

# PRESCRIPTIONS

## POLICY BRIEF

### The War on (High) Drug Prices

*A Study on Factors Influencing Drug Prices Among National Public Hospitals*

#### POLICY LESSONS

**Including the procurement volume in the equation for the Drug Price Reference Index (DPRI) and creating a DPRI per region will contextualize procurement and lower variation in drug prices.**

Creating a DPRI per region would allow flexibility in prices that will attract bidders and encourage hospitals to properly procure compared to shopping or using their emergency funds. A special DPRI for hospitals found in a Geographically Isolated and Disadvantaged Area (GIDA) should be created to lower the number of failed biddings and allow them to properly procure drugs as specified in the World Health Organization's Good Procurement Practice (WHO GPP) protocol.

**By having a forward-looking procurement plan, forecasting will be more efficient and variation in drug prices will decrease.**

Of the fifty-seven hospitals, 28.6% have an existing protocol to estimate drug quantities to be procured. Hospitals use past consumption for procurement planning, disregarding other useful indicators for proper forecasting. Procurement planning may be made more robust using the indicators identified in the GPP checklist.

**Some of the factors that influence drug prices are due to supplier behavior. Having a pooled procurement scheme may lessen supplier collusion, failed biddings, and high variability in procurement prices of essential medicines.**

Great potential lies in finding mechanisms whereby nearby hospitals could participate in provincial or regional pooled procurement. Pooled procurement could have an impact on reducing prices by capturing economies of scale, provided that pooled procurement is operated in an efficient and transparent manner.

## INTRODUCTION

To ensure the provision of good quality essential medicines to the people in the Philippines, the Philippine National Drug Policy (PNDP) intends to [1] assure the safety, efficacy, and usefulness of pharmaceuticals, [2] promote rational drug use, [3] develop self-reliance in the local pharmaceutical industry, [4] tailor drug procurement in order to provide the lowest possible price to the lower-income sector, and [5] to empower the people (Department of Health (DOH), 2008). However, even with the PNDP, issues remain. Medicine purchase accounts for almost 50% of the out-of-pocket (OOP) expenditure among Filipinos, with Quintile 1 spending the highest for medical products (Ulep and Dela Cruz, 2013). Aside from high OOP expenditure, the procurement of medicines has also been a problem among government hospitals. Government entities procure medicines at higher rates than normal prices (Ball and Tisocki, 2009).

***A Study on Factors Influencing Drug Prices among Philippine Public Hospitals*** aims to determine the factors associated with the variation in drug pricing among national public hospitals. Ultimately, this study is to aid decision-makers minimize variation in drug prices across national public hospitals through policy.

## METHODS

A mixed-methods, case-control study was done in 57 public hospitals all over the Philippines. Using a data abstraction tool, the Price Ratio (PR) for each hospital was computed from the mean annual procurement prices of a basket of 26 essential drugs compared to their reference prices listed in the DPRI. The % retail price mark-up was also computed for the same basket of drugs. Cases (PR>1, Mark-up>Median) and controls (PR≤1, Mark-up≤Median) were then compared vis-à-vis indicators in the selection, procurement and distribution

of drugs as well as compliance to GPP Principles. Key informant interviews were conducted to map out the drug management cycle in selected hospitals and to determine challenges in the implementation of the DPRI.

## RESULTS

Sixty percent of hospitals were found to have a PR>1 and were procuring 6.44 times higher than the DPRI. Factors significantly associated with PR>1 include lack of proper procurement planning, propensity towards alternative modes of procurement (over competitive tender), and location in a Geographically Isolated and Disadvantaged Area (GIDA). Hospitals were also found to impose a 40.42% median retail price markup. Higher retail price mark-ups of drugs were associated with a lower level of hospital operations, preference for branded over generic drugs, limitations in storage, and uncoordinated distribution of drugs.

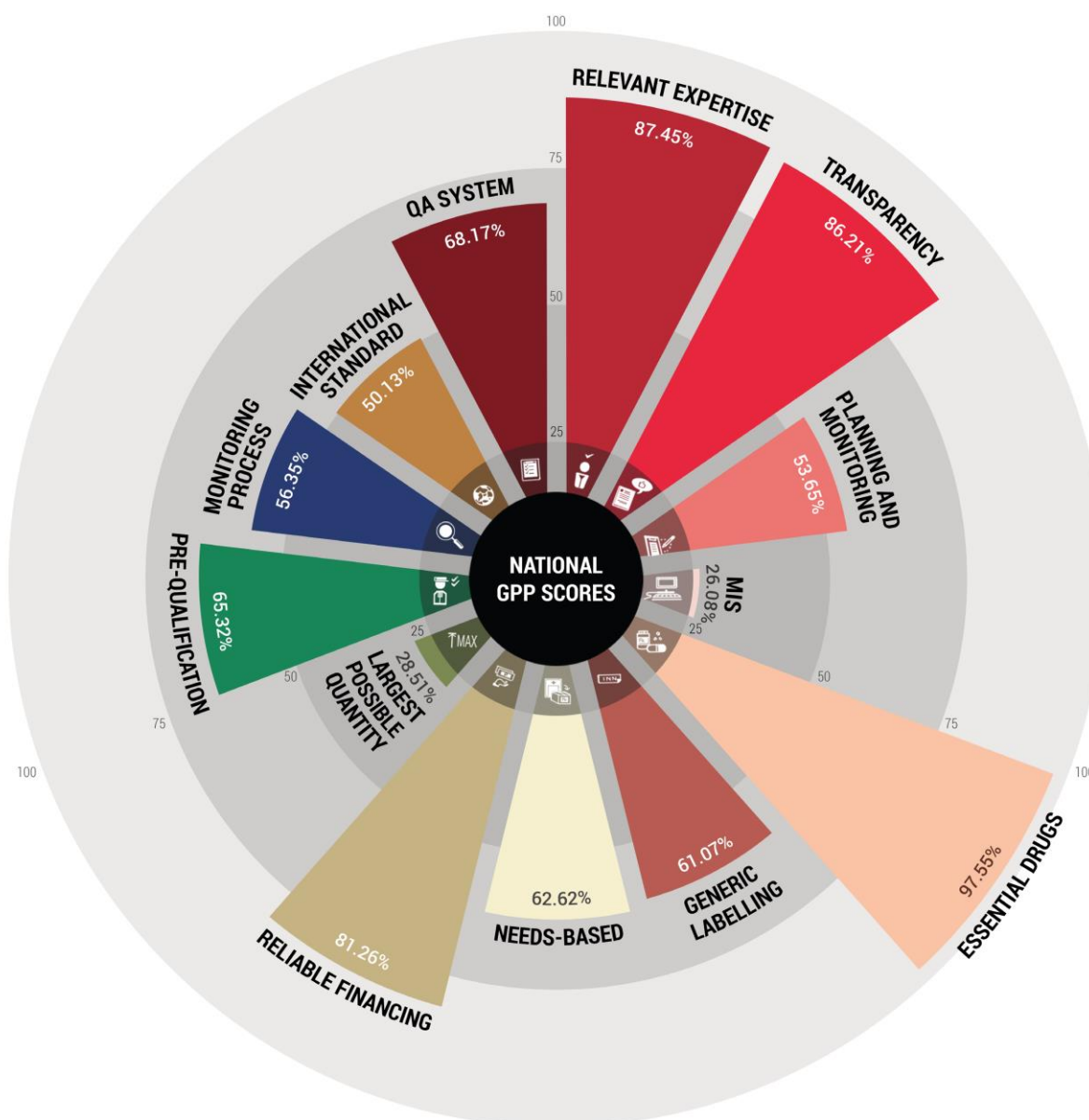
For the WHO GPP principles, most hospitals adhere to the hospital's procurement being limited to the Philippine National Formulary.

## CONCLUSION

Factors with a significant relationship to the price ratio are: [1] being a GIDA hospital, [2] properly planning procurement, and [3] availability of indicator drugs. On the other hand, factors relating to the hospital's mark-up are [1] the hospital's levels, [2] their distance from the population center, [3] their compliance to the World Health Organization's Good Procurement Practice principle on Quality Assurance, [4] the relevance and expertise of their procurement staff on procurement functions, [5] % of generic drugs that they procure, and [6] time out of stock of the indicator drugs. Results also revealed that certain parts of the drug management cycle (distribution both from warehouse and pharmacy) were related to the mark-up.

## NATIONAL COMPLIANCE WITH WHO'S PRINCIPLES FOR GOOD PHARMACEUTICAL PROCUREMENT

The chart below indicates national scores in each of the GPP.  
A large and even circle would indicate 100% compliance rate on all GPP indicators.



## INDICATORS OF GOOD PHARMACEUTICAL PROCUREMENT

The ideal state is to have a large and even circle of scores.

<b>RELEVANT EXPERTISE</b> Different procurement functions and responsibilities should be given to the office or party with relevant and appropriate expertise.	<b>NEEDS BASED</b> Estimates on actual need should provide the basis for drug orders.
<b>TRANSPARENCY</b> Procurement procedures should be transparent and should follow formal written procedures while using explicit criteria in awarding contracts.	<b>RELIABLE FINANCING</b> Mechanisms to ensure reliable financing for procurement should be present.
<b>PLANNING AND MONITORING</b> Procurement should be planned properly and procurement performance monitored regularly.	<b>LARGEST POSSIBLE QUANTITY</b> Procurement in both centralized and decentralized systems should be done in the largest possible quantities to achieve economies of scale.
<b>MIS</b> There is a drug management information system (MIS) to monitor procurement orders, payments, suppliers and deliveries.	<b>PRE-QUALIFICATION</b> Prospective suppliers should pre-qualify.
<b>ESSENTIAL DRUGS</b> Public procurement should be limited to an essential drugs list in the formulary.	<b>MONITORING PROCESS</b> Qualified suppliers should be monitored through a process that considers product quality, service reliability, delivery time, and financial viability.
<b>GENERIC LABELLING</b> Procurement and tender documents should list drugs by their International Nonproprietary Name (INN) or generic name.	<b>INTERNATIONAL STANDARDS</b> Procurement procedures should assure that the drugs purchased are of high quality, according to international standards.
	<b>QA SYSTEM</b> Quality assurance.

## RECOMMENDATIONS

**Policy Recommendations**

The policy recommendations are directed to the three main policies that affect the Drug Management Cycle namely: the Drug Price Reference Index (DPRI), R.A. 9184 or the Government Procurement Reform Act (GPRA), and the generics law.

Drug Price Reference Index (DPRI)

1. Revise the DPRI to make it volume-weighted as the DPRI has been a limiting factor in drug procurement for hospitals.
2. Categorize the DPRI per region. Hospitals belonging to a GIDA region should have its own DPRI, as well. This will contextualize procurement in hospitals, allow flexibility, and decrease failed biddings.

R.A. 9184 or the Government Procurement Reform Act (GPRA)

1. Develop specific policies for hospitals to actively seek the involvement of end-user unit in procurement to have an accurate estimate of their needs.
2. Create guidelines and protocols for hospitals to prevent and protect them from unlawful act such as collusion among suppliers, which was reported by the respondents of this study.
3. Explore alternative modes of procurement other than public bidding. Specific guidelines to ensure that the most advantageous price is still obtained especially for shopping and consignment should also be implemented.
4. Allow hospitals procuring in bulk to schedule deliveries within an agreed period and at a fixed price per unit regardless of increase or decrease in the prevailing market.

Generics Law

1. Advocate the Generics Law in hospitals. As seen in the results of this study, there are hospitals that procure 100% branded drugs, so stricter policies on the implementation of the law must be crafted and enforced to avoid the non-compliance of public hospitals.
2. Create more incentives for hospitals that do not procure branded drugs. The Department of Health and other regulatory agencies should allow more suppliers for generic drugs to enter the local market; introducing more competition will also lower the prices of drugs.

**Research Recommendations**

1. Include the “use” stage of the Drug Management Cycle in future studies. Factoring in “use” would identify patient level problems and indicators that influence the price ratio and mark-ups. This is essential for procurement planning and forecasting.
2. Future research should study the factors that influence drug prices in the supplier side. From the interviews, there is a disconnect in the procurement and distribution between the suppliers and the hospitals. By studying the suppliers, the problems that the hospitals encounter will be identified.
3. For data collection, collect data from a larger sample size to allow for logistic regression.
4. For data analysis, evaluate the factors affecting individual drugs in the basket instead of pooling all the scores into one in each hospital.

**Citation:**

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