

CURATIO INTERNATIONAL FOUNDATION

**MAIN HIGHLIGHTS OF
PHARMACEUTICAL PRICE AND
AVAILABILITY IN GEORGIA
2009 - 2012**

Authors

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Introduction

- **Drug List** – Package containing 52 most used medications in Georgia
- **Survey Location** – Tbilisi, Imereti, Kakheti, Adjara, Kvemo Kartli, Samegrelo
- **Surveyed Pharmacies** - PSP/Aversi/GPC networks, Other networks, Independent pharmacies. In 2011 the new network Pharmadepo/Pharmacenter was added to the sample
- **Survey Phasing**
 - ▣ **I Phase:** December, 2009
 - ▣ **II Phase:** July, 2010
 - ▣ **III Phase:** May, 2011
 - ▣ **IV Phase:** June, 2012

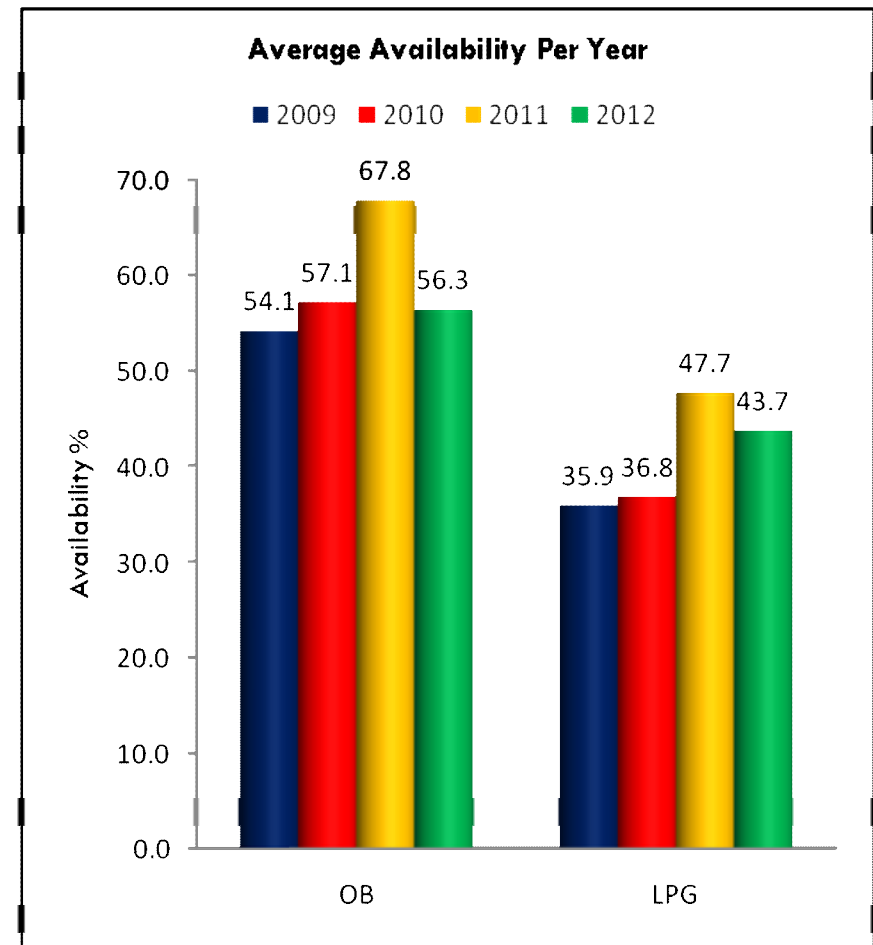
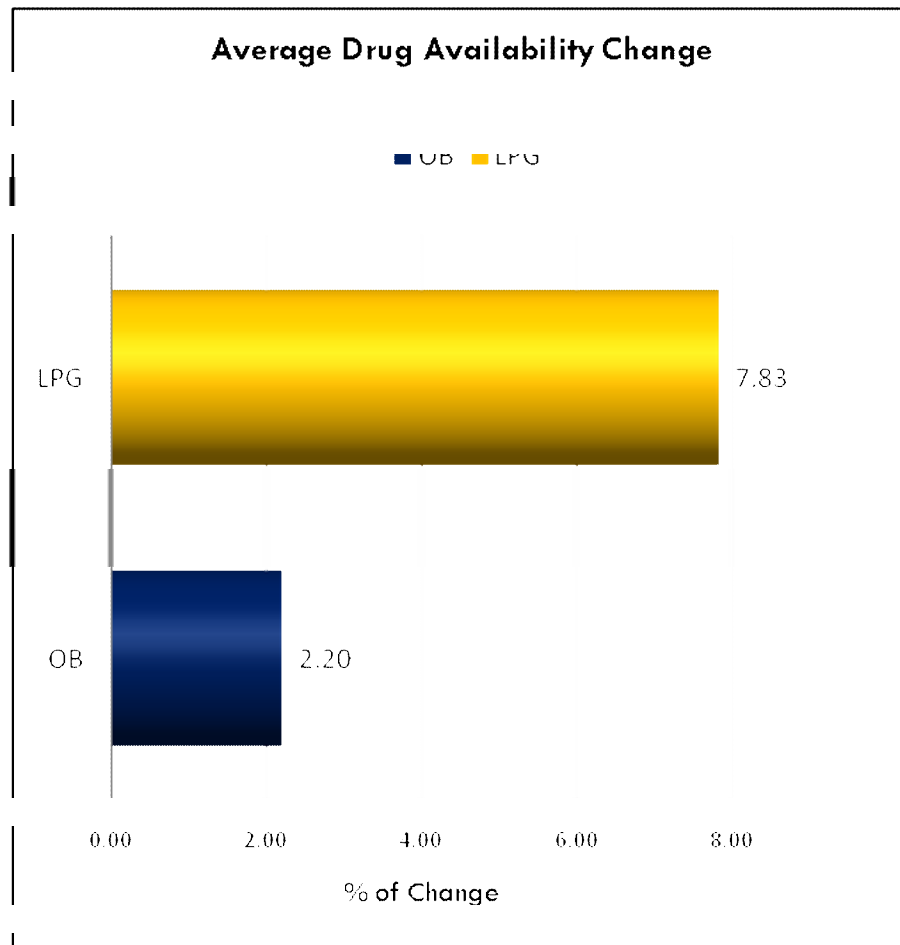
Purpose of the Study

To monitor the impact of legal amendments introduced during September 2009 on availability and affordability of the pharmaceuticals in Georgia

Definitions

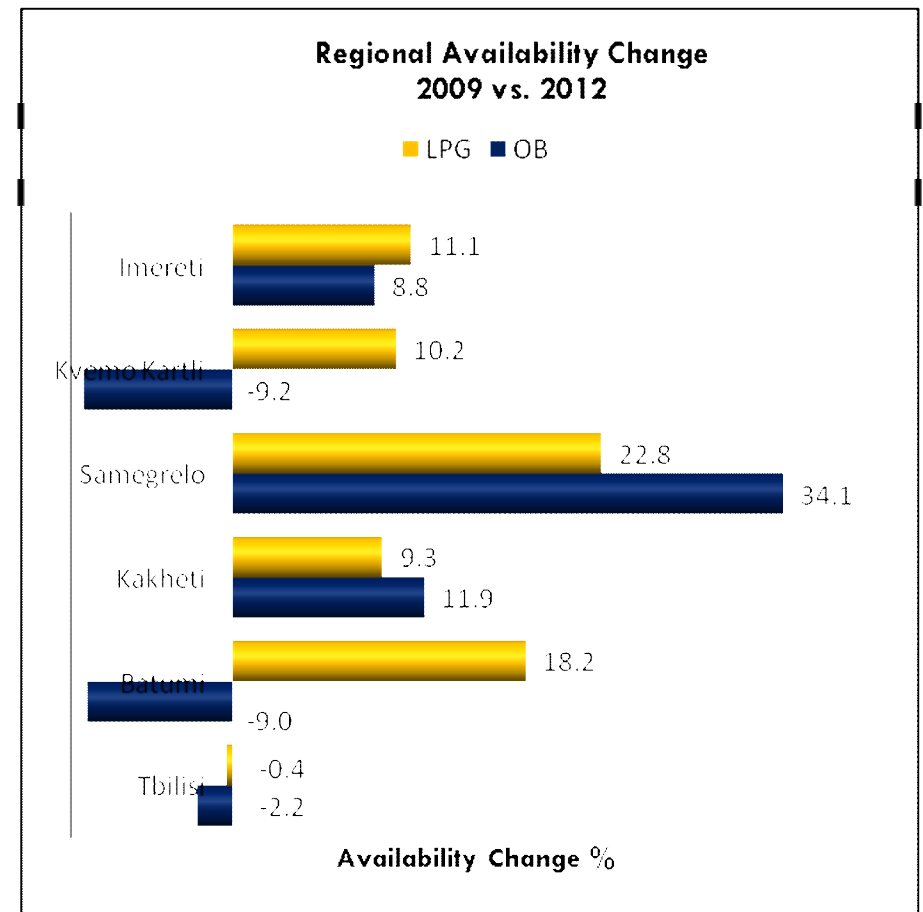
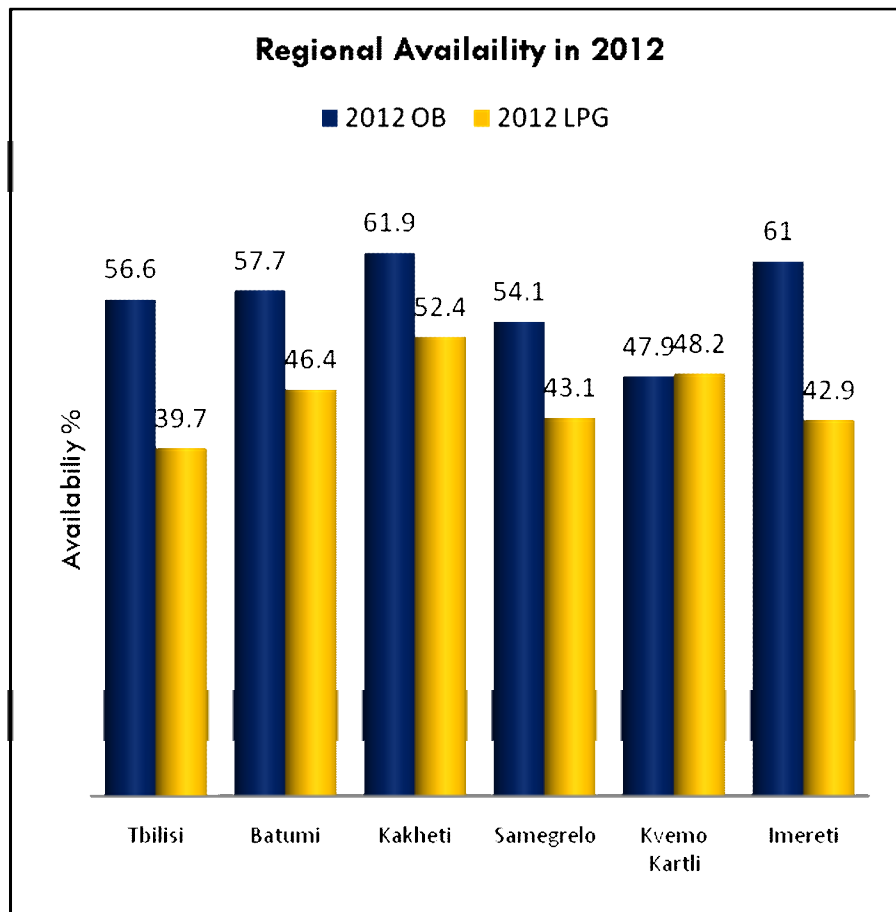
- **OB**
 - ▣ Original Brand medicine
- **LPG**
 - ▣ Equivalent lowest price generic
- **Availability**
 - ▣ Percent availability of an individual medicines at the time of the survey in a surveyed pharmacy
- **Median Price**
 - ▣ Mid point price for a given medicine
- **Mark-up**
 - ▣ Mark-up is the difference between the retail price for a basket of drugs and price recorded at a Georgian border by customs department

Change in Drug Availability



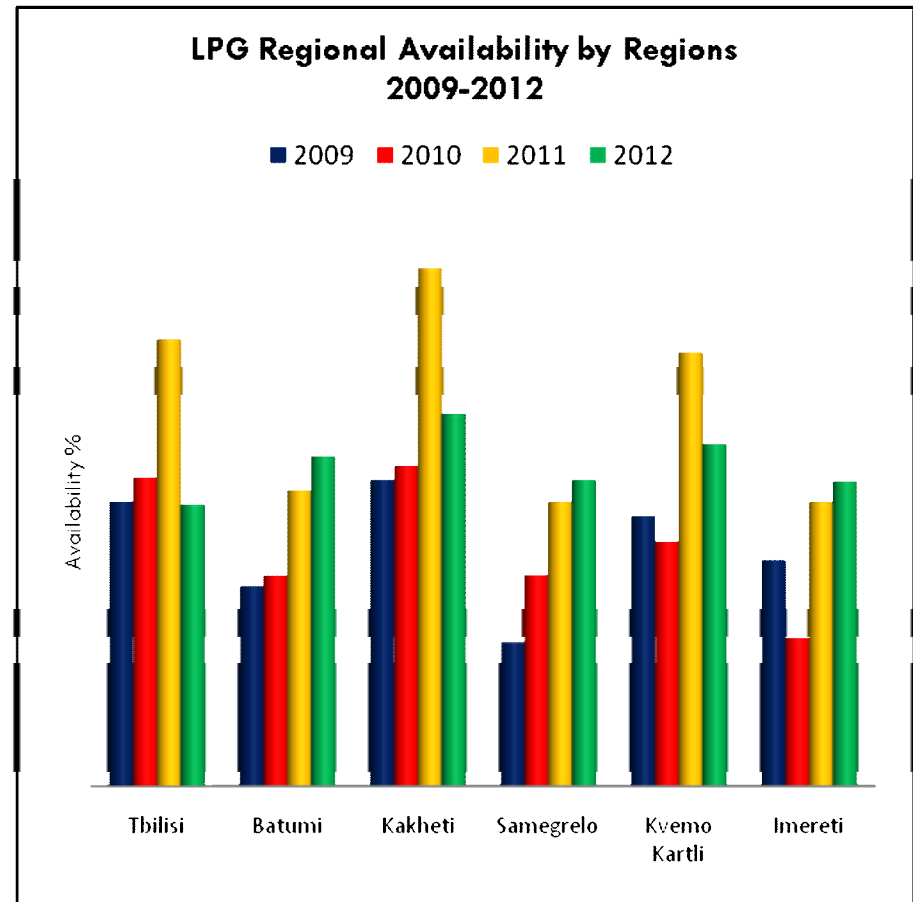
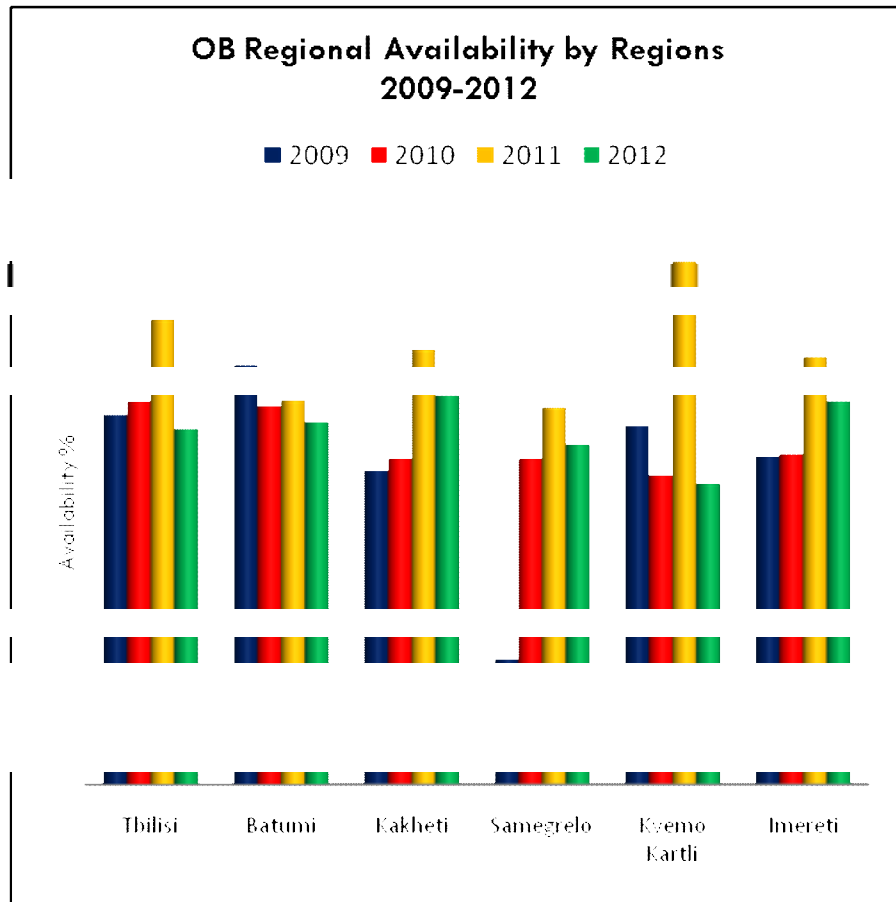
Overall drug availability improved for OB and LPG between 2009-2012, though in 2012 decline in drug availability is observed compared to 2011 ($p < 0,05$)

Dynamics of Drug Availability



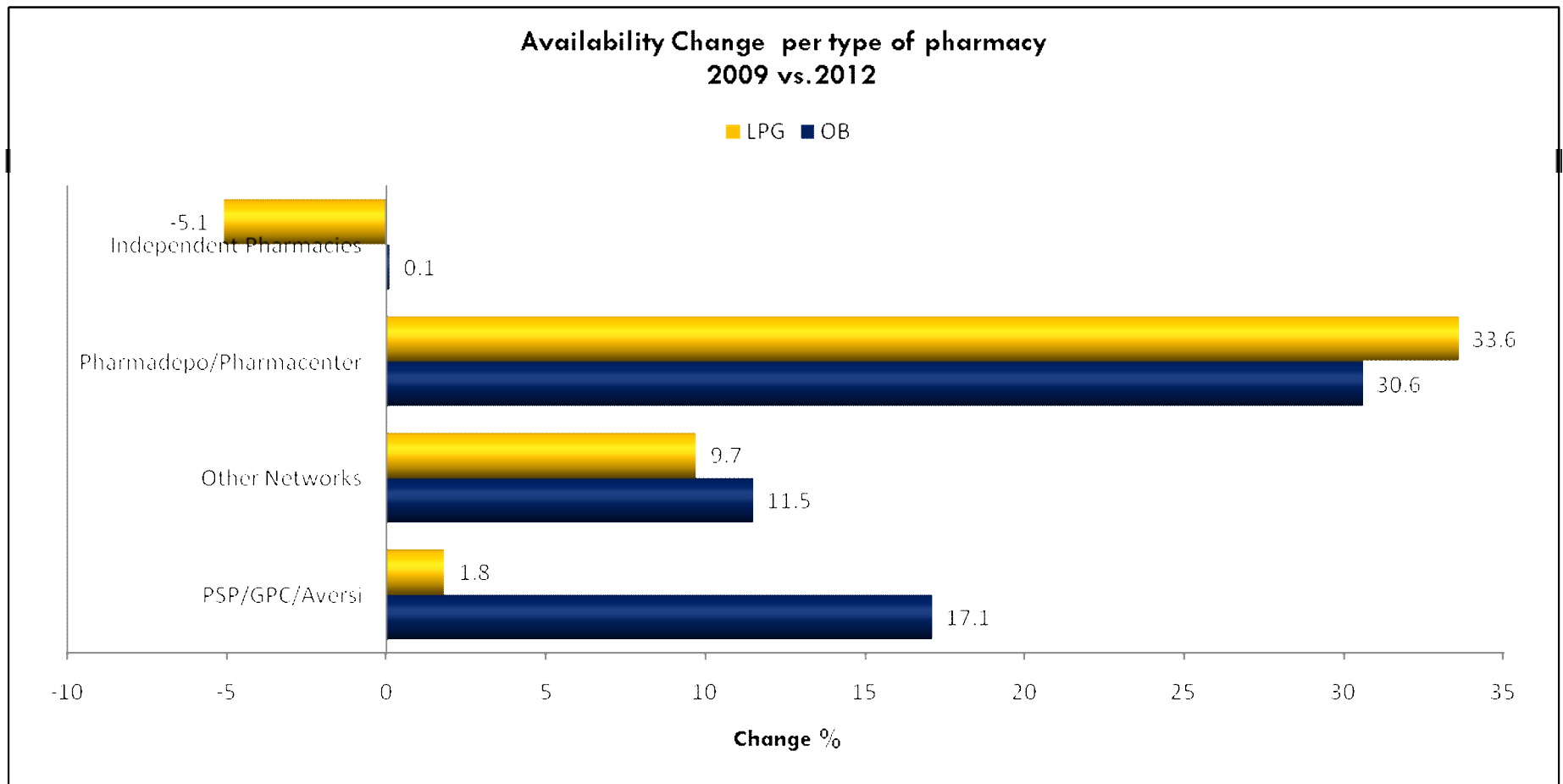
While drug availability improved in 2011 compared to 2009, availability of the Generic drugs remains still low

Change in Drug Availability



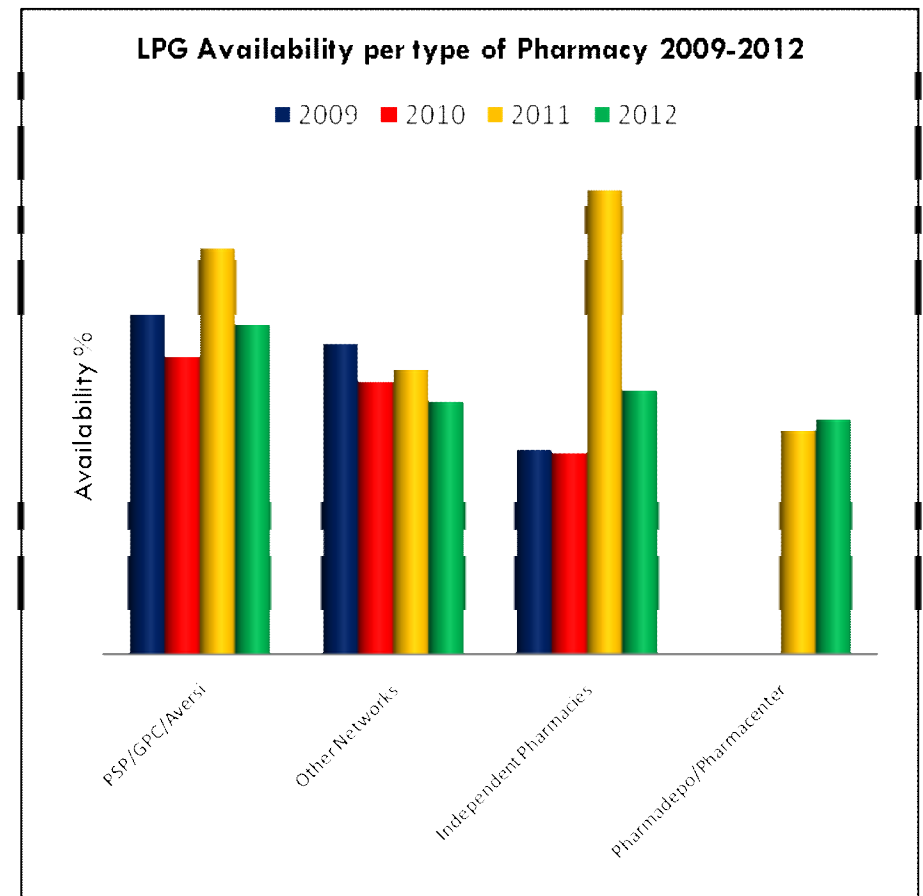
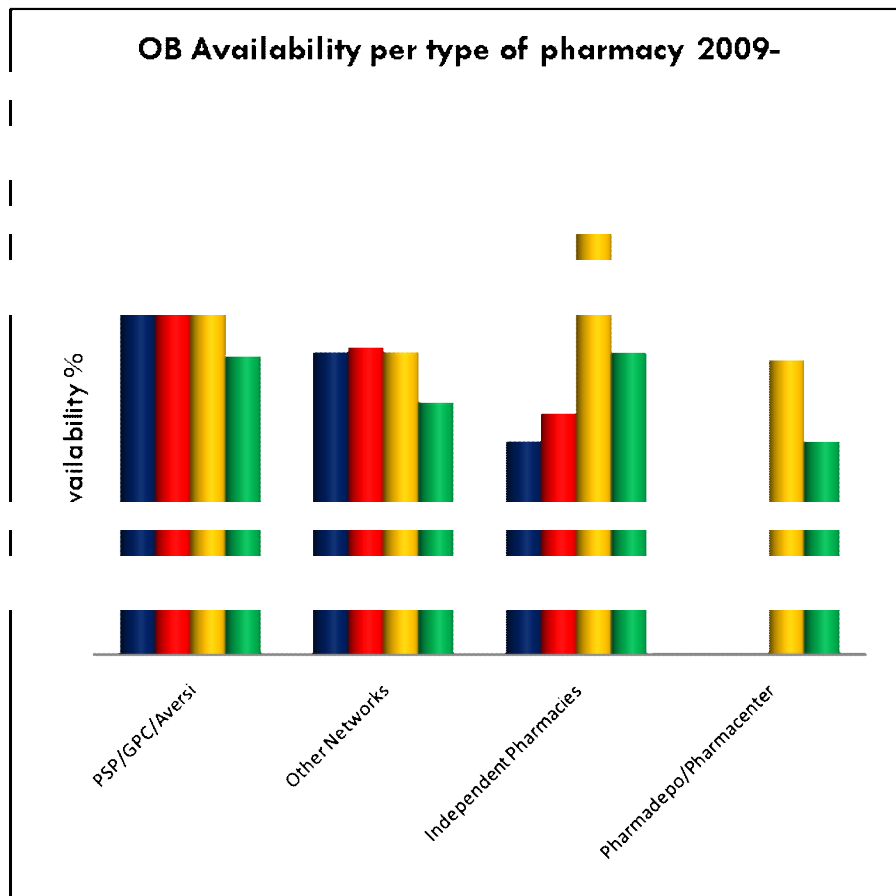
Drug Availability shows improving trend since 2009, however starting from 2012 availability starts to decline for both OB and LPG in all regions except of Samegrelo, Imereti and Batumi where LPG availability continues to show a positive trend.

Dynamics of Drug Availability



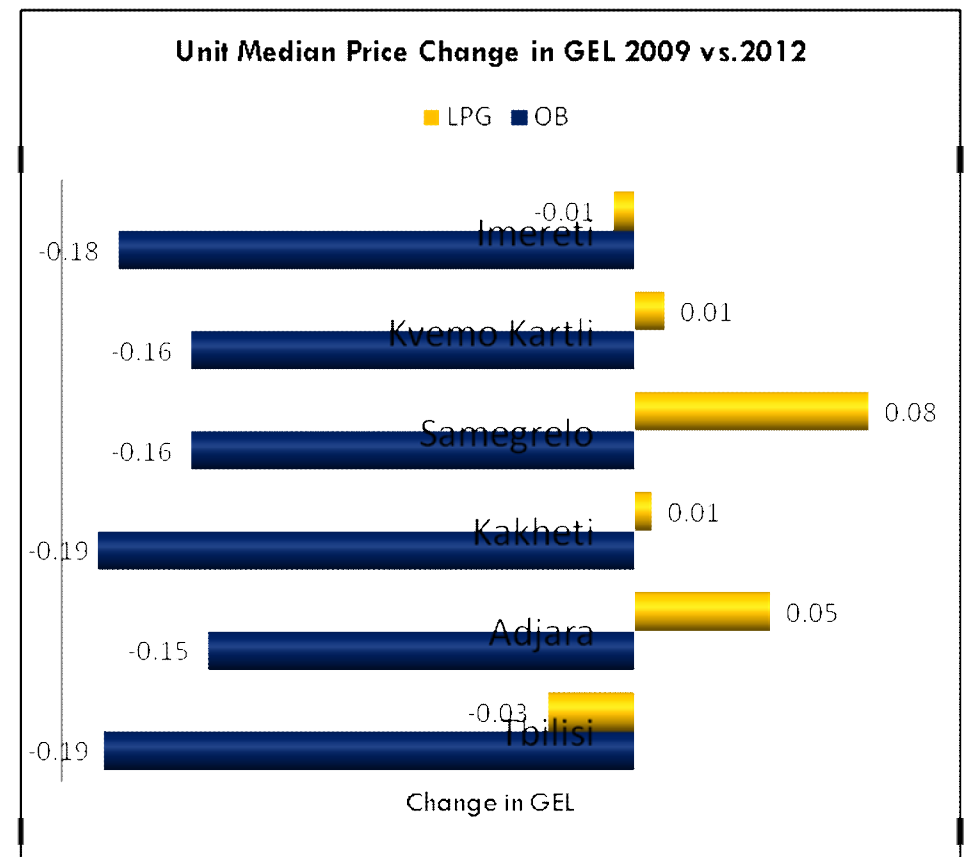
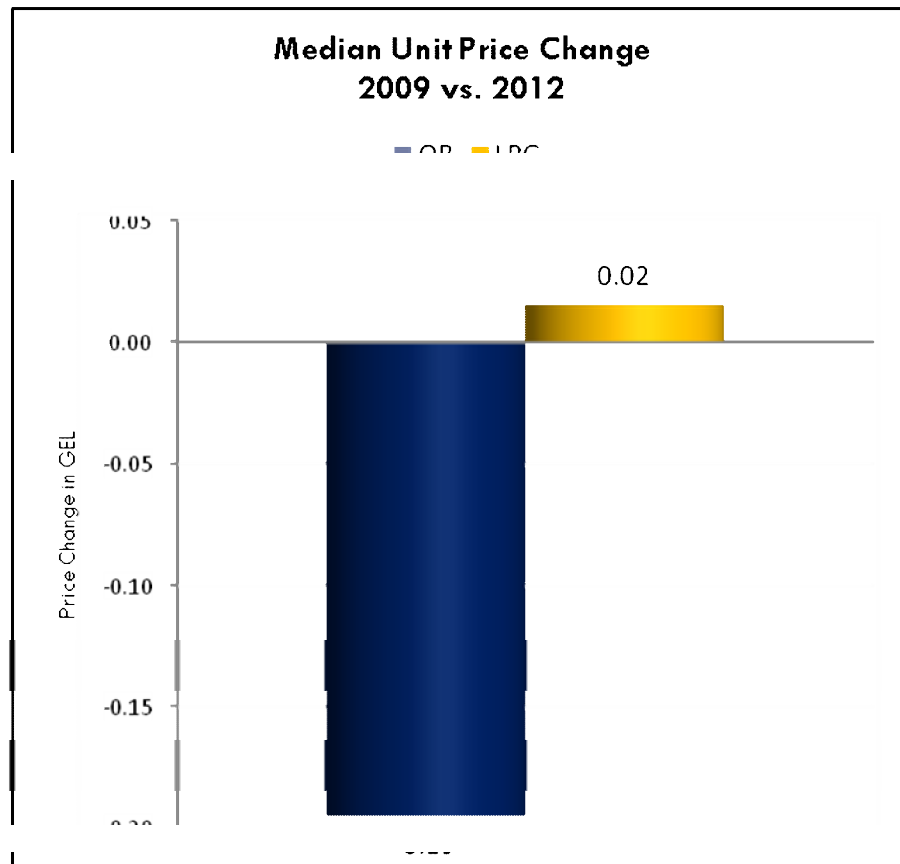
Drug Availability has improved mostly in Pharmadepo/Pharmacentri networks, while in Independent pharmacies availability declined.

Dynamics of Drug Availability



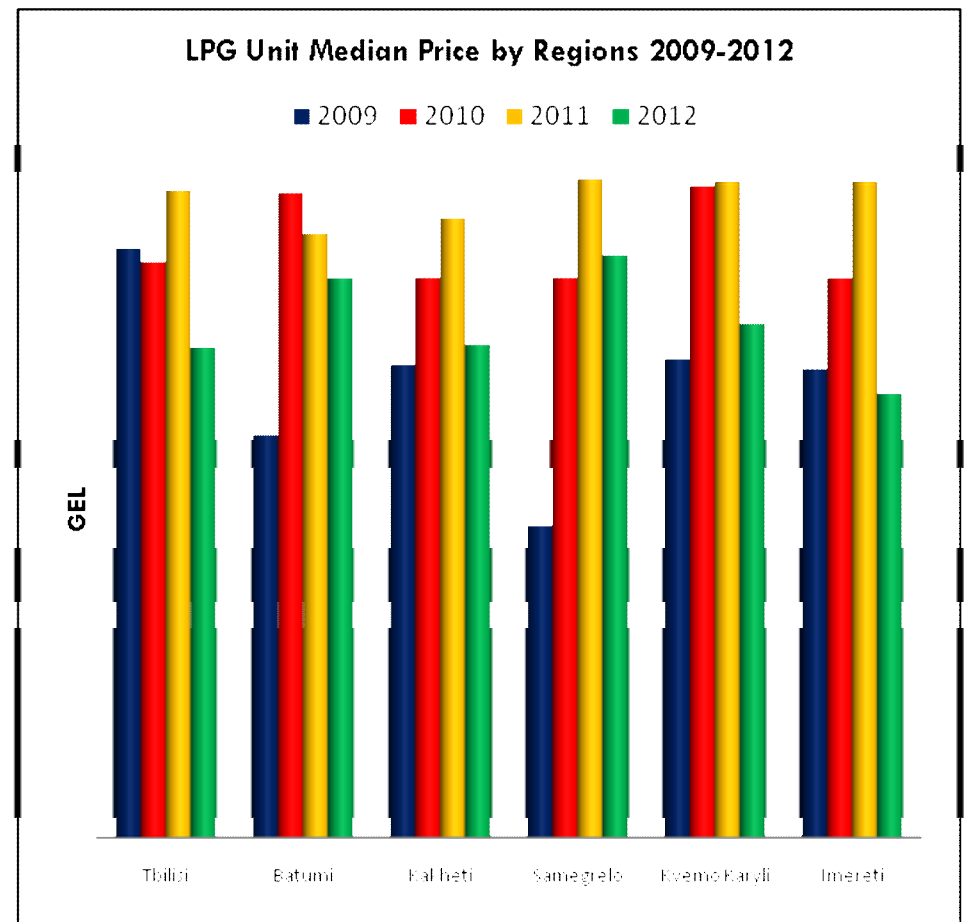
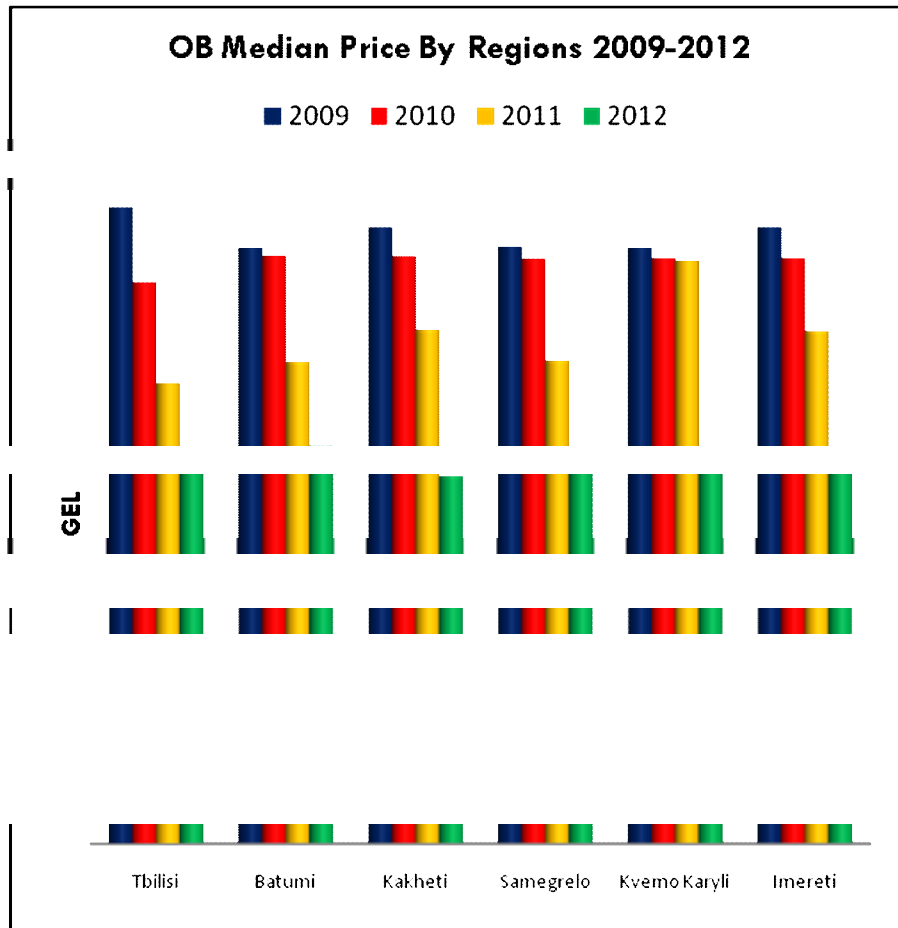
The Availability worsened in 2012 for both OB and LPG in all types of pharmacies compared to 2011 except for LPGs in Pharmadepo/Pharmacentri networks.

Drug Unit Median Price Change



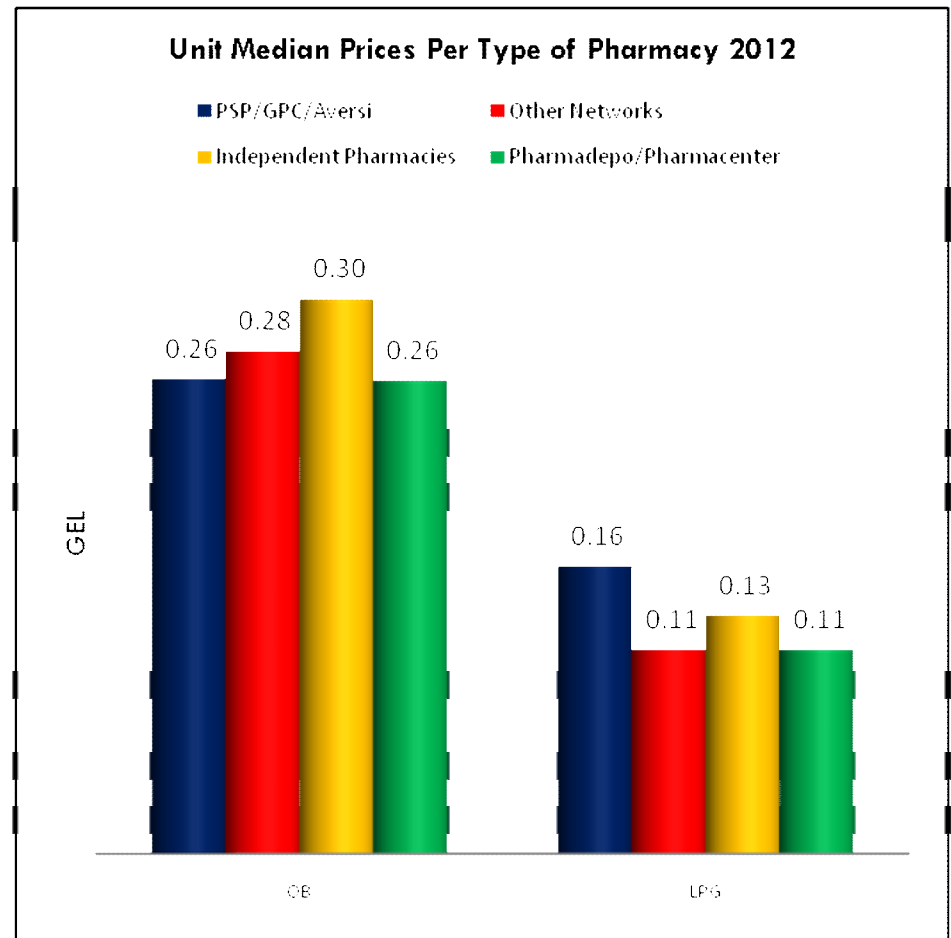
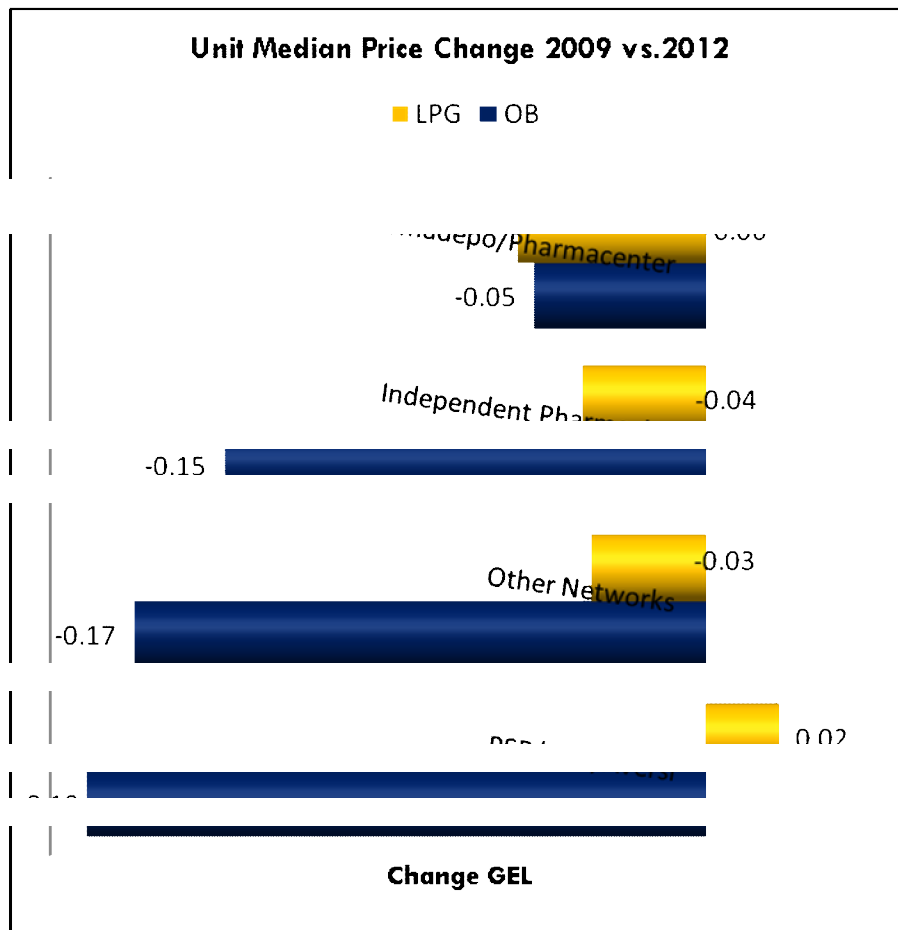
OB Unit Median prices for drugs declined significantly in 2009 - 2012, most likely due to legal changes (increased competition). Price changes for LPGs were marginal in current prices and demonstrates regional differences.

Drug Unit Median Price Change



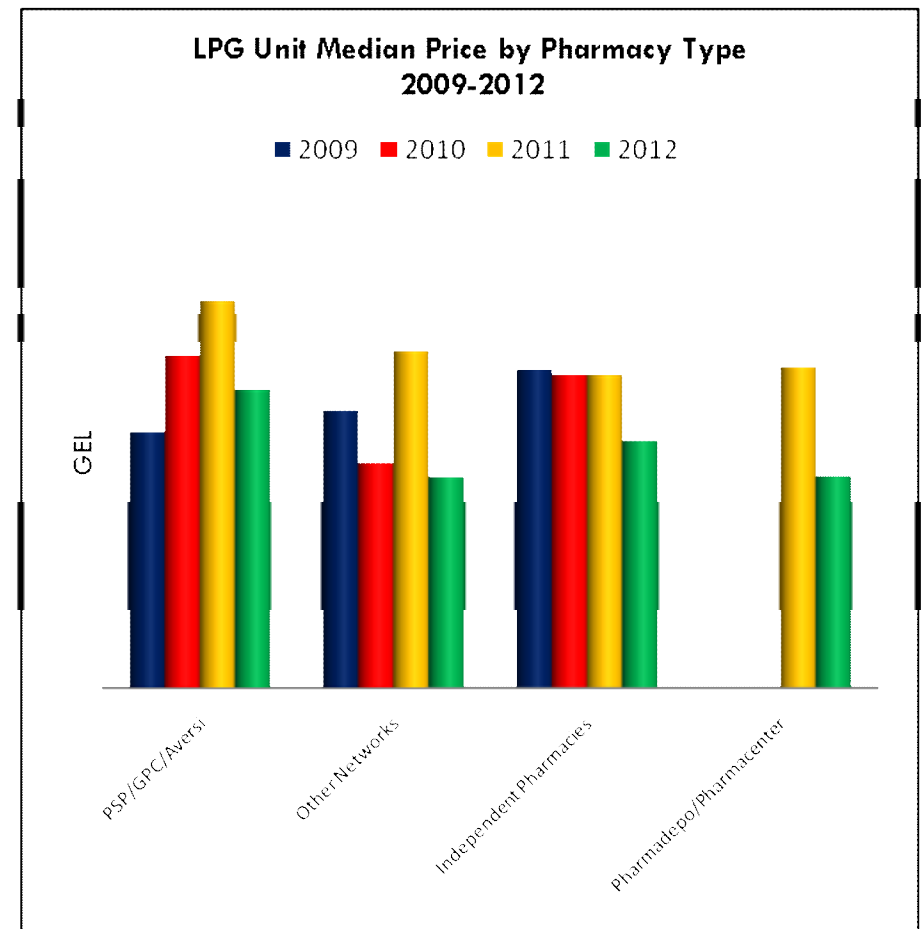
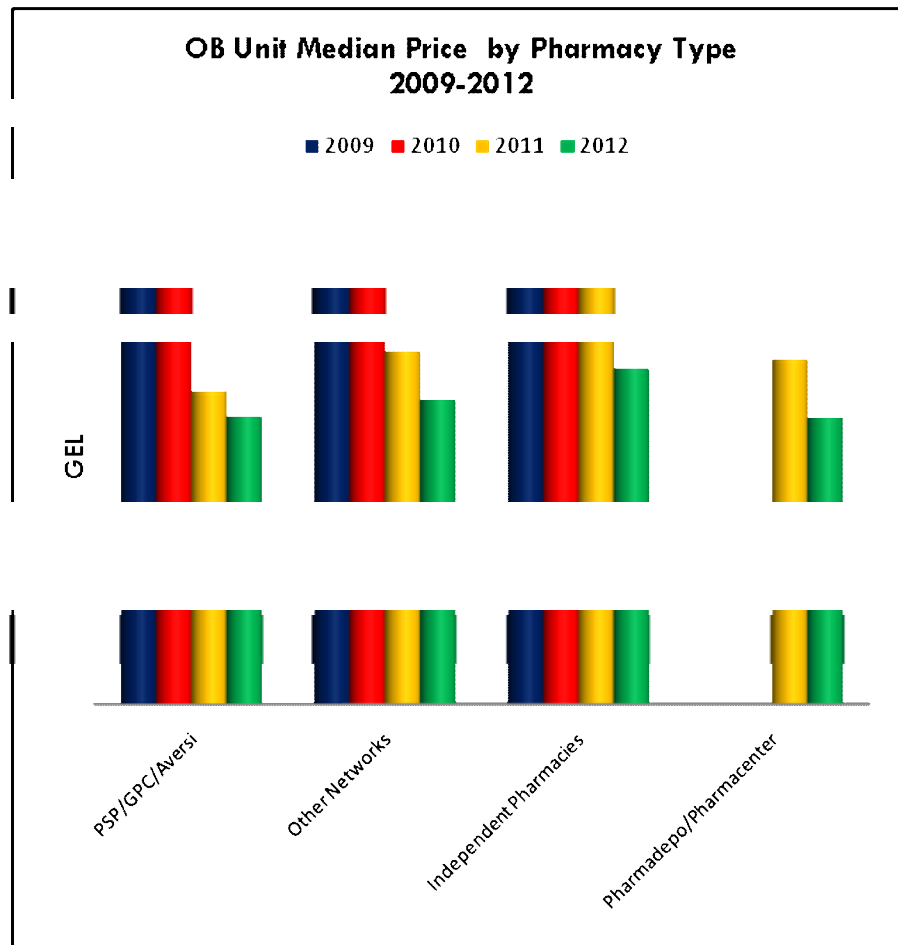
Steady unit median price decline is recorded during 2009 -2012 in all regions of the country. LPG price increase alongside with increased availability is observed till 2011, while in 2012 LPG unit median price decline is reported compared to 2011, possibly as a result of market competition.

Drug Unit Median Price Change



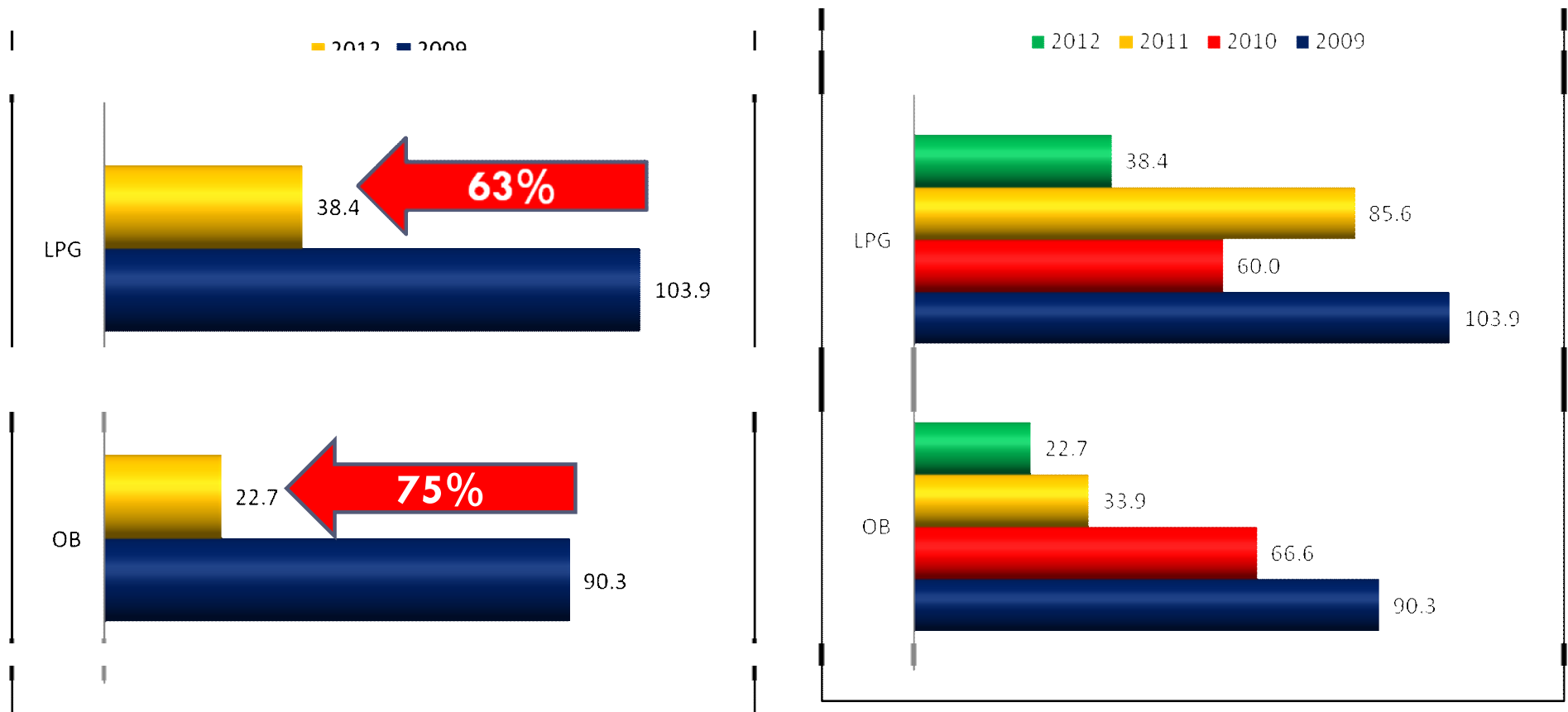
OB Unit Median prices is steadily decreasing since 2009, most likely due to legal changes (increased competition). Price changes for LPGs were marginal in current prices ($p > 0,05$). In 2012 the lowest OB unit price is recorded in PSP/Aversi/GPC and Pharmadepo/Pharmacenter networks, while for the LPGs in other pharmacies and Pharmadepo/Pharmacenter networks

Drug Unit Median Price Change



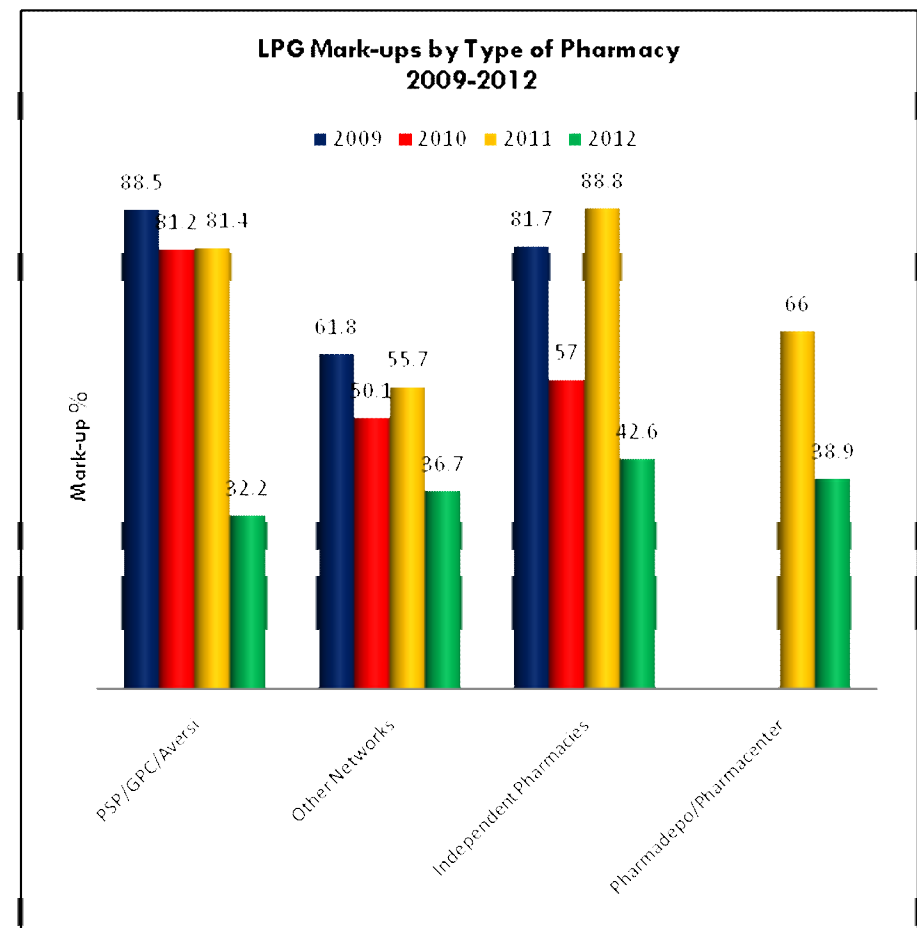
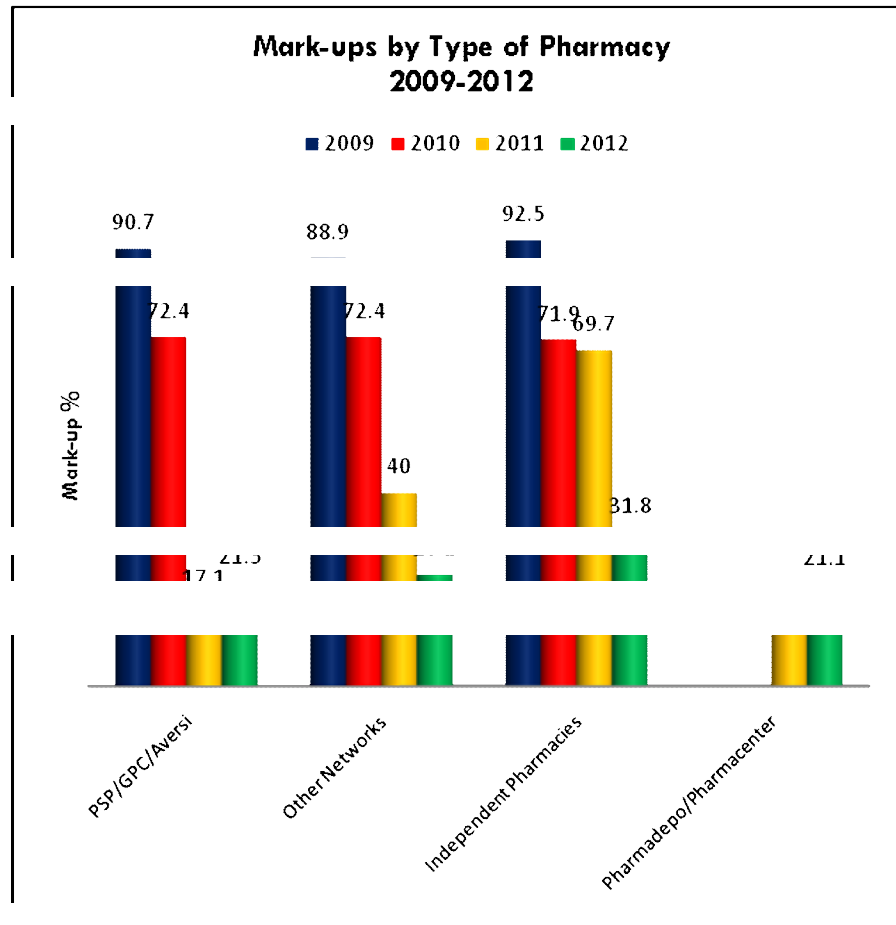
Unit median price reductions are observed since 2009 for Obs. Unit price of LPGs varies by types and years, though it shows decline in 2012 compared to 2011. The Highest OB unit price is recorded in Independent pharmacies in 2012 that shows the unfavorable competitive environment they operate in. The highest LPG price is observed in PSP/Aversi/GPC network in 2012.

Median Mark-up using Median retail prices (%)



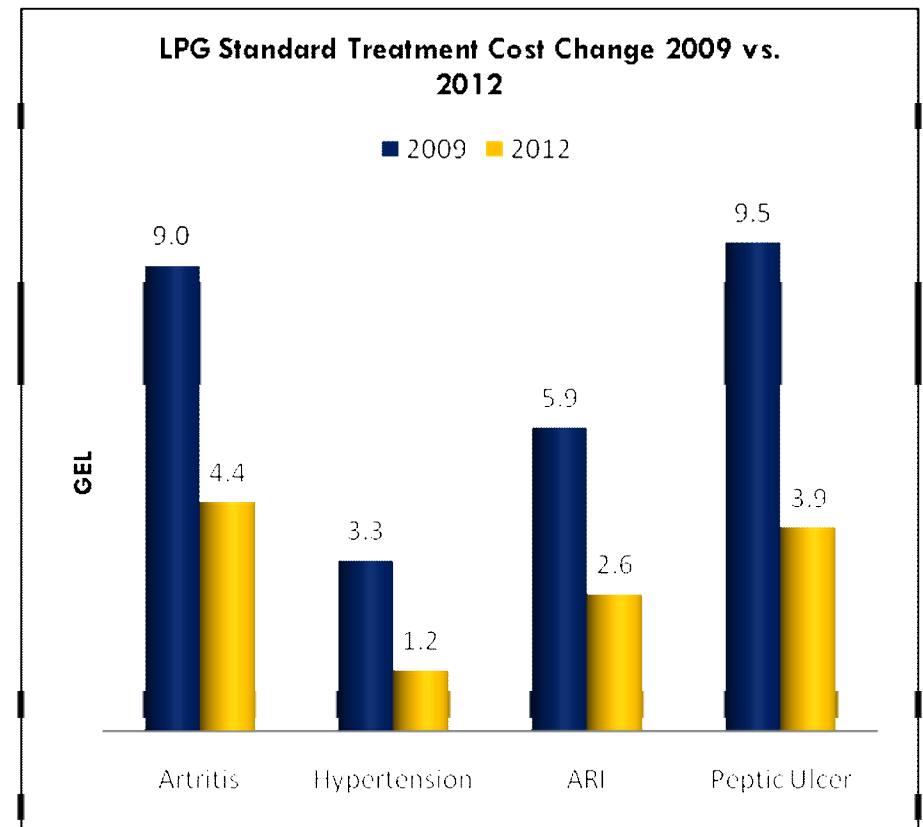
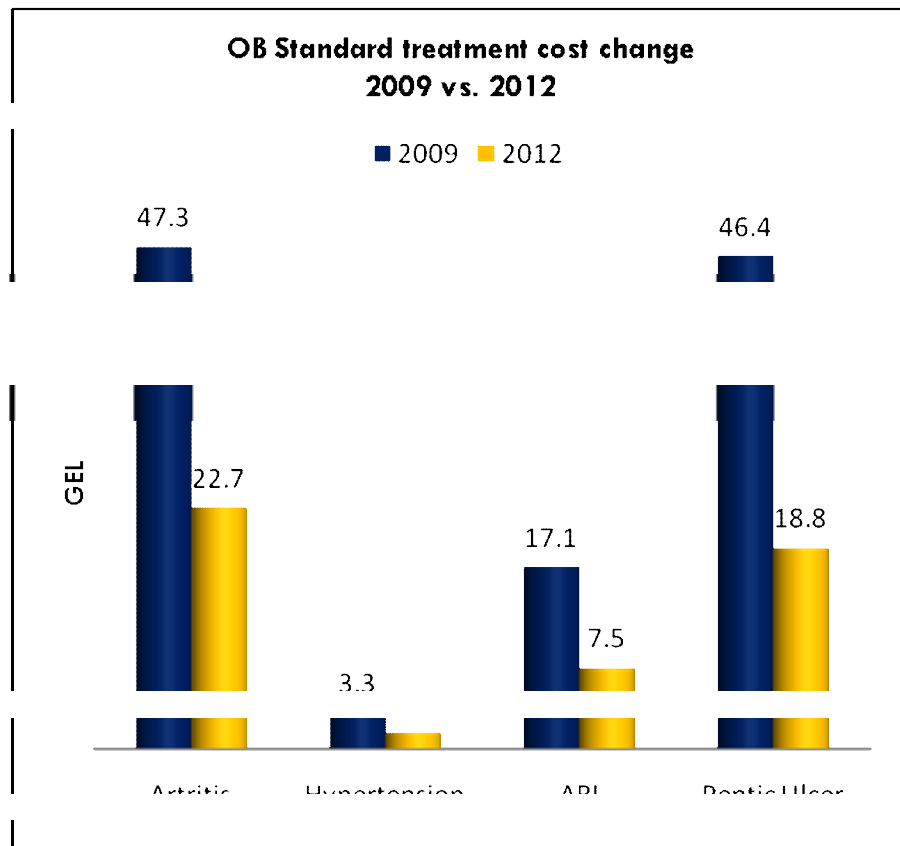
Mark-ups have declined for both OBs and LPGs during 2009-2012, however reductions for OB drugs were more profound 75%. Mark-ups for LPGs vary per year. Almost 16% increase in 2011 is followed by about 47% decrease in 2012.

Median Mark-up Change by Years



In 2012 the highest decline of OB Mark-ups (69.1%) is observed in PSP/Aversi/GPC network though it increased by 8% in 2012 compared to 2011. A substantial (56%) decline of LPG mark-ups is recorded during 2009-2012 in PSP/Aversi/GPC network.

Changes in Price for Standard Treatment



Price decline for OB drugs in 2012 made standard treatment cheaper in current prices and even more cheaper when adjusted for inflation. Price for standard treatment with LPGs also shows declining result.

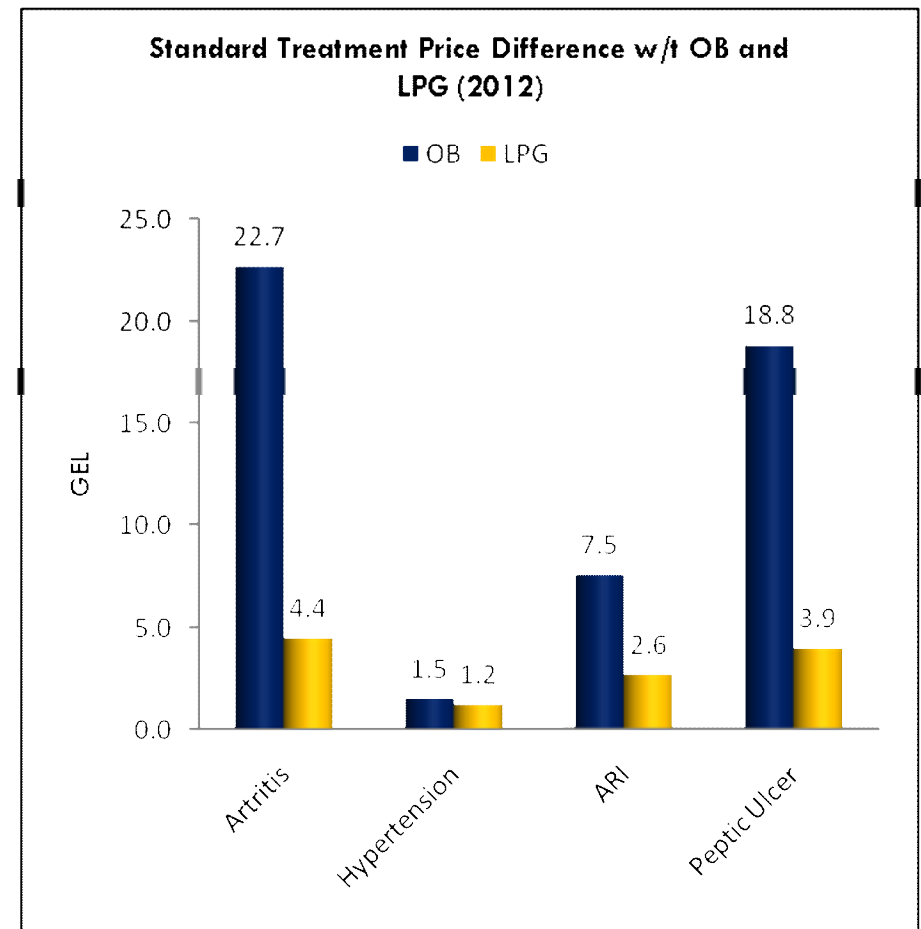
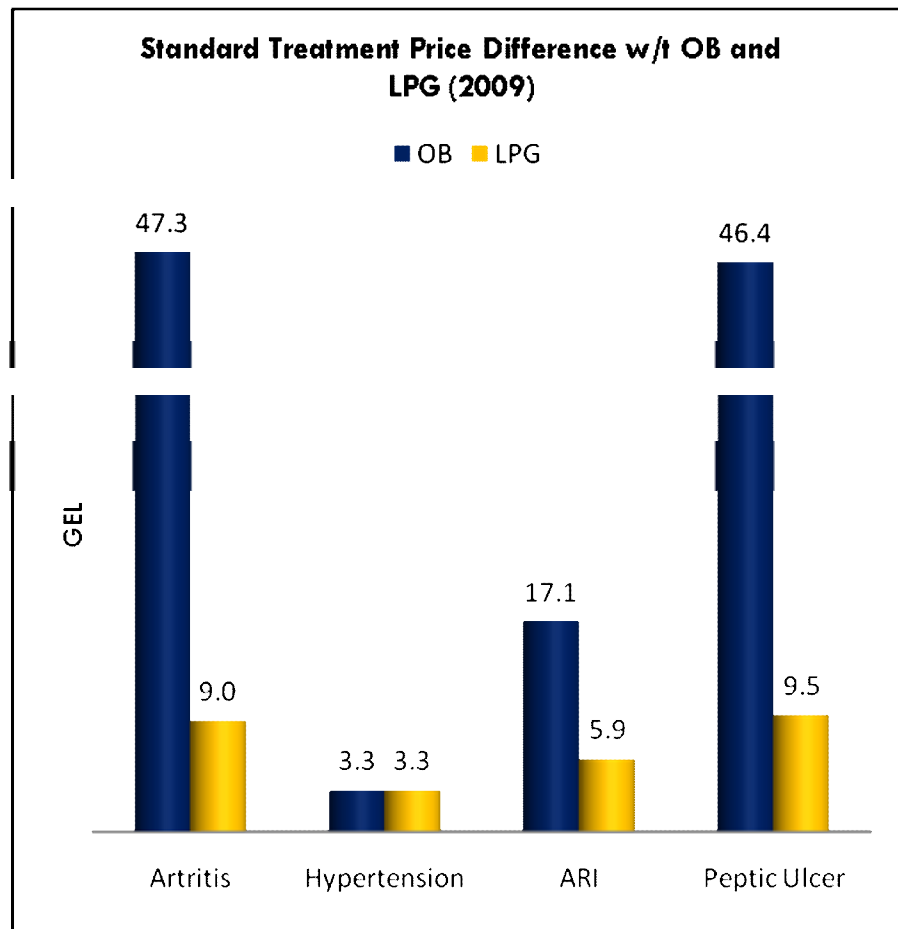
Example:

Impact of OB Price Change on Treating 1,000 Patients

Condition	Price in 2009 (Gel)	Price in 2012 (Gel)	Difference Gel
Arthritis	47 250	22 700	- 24 550
Hypertension	3 300	1 500	- 1 800
ARI	17 100	7 500	- 9 600
Peptic Ulcer	46 400	18 800	- 27 600
Total Savings			- 63 550

Price decline for OB drugs results in savings for Standard Treatment

Changes in Price for Standard Treatment



Treatment with LPGs in most instances is significantly cheaper than treatment with the OB

Example:

Impact of OB LPG Price difference on Treating 1,000 Patients

Condition	OB Price in 2012 (Gel)	LPG Price in 2012 (Gel)	Difference Gel
Arthritis	22 700	4 400	- 18 300
Hypertension	1 500	1 200	- 300
ARI	7 500	2 600	- 4 900
Peptic Ulcer	18 800	3 900	- 14 900
Total Savings			- 38 400

Treatment with LPG offers greater financial benefits and savings

Summary of Findings

DRUG AVAILABILITY CHANGES SINCE 2009

- In 2009 – 2012 drug availability Improved for both, OB and LPG, though in 2012 compared to 2011 availability worsening trend is evident.
- Although overall improvement of LPG availability, in 2012 availability levels are far from being satisfactory
- Availability differs by regions for both OB and LPG and in certain regions availability remains to be a challenge particularly of LPGs – horizontal inequity.
- In 2012 decline in availability of both OB and LPG is observed compared to 2011. If in 2011 the highest availability was recorded in Pharmadepo/Pharmacenter network, in 2012 PSP/AVERSI/GPC network is better supplied with drugs than independent pharmacies.

DRUG PRICE CHANGES SINCE 2009

- In 2009-2012 Median Price for studied drug basket declined for OBs. The observed changes within LPG prices are not statistically significant.
- Price changes differently materialized in different regions of the country creating horizontal inequity
- Price reductions were more profound for Obs in PSP/Aversi/ GPC network, which could be response to increased competition.
- LPGs cost lowest in other pharmacies and Pharmadepo/Pharmacenter network.

DRUG MARK-UP SINCE 2009

- Competition brought markups for OBs down already in 2010 and further decline was seen in 2012. Overall 75% decline is observed in this period. This positive change is potentially result of the new legislation.
- Mark-up reductions for OB in the reporting period were sharper within PSP/Aversi/GPC (from 90.7% to 21.5%) then within competing network of Pharmacies. As in 2012 slight increase is observed compared to 2011 one has to question is this real effect or short-term competition strategy?
- LPG mark-ups showed increasing trend for the years 2009-2011, though in 2012 47% decreased is observed compared to 2011.
- 69% decline of OB mark-ups reported in 2009-2012 in PSP/Aversi/GPC networks although 8% increase is shown in 2012 compared to 2011.
- 56% mark-up decrease is revealed in PSP/Aversi/GPC network for LPGs in 2009-2012.

PRICE OF A STANDARD TREATMENT

- The standard treatment costs have DECLINED over the course of last four years
- In 2012 standard treatment price is 50%-60% less compared to 2009.
- While standard treatment price in 2012 became significantly less for OBs then for LPGs treating patients with LPG is still much, much cheaper.

Conclusions

Remaining Challenges

- Although there is an overall improvement of drug availability, in 2012 worsening of availability is observed
- Regional inequality in drug availability remains a challenge
- Growing but still low availability of LPGs on the market
- Observed unit median price decline in 2009-2012 requires close look in future.

Possible impact of legislative changes

- Most likely due to increased competition in 2009-2012:
 - ▣ OB prices in the retail network have declined
 - ▣ Availability has slightly improved and
 - ▣ For both OB and LPGs drugs profit margins have been squeezed out due to reductions in mark-ups

Observations

- Decrease in mark-ups for LPGs is a positive change, conditioned that this will motivate suppliers to assure higher availability and uptake of generic drugs on the market.
- Mark-up reductions on OB and LPG is obviously positive sign if this is not a short-term marketing event and if these reductions will be sustained in future.

Major Issues

- Significant reduction of OB mark-up within PSP/Aversi/GPC network is this long term achievement or short term marketing strategy to squeeze the competitor out of market? → close monitoring of competition dynamics is warranted.
- Would economic motives to generate higher profit margins (not profits) will be sufficient to promote and increase uptake of Generic drugs on the market?

What are additional policy options to consider

□ **Supply Side**

- Reference pricing
- **Distribution controls along supply chain**
 - Regressive mark-ups / margins (motivation to dispense lower cost generics)

□ **Demand Side**

- **Defining** lists for insurance reimbursements
- **Promoting** generic substitution policy
- **Influencing the demand of insured patients e.g. higher cost-sharing for OB and lower or no for generics**
- **Strict Controls** for drug promotion, marketing, education, sponsorship gifts to doctors.