Pharmaceutical Pricing and Reimbursement – Inputs from a Global Perspective

Andreas Seiter, Vienna (June 2007)
World Bank support for health systems development

- Loans for capacity building through investments into systems and people
- Loans as incentives for policy reforms
- Technical assistance
- Policy dialogue
- Assistance in spending money from other donors (EU)
Pharmaceutical policy related projects 2004-2007

- Ghana
- Lebanon
- Turkey
- Bulgaria
- Serbia
- Montenegro
- Bosnia & Herzegovina
- Iran
- Albania
- Saudi Arabia
- Poland
- India
- Kosovo
- Romania
Pharmaceutical expenditure - OECD

Chart 5. Drug expenditure per capita, public and private expenditure, OECD countries, 2004

USD PPP

Trends in financing over >10 years

Chart 4. Change in share of public spending on health, OECD countries, 1990-2004
(Ranked by public share of health expenditure in 1990)

How much will we pay for drugs in 2017?

Source: The Patented Medicines Prices Review Board, Canada (OECD data)
What the data suggest

- Pharmaceutical expenditure grows faster than GDP (exception: New Zealand, see below)
- Countries respond differently – increasing public expenditure or accepting higher out-of-pocket expenditure
- OECD per capita expenditure for drugs is about 2-5 times higher than in middle income European countries and about 5-10 times higher than for example in Egypt or Iran
Exception – New Zealand

Figure 4-1  Per Capita Expenditure on Pharmaceuticals, New Zealand & Australia

Source: PHARMAC, Statistics NZ, RML4NZ
Does frugality have a price?

Figure 7-4  Coronary Bypass Operations (per 100,000)

Source: OECD Health Data, 2004
Macro-view on drug expenditure

- Overall, pharmaceuticals have shown to improve outcomes and sometimes save costs (hospitalization, surgery etc.)
- Inevitable cost drivers:
  - Innovation
  - Aging populations
  - Better informed and more demanding patients
  - Better diagnosis and easier access to health care
- “Rule of thumb”: Drug expenditure grows at twice the rate of GDP (for Middle-Income-Countries)
- Need to increase efficiency within pharmaceutical system and realize savings elsewhere in the system
How long does it take to catch up?

At a growth rate of 10% p.a., it will take 18 years to catch up with a country that currently spends three times as much and has a 3% growth rate.
Who is going to pay for it?

- Public health insurance?
- Private out of pocket?
- Private or complementary insurance?

- Issues:
  - Fiscal sustainability
  - Equity of access
  - Protection against catastrophic costs of illness
What makes pharmaceutical policy decisions so difficult?

- Increasing access to health information – expectations grow faster than funding
- Drugs are “proxy” for satisfaction with health system
- Lack of cost transparency across “silos” makes health economic assessment difficult
- High commercial importance of drugs creates pressures on policy makers
Who are we dealing with?

Source: World Bank country database, Annual Reports
Navigating between two rocks

- Fiscal ruin by giving in to the pressure from providers and patients
- Losing political support by rationing and restricting access
Typical patterns of dysfunction

- Inclusive reimbursement lists, low co-payments: cost explosion
- Limited reimbursement lists, high co-payments: erosion of political support
- Inefficient allocation of limited funds
- Short-sighted regulation undermines market forces
- Unchecked volume expansion
- Lack of expert and provider accountability for cost and quality
## Top 10 list according to health insurance spending in 2006 (Romania)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Brand, INN Name, Manufacturer</th>
<th>CNAS Expenditure 2006 (million RON)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Neorecormon, beta-erythropoietin, Roche</td>
<td>70.1</td>
</tr>
<tr>
<td>2</td>
<td>Pegasys, alpha-peginterferon, Roche</td>
<td>62.6</td>
</tr>
<tr>
<td>3</td>
<td>Zyprexa, olanzapine, Eli Lilly</td>
<td>50.8</td>
</tr>
<tr>
<td>4</td>
<td>Tertensiv, indapamide, Servier</td>
<td>33.6</td>
</tr>
<tr>
<td>5</td>
<td>Copegus, ribavirin, Roche</td>
<td>28.5</td>
</tr>
<tr>
<td>6</td>
<td>Sermion, nicergolin, Pharmacia Upjohn</td>
<td>27.4</td>
</tr>
<tr>
<td>7</td>
<td>Lipanthyl, fenofibrat, Fournier</td>
<td>24.8</td>
</tr>
<tr>
<td>8</td>
<td>Detralex, diosmin (comb), Servier</td>
<td>24.8</td>
</tr>
<tr>
<td>9</td>
<td>Plavix, clopidogrel, Sanofi-Aventis</td>
<td>22.6</td>
</tr>
<tr>
<td>10</td>
<td>Xalatan, latanoprost, Pfizer</td>
<td>21.7</td>
</tr>
</tbody>
</table>
Pragmatic reimbursement policy options

- A scoring tool based on secondary data to define access to public funds
- Hard and smart bargaining with manufacturers (risk sharing deals)
- Tapping into efficiency reserves (generic competition, efficient supply chains, diagnostic groups)
- Improving utilization of drugs (guidelines, education, training & coaching, systems, incentives)
A simple score to assess drugs

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Yes = 2</th>
<th>partially = 1</th>
<th>no = 0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive decision country 1</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Positive decision country 2</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Positive decision country 3</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Positive decision country 4</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Positive decision country 5</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Directly life threatening or debilitating disease</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>No satisfactory treatment available yet</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>New product has disease-modifying action</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>New product has strong action on symptoms</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>High indirect costs of disease</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>High priority disease for public health</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Not more expensive than current treatment</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Infrastructure/knowledge for safe and effective use</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>of product exist in our country</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
<tr>
<td>Out-of-label use can be contained</td>
<td>□</td>
<td>□</td>
<td>□</td>
</tr>
</tbody>
</table>

Needs to be refined, tested and developed as a full scale instrument with detailed instructions for use
How effective is price regulation?

- Truly innovative drugs have global price bands, limiting effectiveness of reference pricing models
- Regulators have limited bargaining power or they risk trade conflicts (Brazil, Thailand)
- Need to investigate risk sharing deals; negotiated access packages for low income patients; pay for outcome etc. instead of focusing only on price
- Generic prices have downward room in many countries – materializing in the form of generous rebates/bonuses to distributors
- Reimbursement systems can be used to create more competition among generics and capture the efficiency reserve
Using reimbursement to create competition among generics

In this example, the reimbursement authority invites bids from makers of a given generic. Bidders have to state the maximum volume they can supply. Winners 1 and 2 together can supply the whole market and get higher reimbursement than all others (90%). Brands 3-6 only get 70% of the price of Brand 2 as reimbursement, creating a significant commercial barrier for these brands. Their manufacturers can come back with a better offer in the next round.
Factors influencing use of medicines

- Education
- Training
- Financial incentives
- Advertising, promotion
- Bribes, kickbacks
- Prejudice, beliefs
- Treatment guidelines
- Peer influence
- Monitoring and feedback
- Management systems
Systems to monitor medicine use

Information on doctor, pharmacy, drug and patient is coded on the Rx form and centrally collected.

Online feedback in real time can inform doctors and pharmacists about deviations from formulary, drug interactions, pre-clearance requirements etc.
Framework for decision making

- Overall economic growth
- Regional standards, supra-national realities (for example EU)
- Governance and enforcement capacity
- Characteristics of existing health system
- Options for savings and mobilization of additional financing
- Health economics assessment capacity
- “Political economy” – what is doable, how can difficult reforms be orchestrated