The Goals Model as a Tool for Allocating HIV/AIDS Resources & Strategic Planning
How do the Tools Fit?

- Surveillance Data
- Census/UN Pop Division Estimates
- UNAIDS model epidemic patterns
- Costing and coverage data
- Existing effectiveness data

What is the prevalence of HIV/AIDS? (Workbook Method)

What is the impact of HIV/AIDS? (Spectrum)

What resources are required? (Resource Needs Model)

How should we allocate resources? (Goals)
Current Strategic Plans

Goals → Objectives → Activities → Budgets

- Budgets are not linked to goals!
Why is Goals Necessary?

• Informs resource allocation decisions with information from every published study on the costs and effectiveness of various interventions.

• Allows the user to see the trade-offs between various resource allocation strategies.

• Encourages dialogue among government & civil society regarding resource allocation decisions.
How was Goals Developed?

- Reviewed national strategic plans from 20 countries.
- Reviewed and evaluated 241 published and unpublished papers on the impact of HIV/AIDS interventions in developing countries and the costs of interventions.
- Developed the model in Excel (also being made available in Spectrum)
- Pilot tested Goals in 7 developing countries (4 in Africa, 3 in Asia).
Why Use Goals in the Caribbean?

• To improve resource allocation for a country’s HIV/AIDS programs
  – How much funding will be required to reach the goals of the strategic plan?
  – What goals can be achieved with the available resources?
  – What is the effect of alternate patterns of resource allocation on goals and cost-effectiveness?
Structure of the *Goals* Model

<table>
<thead>
<tr>
<th>Programs</th>
<th>Budget</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy Interventions</td>
<td>$</td>
<td></td>
</tr>
<tr>
<td>Prevention</td>
<td>$</td>
<td>%</td>
</tr>
<tr>
<td>Care and treatment</td>
<td>$</td>
<td>%</td>
</tr>
<tr>
<td>Mitigation</td>
<td>$</td>
<td>%</td>
</tr>
<tr>
<td>Program support</td>
<td>$</td>
<td></td>
</tr>
</tbody>
</table>

- **Improved Policy environment**
  - Improved Policy environment
  - Behavior change
    - age at first sex
    - number of partners
    - condom use
    - STI treatment
    - safe injections

- **New HIV infections**
- **Increased care, treatment & mitigation**
- **Treatment Coverage**
Goals

HIV Prevalence/Incidence 15-49

Coverage of Care & Treatment

- Palliative
- OI Tx
- OI Pro
- ARV
- TB
Kenya – HIV Incidence (%)
Disclaimer

• Model output depends critically on assumptions about unit costs and impact
  – Best studies are more likely to be published
  – Poorly implemented programs will not have same impact as good programs
• Difficult to capture synergies
• Cost-effectiveness is not the only basis for resource allocation decisions
Approach

Goals is intended to be a tool to assist interactive discussions among all stakeholder.
Countries with Initial Goals Applications

- Lesotho
- South Africa
- Kenya
- Tanzania
- Cambodia
- Vietnam
- Nepal
- Honduras

-Plans for: Mozambique, Rwanda, Malawi, Zambia, Ethiopia, Guatemala, China
Experience to Date

Goals works best when:

• Implemented by an interdisciplinary technical team

• Combined technical team and advocacy team in resource allocation workshops

• Carried out as a key component in:
  – strategic planning,
  – evaluation or
  – proposal development (e.g., Global Fund application)
### 2003 HIV/AIDS Base Budgets (millions)

<table>
<thead>
<tr>
<th>Country</th>
<th>USAID</th>
<th>HHS/CDC</th>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td>10.55</td>
<td></td>
<td>19.00</td>
<td>14.25</td>
</tr>
<tr>
<td>Cote d'Ivoire</td>
<td>7.75</td>
<td></td>
<td>14.00</td>
<td>10.50</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>21.95</td>
<td>7.30</td>
<td>43.00</td>
<td>32.25</td>
</tr>
<tr>
<td>Guyana</td>
<td>4.20</td>
<td>1.90</td>
<td>10.00</td>
<td>7.50</td>
</tr>
<tr>
<td>Haiti</td>
<td>7.75</td>
<td>2.00</td>
<td>22.00</td>
<td>16.50</td>
</tr>
<tr>
<td>Kenya</td>
<td>26.45</td>
<td>10.22</td>
<td>76.00</td>
<td>57.00</td>
</tr>
<tr>
<td>Mozambique</td>
<td>14.45</td>
<td>3.54</td>
<td>27.00</td>
<td>20.25</td>
</tr>
<tr>
<td>Namibia</td>
<td>7.60</td>
<td>3.60</td>
<td>23.00</td>
<td>17.25</td>
</tr>
<tr>
<td>Nigeria</td>
<td>24.45</td>
<td>5.16</td>
<td>59.00</td>
<td>44.25</td>
</tr>
<tr>
<td>Rwanda</td>
<td>12.95</td>
<td>2.94</td>
<td>35.00</td>
<td>26.25</td>
</tr>
<tr>
<td>South Africa</td>
<td>24.45</td>
<td>8.12</td>
<td>70.00</td>
<td>52.50</td>
</tr>
<tr>
<td>Tanzania</td>
<td>17.95</td>
<td>5.98</td>
<td>49.00</td>
<td>36.75</td>
</tr>
<tr>
<td>Uganda</td>
<td>27.95</td>
<td>10.14</td>
<td>87.00</td>
<td>65.25</td>
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<tr>
<td>Zambia</td>
<td>25.50</td>
<td>4.11</td>
<td>66.00</td>
<td>49.50</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>215.65</strong></td>
<td><strong>83.31</strong></td>
<td><strong>600.00</strong></td>
<td><strong>450.00</strong></td>
</tr>
</tbody>
</table>

Increased Resources Requires Improved Allocation
The Application of the Goals Model in Other Countries
How has Goals been Applied?

An Example from Kenya
Kenya’s Principle Objectives

- Reducing HIV prevalence in Kenya by 20 to 30 percent among people aged 15 to 24 years by 2005.
- Increasing access to care and support for people infected and affected by HIV/AIDS in Kenya.
- Strengthening response, capacity and coordination at all levels.
Can these Objectives be Achieved with the Available Resources ($710 million over 5 years)?

If not, can they be achieved through a combination of improved allocation and additional resources?
How Is Goals Being Used in Kenya?

- Collected data on HIV/STI prevalence, sexual behavior and the costs of prevention and care programs (April 2002)
- Conducted 2, 1-week Goals training sessions with 17 Kenyans from civil society and various government ministries (May 2002 and February 2003)
- Matched the model to Kenya’s Resource Envelope and alternative scenarios were modeled
Will $710 million over 5 years produce...

A 25% reduction in HIV prevalence among 15 to 24 years olds by 2005?

Increased access to care and support for people infected and affected.

Strengthened response, capacity and coordination at all levels
NRE expected to reduce HIV prevalence by 14% by 2005

HIV Prevalence (15-24)

- With NRE
- No additional resources
- Goal

Goal: 25% Reduction

No additional resources

Uses of the different scenarios

- **Current plan scenario**: How much of an impact will currently planned funding have?
- **Improved allocation scenario**: What can be achieved with currently planned resources but programmed in a more cost-effective manner?
- **Full cost scenario**: What is the full cost of achieving the reduction of prevalence required by the strategic plan?
## GOALS RESULTS


<table>
<thead>
<tr>
<th>Source</th>
<th>Reduction in HIV Prevalence</th>
<th>Recurrent Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Plan Scenario</td>
<td>13.8%</td>
<td>$710 million</td>
</tr>
<tr>
<td>Improved Allocation Scenario</td>
<td>+3.2%</td>
<td>$0</td>
</tr>
<tr>
<td>Marginal Resources</td>
<td>+8.0%</td>
<td>$60 million</td>
</tr>
<tr>
<td>Full Cost Scenario</td>
<td>25.0%</td>
<td>$770 million</td>
</tr>
</tbody>
</table>
Level of Coverage Low for OI Prophylaxis and ARVs
Cost of Increasing Access to ARVs

- Currently 7,000 Kenyans have access to ARVs (4% of those in need) (no public subsidies)
- Kenya’s GFATM application indicated that they wished to subsidize access for 60,000 people (23% of those in need) by 2005
- Cost of ARVs estimated to be between $64 million and $76 million
Conclusions


- NACC needs to influence donor & government resources to the most effective interventions.

- Additional resources of approximately US$60 million will be necessary to achieve the prevention target.

- For Kenya to provide access to 60,000 PLHAs, additional resources of between $64 and $76 million will be required in 2004 and 2005.
How has Goals been Applied?

An Example from South Africa
Results from Goals Application in South Africa

- Goals showed little funding for sex workers. As a result, the MTEF recommends increased funding for this area.

- Goals confirmed that government programs are doing virtually nothing with MSMs and IDUs and that very little information is available on these behaviors. Government agrees to research these groups (but no new funding yet).

- Goals showed that condom provision was falling short of need. More funding for condoms is now programmed.

- Goals confirmed previous estimates of the amount needed for PMTCT.

- Goals confirmed that a nationwide ARV program is affordable. Government has agreed in greatly expand access to ARVs.
How has Goals been Applied?

An Example from Lesotho
Lesotho: Goals and Resource Requirements

- **Inventory of available funding**: $10
- **Initial Budget Estimates**: $333
- **Budget Allocation Team**: $99
- **Priority Setting Team**: $41

The graph shows the inventory of available funding, initial budget estimates, budget allocation team, and priority setting team in millions of US dollars per year.