Update from GAVI

Aurelia Nguyen

Vaccine Industry Consultation
(Copenhagen, Denmark, 27 June 2012)
GAVI vaccine support

- **Currently supported vaccines:** pentavalent, pneumococcal, rotavirus, meningitis A, human papillomavirus (HPV), rubella, yellow fever and measles second dose and selected campaigns
  - Also: meningitis and yellow fever vaccine stockpiles
- **Prioritised for future support:** Japanese encephalitis (c.2015) and typhoid (c.2017) vaccines
- **Monitoring development:** malaria (c.2016), dengue (c.2017)
- **New options:** cholera and polio IPV

(year of potential first introduction)
June Board update: Outlook through 2020

GAVI Cash Outflows Estimates (US$ millions)
2011 - 2020

- 2012-15: $1.8 bn per year
- 2016-20: $1.6 bn per year

Prior to any additional vaccines or policy changes

Includes the new vaccine windows
(MR, HPV, JE, typhoid)

Prior to any other new vaccines (and measles option)

2011-15: $8.0 bn
2016-20: $7.9 bn
Indicative
GAVI Alliance Board update

- Rotavirus and pneumococcal supply constraints
- Enhancing GAVI’s investment in measles prevention
- Vaccine introduction grant and operational support for campaigns
- Polio
- Cholera
- Lower Middle Income Countries
Rotavirus forecast v 5.0 unconstrained

*Source demand forecast v5.0*
Rota: supply constrained annual introductions

* Source demand forecast v5.0
Pneumo demand v 5.0 unconstrained introductions

* Source forecast based on SDF v5.0
Pneumo: supply constrained annual introductions

* Source forecast based on SDF v5.0
GAVI’s commitments strengthen measles control

- $197M since 2004, primarily to the Measles Initiative for campaigns
- Routine second dose of measles
- Investments in health systems and improving immunization coverage
- Support for measles-rubella through wide-age campaigns
- Performance-based funding mechanism includes measles coverage indicator
Enhanced support

- Six large countries estimated by WHO at high risk of outbreaks prior to introducing MR

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Afghanistan</td>
<td>66</td>
<td>62</td>
</tr>
<tr>
<td>DR Congo</td>
<td>63</td>
<td>68</td>
</tr>
<tr>
<td>Chad</td>
<td>59</td>
<td>46</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>86</td>
<td>81</td>
</tr>
<tr>
<td>Nigeria</td>
<td>69</td>
<td>71</td>
</tr>
<tr>
<td>Pakistan</td>
<td>88</td>
<td>86</td>
</tr>
</tbody>
</table>

- Response to outbreaks and emerging needs
### Projected Cost Estimates (US$ millions)

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outbreak funds - Pass to MR Initiative</td>
<td>5</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>55</td>
</tr>
<tr>
<td>Funds for vaccines by proposals – up to 6 countries ($0.42/dose)</td>
<td>0</td>
<td>21</td>
<td>3</td>
<td>17</td>
<td>1</td>
<td>-</td>
<td>42</td>
</tr>
<tr>
<td>Funds for operational costs – up to 6 countries ($0.65/person)</td>
<td>0</td>
<td>33</td>
<td>4</td>
<td>26</td>
<td>1</td>
<td>-</td>
<td>65</td>
</tr>
<tr>
<td><strong>Total potential commitment by year</strong></td>
<td><strong>5</strong></td>
<td><strong>65</strong></td>
<td><strong>17</strong></td>
<td><strong>53</strong></td>
<td><strong>12</strong></td>
<td><strong>10</strong></td>
<td><strong>162</strong></td>
</tr>
</tbody>
</table>
Vaccine introduction grant and operational support for campaigns

- **Objective**
  - Facilitate timely, effective implementation of critical activities:
    - Before new vaccine introductions
    - For delivery during campaigns
  - One-time investments, covering a share of the cost

- **Scope**
  - All new GAVI-supported vaccines
  - Activities driven by country needs
  - Does not cover recurrent costs

- **Operating guidelines**
  - Flexible, timely, simple, separate from other cash support, not used for co-financing
New policy: what has changed?

GAVI support:
- Current policy
- New policy

Total cost estimate:
- Current policy
- New policy

<table>
<thead>
<tr>
<th>Category</th>
<th>Current policy</th>
<th>New policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infant vaccines (per child)</td>
<td>$0.0</td>
<td>$0.6</td>
</tr>
<tr>
<td>HPV vaccines (per girl)</td>
<td>$0.0</td>
<td>$1.2</td>
</tr>
<tr>
<td>Operational support campaigns (per target)</td>
<td>$0.0</td>
<td>$2.4</td>
</tr>
</tbody>
</table>

Vaccine Industry Consultation
Copenhagen, 27 June 2012
New policy: funding levels

1. Vaccine introduction grants:
   - Vaccines delivered to infants: US$ **0.80 per child** in birth cohort (min. US$ 100,000)
   - HPV vaccines delivered to adolescent girls: US$ **2.40 per girl** in target population (min. US$ 100,000)

2. Operational support for campaigns:
   - **US$ 0.65 per individual** in target population

3. Product switches after first introduction:
   - **One third of full grant** for transition to new product, provided criteria are met
Polio

- GAVI support to polio efforts - investment case providing financing for operational costs and stockpiling of vaccines
- Intensify support to health systems strengthening in polio-affected countries
- Potential role for GAVI to play to support the new polio “end-game” strategy
  - IPV funding in the context of a tOPV to bOPV switch
  - Update to Board and review following November SAGE meeting
Major cholera outbreaks & hotspots, 2005-2011

- **Oct 2010 - Dec 2011 Haiti**
  - 500 000 cases

- **Nov 2009 - Dec 2011 Central Africa**
  - > 129 000 cases

- **2009/10 Papua New Guinea**
  - > 10 000 cases

- **2008/09 Zimbabwe**
  - > 98 000 cases

- **2007 / 08 Iraq**
  - > 4700 cases + AWD

- **2006 / 07 Horn of Africa**
  - > 130 000 cases

- **2006 /07 Angola**
  - > 86 000 cases

- **2005 Afghanistan**
  - > 155 000 cases

- **2005 West Africa**
  - > 76 000 cases

- **annually: DRC**
  - 13 000 – 30 000 cases

- **annually: Bangladesh**
  - 100 - 300 000 cases

- **India? Pakistan?**

Areas reporting cholera outbreaks, 2010-2011

Source: Global Task Force on Cholera Control, WHO
Estimated size and cost of a potential cholera vaccine stockpile

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Doses in stockpile</strong></td>
<td>2 m/year</td>
<td>5 m/year</td>
<td>10 m/year</td>
<td>54 million</td>
</tr>
<tr>
<td><strong>Cost</strong></td>
<td>$5.5 m/year</td>
<td>$13.6 m/year</td>
<td>$23-27 m/year</td>
<td>~ $138 million</td>
</tr>
</tbody>
</table>
Low- and Lower Middle-Income countries and GAVI support

Low income and Lower-middle income countries & GAVI support

- **GAVI eligible**: 36
- **GAVI graduating**: 14
- **Not supported LMICs**: 21

- Lower-middle-income countries (n=56)
- Low income countries (n=36)
2012-2013: 94 introductions versus 50 in the business plan - an increase of 88%
Rota: cumulative introductions – versus business plan

- 8 roll outs in 2012
- Currently predict 2-5 will introduce in 2013
- 2014-15 will see intro’s back on track
- Up to 9 approved countries delayed for a year
- Future bottleneck ‘readiness’
Pneumo: cumulative introductions – versus business plan

- 16 roll outs in 2011
- 10 roll outs in 2012
- Currently predict 5 will introduce in 2013
- 2014-15 will see intro’s back on track
- Delays of a year effecting up to 15 countries
- ‘Readiness’ is the future bottleneck