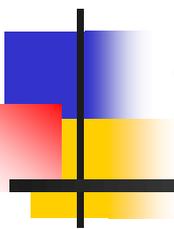


Evaluation of medicine prices, availability, affordability and price structure in Malaysia



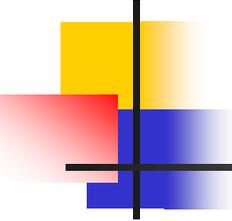
Zaheer-Ud-din Babar

Mohamed Izham Mohamed Ibrahim

Harpal Singh

Nadeem Irfan Bukhari

June 2006



Sampling

- Public Facilities (20, 5 in each region)
- Private Sector Retail Pharmacies (32, 8 in each region)
- Dispensing Doctors (20, 5 in each region)

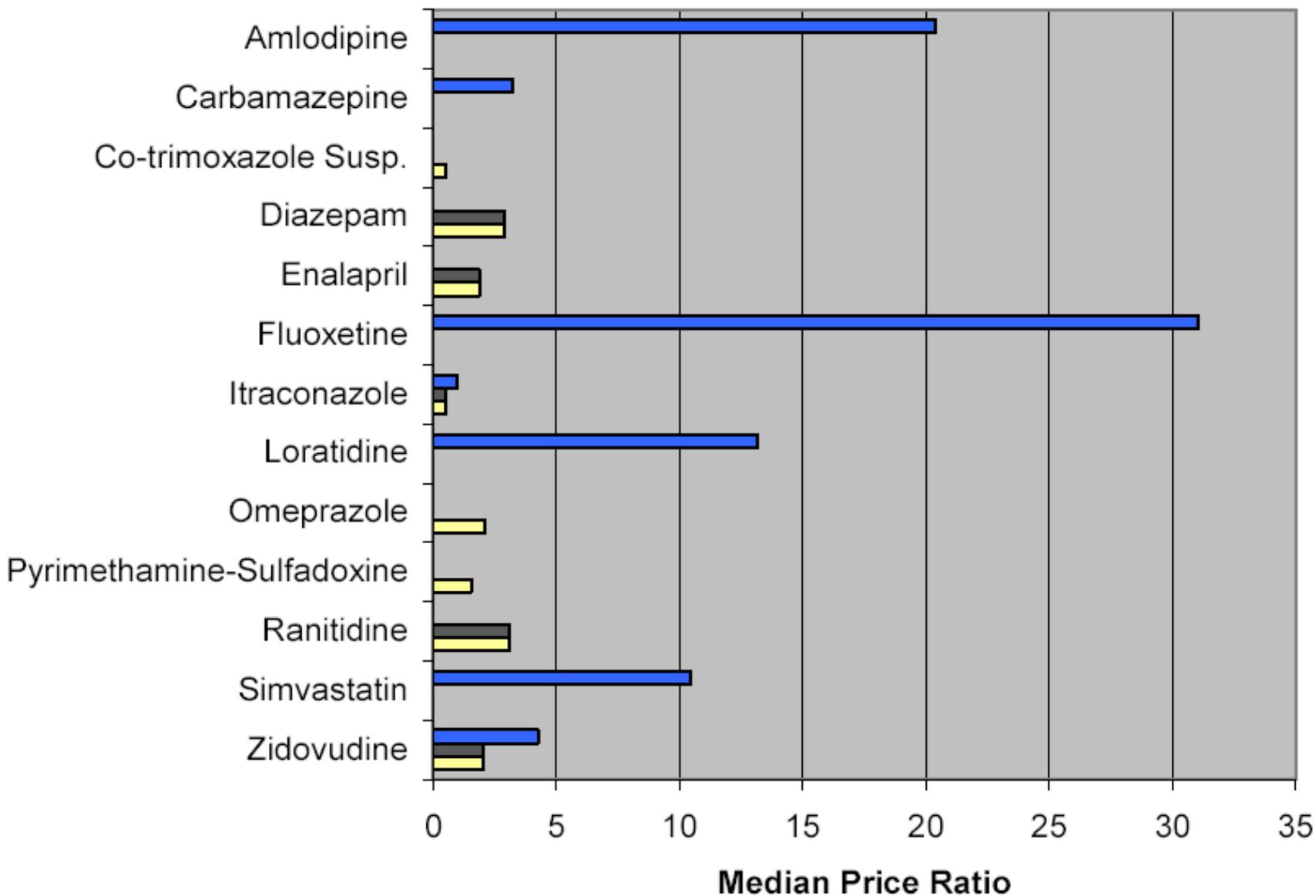
Case Study

- University Hospitals (2)
- Private Hospitals (5)

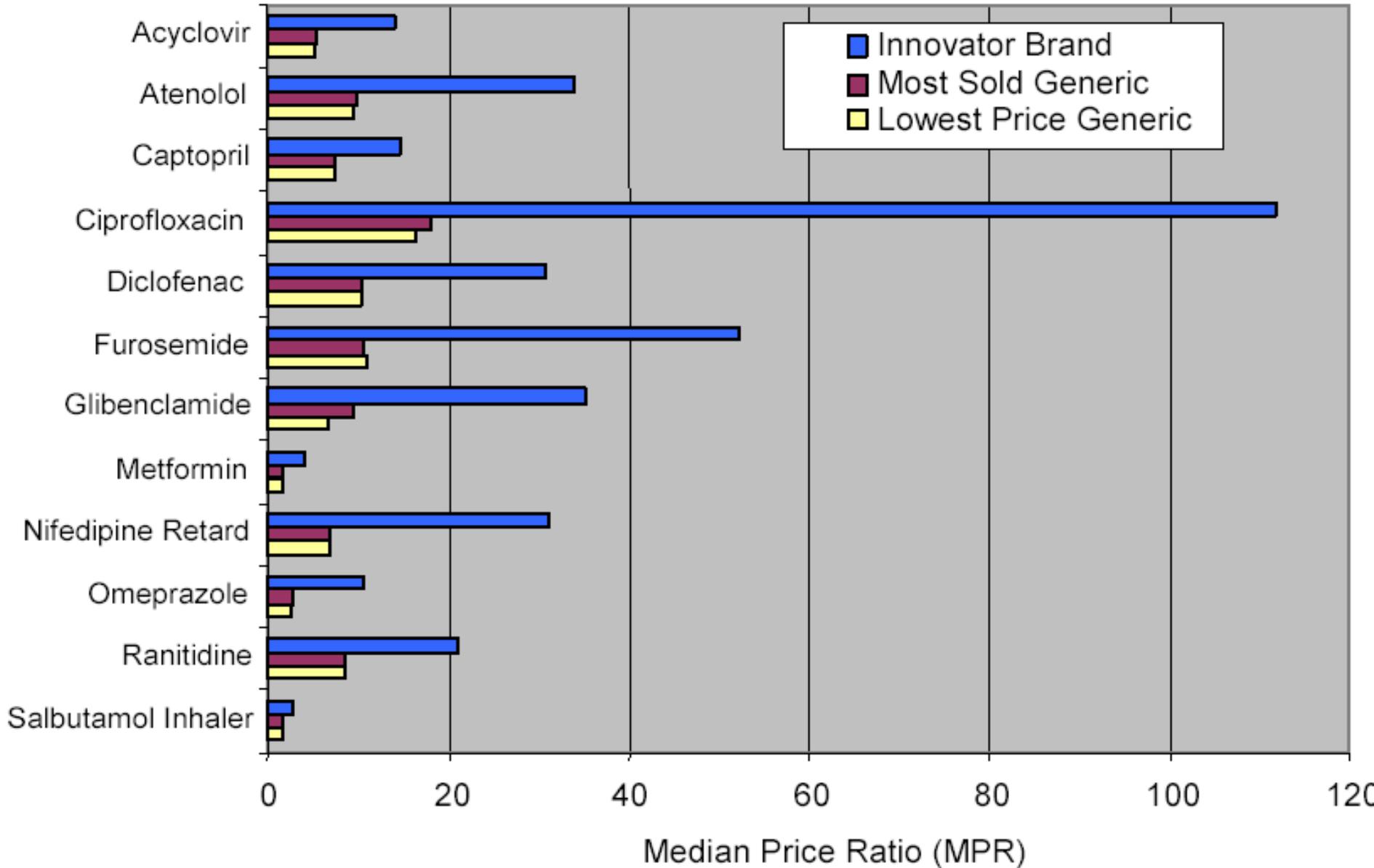
Median MPRs of IB, MSG and LPG in Public for Procurement Sector, Private Sector Retail Pharmacies and Dispensing Doctors Sector

Drugs	Public Sector	PSRP	DDS
Innovator Brands	2.41	16.35	15.40
Most Sold Generic	1.56	6.89	7.76
Lowest Price Generic	1.09	6.57	7.76

Public sector procurement prices

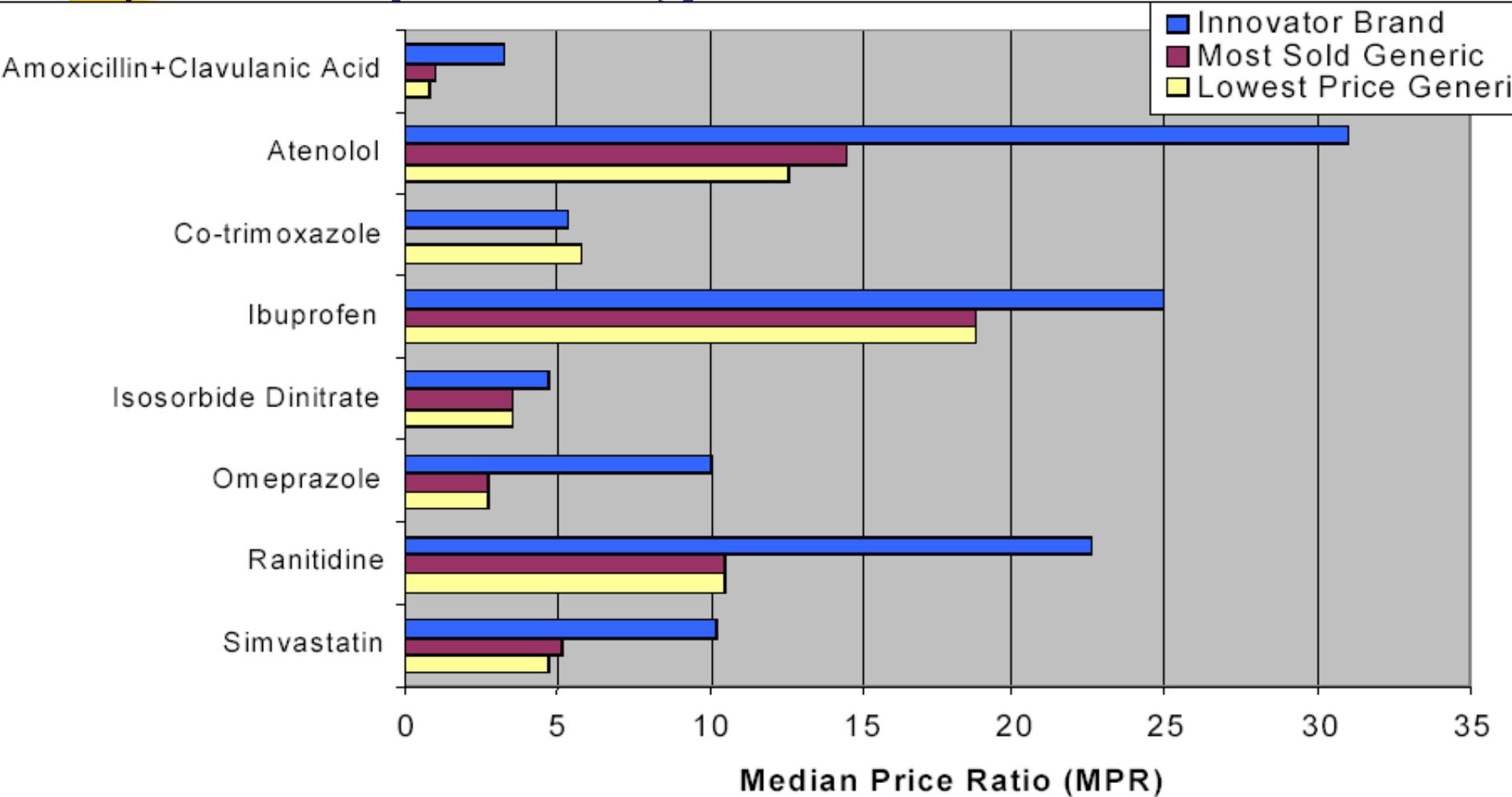


Private Retail Pharmacies

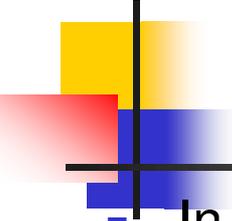




Dispensing doctors



Comparison of Medicine Availability



- In the public sector when all 48 drugs (core and supplementary) were assessed the median availability was low, only 25% of the generic drugs were available in 20 facilities surveyed. However:
 - There was 100% availability of generic furosemide, lovastatin and ranitidine.
 - 90% or more of the facilities had generic propranolol, doxycycline, metformin and nevirapine and 80% had salbutamol inhaler.
- In private pharmacies the median availability of all surveyed medicines was 43% for LPG, 18% for MSG and 39% for IB.
- In dispensing doctor's clinics, the availability was 45% for LPG, 15% for MSG and 10% for IBs.

Affordability of generics

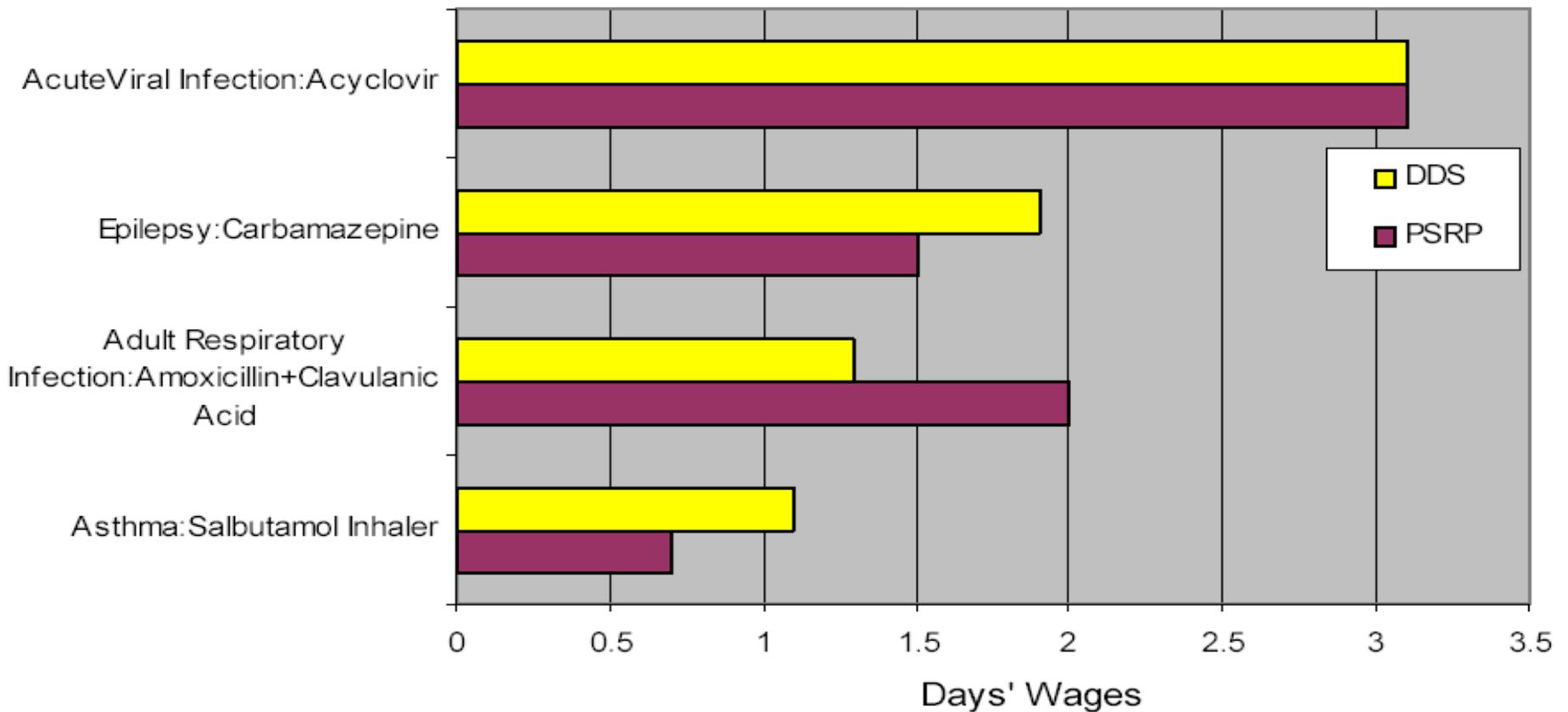
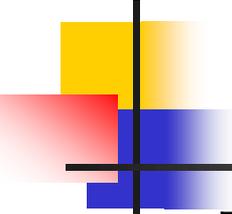
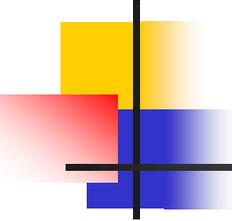


Exhibit 3.14: Comparison of the affordability of generics to treat four conditions when purchased from private pharmacies (PSRP) and dispensing doctor clinics (DDS)



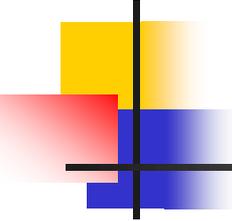
Price Components - Comparison of Retail Mark-ups

Medicine	Retail Pharmacy mark-up	Dispensing Doctor Mark-up
Generic Atenolol 50 mg tab	100%	146%
IB Atenolol 50 mg tab	25%	76%
Generic omeprazole 20 mg caps	140%	317%
IB omeprazole 20 mg caps	38%	50%



Conclusions – excerpts

- Prices were generally high
 - in the private sector for both generics and IB
 - in the public sector for IB
- High availability of branded drugs and comparatively low availability of generic alternatives in the private sector
- Generally high mark-ups along the supply chain, which drives up the price and makes medicines less affordable to the people who need them.
- Profit margins and mark-ups are particularly high in dispensing doctors and private retail sectors for generics as compared to innovator brands.



Recommendations – excerpts

- There is a need for a pricing policy. i.e.
 - Establish maximum wholesale and retail mark-ups
 - Regulate prices of innovator products and generics.
- A price monitoring system is needed in Malaysia.
- Mark-ups must be reasonable and incentives be given such that generics are prescribed and dispensed.
- There should be an investigation as to why generics are expensive and why generic availability is poor.
- There is a need for a generic substitution policy.