Optimizing the Cost and Quality of HIV / AIDS Care and Treatment

Anil Soni, Clinton HIV / AIDS Initiative
19th Board Meeting, Geneva
6 May 2009
The Global Fund aims to optimize the ratio of impact to cost

Low quality services undermine the impact of Global Fund investments...

- ~60% of patients are on regimens that the WHO has recommended moving away from;
- Late initiation and high attrition rates negatively impact morbidity and mortality.

...While increasing demand is driving up total care and treatment costs

- HIV/AIDS treatment already represents ~20% of the Global Fund’s grant budgets;
- These costs will rise as more people access services and migrate to second line therapy.
Second line treatment is intrinsically more expensive than first line treatment...

... And some second line regimens are intrinsically more expensive than others

1. Dosing*

<table>
<thead>
<tr>
<th>2nd-Line</th>
<th>1st-Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>1425 mg / day&lt;sup&gt;1&lt;/sup&gt;</td>
<td>730 mg / day&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

2. Chemistry*

<table>
<thead>
<tr>
<th>2nd-Line</th>
<th>1st-Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>~$2,000 / kg&lt;sup&gt;3&lt;/sup&gt;</td>
<td>$575 / kg&lt;sup&gt;4&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2006**</th>
<th>2009***</th>
<th>2010+</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,620/yr</td>
<td>$944/yr</td>
<td>?</td>
</tr>
<tr>
<td>$802/yr</td>
<td>$590/yr</td>
<td>?</td>
</tr>
<tr>
<td>N/A</td>
<td>$450-$500/yr&lt;sup&gt;6&lt;/sup&gt;</td>
<td>?</td>
</tr>
</tbody>
</table>

<sup>1</sup>[TDF+3TC] or [ddl+ABC]+[LPV/r or ATV+RTV]; 2d4T+3TC+NVP; 3LPV; 4d4T; 5Based on conversations between suppliers and UNITAID / CHAI, this product is expected to be available in co-packaged form later this year and in FDC form in 2010. 6Indicative price based on ongoing negotiations between suppliers and UNITAID / CHAI.

Source: *WHO; **GPRM; ***Pricing agreements announced by UNITAID and CHAI on April 17, 2009
Such changes occur slowly for several reasons:

- Long registration processes delay product introduction;
- Lack of market information can delay changes to national treatment guidelines;
- Lack of information inhibits providers’ ability to “pull” new products into the market;
- Supply chain challenges prevent “push” of new products into local markets;
- Reprogramming is not actively used to absorb additional costs.

Example: Short-term opportunity - manage the cost of second line therapy (2 of 2)

Second line treatment will be a significant cost driver going forward

<table>
<thead>
<tr>
<th>1st-Line</th>
<th>2nd-Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients on ARVs in 2010</td>
<td>Cost of ARVs in 2010</td>
</tr>
<tr>
<td>5%</td>
<td>25%</td>
</tr>
</tbody>
</table>

200K patients on a less costly regimen could save $100 million per year*

- 2nd-Line
  - ddl+ ABC+ LPV/r
  - $944
- 1st-Line
  - TDF+ 3TC+ ATV+RTV
  - $450-$500²

1Based on conversations between suppliers and UNITAID / CHAI, this product is expected to be available in co-packaged form later this year and in FDC form in 2010.
2Indicative price based on ongoing negotiations between suppliers and UNITAID / CHAI.
Source: *Pricing agreements announced by UNITAID and CHAI on April 17, 2009.
Medium-term priority – how to optimize impact & cost of first line therapy

Although the price of TDF-based first line has and will continue to fall, d4T-based first line will remain less expensive … … The improved health outcomes associated with non-d4T regimens may make them a better investment given the Global Fund’s objectives

$509*
$210**
?<$100**

WHO 2006 Guidelines for ART for HIV Infection in Adults and Adolescents:
“It is important to begin planning to move away from d4T-containing regimens so as to avoid or minimize the predictable toxicities associated with this drug.”
“Tenofovir is now included as a preferred first-line NRTI, because of its efficacy, ease of use and safety profile.”

Source: *GPRM, **Pricing agreements announced by UNITAID and CHAI on April 17, 2009
Additional levers exist to optimize the ratio of impact to cost

**Examples**

**Technology Choice**
- Fixed Dose Combinations
- Higher quality treatment for opportunistic infections
- Point-of-Care diagnostics

**Clinical Policy**
- Isoniazid preventative therapy
- Cotrimoxizole prophylaxis
- Criteria to initiate treatment

**Service Delivery**
- Task shifting
- Supply chain management
- Laboratory systems design

**Systems Strengthening**
- Investments in human resources for health
- Health management information systems
- Quality management initiatives
1. **Study the risks and opportunities**
   Project the long term cost and quality implications of the variety of alternatives facing implementers

2. **Take action in the short-term**
   Manage the portfolio in a manner consistent with the Global Fund’s role as a financing mechanism

3. **Build capacity for the future**
   Ensure roles for the Fund, on an ongoing basis, consider opportunities to optimize the ratio of impact and cost

**Recommendations for the Global Fund**

- Revise proposal and renewal forms and guidelines;
- Encourage the use of reprogramming to optimize the ratio of cost to quality;
- Conduct active portfolio reviews where appropriate;
- Adjust performance metrics