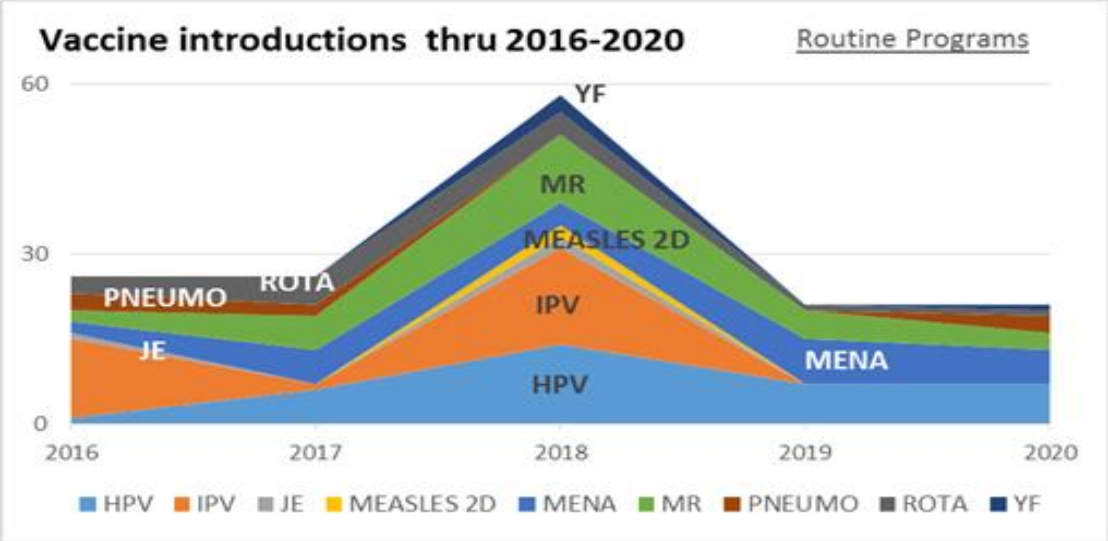
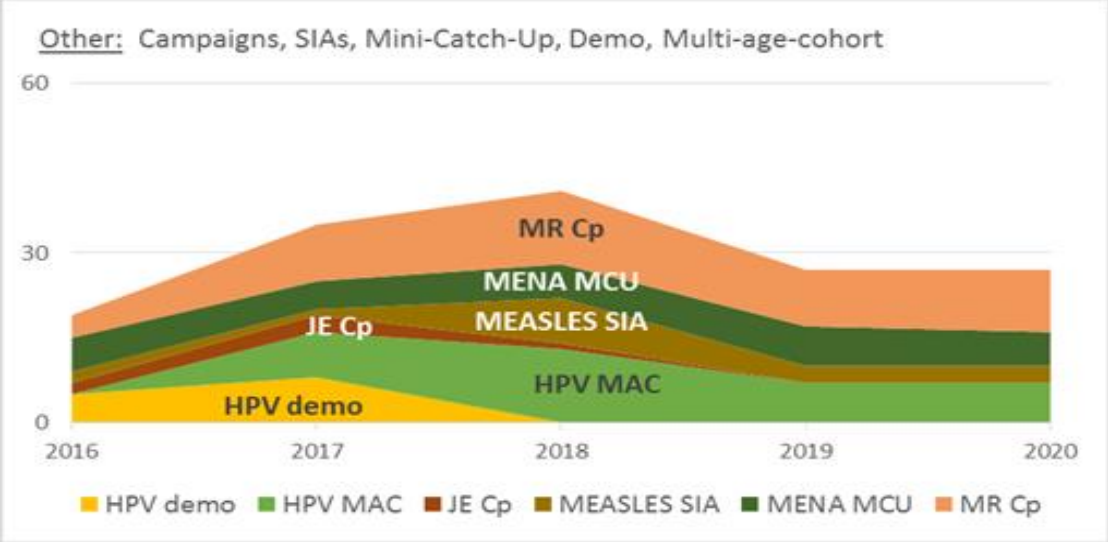
Annex A: Accelerating the equitable uptake and coverage of vaccines: Update on Gavi supported Vaccine Programmes

1. Introduction

Gavi anticipates approximately 270[1] new vaccine introductions between 2016 and 2020, a greater number than in any previous strategic period, with a particularly high number expected in 2018. Over 40% of these introductions will be for non-routine programmes (e.g. Supplementary Immunisation Activities, catch-up campaigns). Over this strategic period, Gavi expects to support 15[2] programme types.





[1] This tally assumes that introductions for routine immunisation and multi-cohort campaigns for HPV are counted as one event for a given country. NB: based on an alternate approach, the total number of introductions, as reported to the PPC in May 2017, is more than 300 events

[2] The count of 15 includes HPV (RI and MAC), IPV, JE, MSD, Meningitis A, MR, Pneumococcal, Rotavirus, Yellow Fever and Pentavalent (10) routine programs and HPV demo, JE campaign, Measles SIA/follow up, Meningitis A mini-catch-up, MR campaign.

This number of introductions and diversity of supported vaccination programmes will require unprecedented strategic and operational planning, coordination, and execution to achieve quality outcomes and deliver "value for money" on these investments. Gavi intends to capitalise on lessons learnt and tools developed over the last several years, apply data and resources judiciously, and work closely with countries and partners to ensure that each immunisation event is designed and executed for high-quality results. In addition, supply challenges exist for several programmes (yellow fever, IPV, rotavirus); Gavi will apply best efforts in collaborating with partners, especially industry and Unicef-SD, to manage this risk on a programme by programme basis.

This appendix summarises the current status and key strategic issues for the most important of these vaccine programmes.

2. Pentavalent vaccine (diphtheria, tetanus, pertussis (whole cell), hepatitis B, Haemophilus influenza b) (Gavi support since 2001)

2.1. **Introductions to date:** As of 2014 pentavalent vaccine has been introduced in all 73 Gavi countries.

2.2. **Strategic issues:** While global coverage for the third dose of pentavalent vaccine (Penta3) increased from 56% in 2014 to 68% in 2015 (largely due to nationwide roll-out in India), several countries (Mauritania, Congo, Ghana and Mali) have seen their coverage rates fall by over 9%.

3. Yellow fever vaccine – YFV (Gavi support since 2001)

3.1. **Introductions to date:** 17 countries have introduced the vaccine into their routine immunisation programmes

3.2. **Strategic issues:**

a) Although 17 countries have introduced the vaccine in routine programmes, 10 countries have less than 80% coverage. To address this, Alliance partners are strengthening links with similarly timed measles and meningitis A vaccination programmes.

b) Rapid establishment of a governance structure for EYE to effectively implement the strategy is a key strategic goal. Following the Board Meeting in December 2016 the Alliance has been working to put in place a new governance process for the global management of YF vaccines which takes into account the global supply and demand issues and will report progress to the October PPC.

c) In 2017, an outbreak of yellow fever in Brazil strained an already stressed global supply situation. The EYE strategy will need to effectively deal with this disruption.

4. Pneumococcal conjugate vaccine – PCV (Gavi support since 2010)

4.1. **Introductions to date:** as of 15 May 58 countries have introduced PCV into their routine immunisation programmes, India starting the roll out in 3 states on 13 May 2017.

4.2. **Strategic issues**

a) As demand for PCV grows and additional PCV 4-dose presentations become available, the preference for multi-dose presentations is increasing; this switch requires careful planning and execution.

b) Gavi countries are increasingly expressing a preference for the 13-valent PCV over the 10- valent product. This requires that Gavi work with countries to provide guidance on product/presentation choice and with manufacturers to accurately forecast and meet demand.

c) The SAGE Meeting in October 2017 will discuss potential revisions to the current immunisation schedule, these recommendations may result in a 2+1 schedule with switch implications for the majority of countries currently on a 3+0 schedule. The Secretariat will update the PPC on the outcome of these discussions and the implications, if any, for GAVI supported programmes. Recommendation for catch-up vaccination has the potential to change Gavi support for a small set of eligible countries (those that have not launched). The SAGE meeting in October 2017 may consider recommendations on catch-up vaccination of additional age cohorts at the time of vaccine programme introduction; an update will be provided in October 2017. Gavi will consider supporting catch up campaigns as part of the VIS.

d) For most Gavi countries, PCV third dose coverage is tracking well against DTP3 coverage by the second year of implementation but a subset of countries (11 countries)[3] have more than 10 percentage points difference between PCV third dose and DTP3.

5. Rotavirus vaccine - RV (Gavi support since 2009)

5.1. **Introductions to date:** as of 31 May 2017 43 countries have introduced RV to date with five additional countries (Lesotho, Uganda, Central African Republic, DRC, and Afghanistan) expected to introduce by the end of the year.

5.2. **Strategic issues:** Recent supply difficulties by GSK will affect the implementation of Gavi's rotavirus programmes in 2017-2018, including delays in the scale up in Pakistan and national introduction in Uganda in 2017. Supply constraints will also affect planned vaccine introductions in 2017/2018, including in DRC, Nigeria, and Afghanistan.

3 Georgia, Armenia, PNG, Moldova, Kenya, Bolivia, Afghanistan, Lao PDR, Uganda, Cote d'Ivoire and Mali

6. Human Papilloma Vaccine – HPV (Gavi support since 2013)

6.1. **Introductions to date:** As of 31 May 2017, 25 countries have launched HPV demonstration programmes, and 4 countries have introduced HPV in their national programmes.

6.2. **Strategic issues:**

a) Following Board approval in December 20164 Gavi is focusing on an effective launch of the new HPV strategy, which 1) allows countries to apply directly for national introductions, without the need for a demonstration programme and 2) support countries to vaccinate multiple cohorts of girls between the ages of 9-14 years in the year of introduction. Since Board approval, Ethiopia, Zimbabwe and Senegal have applied and received approval for national introductions with multi-age cohort.

b) The majority of HPV demonstration programmes have achieved about 80% coverage of the target populations. At a national scale, Rwanda has reported a 90% of vaccine coverage while Uganda only reached a coverage of 52% (1st dose). With the shift of the new HPV strategy towards accelerated national introductions, Gavi will leverage the lessons of the last several years to help countries prepare for robust coverage of immunised population.

7. Measles containing vaccines - MCV (Gavi support since 2007)

7.1. **Introductions and coverage to date:**

a) By 15 May 2017, Gavi had supported 55 measles and rubella programmes in 34 countries (21 countries supported for routine measles second dose and 27 countries for measles or MR campaigns[5]).

b) As per the latest WUENIC estimates for 2015, MCV1 coverage remained at 78% in Gavi 73 countries and MCV2 coverage has increased steadily as countries introduce the vaccine into their schedule, but remains low at 42%.

7.2. **Strategic issues:** Fourteen countries have now been recommended for introductions or campaigns within the next 12 months. A further increase in introductions of MCV2 in the coming years is expected following the October 2016 SAGE recommendation and lifting of MCV1 coverage criterion. Special focus is being placed on six countries with the largest number of MCV1 unimmunised children in order to improve MCV routine immunisation coverage, ensure high coverage campaigns and strengthen surveillance.

[4] http://www.gavi.org/about/governance/gavi-board/minutes/2016/7-dec/final-minutes/gavi-alliance-board-minutes---7-8-december-2016/

[5] 20 countries supported for MR catch-up campaigns and 6 countries supported for measles follow-up campaigns.

Increased demand from India in the last quarter of 2017, expected to impact domestic and global supply, is being managed by the Supply Coordination Group, led by UNICEF (see PPC document: Update from Secretariat, including 2016-2020 Strategy, Indicators and KPIs).

8. Meningitis A – (Gavi support since 2009)

8.1. **Introductions to date:** As of 15 May 2017 three of the 26 endemic countries (Sudan, Ghana and Mali) have introduced meningitis vaccine into their routine systems and 6 additional countries are scheduled to introduce in 2017. As of Q1 2017, 21 endemic countries have conducted preventive campaigns.

8.2. **Strategic issues:**

a) Although the meningitis conjugate A vaccine has virtually eliminated epidemics caused by the Neisseria meningitides serogroup A (NmA), other meningococcus serogroups, including NmC, continue to cause outbreaks of meningitis across parts of Africa e.g. recent outbreak of meningitis C in Nigeria. Thus, there could be a need to provide a flexible array of vaccines in a changing epidemiologic situation. The assessment of vaccines containing serotypes other than A will be considered as part of the VIS.

b) After mass vaccination campaigns among 1-29 year olds, the main challenge is protecting new birth cohorts throughout infancy. The uptake of RI and one time catch up campaigns is slower than originally anticipated due to delays associated with country specific priorities and preparedness. Maintaining coverage through RI and one time catch up campaigns will require advocacy and a major public health commitment on the part of meningitis belt countries and their partners.

9. Inactivated Polio Vaccine – IPV (Gavi support since 2014)

9.1. **Introductions to date:** as of 15 May 2017 55 out of 73 Gavi countries have introduced IPV to date. Georgia and Ukraine introduced without Gavi support.

Progress and challenges in introducing IPV and Gavi's engagement with IPV post-2018 is the subject of a paper and presentation to the PPC and Board.

10. Japanese encephalitis vaccine – JEV (Gavi support since 2014)

10.1. **Introductions to date:** as of 15 May 2017 3 countries have conducted campaigns and/or introduced JE in their routine programme (Lao PDR, Cambodia, and Nepal). Myanmar is planning to conduct a campaign later in 2017 and introduce into routine in early 2018. Indonesia is planning to conduct the campaign in Bali also later in the year. Viet Nam will conduct the campaign most likely in 2018 with Gavi support.

10.2. **Strategic issues:** Careful monitoring demand and supply continues to be critical due to the long lead time required by the preferred qualified vaccine.

11. Typhoid conjugate vaccine – TCV was prioritised for future support by the Gavi Board as part of the 2008 VIS process.

11.1. **Introductions to date:** none to date due to the lack of a prequalified vaccine.

11.2. **Strategic issues:**

a) WHO prequalification timelines for TCV are estimated for Q4 2017 and SAGE review is scheduled for October 2017. If both PQ and SAGE recommendations occur before the end of 2017, the Alliance will develop recommendations to open a funding window for TCV, for decision at the October /November 2017 PPC and Board meetings. If WHO PQ and SAGE recommendations are not attained by the end of 2017, TCV will be included in the 2018 VIS process to be evaluated against other immunisation investment options for an investment decision by the PPC/Board in October/December 2018.

b) Regardless which scenario is triggered, TCV investment rationale will require an update of all analyses (i.e. estimated impact, cost, etc.) to inform the decision and programme design.

12. Oral Cholera vaccine – OCV (Gavi support since 2014)

Use of the vaccine to date: As of May 2017, the stockpile has been accessed for both emergency and non-emergency response over 38 times in 17 countries. Annual demand has increased more than 10 fold from 300,000 doses in 2013 to 3.7 million doses in 2016 and in the first 5 months of 2017 alone, over 11 million doses have been requested for use in 2017. [5] Importantly, there are an increasing number of requests to use OCV as part of comprehensive national cholera control strategies, illustrating strong country commitment to long term disease control. Use of OCV in endemic settings will be assessed as part of the next VIS.

Following the vaccination campaign in Haiti after Hurricane Matthew, The Global Task Force for Cholera Control has accepted Haiti's request to vaccinate those originally targeted with a second dose. The Alliance continues to work closely with the country to ensure appropriate Monitoring & Evaluation practices are in place.

[5] South Sudan (two requests), Malawi, Somalia, Haiti, Mozambique and Cameroon have all been approved to conduct OCV campaigns.