CEO Board update

Seth Berkley, MD

7th December 2016, Côte d’Ivoire
Reporting back on Board decisions

Global landscape

Health threats

Alliance fit for purpose
Côte d’Ivoire: road to recovery

• **High coverage** before crisis: 85% in 2010
• **During crisis** coverage dropped: 62% in 2011
• **Rapid system recovery** – waived coverage requirement for pneumococcal and rotavirus vaccines in 2014
• **Focus on routine** – improved coverage: pentavalent 83%, pneumococcal 72% in 2015
• **HPV demonstration project**: 98% coverage, preparation for national introduction
• **No Ebola cases** despite bordering Guinea and Sierra Leone

Gavi Board meeting
7 December 2016
Côte d’Ivoire: issues remain

- **Yellow fever**: campaign 2011-2012, no confirmed cases since but routine coverage just 49%
- **Equity**: focus on low-coverage districts and communities
- **Data quality**: country-tailored approach has plan to improve quality and flow of data from service delivery to national level
- **Sustainability**: challenge to shift from preparatory to accelerated transition (expected by 2020)
Reporting back on Board decisions
Malaria vaccine pilots

• June Board approved up to US$ 27.5m for pilots, to be matched by other donors
• Full funding now secured for first phase:
  • Global Fund: US$ 15m
  • UNITAID: US$ 9.6m
• WHO responded to Gavi’s review committee request to reduce budget: 8% reduction means pilots should go ahead
• Historic partnership to tackle one of the biggest child killers
Measles-rubella strategy

- **Implementation**: 10 applications so far, implementation from 2017
- **Joint appraisals**: incidence, coverage, surveillance
- **Ownership**: countries self-financing 1st dose from 2018
- **Sustainability**: long-term planning, focus on routine
- **Enhanced analysis**: changed Ethiopia targets, high potential for modelling to improve results

### Dec 2015: Board approved new strategy

Number of Reported Measles Cases with onset date from Apr 2016 to Sep 2016 (6M period)

Credit: World Health Organisation
Source: Surveillance DEF file, 09 Nov 2016
Ethiopia: targeted measles campaign

- **2013 nationwide campaign**: 98% administrative coverage, 90.6% survey
- **Continued outbreaks** 2013-15
- **Oct/Nov 2015, Apr 2016 campaigns**
  - April 2016: 94% average survey coverage in targeted woredas (districts)
- **Jan 2017 targeted campaign**
  - Adjusted after epidemiological analysis
  - Targeting woredas not covered before or below 90% coverage
  - Post-campaign coverage survey

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**Measles SIA in Ethiopia (non-Gavi supported)**

- **April 2016**: 545 woredas
- **>= 95%**
- **< 95%**
- **No campaign**

Note: all woredas could not be accurately mapped

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Gavi Board meeting
7 December 2016
## India partnership strategy

### Acceleration in new vaccine introductions

<table>
<thead>
<tr>
<th>Vaccine Type</th>
<th>2011-2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
<td>Q4</td>
</tr>
<tr>
<td>Pentavalent</td>
<td>✔</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measles &amp; rubella</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pneumococcal</td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Rotavirus</td>
<td></td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>HPV</td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>IPV</td>
<td></td>
<td>✔</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- ✔ Expansion to additional states/union territories
- ✔️ Funded by the Government of India
- ** Tentative

Transition to domestic funding:
- Q1
- Q2
- Q3
- Q4

Gavi Board meeting
7 December 2016
June 2015: Board approved US$ 50m initial investment

Total recommended and approved: US$ 134 million
Cold chain equipment platform

Changed marketplace in first 11 months:

- 15 new prequalified devices
- 2 manufacturers: 10-year warranty for solar direct drive fridges
- First 5-year warranty for ice-lined fridges

Financial forecast for the strategy period includes price reductions from market shaping activities

June 2015: Board approved US$ 50m initial investment

Solar fridge in Mbankana village, DRC
Risk management

- Plan approved by Board in December 2014 largely implemented
- New teams and processes operational, embedded in business as usual
- Enhanced understanding of risk at Alliance and country level
- Increased Board engagement: risk policy & risk appetite, April 2016 retreat
- This meeting: risk & assurance report
Alliance top risks ranked against likelihood and impact
Current risk exposure, taking into account existing mitigation

**VERY HIGH RISK**

a. Country management capacity  
b. Data quality  
c. Transition readiness  
d. Country performance post-transition

**HIGH RISK**

e. Outbreaks disrupt immunisation  
f. Vaccine confidence  
g. Misuse by countries  
h. Donor support  
i. Partner capacity  
j. Strategic relevance  
k. Supply shortages  
l. Frequent or unplanned campaigns  
m. HSIS value for money  
n. Secretariat disruption  
o. Forecasting variability
Nigeria risk: critical need to get back on track

- 7th lowest coverage among Gavi-supported countries - below eg Afghanistan, Mali, DRC
- Acute fragility, especially in northern states
- Entering transition in 2017
- Misuse of funds
- No longer polio free
Nigeria: moving in the right direction

- Visit with Mark Dybul and President Buhari in July
- Replaced leadership of National Primary Healthcare Development Agency
- Commitment to repay misused funds
- Plan to improve country systems
- Plan for Alliance-wide visit Q2 2017
Inactivated polio vaccine (IPV)

- 55 countries introduced
- Continued delays due to supply shortages
  - Further delays scaling up production: <40% of awarded supply available 2014-17
  - 15% of doses procured by UNICEF used in SIAs 2014-16
- Use of fractional doses, evaluating other options
IPV launches since the June Board meeting

Indonesia

Armenia

Guinea-Bissau
Global landscape
Changing leaders among key donors and partners

Gavi Board meeting
7 December 2016
Brexit and exchange rate risk

- Worked with donors to sign most grant agreements before UK referendum
- Hedging policy protects against currency exposure for two years
  - 75% of UK core contribution for 2016 hedged prior to Brexit
  - ~50% of 2017 non-US$ income hedged
- Exposure of $146m through 2020 vs. forecast if rates stay at current level
- Remaining contributions through 2020 will be progressively hedged

Variance of average forecast:
Nov 2016 vs Jan 2015

- GBP, NOK, CAD, EUR, AUD, SEK

Gavi Board meeting
7 December 2016
Elections in donor and implementing countries

Jun 2016 – Dec 2017

- Elections taken place
- Upcoming elections in donor countries
- Upcoming/ongoing elections in implementing countries

*Referendum

Status as of end of 5 December 2016
Global Fund replenishment
“Organisations like Gavi are in many ways one of the best parts of our aid effort, saving millions of lives with our investment.”

“Critical role in delivering concrete results in challenging settings and all-round organisational effectiveness.”

DFID: Multilateral Development Review 2016

Gavi Board meeting 7 December 2016
Donor support: intensifying engagement

- New donors: Monaco (Nov), Switzerland by end 2016 (tbc)
- Italy, Saudi Arabia signed agreements
- Increasing engagement in emerging markets, including private sector
- 83% of Berlin pledges signed by the end of the year
- Most unsigned pledges from countries that can only sign annual agreements
Global landscape

Reporting back on Board decisions

Health security on the agenda

Alliance fit for purpose

Health security on the agenda

Alliance fit for purpose

Sustainable development goal (SDG) indicator

Vaccines included in two health targets:

- **Target 3.8**: achieve UHC and access to affordable medicines and vaccines for all

- **Target 3b**: support the research and development of vaccines… provide access to affordable essential medicines and vaccines

Two indicators accepted:

- **3.8**: investigating indicators to measure fully immunised child – moving beyond DTP3

- **3b**: indicator based on GVAP 90/80 target

UN Stats Commission to give final endorsement in March 2017

Gavi Board meeting
7 December 2016
Global Vaccine Action Plan: 5/6 mid-point targets missed

**DTP3**: All countries >90% national coverage >80% in every district by end 2015

**Polio**: transmission stopped by end 2014

**Maternal & neonatal tetanus**: eliminated by 2015

**Measles**: eliminated in 4 regions by end 2015

**Rubella**: eliminated in 2 regions by end 2015

**Introduction of under-utilised vaccines**: At least 90 low- or middle-income countries to have introduced one or more such vaccines by 2015
“We must ensure that every last child – regardless of where they are born, and their level of poverty or social exclusion – has access to immunisation as an early priority in building UHC…”

“It is possible – it just requires renewed political leadership, commitment and investment. We must act now.”
Declarations on migration and refugees

**UNGA** declaration to protect rights of refugees and migrants, including to “improve the delivery of humanitarian and development assistance to those countries most affected”

**Addis declaration** by African Ministers of Health in February called on **Gavi** to “consider refugees and internally displaced populations as eligible recipients of Gavi support for vaccines and operational costs”
Reduced pneumococcal vaccine prices for refugees

Working with partners such as Gavi, GSK is proposing to provide Synflorix at the deeply discounted price of $3.05 per dose to charities who fund and deliver immunisation programmes to refugees and displaced people.

19 September 2016

Today’s announcement of a new and specific pricing tier [...] builds on Pfizer’s longstanding support for humanitarian emergency relief around the world.

11 November 2016
Record number of emergencies

Number of Grade 3 emergencies 2005-2016

- Repeat grading
- First time grading

12 countries

Gavi Board meeting
7 December 2016
Increasing share of under-immunised children in fragile countries

Total number under-immunised children in Gavi-eligible countries (millions)

- Total number of under-immunised based on number of eligible countries 2001-2015 (excluding China) and forecasted numbers of Gavi-supported countries in 2020 and 2022.
- Note: In 2015, 14.9 million under-immunised children lived in the 68 countries eligible for Gavi support in the 2016-2020 strategy period.
- Country fragility classification sources: World Bank lists of Low-Income Countries Under Stress in 2006, 2015 countries are identified based on a broad definition of fragility using the WB harmonised list, Fund for Peace Fragile states top 3 categories and OECD countries fragile in all dimensions.
- Under-immunised burden sources: WUENIC 2016, United Nations Population Division; World Population Prospects

Gavi Board meeting
7 December 2016
Fragility: Hurricane Matthew devastates Haiti

- **Poorest** country in Western Hemisphere
- **Cholera:** >5,800 suspected cases
- Nov: Gavi funded 1m doses through global stockpile
- Post-hurricane phase could aggravate Zika + other mosquito-borne diseases
- First country to be approved for Gavi's cold chain equipment platform support

Source: Ministère de la Santé Publique et de la Population d’Haiti
Health threats
Growing risk factors

Climate change
Population growth
Urbanisation
Migration

increasing health threats
Growing risk factors: *Aedes aegypti* distribution

Locations newly infested with *Aedes aegypti* since 2006

- California, 2013
- Washington, 2011
- Madeira, 2007
- Black sea (unknown genetic affinities)
- *Aaf* entering urban habitats
- *Ae. aegypti* interbreeding in Mombassa, 2006

**Predicted distribution of *Aedes aegypti***

(Published June 30, 2015)

Gavi Board meeting
7 December 2016

**Source:** The global distribution of the arbovirus vectors *Aedes aegypti* and *Ae. albopictus* eLife 2015;4:e08347
Growing risk factors: *Aedes aegypti* suitability

**Temperature suitability for *Aedes aegypti***

(Published June 30, 2015)

Gavi Board meeting

7 December 2016

Source: The global distribution of the arbovirus vectors *Aedes aegypti* and *Ae. albopictus* eLife 2015;4:e08347
Growing risk factors: migration

1 million people

Net migrants arriving

Net migrants leaving

Examples of main migrant routes

Main country-to-country net migration 2010-2015

Source: UN Population Division’s estimates for Total Migrant Stock, 2015
Growing risk factors: urbanisation

Urbanisation of countries 1990-2020
Circles are scaled in proportion to national urban population size

Gavi Board meeting
7 December 2016

Source:
UNICEF, United Nations, Department of Economic and Social Affairs (UNDESA), Population Division special updated estimates of urban population as of October 2011

Urban population
- Greater than 75%
- 50% - 75%
- 25% - 50%
- Less than 25%

Figures refer to urban population
Yellow fever outbreak: unprecedented need

- Stockpile **6m** doses, exceptional Gavi support: **16.8m** doses in 2016
- Yellow fever campaign in August: 15.5m people immunised in Angola & DRC
  - Angola funded operational costs, 50% of vaccine costs
  - Fractional doses in Kinshasa
- Worked with WHO on new strategy

Yellow fever infected districts in Angola

No new confirmed cases in Angola since June 2016

~20% reduction in RI coverage (admin data)
Zika: 67 countries affected since 2015

Currently no vaccine or treatment, but:

- 30+ vaccines in development
- 2 vaccines in phase 1 trials
- Another starting trials in 2018

Once developed could be part of package for adolescent girls, with HPV vaccine

Source: ECDC, 29 November 2016
The economic impact of outbreaks

Total cost of **Ebola** in the 3 countries: **US$ 2.8 billion**

Cost of Zika in Latin America and the Caribbean: **US$ 3.5 billion** (2016)

Impact of Ebola on GDP (%)

Setback to polio eradication
Wild poliovirus & cVDPV cases\(^1,2\) in the last six months\(^3\)

- Nigeria no longer polio free
- Very likely to miss end-2016 target of ending wild poliovirus transmission

<table>
<thead>
<tr>
<th>Country</th>
<th>Onset of most recent case</th>
<th>Number of WPV1 cases</th>
<th>Number of WPV infected districts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Current</td>
<td>Same period last year</td>
</tr>
<tr>
<td>Nigeria</td>
<td>21-Aug-16</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>AFR</td>
<td>21-Aug-16</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Pakistan</td>
<td>03-Nov-16</td>
<td>7</td>
<td>18</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>12-Oct-16</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>EMR</td>
<td>03-Nov-16</td>
<td>13</td>
<td>31</td>
</tr>
<tr>
<td>Global</td>
<td>03-Nov-16</td>
<td>17</td>
<td>31</td>
</tr>
</tbody>
</table>

\(^3\) Current rolling 6 months: 30 May 2016 – 29 November 2016

\(^1\) Excludes viruses detected from environmental surveillance

\(^2\) In Nigeria, 1 cVDPV2 from a healthy child contact of WPV1 case (specimen collection date 26 Aug)

Data in WHO HQ as of 29 November 2016

Gavi Board meeting 7 December 2016
UN General Assembly: antimicrobial resistance

Declaration recognised that:

“the keys to tackling antimicrobial resistance are: the prevention and control of infections in humans and animals, including immunization, monitoring and surveillance of antimicrobial resistance…”

Days of antibiotic use prevented by Gavi support for Hib, pneumococcal and meningitis A vaccines:

- 30 million days (2011-2015)
- 35 million days (2016-2020)
Alliance fit for purpose
Alliance working closely together at every level

**Global level**

- PEF Management Team
  - Oversee implementation of PEF
- Alliance Coordination team
  - Coordinate Alliance operational issues
- Alliance Technical teams
  - Provide technical guidance in key areas

**Country level**

- Health Minister, Niger, discussing JA at ICC

**Examples**

- Regional working groups provide input along the way

**Joint appraisals**
- Countries and partners review implementation progress & performance

**Strengthened interagency coordination committees (ICCs)**

Gavi Board meeting 7 December 2016
Starting to scale up new tools

- Joint appraisals
- Partners’ Engagement Framework
- Health system and immunisation strengthening support
- Cold chain equipment optimisation platform
- Grant performance frameworks
- Country risk matrix
- Programme capacity assessments
- Audits
Bangladesh: Alliance model in action

- Excessive wastage highlighted by full country evaluation
- Triggered dialogue with partners
- Implementation of multi-dose policy incorporated into PEF monitoring matrix
- Integrated into joint appraisals
- Starting to see impact
Global landscape
Reporting back on Board decisions
Health security on the agenda
Alliance fit for purpose

Alliance KPI: time to cash disbursement

Produce Grant Application Recommendations (IRC / HLRP)
Resolve issues
Issue Decision Letter
Disburse cash

Provide information

Support and manage (IRC)

Support and manage (HLRP)

Time payments and disbursements

Support and manage (IRC)

Support and manage (HLRP)

Submit disbursement

Resolve issues

Issue Decision Letter

Disburse cash

Alliance KPI: time to cash disbursement
Reduction in time to process cash disbursements

Improved workflow and visibility has led to a 50% year-on-year reduction in the average time to process cash disbursement requests.

- 50% Year-on-year improvement in average time to process cash disbursement requests.

Gavi Board meeting
7 December 2016
Global landscape

Reporting back on Board decisions

Health security on the agenda

Alliance fit for purpose

Vaccine coverage dashboard


Vaccines

Period, region and type of information

Type of coverage information: Coverage

Period: 2000 - 2015

Country groupings: Gavi73

Description: 73 countries supported during 2011-2013 Gavi strategic period

Coverage information for: YFV, 2009 - 2015, Gavi73 (73 countries)

Country Name: (all)

Heat map representing the YFV coverage

Average coverage

Number of children immunised

Average DTP3 drop-out

125 million

11pp

Historical YFV coverage

add media or start a new project to enable

Contact: If you have questions, click on the blue box to contact the M&E team
Health campus

Nov 2015

Nov 2016

Today

Start 2018

June 2018

Gavi moves in

The Global Fund moves in

Gavi Board meeting
7 December 2016
At this Board meeting

For Board decision:
- Fragile settings, emergencies and displaced people
- Risk management
- Review of Gavi support for HPV vaccine
- Gavi’s support for emergency vaccine stockpiles
- Gavi’s continued role in yellow fever control
- Cold chain equipment optimisation platform

Consent agenda:
- Country engagement framework
Addressing fragility, emergencies and displaced people in Gavi countries

- 2015: ~70% of Gavi funds invested in fragile countries
- Of the top-10 countries with highest under-5 mortality, 8 are in emergency states
- Gavi countries among top refugee hosting countries worldwide

New principles for:
Fragility | Emergencies | Displaced people
Gavi’s support for emergency vaccine stockpiles

Strategic design

Effective implementation

Accountability

Gavi Board meeting
7 December 2016
Gavi’s continued role in yellow fever control

- Aligned with new WHO EYE strategy
- Increases available supply
- More transparency and accountability
- Aligns routine, campaigns, stockpiles
- Prioritises routine

US$ 150m additional investment = 95m more vaccine doses, 180,000 additional deaths averted
Review of HPV vaccine support

23 countries launched HPV demonstration projects, but only 2 went national

Honduras also went national in 2016, but received only 50% support (exceptional catalytical country)

- Gavi-supported national introductions (2)
- Gavi-supported demonstration projects (23)
- Gavi-eligible, no support so far (42)
Review of HPV vaccine support: proposed shifts

- Faster roll-out
- Bigger impact: Additional investment of 0.8% of 2016-2020 expenditure = 5% increase in total number of deaths averted by Gavi programmes
  
  - Increased herd effects, but smaller number of countries initially benefiting
  
  - Sustainability to be demonstrated

Move beyond demonstration programmes allowing countries to introduce nationwide directly

Vaccinate multi-age cohort within age range 9-14 years in the year of introduction
HPV and yellow fever: two of Gavi’s most impactful vaccines

Forecasted impact by antigen, 2016-2020

Sources: OP v14 - Joint impact modelling by Gavi, the Vaccine Alliance and the Bill & Melinda Gates Foundation. For MCV2 and MR: Strategic Demand Forecast v12. Numbers on click for yellow fever and HPV reflect proposed strategy changes. Note: future deaths averted for Japanese Encephalitis are below the visible threshold.
HPV partnerships: integration and demand

Organisation of African First Ladies Against HIV/AIDS (OAFLA)

CHILDREN'S INVESTMENT FUND FOUNDATION

GLOBAL PARTNERSHIP FOR EDUCATION


The Global Fund

Gavi Board meeting
7 December 2016
Operational partnerships

Increasing private sector engagement

Strategic Training Executive Programme (STEP) for supply chain managers, East & West Africa

zipline
Drone launch to test vaccine delivery, Rwanda

PHILIPS
Data collection and integration workshop, Uganda
Board papers and myGavi

- Shorter pack, more papers on myGavi:
  - June 2016: pack 1+2: 341 pages, myGavi: 28 pages
  - Dec 2016: pack: 296 pages, myGavi: 203 pages
Thank you