



# A Study on Factors Influencing Drug Pricing Among Public National Hospitals

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- **Higher prices of medicines** relative to other ASEAN countries over the past two decades
- **High variability in the procurement prices** of essential medicines in national and local health facilities
- **Drug Price Reference Index (DPRI) was established in 2014 as a ceiling price**
- A year later, **high costs and variation** of essential drug prices remain

What are the factors across the **drug management cycle** that influence drug prices among national public hospitals in the Philippines?

## DRUG MANAGEMENT CYCLE

drug selection, procurement, distribution, use, and management support




$$\text{PRICE RATIO} = \frac{\sum(p_{c,t_n}) * (q_{c,t_0})}{\sum(p_{c,t_0}) * (q_{c,t_0})}$$

The price ratio (PR) was analyzed:

- as a continuous variable and
- as a dichotomous variable (i.e., those compliant will have a **PR  $\leq 1$**  while those who are not will have a **PR of  $> 1$** ).

## SAMPLING

TARGET:  
65 out of 77 eligible hospitals

challenges/resistance

ACTUAL:  
57 out of 77  
(74%) eligible hospitals

## DATA COLLECTION

CONSULTATION  
WORKSHOP

FACILITY-RECORDS REVIEW

INVENTORY CHECK

CHECKLIST ASSESSMENT  
(WHO Principles for GPP)

## DATA ANALYSIS

DESCRIPTIVE STATISTICS

BIVARIATE ANALYSIS

LINEAR REGRESSION

For a basket of indicator drugs, hospital prices are, on the average, **more than six times higher** than DPRI prices.

**Table 1. Compliance with DPRI is low among DOH hospitals.**

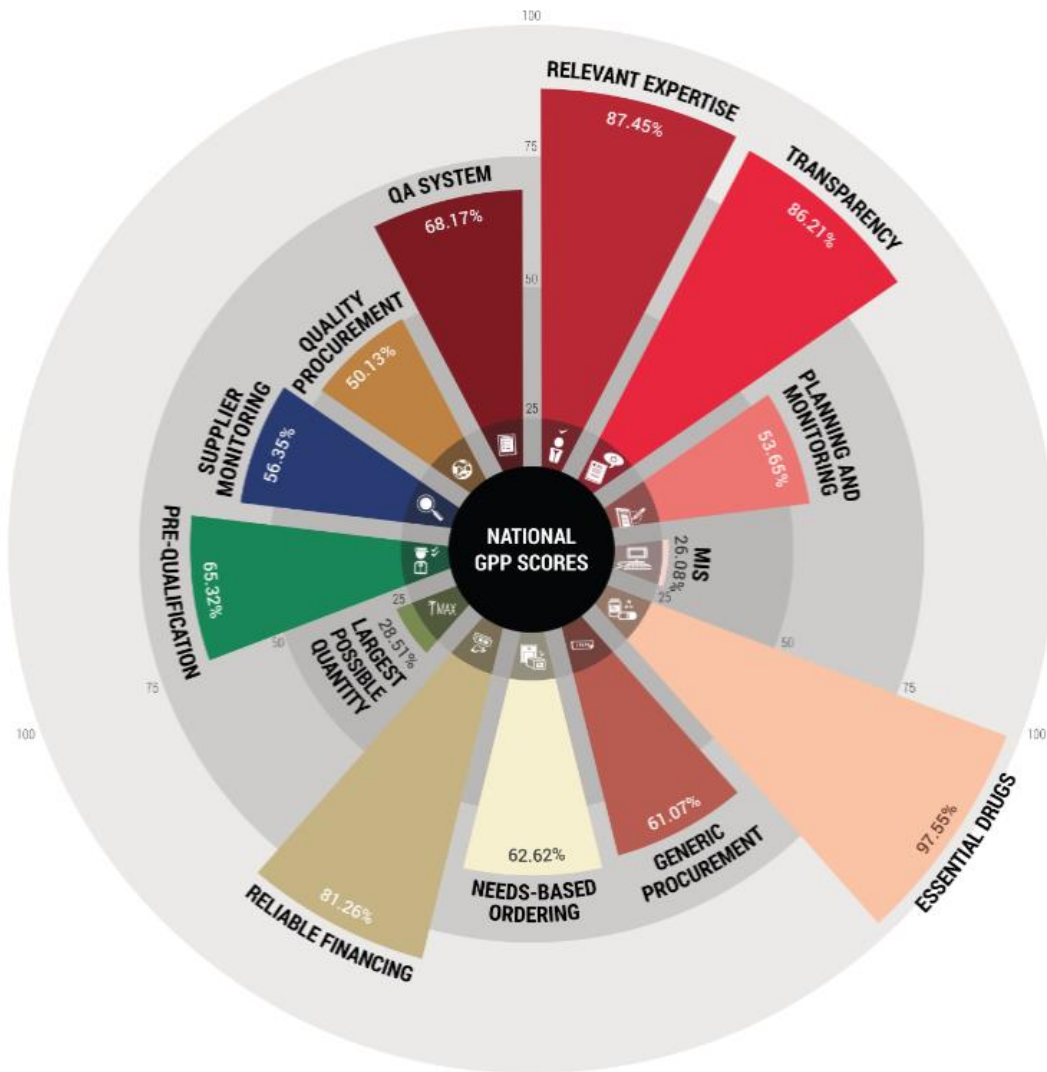
	PRICE RATIO	RATE OF COMPLIANCE TO DPRI PRICE	
		BY DRUG	BY HOSPITAL
<b>MEAN</b>	6.44	<b>46.40%</b>	<b>44.00%</b>
<b>SD</b>	17.36	25.26%	33.08%

## Table 2. Factors associated with low drug prices.

PRINCIPLES	PRICE RATIO	
	Corr. Coeff.	p
GPP 1: Functions and responsibilities are divided among different offices with appropriate expertise	-0.334	0.018
GPP 3: Procurement is planned properly and procurement performance is monitored.	-0.309	0.029
% of value of MOH drugs purchased through competitive tender	-0.338	0.018



Price Ratio	Coefficient	p-value	95% CI	
<b>Characteristics</b>				
Specialty hospitals	22.52129	.000*	10.48	34.56
<b>GPP</b>				
GPP 2: Procurement procedures should be transparent, formally written, and uses explicit criteria to award contracts.	0.3509631	0.008	0.10	0.60
GPP 8: Procurement should be effected in the largest possible quantities to achieve economies of scale.	-0.127637	0.029	-0.24	-0.01



## Factors associated with LOW drug prices

- Not being a **specialty hospital**
- **GPP 1:** Functions and responsibilities are divided among different offices with appropriate expertise.
- **GPP 3:** Procurement is planned properly and procurement performance is monitored.
- **GPP 8:** Procurement should be effected in largest possible quantities to achieve economies of scale

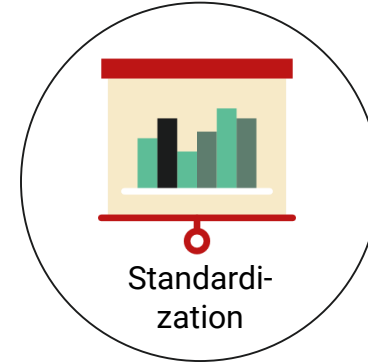
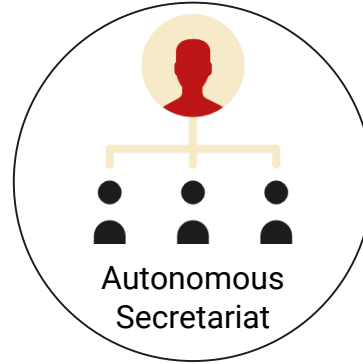
**Review the effects of the DPRI on other factors of affordability**

**Enforce appropriateness of BAC composition, competitive tendering, and generic procurement**

**Implement pooled procurement**

**Develop systems for procurement planning and performance monitoring**

# To establish pooled procurement in the Philippines, the following factors should be considered:





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