operational Recommendations

The P100 program is highly innovative in the Philippine context, with a large potential for reducing out-of-pocket spending, especially on those drugs dealing with chronic care. However, the program needs to be redesigned and funded adequately from the government budget (pump-priming) + PhilHealthcapitation program (sustaining). Moreover, procurement of drugs should be open to the private sector (under COBAC) and not limited to PITC Pharma. DOH's Materials Management Division can be the lead unit as it is currently doing outsourcing.

Following the above parameters, the new, rebranded DOH complete treatment pack program is expected to be the main pharmaceutical procurement activity in government, even as the BnB program is expected to slow down. The treatment pack program will have the following main features:

(1) Three separate sub-programs can be considered, as explained above:

- Treatment packs to be provided for free to poor, CCT-receiving families and families deemed indigent and enrolled under the PhilHealth Sponsored Program (Sub-program 1).

- (b) Treatment packs to be provided to nonpoor families in participating DOH and LGU hospitals, at allowed margins inclusive of all applicable discounts (Sub-program 2).

- (c) Treatment packs to be provided to patients in private retail outlets (Sub-program 3).

(2) The supply of treatment pack drugs will be open to bidders (private suppliers + PITC Pharma), since a healthy market for generic drugs has made this possible. Procurement of these treatment packs will be done centrally through open bidding. The annual needs of municipalities have been forecasted based on population and epidemiology. This should be reconciled with what would be made available by DBM as budget in 2012 and subsequent years.

The availability of budget will also determine whether the program can expand to include other chronic diseases (asthma, chronic obstructive pulmonary diseases, and insulin for diabetes).

(3) DOH and LGU facilities will be provided with the treatment packs as grants, under Sub-program 1 described above. Only facilities that have remitted the sales revenues from the original P100 treatment pack program will be eligible.

DBM will be asked to fund the "pump-priming" program, but Philhealth should be asked to roll out its capitation scheme under the Sponsored Program for indigents, with the treatment pack as centrepiece benefit for about 8 million primary members. Philhealth and DSWD targeting systems are being harmonized for this purpose.

(4) DOH and LGU hospitals will also be provided with treatment packs under consignment basis to be used for non-poor patients, under Sub-program 2 described above. The supply for this sub-program could similarly be contracted out to the private sector under a bidding arrangement (for non-PDI drugs). If local generics prices rise, the government has the option to resort back to PDI as an emergency measure. The initial year's requirements should be funded by DBM, with the expectation that the subsequent years' funding should come increasingly from PhilHealth's Outpatient Benefit Package, for PhilHealth members.

(5) Finally, private hospitals and clinics could also be provided with treatment packs under a consignment basis, under Sub-program 3 described above.

Chapter VI.Review of the Drug Inventory Management System Supporting the Government Pharmaceutical Programs

A. Advantages of PITC PharmaProcurement

Are PDI medicines procured by PITC Pharmaof good quality? According to an assessment done by MSH (n.d.), three factors guarantee the quality of PDI medicines (MSH, n.d.): (a) The drugs are purchased only from the largest and most reputable distributors in the country where they are imported from; (b) Among branded imports, only branded products manufactured by reputable multinational companies are procured; and (c) BFAD/FDA and DOH perform laboratory testing on each batch of PDI drugs using standards stricter than those used for locally made drugs (MSH, n.d.). Despite these assurances, a few key informants for this study raised the issue of bioequivalence in PDI drugs. This is a technical issue that is beyond the scope of this review.

Aside from low price and assured quality, the other advantages of LGU and DOH health facilities buying PDIs from PITC Pharma are as follow (MSH, n.d.):

(1) No need of bidding. Since PITC Pharmais a government agency, LGUs and DOH can simply enter into a negotiated contract with PITC.

(2) Value for money: Because of lower prices offered by PITC Pharma, LGUs can maximize their drug budgets.

(3) Reasonable payment terms. The PITC is prepared to extend credit within a reasonable time from the date of delivery. In addition, payment is in pesos, not in dollars.

The process through which the medicines procured by PITC Pharmaare distributed to the existing government programs is above board. According to an assessment of LGU procurements done by Wong and de la Luna (2001), the process involves not only PITC Pharma but hospital retailers as well. Although this assessment is dated, there is little reason to suppose the process has changed dramatically since 2001:

- Drug selection. LGU and participating hospitals selects drugs it needs from among the products available through PITC.

- Quantification. LGU and participating hospitals then estimate the quantities of the drugs needed, taking into account their available funds (allocation).

- Each LGU and participating hospital submit its requirements to the Provincial Health Officer who will consolidate all the purchase requests (PR) and then forward the consolidated PR to the Provincial General Services Office (PGSO).

- The PGSO processes the PR and, with the approval of the Governor, issues a Purchase Order (PO) to the PITC.

B. BnB Program Procurement and Inventory Management

Table 24 shows the process of distributing PDI drugs under the BnBprogram.

Table 24. PITC Procurement and Distribution Process for the BnB Program

Steps	Days Sequence
FOD1 gets advance copy of PR with CAF	Day 1
FOD1 checks PR as to dosage form, quantity and price	1
Convenes meeting among SAM (JAC and CER), LSC, Distribution, BAC Secretariat, IPMU	2
Start of BAC process	3
Pre-Bid conference	10
Deadline for submission and opening of bids	25
Bid evaluation/Post qualification	26-28
Approval by the HOPE of the post qualification evaluation sheet	29
Issuance of NOA (Notice of Award)	30
Acceptance of the NOA by the winning bidder (5 days)	31-35
Issuance of the Notice to file Performance Security	36
Posting of Performance Security	38-46
Issuance of Purchase order (PO) and Notice to Proceed (NTP)	39-47
Acceptance of PO and NTP	39-54
Delivery of Medicines to PPI Warehouse	43-84
Completion of Inspection by PPI Quality Assurance (QA) (2 days)	85-86
Inspection by NCPAM/Collection of samples by FDA	87-88
Preparation of sales invoice and property receipts	87-88
Packing by CTSI/ACCLI (7 days)	87-95
Delivery to CHDs (7 to 14 days)	89-95
Retrieval of PODs by CTSI and ACCLI	96-109
Receipt of PODs from CTSI/ACCLI by PPI	110-116
Release of RA from FDA	117-118
Preparation of documents for DOH billing	118
Transmittal of documents to DOH	119
Processing of payment at DOH	120
Transmittal of documents to DBM	121-135
Processing of payment at DBM	136
Release of check to DOH	137-157
Processing of payment to PPI	158
Receipt of payment from DOH by PPI	159-161
Processing of payment to suppliers by PPI	162
PPI releases checks to suppliers	Day 163

Source: PITC Pharma

LGUs initially hesitated to participate in retailing the PDI drugs due to the perceived long lead time for ordering. In the first year when PITC had not yet stocked up, the ordering process took as long as 4 months (Wong and de la Luna, 2001). However, with PITC stockpiling, rapid distribution has been done as soon as the orders came.

Still, some BnBshave low turn-over, and face problems with re-supply, as has been mentioned earlier (De Vreeke, 2007). In Pakil, Laguna, a UP-Public Health study found that BnBs usually experienced stockouts because of larger-than-expected demand for drugs. The antibiotics cotrimoxazole and amoxicillin were usually unavailable in the 11 BnBs studied.

COA auditors also found that between 2005 and 2007, more than Php 1.5 million worth of BnB drugs nationwide had expired, mainly because of the procurement of least requested drug. BnBs have to absorb this cost of unsold drugs because current rules do not permit their return to PITC for a refund. The unintended wastage is a consequence of combined factors including lack of BnB manager's knowledge of local disease conditions, poor quantification, weak logistics at CHD offices, and poor inventory and management of BnB operators. In Region XII in 2007, the large number of the five antibiotic drugs that expired was due to the absence of a supervising pharmacist needed to dispense them, not so much to lack of demand. However, there seem to have been improvement; DOH officials are confident that there has not been any reported expiry of drugs recently.

C. P100 Program Procurement and Inventory Management

The PITC procures the P100 medicines on behalf of DOH. The P100 system enjoys the benefits of economical bulk procurement as it allows the DOH to consolidate all the drug requirements of various (small) LGUs and its own retained hospitals. This aspect of the program is very important but is often not highlighted. With devolution, LGUs became small procurers, many of them purchasing at highly uneconomical prices, leading to extremely high prices as documented elsewhere in this report.

Under the current system of procurement, difficulties in reordering have been experienced under the P100 program, as in the BnB program. To deal with this problem, NCPAM (n.d.) has proposed a new procurement system outlined in Table 25.

Table 25. Proposed New Procurement System for the P100 Program

Unit	Tasks
CHD	Identify one DOH retained hospital as central processing and distribution agency in each region
	Through the provincial health offices, identify LGU hospitals in the region who are interested in participating in the P100 program
	Quantify and consolidate the demand volumes for P100 within the region
	Submit the consolidated summary of demand volumes and submit to DOH central office
DOH Central Office	Suballot the budget to the DOH retained hospital identified in each region as the central processing and distribution agency
	Identify the approved budget ceiling/allocation for each recipient LGU hospital
DOH Hospital	Decide on the appropriate option whether (a) to procure from PITC Pharma, or (b) bid out the d/mcompetitively to private suppliers (as per R.A. 9184), inclusive of packaging and labelling
	Provide the allocation for each recipient hospital
	Apply for License to Operate as distributor/repacker.
	Repack and distribute P100 d/m to recipient hospitals.
Recipient Hospital	Receive P100 supplies and sell them. What to do with the proceeds of sales and fund management are still to be determined. Discussions with DOF, DBM, DOH, and each LGU to be held.

Souce: NCPAM, n.d.

Chapter VII.Review of PITC Mandate and Performance

A. PITC Mandate

PITC is a government owned and controlled corporation (GOCC) created by virtue of Presidential Decree 1071 as amended, under the Department of Trade and Industry (DTI). It has over 30 years' experience in the export, import, and marketing of a wide range of commodities, industrial products, and consumer goods. It was established in 1973 to take the lead in the Philippine trade with socialist and other centrally planned economies then in existence.

In August 2004, PITC was designated as the key agency in the implementation of former Pres. Gloria Macapagal Arroyo's 10-Point Legacy Program, one thrust of which is to lower the price of essential medicines by 50 percent by 2010. PITC Pharma, Inc. (PPI) was createdas a subsidiary to procure the required drugs internationally and distribute them locally. Under the approved arrangement, PCSO earmarks the money for PITC to procure the drugs, PITC[12] distributes the purchased drugs to the CHDs, the CHDs will sell to the BnBs within the respective catchment areas, and the selling price (including markup) will be determined by the 50 Pharma Project Management Unit (PMU).

B. Performance of PITC Vis-a-Vis DOH and LGUs

Ball and Tisocki (2009) assessed the public procurement prices of medicines in the Philippines based on a survey of DOH retained, provincial and municipal hospitals in six regions as well as PITC. The study covered a basket of 50 medicines (originator brands as well as generics) and compared local prices with the corresponding international reference prices usually of not-for-profit suppliers. The median price ratio (MPR) indicates how the local unit price compares with the international reference price. The study (Table 26) finds the following:

(1) DOH retained, provincial and municipal hospitals procure generic medicines at 2.9 times the international reference price. When originator brands are procured, they are on average 15.7 times more than the international reference prices.

(2) For generic procurement, DOH retained hospitals (MPR 2.2) are generally more efficient than provincial hospitals (MPR 3.2), and provincial hospitals were more efficient than municipal hospitals (MPR 3.9).

(3) PITC Pharma was able to procure low-cost generic essential medicines using its current structures, procuring generics on average at levels similar to the international reference prices (median MPR 1.0).

(4) PITC parallel imported originator brands are cheaper than locally available originator brands and, in some cases, cheaper than publicly procured generic equivalents. However, PITC Pharma was able to procure generic captopril at prices lower than that for the parallel imported originator brand (unit costs Php 2.4 and 6.7, respectively). Procuring generics is thus more advantageous for patients although probably less lucrative for PITC Pharma (HAI Global, 2008b).

(5) The overall conclusion is that PITC is more efficient than DOH and LGUs in drug procurement. Because of this comparative advantage, Ball and Tisocki (2009) recommend that PITC concentrate on procuring quality generic medicines for the public sector.

Table 26. Variation of Actual Procurement Price (Php) of Generic Amoxicillin and Ranitidine at Each Procurement Entity in NCR, Region IV-A, and Region IV-B, 2008

Procurement Entity	Region	Procurement Price (Php)	
		Generic Amoxicillin	Generic Ranitidine
DOH retained hospitals	NCR	4.8	5.0
	IV-A	4.5	4.3
Provincial hospitals	IV-A	7.1	16.2
	IB-B	2.9	-
Municipal hospitals	NCR	5.0	5.0
	NCR	3.0	4.0
	IV-A	9.4	14.0
	IV-B	2.1	-
Non-DOH hospital	NCR	4.0	5.0
BLOM	IV-B	2.6	2.7
PITC Pharma	NCR	1.3	0.7

Source: HAI Global, 2008a

C. Performance of PITC Vis-a-Vis Private Sector

While PITC outperforms other government procurers (DOH, LGUs) in terms of price, it does not beat the prices of a private pharmacy selling generics. In Table 27, all four drugs are cheaper in the generic private pharmacy compared to PITC. Sometimes, PITC is also beaten by pharmacies selling branded generics (both Salbutamol). Finally, in at least one of the sampled drugs (Salbutamol 2 mg/5mL syrup), the difference between the PITC generic and the innovator (branded) drug is surprisingly quite close (Php 100.10 for PITC and Php 108.00 for the innovator drug). These findings indicate that the private sector has a cost advantage (is more efficient) than PITC, especially for generic drugs.

Table 27. Price Comparison of a Sample of Essential Medicines Among PITC Generic, Branded Generic, Private-Sector Generic, and Innovator Drugs, 2009

Sample of Essential Medicines	PITC Generic	Private Sector		
		Generic	Branded Generic	Innovator Drugs
Salbutamol 2 mg tab	4.50	0.50	2.30	7.00
Salbutamol 2 mg/5mL syrup	100.10	25.00	55.75	108.00
Glibenclamide 5 mg tab	5.10	1.50	11.60	16.00
Cotrimixazole 400 mg tab	8.00	1.50	9.50	19.50

Source: Gloor (2009)

D. PITC Challenges

While PITC outperforms DOH and LGUs in drug procurement, the private sector outperforms PITC. An assessment done by BIZCLIR (2009) cites some of the reasons for PITC's cost disadvantage. These are the remaining challenges it needs to face:

(1) Sustainability – PITC Pharma is funded by the DOH, and its expansion is limited by the availability of DOH funds. Other, non-DOH sources of government funds (PhilHealth, DRFs of government hospitals) have not evolved in the Philippines to an extent that they could be tapped by PITC Pharma for financing. Because of these developmental issues, funding for PITC Pharma has been low and erratic.

(2) Shortcomings in IT – PITC Pharmahas severe weaknesses in IT and inventory management. It will be challenged to manage the distribution of drugs even if the money is found. According to an interviewee in the BIZCLIR (2009) report, "It is 1980 at PITC Pharma, Inc. There are computers, but they're used as typewriters. There are spreadsheets, but no database. Information is all entered by hand, and nothing connects to anything else."

(3) PITC Pharma has not been able to send a purchasing agent abroad to Southeast Asia or India. Instead, it is forced to rely on local interlocutors, contacted by phone and e-mail. It is currently receiving technical assistance from EU, but this consists of a single embedded technical expert (BIZCLIR, 2009).

(4) Competition – Theoretically, there are clear benefits of a large procurement agency like PITC as it is able to consolidate the individual procurements of each DOH and LGU health facility and BnB/BNB outlets, thus conferring on it economies of scale to undertake bulk procurement and negotiate for better prices. However, it needs to upgrade its institutional capacity to do so.

E. Strategic Considerations

The future of PITC Pharma needs to be taken in the context of overall government strategy in lowering the price of drugs and oligopolistic elements in the distribution and retail of drugs. Overall, there has been progress over the past 4-5 years, mainly because of the push for PDI and generic drugs, and the emergence of alternative private sources of drugs, mainly through franchising arrangements.

However, there continues to be serious capacity constraints all over the supply chain: PITC Pharma lacks more efficient procurement systems and skills training; BnBs remain fragile enterprises and need institutional support; BNB performance is unknown although they are growing and facing healthy competition from the non-PITC-supported private sector; and the P100 treatment pack program remains very limited in reach, despite its popularity and rapid expansion.

A major part of the problem is the very small scale of government budget financing for pharmaceuticals, compared to total pharmaceutical sales in the country. (Added to this is the huge underutilized potential of PhilHealth to be the main source of pharmaceutical reimbursement and financing, both for inpatient and outpatient care.) Despite these limitations, government has been able to make a significant dent on the reduction of pharmaceutical prices in recent years. Given the structure of private pharmaceutical sector in the Philippines, as well as the level of poverty that requires pharmaceutical financing subsidy, what needs to be highlighted is the importance of the countervailing power of government in pharmaceutical procurement and distribution.

Thus, existing opportunities to enlarge government financing of pharmaceuticals must be exploited, including" increasing DOH appropriation (e.g., through annual commitment to finance essential drugs); pooling LGU procurements; persuading Philhealth management to expedite and massively increase pharmaceutical benefits, both for inpatient and outpatient care; and strengthening BnBs and the P100 programs so that reflows of pharmaceutical funds are assured. These external problems must be sorted out, even as PITC Pharma sorts out its own internal problems.

F. Alternative Options for Government Drug Procurement

Given the large number of Filipinos who remain poor and who rely primarily on government health services and commodities, there is strong economic basis for government involvement in the financingof drugs. Indeed, government health financing under the previous administration fell or remained stagnant, and this trend needs to be arrested. However, there is no ex-ante basis for government procurement of the drugs and related commodities, especially if it can be shown that the private sector can do it better at a lower cost.

It must be mentioned parenthetically that controlling the prices of the private sector, as was done in the GMAP, is politically risky, painful to producers, expensive to monitor, and engenders unintended consequences such as hoarding and artificial shortages, and dampening longer-term investments in the sector. Key informants for this study unanimously endorsed the need for government to increase the financing and improve the procurement and distribution of medicines for the poor, rather than trying to control prices across the board.

The options to dramatically increase pharmaceutical financing cover a much broader topic than what could be dealt with in this report, e.g., Universal Health Care, PhilHealth reforms, LGU financing, and DOH financing, and potential public-private partnerships. Thus, the options to be dealt with in this section only cover alternative procurement arrangements. The following options, not necessarily mutually exclusive, can be considered:

(1) Option 1: Contracting out procurement to international agencies (International Dispensary Association or IDA, UNICEF/Copenhagen, Crown Agents, and others). Key informants noted that any of these arrangements could be more expensive than the status quo, since they involve foreign exchange costs and expatriate management.

(2) Option 2: Contracting out procurement to local GMP-certified pharmaceutical firms. For generics, this is possible since the market has become competitive; local procurement would hasten the process and ensure an uninterrupted flow of supply (WHO, 2009). WHO is providing technical assistance for defining the strategies under this option.DOH prefers this route using COBAC procedures and the Materials Management Department as lead unit. However, this requires pooling of procurements at the national level for economies of scale to be gained.

(3) Option 3: Expand the drug consignment system now in place in certain government health facilities. Under this system, the private supplier places its drugs in a government health facility, and the latter pays as it consumes the stocks. Thus, the problematic areas of inventory and logistics management is "privatized" as these risks are turned over to the private supplier and not internalized by the government health facility. For instance, expired drugs will not be used and paid. This consignment system was pioneered in the Southern Philippines Medical Center (PIDS, 2011), and has since been adopted in other government (LGU) hospitals as well, e.g., Negros Oriental Province.

(4) Option 4: Central purchasing via a Public/PrivatePartnership "Service Access Program" of the Pharmaceutical Healthcare Association of the Philippines (PHAP). This idea was broached by PHAP representatives, but the concept note is still being finalized.

(5) Option 5: Strengthen PITCPharma. The capacity-building program should address the logistics, information technology, staff skills, and management gaps already identified earlier. In addition, greater attention should be placed towards developing a more transparent, open, and competitive procurement system.

Note that the overall problem in this area is rooted in poor government financing of drugs and the fragmented drug procurements (arising from the devolution of health services) that need to be pooled through some mechanism. The procurement agency problem, which is the focus of this section, is secondary.

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