

Impact of Health Policy Changes on the Growth Locally Manufactured and Imported Pharmaceutical Markets of Top Selling ATC1 Pharmaceutical Group (Alimentary and Metabolism (A0) in Turkey

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Objectives

Turkish Ministry of Health (MoH) initiated Health Transformation Program (HTP) in 2003. HTP impacted all clinical and economic outcomes of health including pharmaceutical sales by improving access to health services. Total pharmaceutical market reached US \$ 8 billion in last 10 years.

The objective of this analysis is to understand the impact of selected 5 major policy changes by MoH on the growth locally manufactured and imported pharmaceutical markets of top selling ATC1 pharmaceutical group, which was Alimentary and Metabolism (A0) with US \$ 1.1 billion sales in 2012, in the respective periods in Turkey.

Methodology

132 months sales data with segmented regression analysis for interrupted time series were used.

International reference pricing of pharmaceuticals (RF), mandatory reimbursement dossier submission for new molecules, new indications and line extensions with medical and economic evaluations (MRDS), auditing for good manufacturing practice (GMP), family physician system (FP) and compulsory medical service for physicians (CMS) were selected as five major policies that may affect cost, demand and supply of pharmaceuticals. We analyzed possible breaks in trends prior and after the implementation of 5 selected policies of the HTP.

The analysis was conducted for total imported pharmaceutical (IP) sales and total locally manufactured pharmaceutical (LMP) sales in the A0.

The Durbin-Watson d statistics of SPSS version 20.0 was used as a test for serial correlation of error terms. Shift in slope with $p < 0.05$ were considered as statistically significant.

Results

All policies effected the LMP sales more positively than IP sales except FP. However, the difference of impact was moderately positive for LMP sales, there was not any statistically significant change.

Table 1. Impact of Health Policies on LMP and IP ATC1 Groups (Unit)**

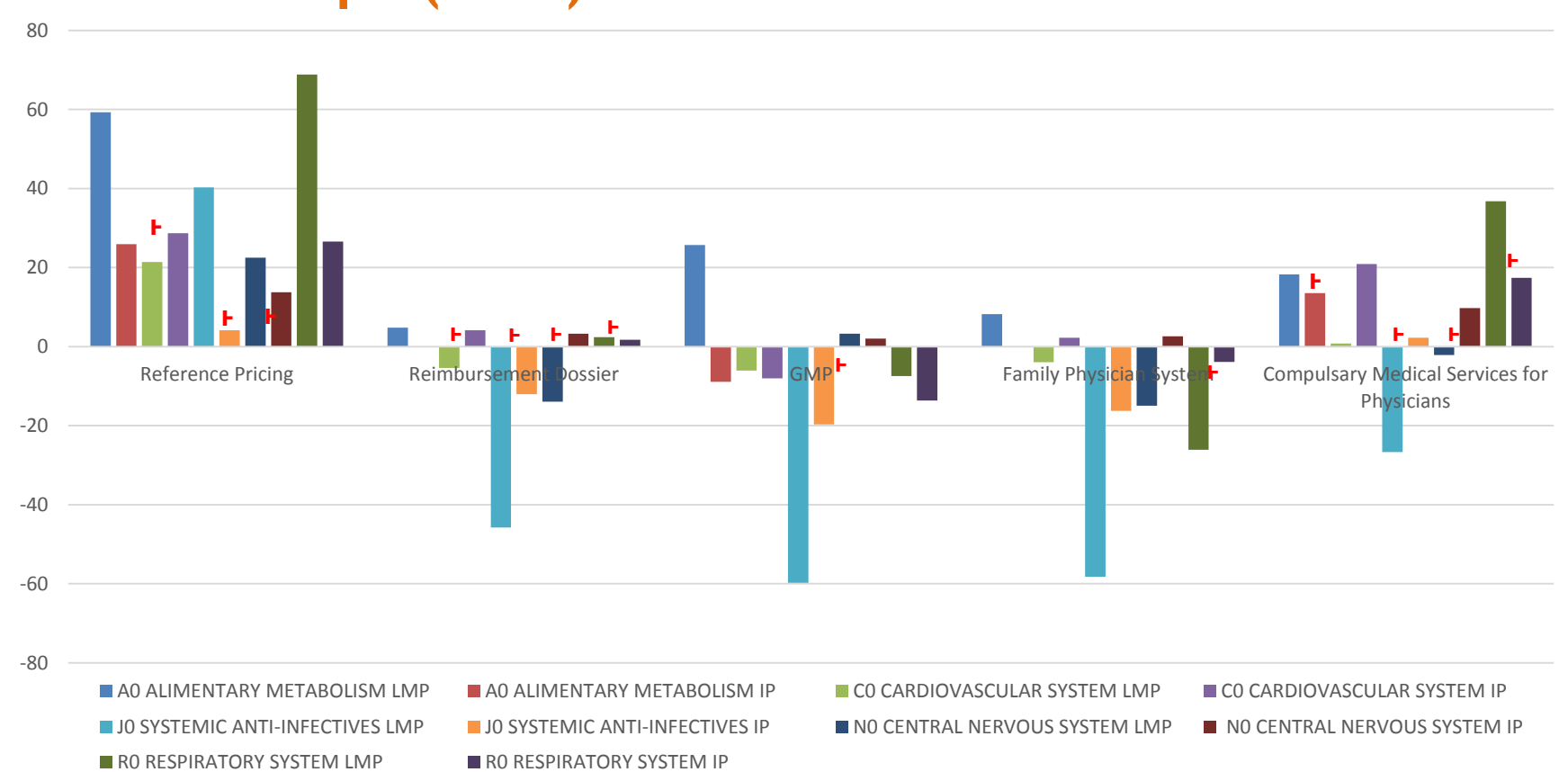
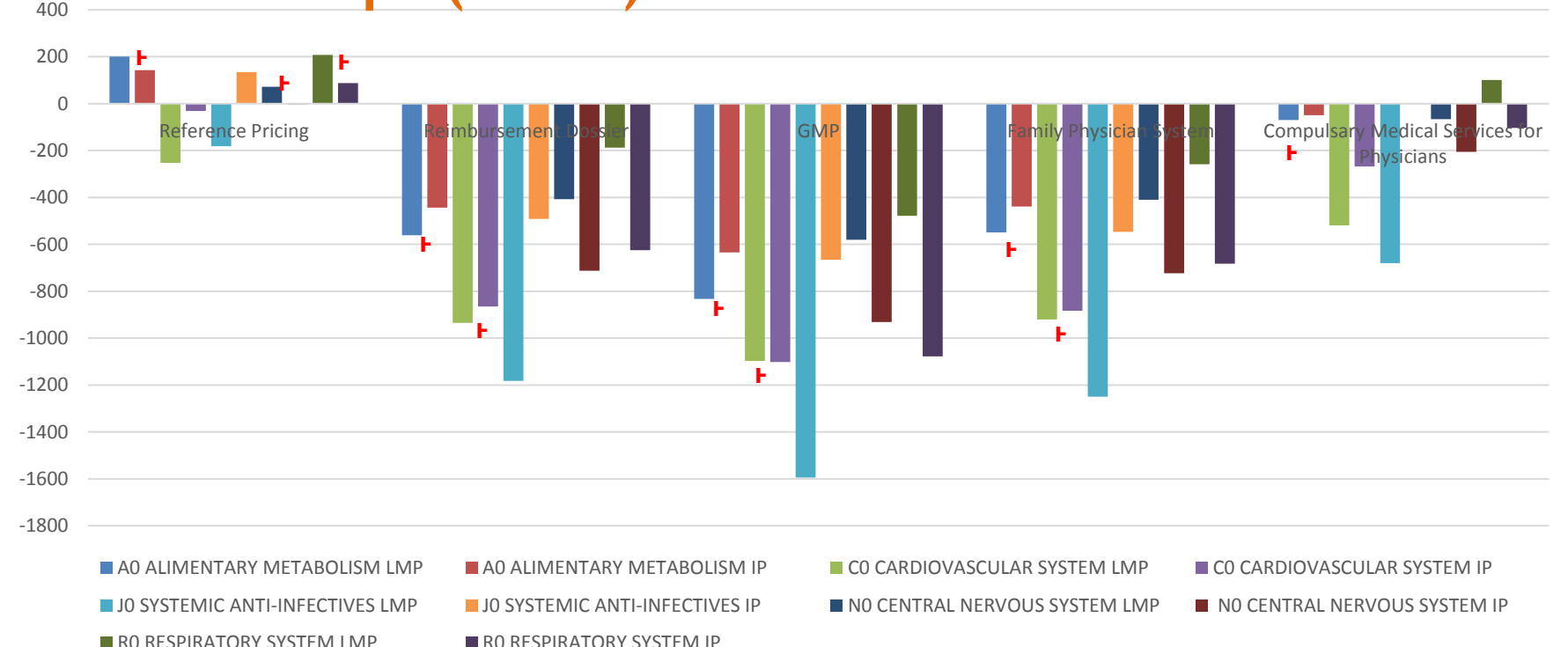


Table 2. Impact of Health Policies on LMP and IP ATC1 Groups (Value)**



**Significant value with t between -1.96 and 1.96.

Conclusion

Policy changes may effect at differently direction and amount the cost sales of LMPs and IPs. Non significant effect of these policy changes may partly explained by limited observation time and by other market dynamics.

References:

- <http://www.saglik.gov.tr/TR/belge/1-2906/saglikta-donum-programi.html>
- [IMS Health Data](#)

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