Approaches to Pharmaceutical Price Government Regulation in Armenia

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Introduction

Due to specific characteristics of Pharmaceutical market, medicine price regulation is not possible by only market mechanisms. Therefore, different schemes of Pharmaceutical Price Regulation have been implemented in EU countries, as well as in CIS member states (except Armenia and Tajikistan).

The new Law «On Medicines» of Republic Armenia is intended to provide the development and implementation of Pharmaceutical Price Regulatory system in Armenia.

Objectives

The main objective of this research is to develop recommendations for the synthesis of Pharmaceutical Price Regulation mechanisms based on the analysis of regulatory schemes currently applied to other countries.

Materials and methods

The medicine sales chain involves wholesale and retail phases represented as a system consisting of two «Input → Output» type modules (Figure №1).

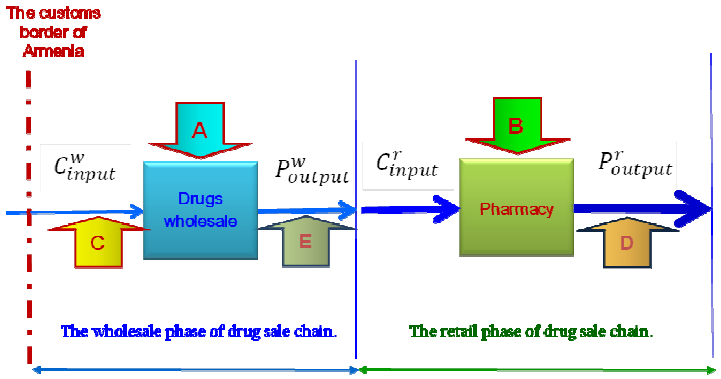

Figure N 1. The apportionment of regulatory influences of medicine prices.

Where:

C^w_{input} - is the cost of imported medicine per unit formed according to requirements of IAS 2 «Inventory» or its custom value formed on the border of Armenia,

P^w_{output} - is the wholesale price of imported medicine per unit,

C^r_{input} - is the cost of the medicine per unit purchased by pharmacy that is formed according to requirements of IAS 2 «Inventory»,

P^r_{output} - is the retail price of pharmacy,

D - is the regulatory influence on the retail price – D,

E - is the direct government regulation of wholesale price – E,

A - is maximum wholesale Mark-up – A,

B - is maximum retail Mark-up – B,

C - is regulatory influences on the wholesalers purchased medicines costs formation process – C.

Materials and methods

This system aims to restrain the growth of medicine prices, and as a starting point for assessing feasibility of this goal was analyzing the effects of possible influences on both inputs and outputs of the chain phases.

The designed «comprehensive model» of Pharmaceutical Price Regulation includes (may include) the integrity of possible regulatory influences currently applied to the systems of other countries.

The «comprehensive model», built using modular principle, enables to easily change (improve) each module entirely or its particular components.

Results

The analysis of all possible regulatory influences allows making approaches to the selection of the most effective set (vector) of possible regulatory influences included in the «comprehensive model». These approaches could serve as a basis for development and implementation of Pharmaceutical Price Regulation Scheme in Armenia.

Taking into account the peculiarities of Armenian pharmaceutical market, it is proposed to develop an effective and comprehensive Pharmaceutical Price Regulation Scheme including only three regulatory influences (tool), such as:

1. *To define the maximum wholesale Mark-up,*
2. *To define the maximum retail Mark-up,*
3. *To define basic cost for imported medicines by using external (internal) reference prices as a base.*

Conclusions

The designed «comprehensive model» involves the complex of all possible regulatory influences of medicine prices and could be used as an effective tool for:

- ❖ *carrying out analysis,*
- ❖ *developing Pharmaceutical Price Regulation systems.*

The research shows that maximum Mark-ups must be applied to both wholesale and retail phases of pharmaceutical market in Armenia, as well as the price regulation of wholesale phase only will not be effective.

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