Medicine prices, availability, affordability and price components

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WHO, WIPO and WTO Joint Technical Symposium 16 July 2010
Outcome of the WHO/public interest NGOs Roundtable on Pharmaceuticals:

WHO/HAI Project on Medicine Prices and Availability

improve the availability and affordability essential medicines

• Develop and apply a reliable methodology for collecting and analysing price and availability data across healthcare sectors and regions in a country

• Price transparency; survey data on a freely accessible website allowing international comparisons

• Provide guidance on pricing policy options and monitoring their impact
WHO/HAI standard methodology for measuring medicine prices and availability

Facility-based survey that measures:
• medicine prices
• medicine availability
• affordability of treatments
• components in the supply chain

Launched at World Health Assembly in 2003

2nd edition published in 2008 includes:
• adjustments to methodology
• practical advice based on prior surveys
• additional tools and resources
• new guidance on international comparisons, policy options, advocacy and regular monitoring

Manual, tools, database and more: www.haiweb.org/medicineprices
Medicine price and availability surveys to date using WHO/HAI methodology
Median % availability by World Bank income group

A Cameron, M Ewen, D Ross Degnan, D Ball, R Laing The Lancet online 1 Dec 2008

- **Public sector generics**
  - India (n=7)
  - Other low-income (n=15)
  - Lower-middle (n=9)
  - Upper-middle (n=3)
  - Mean: 27.0%

- **Private sector generics**
  - India (n=7)
  - Other low-income (n=17)
  - Lower-middle (n=11)
  - Upper-middle (n=3)
  - Mean: 60.7%

- **Private sector originator brands**
  - India (n=7)
  - Other low-income (n=17)
  - Lower-middle (n=11)
  - Upper-middle (n=4)
  - Mean: 43.1%
### Mean % availability of medicines to treat acute and chronic diseases

*J Roubos, A Cameron, M Ewen, Laing R et al 2009*

<table>
<thead>
<tr>
<th></th>
<th>Public sector</th>
<th></th>
<th>Private sector</th>
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<tbody>
<tr>
<td></td>
<td>Generics (n=35)</td>
<td>Acute conditions</td>
<td>Generics (n=40)</td>
<td>Acute conditions</td>
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<tr>
<td></td>
<td></td>
<td>53.5%</td>
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<td>66.2%</td>
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<td>Originator brands (n=34)</td>
<td>Acute conditions</td>
<td>Originator brands (n=39)</td>
<td>Acute conditions</td>
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<td>5.5%</td>
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<td>39.1%</td>
</tr>
<tr>
<td></td>
<td>Any product type (n=35)</td>
<td>Acute conditions</td>
<td>Any product type (n=40)</td>
<td>Acute conditions</td>
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<tr>
<td></td>
<td></td>
<td>55.9%</td>
<td></td>
<td>74.8%</td>
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<tr>
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<td>Generics (n=40)</td>
<td>Chronic conditions</td>
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<td>Chronic conditions</td>
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<tr>
<td></td>
<td></td>
<td>36%</td>
<td></td>
<td>54.7%</td>
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<td>Originator brands (n=39)</td>
<td>Chronic conditions</td>
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<td>Chronic conditions</td>
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<td></td>
<td></td>
<td>9.6%</td>
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<td>39.1%</td>
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<tr>
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<td>Any product type (n=40)</td>
<td>Chronic conditions</td>
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<td></td>
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<td>41.6%</td>
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<td>69.2%</td>
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<td></td>
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<td>17.5%</td>
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<td>11.5%</td>
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<td>-4.1%</td>
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<td>0%</td>
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<td>14.3%</td>
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<td>5.6%</td>
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</tbody>
</table>
Median government procurement prices, lowest priced generics

- **max**
- **min**
- **mean**

<table>
<thead>
<tr>
<th>World Bank Income Group</th>
<th>Median Price Ratios</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>low income: India (n=7)</td>
<td>0.78</td>
<td>±0.15</td>
</tr>
<tr>
<td>other low income (n=16)</td>
<td>1.17</td>
<td>±0.59</td>
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<tr>
<td>lower middle income (n=11)</td>
<td>2.94</td>
<td>±0.51</td>
</tr>
<tr>
<td>upper middle income (n=5)</td>
<td>1.76</td>
<td>±0.31</td>
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<tr>
<td>MPR=1</td>
<td>1.39</td>
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<tr>
<td></td>
<td>0.90</td>
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Note: MPR=1 indicates the median price ratio.
Public sector patient prices

• In many countries medicines are free but availability is often very poor

• Good procurement prices are not always passed on to patients e.g. Khartoum over 500% mark-up

• In some countries, public sector prices are similar to private sector prices e.g. China, Shanghai
Median patient prices, private sector

Adjusted CPI & PPP

Originator brands
Lowest priced generics

<table>
<thead>
<tr>
<th>Income Category</th>
<th>Originator Brands</th>
<th>Lowest Priced Generics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low income India (n=7)</td>
<td>12.5</td>
<td>9</td>
</tr>
<tr>
<td>Other low income (n=15)</td>
<td>39.7</td>
<td>14</td>
</tr>
<tr>
<td>Lower-middle income (n=4)</td>
<td>41.6</td>
<td>17.5</td>
</tr>
<tr>
<td>Upper-middle income (n=3)</td>
<td>40.1</td>
<td>9</td>
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Differences between originator brands & lowest priced generics, matched pairs, private sector

The chart illustrates the percentage differences in prices between originator brands and lowest priced generics across different income groups. The data is categorized by income level:

- Low income: India (n=7)
- Other low income (n=14)
- Lower-middle income (n=12)
- Upper-middle income (n=3)
- All low- and middle-income countries (n=36)

Key observations:
- The median price difference for low income: India is 26.0%.
- For other low income countries, it is 6.0%.
- Lower-middle income shows a median of 0.0%.
- Upper-middle income has a median of 260.2%.
- Across all low- and middle-income countries, the median price difference is 0.0%.

The chart highlights significant price variability among different income groups, with the highest recorded differences in the upper-middle income category.
Affordability: mean number of days wages of the lowest paid unskilled govt. worker needed to buy 60 glibenclamide 5mg tabs, for diabetes, in the private sector (by WHO region)
**Affordability:** no. of days wages, lowest paid govt. worker, to buy 7 day course ciprofloxacin 500mg tab twice daily, private sector
Global snapshot 11 May 2010
Average price US$ 10ml traditional vial soluble human insulin 100IU/ml, private sector
Eli Lilly brand
Price components

• Largest contribution to the final patient price varies across countries, sectors, medicines (imported/locally manufactured, originator brand/generic)

• Applied cumulatively so the higher the manufacturer’s selling price the higher the patient price

• Evidence private sector: 25% in Pakistan to >6000% in El Salvador

• Large mark-up on a low priced medicine can result in a lower patient price than a smaller mark-up on a more expensive medicine

• Taxes, tariffs and other government charges are often applied on medicines
  eg Tajikistan - VAT 20%, customs duty 5%, local tax 1-5%
  Sudan - customs duty 10%, Ministry of Defence tax 1%, Pharmacy career fee 1% & other charges totally 20%
Important strategies to improve the availability and affordability of essential medicines

Make medicines affordable and available

• Provide essential medicines free of charge in the public sector and ensure adequate financing and efficient supply systems to prevent stock-outs
• Remove taxes, tariffs and other govt charges on medicines, and regulate margins in the supply chain
• Mandate generic substitution and create incentives for pharmacists to dispense the low priced generics
• Utilise TRIPS flexibilities and do not accept TRIPS-plus conditions in trade negotiations

Ensure quality

• Ensure only good quality medicines are on the market
Important strategies to improve the availability and affordability of essential medicines

Ensure public sector procurement efficiency

• Limit public sector procurement to the essential medicines list, which should be regularly updated
• Centralise medicine procurement at the national level to obtain better prices, and buy low-priced generics of off-patent medicines instead of high-priced originator brands
• Share medicine procurement price information regionally to strengthen governments’ negotiation power

Inform the public

• Ensure the public has easy access to information about the price they should pay for a medicine
• Encourage active involvement by consumer, patient and health professional organisations in education initiatives about the use of generic medicines
I DON’T TAKE CHANCES
I ONLY USE ORIGINALS

"Tengo diabetes, si mi medicamento falla podría sufrir un coma diabético."

YO NO ME LA JUEGO
uso sólo ORIGINALES.

Los medicamentos originales cuentan con estudios que respaldan su calidad, eficacia y seguridad

Respete la receta médica. Pregunte a su médico o regente farmacéutico cuál es el medicamento original.

Laboratorios asociados a Fedefarma
In May 2008 Health Action International (HAI) and the World Health Organization (Department of Medicine Policy and Standards) published the 2nd edition of a manual to collect and analyse medicine prices (patient prices and government procurement prices) across sectors and regions in a country, as well as medicine availability, treatment affordability and all price components in the supply chain from manufacturer to patient (taxes, mark-ups etc.).

Governments, civil society groups and others concerned about the prices of medicines are encouraged to undertake a survey using the methodology outlined in the manual. Reliable data is the first step to exploring policy options and taking action to reduce prices and improve the availability and affordability of essential medicines. The results of over 50 surveys are currently available on the database, along with survey reports and other information.

Policies and practices that impact on the availability and affordability of medicines

- National medicines policy
- Medicines regulatory authority
- Pricing policy
- Medicine financing
- Generic medicines policies
- Pharmacists remuneration
- Internal reference pricing
- External reference pricing
- Medicines budget
- Public procurement
- Supply chain mark-ups
- Pharmaceutical promotion
- Scheduling of medicines
- Pharmacoeconomic analysis
- Sustainable supply chain
- Insurance schemes medicines benefits