

<b>SUBJECT:</b>	<b>REVIEW OF GAVI'S CO-FINANCING POLICY</b>
<b>Report of:</b>	Aurélia Nguyen, Director of Policy & Market Shaping
<b>Authored by:</b>	Santiago Cornejo, Judith Kallenberg,
<b>Agenda item:</b>	06
<b>Category:</b>	For Decision
<b>Strategic goal:</b>	SG3 - Financing: global predictability/nat'l sustainability

## **Section A: Overview**

### **1. Purpose of the report**

1.1 The purpose of this report is to seek Board approval of the recommendations by the Programme and Policy Committee (PPC) with regards to the co-financing policy. The paper discussed by the PPC at its meeting on 4-6 May 2015, which includes details on the recommendations, is attached to this report. The recommendations in this report are complementary to those in Doc 05 on *strengthening country transitions out of Gavi support*.

### **2. PPC recommendations**

2.1 The Programme and Policy Committee (PPC) recommended to the Gavi Board, that it:

**Approve** the Gavi Co-financing Policy attached as Annex A to Doc 05 to the PPC.

### **3. Update since the May 2015 PPC meeting and updated recommendation**

3.1 As requested during the PPC discussions (4-6 May 2015), the Gavi Secretariat met with UNICEF SD to further discuss the implications of the revised co-financing policy on market shaping objectives and the necessary operational considerations to mitigate risks. Based on these discussions, UNICEF SD and the Gavi Secretariat have agreed to the following:

- (a) As stated in the policy, the primary aim of the proposed change to link co-financing to vaccine prices for Phase 1 countries is to help countries prepare for the transition to full financing. This objective is expected to be achieved with this recommendation by increasing awareness of country Governments in Phase 1 of the financial implications of vaccine adoption and presentation choices. This awareness may translate into modified product choices. Experience thus far suggests that price is only one of several factors influencing country choices for specific vaccine presentations. Other key factors include programmatic suitability and wastage. From an operational standpoint, it will be critical to emphasize that 'total delivery cost / value for money' is an important driver of product choice with countries during planning discussions. The Gavi Secretariat will need to strengthen the information in this regard through existing processes such as application and renewal forms as well as guidelines.
  - (b) Gavi and UNICEF SD will monitor the potential impact on the vaccine market of the new policy, resulting from a change in country product preferences. Supply security and market health continue to be key objectives in the management of market dynamics. Accordingly, the approaches currently used by UNICEF SD to balance aggregate country preferences to available supply to maintain a healthy market will continue to be applied. Furthermore, the timing of implementation of requested switches in product presentation will need to be synchronized with manufacturer awards in order to mitigate demand volatility during a tender cycle, and maintain accurate long-term forecasts to continue to secure low prices. Countries will continue to utilise the current Gavi procedures to request potential switches in product presentations (i.e. through the annual grant renewal process).
  - (c) As part of the discussions, UNICEF highlighted the need for clarification of the following issue: In cases where country preferences cannot be satisfied the country will not be required to pay a higher co-financing amount if the product provided would have a higher price. Any additional vaccine costs will continue to be borne centrally by Gavi. It is recommended this circumstance is addressed in the proposed co-financing policy. The proposed new policy will not bear any additional cost to Gavi's financial projections; if any, it is expected that linking co-financing to prices might reduce Gavi's overall financial projections.
  - (d) Finally, Gavi will ensure that communications with countries to explain the revised co-financing policy highlight the importance of operational considerations, including processes for country expression of product choice and timing options. The Gavi Secretariat will strengthen the information to ensure that countries are aware of the options available and their implications beyond price.
- 3.2 The PPC also provided guidance on Gavi's approach to requiring full country financing for some routine vaccines (currently MR and JE). Some

PPC members expressed concerns about the fiscal challenge that some low-income countries face as co-financing for multiple vaccines accumulates, and it acknowledged that full country financing of MR routine vaccines further adds to this challenge. Some PPC members felt that co-financing requirements should be consistent for all vaccines. However, the PPC felt that further discussion is required, particularly in relation to MR, and suggested that this needs to be discussed within the context of Gavi's overall measles strategy.

<b>SUBJECT:</b>	<b>Review of Gavi's Co-financing Policy</b>
<b>Report of:</b>	Robert Newman, Managing Director, Policy and Performance
<b>Authored by:</b>	Judith Kallenberg, Aurelia Nguyen, Santiago Cornejo,
<b>Agenda item:</b>	05
<b>Category:</b>	For Decision
<b>Strategic goal:</b>	SG3 - Financing: global predictability/nat'l sustainability

## **Section A: Overview**

### **1. Purpose of the report and related reports**

- 1.1 The purpose of this report is to seek PPC endorsement of a revised *Co-Financing Policy*, which would replace the current policy that expires at the end of 2015. The analyses and recommendations for the *Co-Financing Policy* were conducted in conjunction with the review of the eligibility and graduation policies. The recommendations in this report are complementary to those in Doc 04 on *Strengthening country transitions out of Gavi support* and PPC members are advised to read that report first.

### **2. Recommendations**

- 2.1 The PPC is requested to:

**Recommend** to the Board that it

**Approve** the Gavi Co-financing Policy attached as Annex A to Doc 05.

- 2.2 The PPC is asked for guidance on Gavi's approach to requiring full country financing for some routine vaccines (currently MR and JE), taking into account:

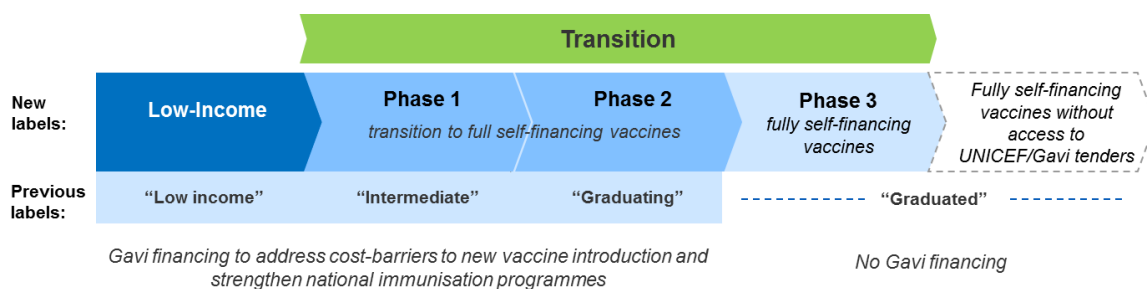
- (a) the objective of the Co-Financing Policy
- (b) the existing difference in Gavi's co-financing approach for vaccines that have similar characteristics
- (c) the potential risk that full country financing of (Gavi-supported) routine vaccines will create challenges for Low Income Countries in meeting vaccine financing obligations in the future, and Gavi's tolerance of this risk.

### 3. Executive summary

**3.1 Gavi’s co-financing policy has helped to increase domestic investment in vaccines.** Gavi’s co-financing policy is unique among global health funding agencies. Mandatory co-financing for all countries has resulted in significant increases in domestic spending on vaccines, adding to governments’ investments in service delivery and immunisation systems more broadly. In practice co-financing is achieved through ‘co-procurement’ of vaccines (usually through a procurement agency)<sup>1</sup>, which creates ownership and helps to build capacity relating to procurement processes. Since the introduction of the policy in 2008, the majority of governments have fully complied with the requirements in the policy. In 2014, the estimated country contributions to Gavi vaccine costs through co-financing totalled approximately US \$100 million.

**3.2 The proposed Co-Financing Policy maintains the key components of the current policy.** Based on country performance and feedback, and the findings of an independent evaluation, the policy review concludes that the policy as a whole has worked well and does not require major changes. The proposed policy maintains the three different phases of co-financing that are aligned with governments’ ‘ability to pay’ along a continuum of GNI per capita growth. With the exception of the ‘Low-Income Country’ (LIC) phase, it introduces new labels for ‘intermediate’ and ‘graduating’ countries in line with a revised terminology around country transitions described in Doc 04 and illustrated in figure 1 below. It maintains a US \$0.20 per dose requirement for LICs, an annual increase in co-financing of 15% during Phase 1 and a rapid scale-up of co-financing towards the full cost of vaccines during Phase 2.

**Figure 1: revised terminology for phases in transition out of Gavi support**



**3.3 The proposed policy links co-financing requirements for Phase 1 countries to the price of vaccines in order to increase awareness of vaccine costs and improve ownership and decision-making.** Under the proposed policy, the co-financing obligation for Phase 1 countries would be a proportion of the vaccine price. Co-financing obligations would therefore be greater for higher-cost vaccines and presentations than for lower-cost ones. As under the current system, the amount paid would

<sup>1</sup> Co-financing is *not* a payment made to Gavi. Gavi translates the required co-financing amount into the number of vaccine doses that countries will need to procure at the full Gavi price.

grow by 15% every year. This approach contributes to transition preparedness by increasing awareness of the financial implications of vaccine adoption and presentation choices. It also eases the transition to Phase 2, when co-financing is already (under the current policy) tied to vaccine prices, as countries would be familiar with the approach.

- 3.4 **The proposed policy introduces a ‘payment plan’ for countries in default.** A country is considered ‘in default’ when it has not fulfilled its co-financing commitment for a particular year by 31 December of that year. Countries in default can apply for, but will not be approved for new vaccine support. For some countries the failure to meet their requirements on time is related to administrative barriers and for others to an inability to mobilise the needed resources for procurement. In recent years more and more countries are experiencing a ‘vicious cycle of default’ - when countries pay their arrears from the previous year to avoid a suspension of Gavi support, but are unable to simultaneously cover the full requirements of the current year. Under the proposed co-financing policy, Gavi and the country in default would agree on a plan to pay back the arrears in tranches. This would help to ensure that current year requirements are fulfilled on time while securing a strong commitment to and tangible progress towards paying back arrears from the previous year. To come out of default, a country is required to fulfil the co-financing requirement of the current year together with the first tranche of arrears payments relating to the previous year as agreed in the payment plan. This approach would not change the sanctions for countries that remain in default for more than one year - a suspension of Gavi support, which can only be waived by the Gavi Board in case of exceptional circumstances.
- 3.5 **The PPC is asked for guidance on Gavi’s current approach to require full country financing for some routine vaccines** (currently MR and JE). The price of some Gavi vaccines has in the past been considered low enough to justify a deviation from the co-financing policy by requiring countries to fully finance these (routine) vaccines following a Gavi-financed campaign. This is currently the case for Measles-Rubella (MR) and Japanese Encephalitis (JE) vaccines. In contrast, routine Meningitis A vaccine, which – like MR and JE – is introduced into routine immunisation following an initial campaign and which has a similar cost profile, is offered at US \$0.20 per dose<sup>2</sup> (in line with the co-financing policy), with Gavi covering the rest of the costs. Stakeholders have commented that the absence of a cost-sharing approach for some routine vaccines creates an inconsistency in co-financing requirements across Gavi vaccines. Given regional differences in disease burden being targeted by these vaccines this approach also creates inequities between countries in Gavi’s co-financing model. The PPC is asked for guidance on Gavi’s approach to requiring full country financing for some routine vaccines, taking into account the objective of the Co-Financing Policy, the (perceived) inequity in Gavi’s co-financing approach for different vaccines and the potential risk

---

<sup>2</sup> Increasing annually by 15% for intermediate (Phase 1 countries)

that full country financing of (Gavi-supported) routine vaccines will create challenges for LICs in meeting vaccine financing obligations in the future, and the related risk appetite.

#### 4. Risk implication and mitigation

##### 4.1 **Cumulative co-financing requirements become unaffordable for low income countries.**

The objective of co-financing for LICs is to increase ownership rather than achieving financial sustainability, acknowledging that these countries will need external aid for an extended period of time. There is a risk that co-financing becomes too challenging for LICs creating cost barriers for the introduction of new vaccines or resulting in default on their co-financing requirements. This undermines Gavi's mission to save lives in lower-income countries by increasing the use of vaccines. If a significant number of LICs default on their obligations, Gavi would need to consider waiving the suspension of support to these countries in order to achieve its health impact targets. This could send the wrong signal and jeopardise compliance by other countries. Achieving the right balance between encouraging domestic investment in vaccines on the one hand and ensuring affordability on the other is critical to mitigate this risk. The PPC is asked for guidance on Gavi's current approach to require full country financing for some routine vaccines, which adds to the fiscal burden of LICs. In addition, the Gavi Secretariat and Partners will need to increase their advocacy efforts with senior decision-makers in ministries of health and finance to increase mobilisation of domestic resources for immunisation.

##### 4.2 **Policy changes cause confusion among countries and stakeholders.**

The revised Co-financing Policy introduces changes in the calculation of co-financing levels for Phase 1 countries. These changes could create misunderstanding and confusion among implementing countries and partners. To mitigate this risk, the policy would be implemented in a manner that avoids disruptive changes for countries. Specifically, the total co-financing obligation for current Phase 1 countries does not change in the first year of implementation of the revised policy from what it would have been under the current policy. In addition, the policy is designed to avoid disruptive changes when Low-Income Countries enter into Phase 1 as described in section 9.6. In consultations with UNICEF Supply Division and vaccine manufacturers, there was general agreement that price-linked co-financing is feasible, but would need to be communicated to countries in a manner that is easy to understand. The Gavi Secretariat will develop and actively distribute clear communication materials (guidelines, Q&A, presentations, etc.) to inform countries and partners of the policy changes and their implications. Timely communication and dialogue with countries and partners is a key responsibility of the expanded Country Support team in the Gavi Secretariat. The new policy changes and implications will be introduced in the core training of relevant parts of the Secretariat to better equip them to provide accurate information.

**4.3 Price-linked co-financing for Phase 1 countries could create cost barriers for the introduction of higher-cost new vaccines.** From the second year after the proposed co-financing policy takes effect, when a Phase 1 country introduces a new vaccine, the co-financing requirement is a proportion of the price of the vaccine. For some higher-cost vaccines, this will result in an amount that is higher than US \$0.20 per dose, which is the current initial financing requirement for new vaccines introduced during Phase 1 or Phase 2. A higher initial financing requirement for newly introduced vaccines could negatively affect adoption decisions. However, as described in Annex B, this risk is limited based on an analysis of the projected initial financing requirements for forecasted introductions of higher-cost vaccines by Phase 1 and Phase 2 countries in the coming years, which shows that the co-financing requirement would be significantly higher (ie. 21% of the vaccine price) for one country only. For the majority of countries the starting requirement is below 15% of the price. While this is higher than US \$0.20 under the current policy, it is still a small fraction of what these countries will have to pay as soon as they enter the second year of Phase 2, let alone after Phase 2 when they will pay full Gavi price<sup>3</sup>. Starting co-financing of new vaccines at a higher amount will leave a smaller price gap to be bridged during Phase 2, and thus help ease the transition to full financing, which is the main rationale for introducing this approach.

## **5. Financial implications: Gavi Alliance Engagement Framework and budgets**

5.1 Financial implications for the Gavi Alliance Engagement Framework relating to the implementation of price-linked co-financing are included in Doc 04, section 5.1 (d).

### **Section B: Content**

## **6. Background and review process**

6.1 Gavi included a co-financing policy in its model to help country transitions to self-financing of vaccines. The policy was first introduced in 2008. Since then Gavi has reviewed the policy once, incorporating lessons learnt and feedback from countries. A brief history of the eligibility, graduation and co-financing policies is presented in Annex C of the Doc 04. The current policy came into effect in 2011 and introduced, in line with the graduation policy, a five-year increase in co-financing for Phase 2 countries towards the full price of vaccines, signalling the end of Gavi support. Demand forecasting and analyses conducted during the 2010 policy review, indicated that co-financing requirements should be affordable for all Gavi countries in the 2011-2015 strategy period. Recognising the uncertainties in longer-term projections of affordability (post-2015), and the risks

---

<sup>3</sup> Assuming that the PPC and Board approve the proposed approach to ensuring access to appropriate vaccine prices



associated with failure to comply with the policy, the Board approved the co-financing levels explicitly *only through 2015*.

- 6.2 **Policy review process:** In April 2014, the Gavi Secretariat started the comprehensive, Board-requested review of the eligibility, graduation and co-financing policies. Fiscal space analyses<sup>4</sup> and scenario modelling were undertaken with support from Results for Development Institute, a non-profit policy advisory organisation. The review was informed by extensive consultations with stakeholders and experts at different stages of the process, an independent evaluation of the co-financing policy<sup>5</sup>, co-financing implementation tracking, vaccine adoption monitoring, graduation assessments in 14 currently graduating countries, and advice from an expert Technical Consultation Group (TCG)<sup>6</sup>. Initial findings from analyses and consultations were discussed with the PPC in October 2014.

## 7. Gavi's current co-financing policy

- 7.1 The co-financing policy requires that country governments contribute to vaccine costs by procuring a share of the required vaccine doses to cover the national target population (e.g. the birth cohort). Co-financing is *not* a payment made to Gavi. Gavi translates the required co-financing amount into the share of vaccine doses that countries will need to procure at the full Gavi price. Countries procure the required share of vaccine doses through systems and processes that are aligned with their existing procurement practices<sup>7</sup>.
- 7.2 The objective of the co-financing policy is to prepare countries for full self-financing of vaccines and the end of Gavi support and to ensure financial sustainability of Gavi's investments. For **low-income countries (LICs)**, self-sufficiency is a longer term goal. For these countries, the objective of the policy is to enhance country ownership of vaccine financing and to build capacity relating to procurement processes. The share of vaccine doses that these countries are required to contribute is small, and should not discourage vaccine adoption nor be an undue burden. LICs pay a flat rate of US \$0.20 per dose for each vaccine for which co-financing is required. For example, an LIC ('country x') that receives Gavi support for pentavalent (3 doses per child), pneumococcal (3 doses per child) and rotavirus (2 doses per child) vaccines, is required to contribute approximately US \$1.60 (8 x US \$0.20) per child in the birth cohort.
- 7.3 Once a country enters **Phase 1** ('intermediate'), its co-financing obligation increases by 15% every year in preparation for Phase 2 ('graduation'). For

---

<sup>4</sup> Fiscal space analyses draw on World Bank GNI per capita data, IMF economic growth projections, the WHO's global health expenditure database, UN population estimates and projections, Decade of Vaccine estimates on traditional vaccine expenditures, and Gavi vaccine demand forecasts and price projections.

<sup>5</sup> By the Norwegian Institute of Public Health, available on MyGavi

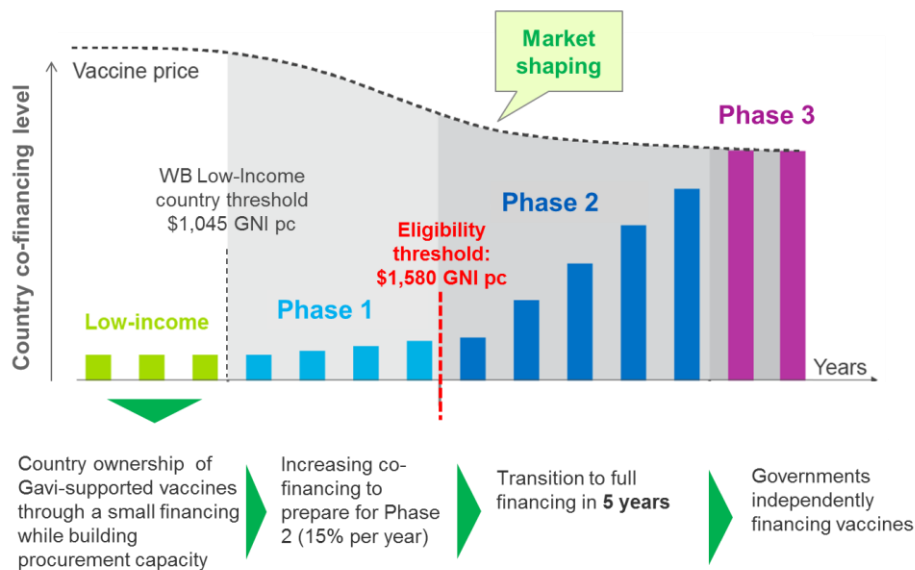
<sup>6</sup> A list of members of the TCG is available on MyGavi

<sup>7</sup> The only exception is Pneumococcal vaccine for which countries must use UNICEF SD to access to the Advance Market Commitment subsidy.

example, after five years in Phase 1, the co-financing requirements for country x would have increased to approximately US \$3.22 per child in the birth cohort.

- 7.4 As its GNI p.c. crosses the eligibility threshold, countries enter **Phase 2** (“graduating”) for a set period of five years. During this period, co-financing increases in a linear fashion to 100% of the projected cost of the vaccines used by the country (assuming the Gavi vaccine price) in the first year without Gavi support. Co-financing rates for Phase 2 countries are thus linked to (projected) Gavi prices in the current model.
- 7.5 The period that countries spend in the LIC phase and in Phase 1 depends on the rate at which their economies grow. Some countries remain in Phase 1 for a significant period of time, gradually building up their share of co-financing. Others progress more rapidly, and therefore have a larger financing gap to bridge in the five years of Phase 2.
- 7.6 The figure below illustrates how these elements, together with market shaping efforts, form the foundation of Gavi’s catalytic support model.

**Figure 2. Role of Co-financing in Gavi’s catalytic model**



## 8. Policy review findings

- 8.1 The sections below summarise key findings from: 1) an assessment of country performance to date, 2) fiscal space analyses and projections for 2016-2020, and 3) the independent evaluation of the Co-Financing Policy.

### Country performance to date

- 8.2 Although governments have generally made co-financing contributions in line with the policy, **an increasing number of countries fail to satisfy co-financing requirements on time** (see Table 1, Annex C). For most countries, the reasons for default appeared to be administrative and

process-related. However, some countries, such as Central African Republic (CAR), Guinea, and Afghanistan, have indicated encountering fiscal challenges in mobilising the required financial resources. The Country Programmes Update (Doc 03) provides additional analysis of country co-financing performance.

- 8.3 One clearly emerging pattern is a “**vicious cycle of default**”, which occurs when countries pay their arrears from the previous year to avoid the sanction of a suspension of Gavi support, but are unable to simultaneously cover the full requirements of the current year. For example, 70% of 2012 default countries defaulted again in 2013 although they paid their 2012 arrears during 2013. Again in 2014, 60% of the 2013 default countries defaulted in 2014, with about half making partial payments towards 2014 co-financing while paying off the arrears for the previous year. It is challenging for countries to pay two years of co-financing requirements in one fiscal year; particularly for countries that are required to co-finance large amounts (e.g. Phase 2 countries like Angola, Congo Republic and Ghana) or for countries with very limited fiscal space (e.g. CAR, DRC, Guinea, etc.). Also, the approach creates a characterization of these countries as chronic defaulters even though they have contributed co-financing annually following the initial year of default. For example, CAR did not co-finance in 2008 but has paid its contribution annually since on a timely basis though its payment has been allocated to the previous year’s arrears. Under current policy, Gavi reports CAR as being in default every year. Table 1, Annex C shows the countries that have not been able to pay co-financing on time, highlighting those with recurrent challenges.

#### Affordability of co-financing in 2016-2020

- 8.4 In line with the policy, and as a result of increasing vaccine introductions, countries will increase their co-financing contributions significantly in the period 2016-2020. During the next strategic period, countries are projected to contribute around US \$1.2 billion in co-financing.<sup>8</sup> To assess the affordability of these contributions, the Secretariat conducted fiscal space analyses of the projected cost to countries of Gavi-supported vaccines for all countries in 2016-2020 relative to general government expenditures (GGE)<sup>9</sup>. The projected average expenditure of all countries completing Phase 2 by 2020, 0.06% in their first year without Gavi support (Phase 3), was used as a comparator.
- 8.5 These analyses show that (projected) **co-financing requirements for countries in Phase 1 should generally be affordable** (see Figure 1, Annex C). By 2020, Phase 1 countries would, on average, need to allocate proportionally fewer resources for vaccines (0.05% of GGE) than Phase 3 countries. Some countries remain in Phase 1 for a significant time,

---

<sup>8</sup> These projections are based on the current policy and do not reflect adjustments in tailoring transition, which will impact the overall co-financing contribution.

<sup>9</sup> GGE is a more accurate proxy of fiscal capacity than health expenditures as it is not influenced by countries’ policy choices and priorities

gradually building up their co-financing share. Others progress more rapidly, leaving a larger financing gap to bridge in the final five-year graduation period (Phase 2). Countries entering Phase 2 after 2020 will, on average, have reached co-financing levels equivalent to approximately 30% of the cost of their vaccine portfolios. In contrast, current or soon to be Phase 2 countries, have entered / are entering Phase 2 co-financing less than 10% of their vaccine portfolios, requiring a rapid increase in vaccine budgets to assume the remaining 90% of the cost<sup>10</sup> over five years.

- 8.6 **Several low income countries could face fiscal challenges by the end of the next strategic period as cumulative co-financing requirements for expanding vaccine portfolios are projected to reach relatively high levels** (see Figure 1, Annex C). Low-income countries co-finance a small share of doses: this contribution is intended primarily to reinforce country ownership, without discouraging vaccine adoption or placing an undue burden on these countries. However, for some LICs the cumulative co-financing requirements related to expanding vaccine portfolios are reaching relatively high levels. Although co-financing for this group does not increase annually as it does for Phase 1 countries, additional vaccine introductions add \$0.20 per dose to the total co-financing obligation of these countries. As a result of these cumulative requirements and growth in the birth cohort, and in the context of relatively low General Government Expenditures, half of LICs will need to allocate shares higher than the average of those of countries in the first year of Phase 3 (0.06%). Some LICs, such as the Gambia, Burundi, and Malawi, would need to allocate shares (0.13-0.15%) that are two to two and a half times higher than the average of countries entering Phase 3 by 2020. The requirement that countries fully self-finance MR and JE routine vaccines is an important driver of the fiscal burden for LICs (See Figure 2, Annex C). The cost of these vaccines is currently about a quarter to half of the total co-financing requirement for the other vaccines supported by Gavi. These countries will also need to self-finance non-Gavi routine vaccines, which further adds to the cost.

#### Independent evaluation of the Co-Financing Policy

- 8.7 The independent evaluation of the co-financing policy, conducted by the Norwegian Institute of Public Health in 2014, informed this policy review. The evaluation focused on assessing the design, implementation and initial results of Gavi's (current) co-financing policy.<sup>11</sup> The evaluation concludes that Gavi's co-financing policy is an innovative mechanism in the field of global health that contributes to country ownership of vaccine financing and sustainable financing of vaccines. Other positive findings include:

---

<sup>10</sup> Assuming access to the Gavi price following Phase 2

<sup>11</sup> The report of the independent evaluation can be found on the Gavi website: <http://www.gavi.org/Results/Evaluations/Co-financing-Policy-evaluation/>

- (a) Policy design and revision processes have been characterised by extensive analyses and consultations
- (b) To date, co-financing requirements have been affordable for countries.
- (c) The default mechanism is a fair and appropriate mix of penalties and incentives.
- (d) The monitoring and support mechanisms are appropriate and effective

8.8 The evaluators also identified key barriers to successful implementation the co-financing policy including the administrative burden imposed on countries, affordability of future co-financing requirements for countries having adopted many vaccines, and an increase in the number of countries in default.

8.9 The evaluation also comments on the 'inconsistent inclusion of new vaccines into co-financing policy scope'. It states that not all GAVI-support vaccines require co-financing (some are fully financed by Gavi, such as IPV, and others are fully financed by countries, such as MR and JE routine vaccines) and that the exceptions create confusion. It also states that the rationale for excluding certain vaccines like MR is unclear. Co-financing was designed to apply to all Gavi-supported routine vaccines<sup>12</sup>, but not to campaigns because of the fiscal burden. However, in subsequent Board decisions on the opening of 'support windows' for MR and JE vaccines, Gavi decided not to apply co-financing to MR and JE routine vaccines.

## 9. Policy review recommendations

9.1 Based on country performance and feedback, the findings of the independent evaluation, and fiscal space analyses, the policy has generally worked well and the **revised policy maintains the key components** for the next strategic period 2016-2020. Specifically, the **country groupings** are well-aligned with countries' ability to pay, and are well known and accepted by countries. In addition, the **co-financing levels**, starting with US \$0.20 per dose for LICs, and increasing annually by 15% for Phase 1 countries are also maintained. As described in section 8, fiscal space analyses indicate that the increasing total co-financing amounts for Phase 1 countries should be affordable in 2016-2020. The same analyses give cause for some concern regarding the rise in fiscal burden for LICs. Several options for containing the fiscal burden on LICs imposed by Gavi's co-financing policy were evaluated. For example, a 'price break' on the co-financing requirement for the 4<sup>th</sup> or 5<sup>th</sup> vaccine and subsequent ones that are introduced was examined. However, none of these options were found to significantly reduce the projected fiscal burden

---

<sup>12</sup> At the time: Pentavalent, Yellow Fever routine, PCV and Rotavirus. Support for measles second was the only exception made because the vaccine cost was below the minimum co-financing level of \$0.20.

for LICs introducing the greatest number of vaccines. Waiving co-financing requirements for future introductions in LICs would have a significant effect, but this was not considered a viable option as it undermines the objective of ownership. It is therefore recommended that co-financing for LICs remains at a minimum of US \$ 0.20 cents per dose and with no mandatory annual increases. The proposed price floor for co-financed vaccines may help to reduce the fiscal burden for LICs.

- 9.2 Recommended **changes** in the revised policy are aligned with the overall goal **to strengthen Gavi's approach to supporting country transitions and mitigate associated high risks**. These include calculating the co-financing amounts for Phase 1 countries as a proportion of the vaccine price rather than a fixed per dose amount as described in the paragraphs below, and aligning co-financing requirements for Phase 2 countries with an extended timeframe for countries that face the highest transition risk, as described in Doc 04.

*Linking co-financing to the vaccine market price*

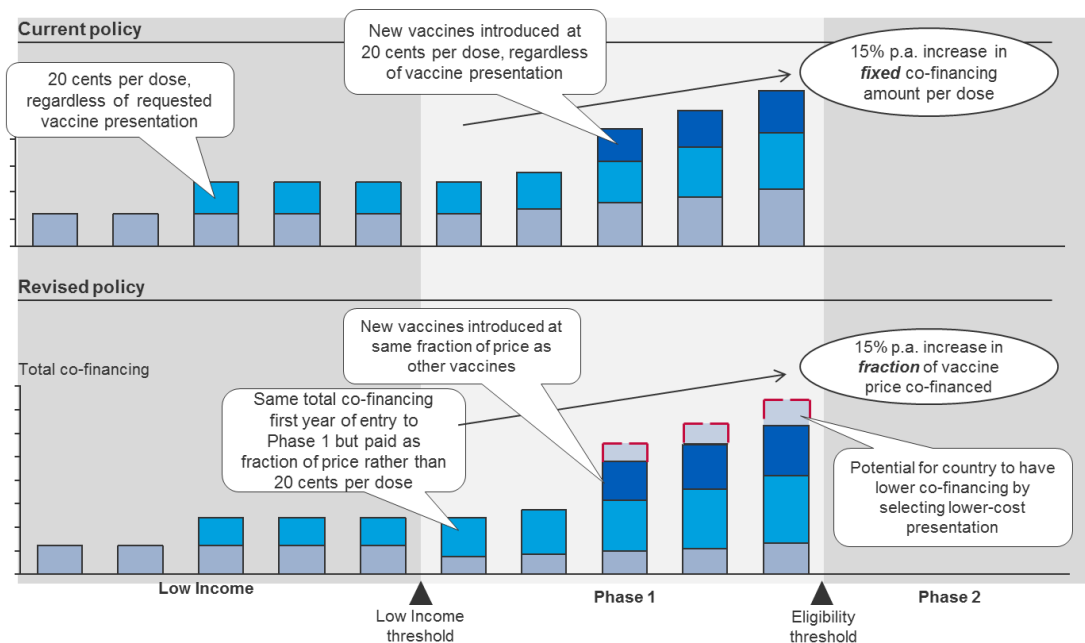
- 9.3 **Background.** Vaccine introduction decisions and product selection, including consideration of financial implications and trade-offs, are important responsibilities and key determinants of the long-term sustainability of immunisation programmes. The current co-financing policy does not provide strong incentives for countries under the eligibility threshold to take price differences between vaccines and between vaccine presentations into account in introduction decisions. As a consequence, eligible countries are afforded only limited opportunity to prepare for the realities of vaccine markets. **Linking co-financing obligations to vaccine prices helps countries prepare for the transition to full financing by increasing awareness of the financial implications of vaccine adoption and presentation choices.** When the current co-financing policy was approved in 2010, the Board asked for a review of this policy in 2014, to assess lessons from implementation and to (re-) assess the feasibility of linking co-financing to price for non-graduating countries. Co-financing obligations are already linked to the vaccines' prices for Phase 2 (graduating) countries, when co-financing is scaled up rapidly over five years as an increasing proportion of the (projected) total cost of vaccines. The proposed co-financing policy introduces this concept earlier, at the start of Phase 1.

- 9.4 **Current policy and rationale for change.** Co-financing for intermediate group ('Phase 1') countries currently begins at US \$0.20/dose, the amount paid by low-income countries, and then increases by 15% per year until they enter graduation ('Phase 2'). Phase 1 countries can express preferences for particular presentations, but they are not exposed to the cost implications of those choices. Instead, they co-finance a fixed amount per dose (increasing annually by 15%), regardless of the vaccine or vaccine presentation. This changes when countries cross the eligibility threshold to become graduating ('Phase 2') countries. Co-financing obligations are then calculated as a share of the total cost of each vaccine

as projected for the first year without Gavi support. This share increases rapidly over five years to reach the full (Gavi) price of the vaccine. Co-financing in Phase 2 is thus linked to vaccine prices. Consultations demonstrated broad consensus that preparations for countries' transition to full financing of vaccines should begin earlier, when countries are in Phase 1. Linking co-financing obligations to vaccine prices during this phase would contribute by increasing awareness of the financial implications of vaccine adoption and presentation choices. It would also ease the transition to Phase 2, when co-financing is already tied to vaccine prices, as countries would be familiar with the approach.

9.5 **Under the proposed policy the co-financing obligation for Phase 1 countries<sup>13</sup> would be a proportion of the vaccine price.** Co-financing obligations would therefore be greater for higher-cost vaccines and presentations than for lower-cost ones. The proportion of the price paid by a particular country (the 'price fraction') would be the same for all vaccines in its portfolio, including newly adopted vaccines as illustrated in figure 3 below. The co-financing obligation could therefore also be expressed as the share of doses that a country must procure for every co-financed vaccine. Similar to the current system, the fraction paid would grow by 15% every year. Thus, in a given year the country could be financing 10% of pentavalent vaccines, 10% of HPV vaccines, etc. In the following year (following a 15% increase of the price fraction), this country would be financing 11.5% of pentavalent vaccines, 11.5% of HPV vaccines, etc.

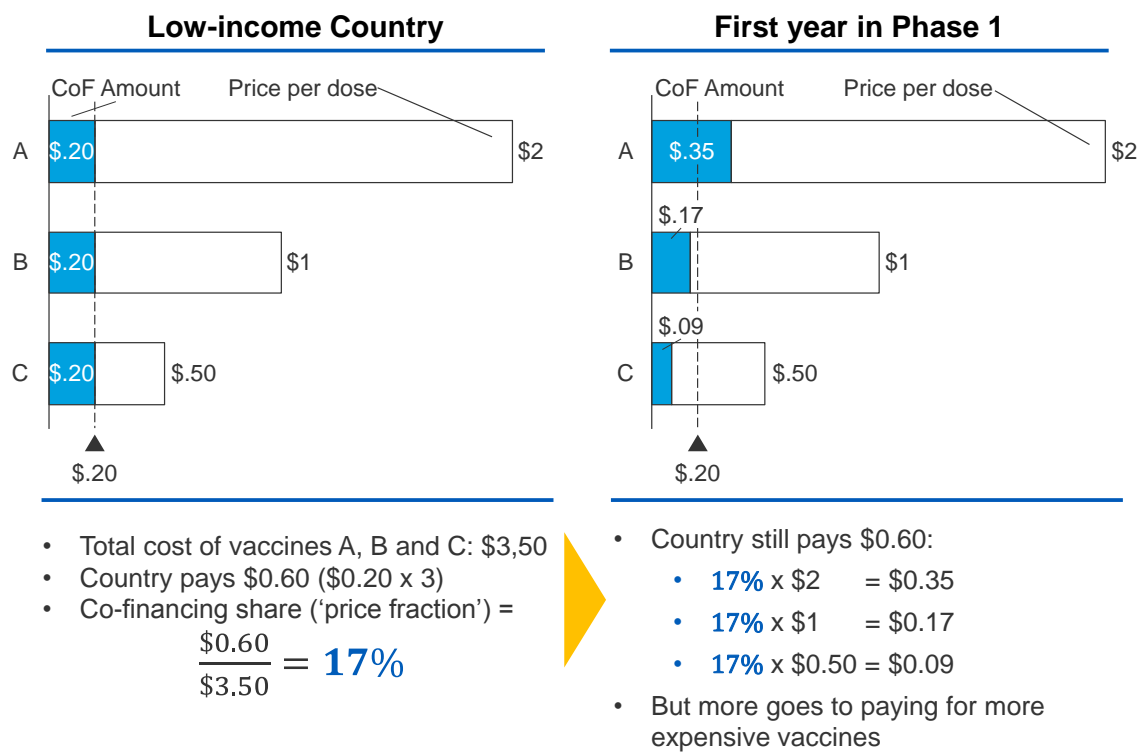
**Figure 3: price-linked co-financing from Phase 1 compared with the current policy**



<sup>13</sup> Compared to low-income countries, countries in Phase 1 generally have a greater capacity to manage change and respond to incentives, as well as a greater need to prepare for self-financing. The proposed policy therefore maintains the simple, fixed co-financing requirement for low-income countries as under the current policy. As low-income countries transition into Phase 1 and become exposed to price differences they could choose to switch products at any time.

9.6 **Transition from fixed amount co-financing in LIC group to price-linked co-financing in Phase 1.** The basis for calculating co-financing requirements thus changes as countries move from the Low-Income Country group to Phase. The policy is designed to make this transition relatively smooth. When a country transitions from the Low Income Country group to Phase 1, the *total* co-financing amount for the portfolio of co-financed vaccines remains the same in the first year of Phase 1, as it was in the last year of the Low-Income country phase. However, its co-financing requirements for the *individual* vaccines in its portfolio change to a proportion of the price of each vaccine, as illustrated in figure 4.<sup>14</sup>

**Figure 4: co-financing requirements for a portfolio of three vaccines in a countries' first year in Phase 1 (illustrative example)**



9.7 **Grandfathering.** Co-financing amounts in the first year of implementation of this policy (2016) will be calculated under the previous co-financing policy, as these are based on country applications from 2015, before countries would have been aware of the new policy. From 2016, all approvals and renewals for vaccine support will be governed by this policy, and from 2017 co-financing amounts would be calculated by applying the 'price fraction', as explained in section 5 of the policy in Annex A. This

<sup>14</sup> See Annex B for more details



ensures that there would be no disruptive transitions or abrupt changes to country co-financing budgets. The policy change would be accompanied by greater communication with countries about the implications of product choices and by new tools to aid decision-making. The aim would be to encourage a holistic view of these choices that takes into account the value of the vaccine in the local epidemiological context, short- and long-term cost, and operational implications, among other considerations.

- 9.8 **Implications.** The proposed approach to implementing the policy prevents disruptive change in total co-financing obligations of countries upon introduction of the new policy. For all but a few countries, projected *total* co-financing in later years, and thus fiscal burden, would remain similar to projected levels under the current policy. However, co-financing for higher-cost vaccines that are introduced during phase 1 would start at a somewhat higher level than under the current policy. For example, instead of US \$0.20 per dose, the co-financing amount would be a fraction of the vaccine price, typically 10-20%, which should still be affordable for Phase 1 countries. This furthers the objective of promoting increased consideration of financial sustainability in vaccine introduction decisions without introducing a major price barrier. Having started co-financing at a higher level for these more expensive vaccines, countries would face a less steep increase to the full price during Phase 2 than under the current policy. Countries that choose to switch to lower-cost presentations would benefit from reduced co-financing. It is difficult to predict how strong this incentive would be and what its market impact might be over the longer term. The introduction of a price signal might help to shape vaccine markets, which could in turn yield cost savings both to Gavi and to countries. This would probably be most relevant for pentavalent vaccine in the short run, given the price differences among presentations, but could become important for other vaccines if and when new products become available in the coming years.
- 9.9 Annex B provides more detail on the implementation of price-linked co-financing and alternative options considered.

#### *Default mechanism*

- 9.10 A country is considered 'in default' when it has not fulfilled its co-financing commitment for a particular year by 31 December of that year. Countries in default can apply for, but will not be approved for new vaccine support. For some countries the failure to meet their requirements on time is related to administrative barriers; for others to an inability to mobilise the needed resources for procurement. In recent years more and more countries are experiencing a '**vicious cycle of default**' - when countries pay their arrears from the previous year to avoid a suspension of Gavi support, but are unable to simultaneously cover the full requirements of the current year.
- 9.11 Under the proposed co-financing policy, Gavi and the country in default would agree on a plan to pay back the arrears in tranches. This would help to ensure that current year requirements are fulfilled while securing a

strong commitment to and tangible progress towards paying back arrears from the previous year. To come out of default, a country is required to fulfil the co-financing requirement of the current year together with the first tranche of arrears payments relating to the previous year as agreed in the **payment plan**. Following this payment and until the country has paid all arrears it will be considered a 'late payer'.

- 9.12 The proposed change better aligns the reporting on default with country performance. By labelling countries as 'late payers' if and when they have paid the current year requirement in combination with the first tranche of the previous year arrears, this helps to distinguish between 1) a country that was in default but is in the process of clearing the arrears (a 'late payer') in line with the agreed payment plan, and 2) a country that is in default and faces sanctions. This approach does not relax the requirements or **sanctions** that apply when a country does not fulfil the co-financing obligation on time. Support for the relevant vaccine will be suspended until all co-financing arrears for that vaccine are paid in full, unless the Board considers that exceptional circumstances justify the continuation of such support. The Board may also consider whether other types of support should be affected for the specific country in default.
- 9.13 The Immunisation Financing & Sustainability (IF&S) Task Team will continue to **monitor country performance** on timely co-financing on the reporting year and advise the Gavi Secretariat on determining whether a country has met its obligations. Gavi will continue to report regularly to the PPC and Board on country co-financing performance.

## **10. PPC guidance sought on financing model for MR and JE vaccines**

- 10.1 The support windows for Measles-Rubella (MR) and Japanese Encephalitis (JE) vaccines ('opened' by the Board in 2011 and 2013 respectively) introduced a unique cost-sharing approach. Under this model Gavi fully finances an initial, one-time campaign, while countries fully finance the subsequent routine introduction of the vaccine in the national immunisation programme.
- 10.2 The rationale<sup>15</sup> for this approach was that '...JE and rubella vaccines are inexpensive and in-line with the price of traditional vaccines, i.e. estimated to cost only slightly more than the minimum co-financing commitment of 20 cents per dose for low income countries. To increase country ownership and sustainability, Gavi recommends funding catch-up campaigns with countries then paying for routine introduction.' Of note, JE is more than twice and MR is almost three times the LIC co-financing requirement of \$0.20.

---

15As outlined in the September 2011 report to the PPC on 'Next steps on new vaccine windows: HPV, JE, Rubella and Typhoid'

- 10.3 Gavi's decision not to contribute to the financing of (routine) MR and JE was thus based on an assessment of the affordability of the *individual* vaccines. It did not explicitly assess the incremental effect of these costs on the affordability of countries' *total vaccine portfolios* over time, although it acknowledged that for some countries this could become challenging.<sup>16</sup>
- 10.4 As part of the 2014-2015 policy review, the Secretariat conducted fiscal space analyses of the projected cost of co-financing for LICs in 2016-2020. As described in paragraph 8.6, the fiscal burden of cumulative co-financing requirements for LICs is projected to reach relatively high levels in 2016-2020. An important driver is the added cost of fully country-financed MR and, to a lesser extent, JE.
- 10.5 The absence of a cost-sharing approach for MR and JE routine vaccines also creates inconsistency in co-financing requirements across Gavi vaccines. Routine Meningitis A vaccine, which – like MR and JE – is introduced into routine immunisation following an initial campaign and which has a similar cost profile, is offered at US \$0.20 per dose (in line with the co-financing policy), with Gavi covering the rest of the costs. Given regional differences in disease burden being targeted by these vaccines this approach also creates differences between countries in Gavi's co-financing model. The independent evaluation of the Co-Financing Policy also commented on the inconsistent inclusion of new vaccines into the co-financing policy scope. It states that these exceptions create confusion.
- 10.6 The Technical Consultation Group supported aligning Gavi's support for routine MR and JE vaccines with other vaccines in order to improve consistency of the approach across vaccines and geographical regions and to ensure affordability of life-saving vaccines for low-income countries (meeting report attached as Annex E to Doc 04).
- 10.7 Of note, the Gavi Board has requested a comprehensive Gavi investment strategy for measles and rubella vaccines for the 2016-2020 period. This strategy will be developed in 2015 for Board approval in December 2015.
- 10.8 The PPC is asked for guidance on Gavi's approach to requiring full country financing for some routine vaccines (currently MR and JE), taking into account:
- (a) the objective of the Co-Financing Policy
  - (b) the existing difference in Gavi's co-financing approach for vaccines that have similar characteristics

---

<sup>16</sup> The report states that 'GAVI must continue to monitor the programmatic and financial impact of multiple vaccine introductions on GAVI eligible countries. [...] some of the more fragile countries could find escalation of vaccine programmes cost-prohibitive over the short-term.'

- (c) the potential risk that full country financing of (Gavi-supported) routine vaccines will create challenges for LICs in meeting vaccine financing obligations in the future, and Gavi's tolerance of this risk.

10.9 Estimated incremental programme costs to Gavi resulting from Gavi supporting and countries co-financing MR and JE routine vaccines are in the range of US \$100-150 Million over 2016-2020, depending on uptake and on the recommended strategy for MR implementation (ie. one or two doses).

## **11. M&E Framework**

11.1 The M&E Framework for the revised Co-financing Policy is available on MyGavi.

## **12. Implementation plan**

12.1 The Co-Financing policy will come into effect on 1 January 2016. More details of the implementation plan are available on MyGavi.

12.2 Secretariat and partner activities relating to the proposals in this report will be included in the 2016 Gavi Alliance Engagement Framework.

## **Section C: Implications**

### **13. Impact on countries**

13.1 The introduction of price-linked co-financing for Phase 1 countries, accompanied by intensified communication on the implications of vaccine product choices and tools to facilitate scenario planning, would help inform country decision-making on vaccine introductions and product choice or switches. Price-linked co-financing creates an opportunity for countries to benefit from reduced co-financing for specific vaccines if they choose to switch to lower-cost presentations.

13.2 If countries in default comply with the agreed payment plan for co-financing arrears while also fulfilling their most recent co-financing requirement on time, they will now be reported as 'late payers' until all arrears have been paid.

13.3 Continued full country financing of MR, and to a lesser extent JE, in 2016-2020 will increase total vaccine financing obligations of LICs to relatively high levels.

### **14. Impact on GAVI stakeholders**

14.1 UNICEF, in cooperation with the Gavi Secretariat, will play an important role in the implementation of price-linked co-financing for Phase 1 countries including through intensified communication on product profiles to help inform country decision-making. Additional funding for these activities would be channelled through the Gavi Alliance Engagement

Framework and are included in the cost implications presented in Doc 04 (Strengthening country transitions out of Gavi support).

- 14.2 WHO, UNICEF, The World Bank and other partners will need to intensify their engagement to advocate and support countries to understand and comply with co-financing requirements.

## **15. Impact on Secretariat**

- 15.1 Countries will need to be made aware of and familiar with the new approach to calculating co-financing requirements and related implications. The Secretariat and Partners will need to engage with countries in default to ensure compliance with the agreed “payment plan” for arrears. Additional funding for these activities would be channelled through the Gavi Alliance Engagement Framework and are included in the cost implications presented in Doc 04 (Strengthening country transitions out of Gavi support).

## **16. Legal and governance implications**

- 16.1 Subject to the PPC recommending to the Board the approval of the revised Co-financing Policy, the Partnership Framework Agreement between Gavi and implementing countries and any affected legal arrangements with partners will be adjusted as appropriate.

## **17. Consultation**

- 17.1 Consultations for the revision of the co-financing policy were conducted in conjunction with the eligibility and graduation policy. The consultation process and key findings from the consultation are described in Doc 04 on strengthening country transitions out of Gavi support.

## **18. Gender implications**

- 18.1 The recommendation does not have gender implications.

## **Section D: Annexes**

Annex A: Co-Financing Policy

Annex B: Details on price-linked co-financing approach

Annex C: Graphs and data tables

Available on myGavi

- Independent Evaluation of the Co-financing Policy
- M&E framework for the Eligibility and Transition, and Co-financing policies

## Annex A: Co-Financing Policy

### DOCUMENT ADMINISTRATION

VERSION NUMBER	APPROVAL PROCESS	DATE
2.0	Prepared by: Robert Newman, Policy and Performance	
	Reviewed by: Gavi Programme and Policy Committee	04 May 2015
	Approved by: Gavi Alliance Board	June 2015 Effective from: 1 January 2016
	Next review:	To be reviewed and updated in 2019 or as and when required

## 1. Objectives

- 1.1. The overall objective of the co-financing policy is to increase country financing of Gavi supported vaccines in order to facilitate the transition out of Gavi support.
- 1.2. For countries with a long time frame before they will transition out of Gavi support, the intermediate objective is to enhance country ownership of vaccine financing and to build capacity relating to procurement processes.

## 2. Scope

- 2.1. This policy covers country groupings for co-financing purposes, co-financing levels, the process for annual co-financing updates, and the mechanism for situations in which countries fail to meet their co-financing requirements.

## 3. Principles

- 3.1. In accordance with this policy, all countries shall contribute to the cost of new vaccines introduced in routine vaccination programmes with Gavi support.
- 3.2. Low-Income Countries contribute an absolute (flat) amount per dose independent of the price of the vaccines used. Phase 1 and Phase 2 countries contribute an (increasing) proportion of the vaccine price towards full self-financing at the end of Phase 2.
- 3.3. Co-financing shall represent new and additional financing; countries shall not use funds allocated for financing other vaccines.
- 3.4. Countries shall not use other Gavi funds for co-financing.

## 4. Definitions

- 4.1. **“GNI per capita atlas method”**: Gross national income (GNI) is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad. GNI per capita is GNI divided by mid-year population. GNI per capita in US dollars is converted using the World Bank Atlas method which smoothes exchange rate fluctuations by using a three year rolling (‘moving’) average, price-adjusted conversion factor.
- 4.2. **“Low-Income Country”**: A country whose GNI per capita is equal to or below the threshold for the World Bank’s definition of a “Low-Income Country”.
- 4.3. **“Phase 1 Country”**: A Gavi-eligible country whose GNI per capita is above the Low-Income Country threshold and whose average GNI per capita of the previous three years is equal to or below the Eligibility Threshold.
- 4.4. **“Phase 2 Country”**: A country whose 3-year average GNI per capita is above the Eligibility Threshold, and for whom Gavi support is decreasing in accordance with the Eligibility and Transition policy.
- 4.5. **“Financial sustainability”**: The ability of a country to mobilize and efficiently use domestic and supplementary external resources on a reliable basis to achieve current and future target levels of immunisation performance.
- 4.6. **“Starting Fraction”**: the Starting Fraction is calculated by dividing a country’s total co-financing contribution for all co-financed vaccines by the total cost of all co-

financed vaccines based on the weighted average prices of the presentations used by the country. The Starting Fraction shall be calculated in year 1 of Phase 1 or, for countries already in Phase 1 when this policy becomes effective, in the first year of this policy.

- 4.7. **“Price Fraction”**: the Price Fraction is calculated annually by increasing the previous year’s fraction by 15% (ie. a factor of 1.15). The Price Fraction is applied to the price of a co-financed vaccine to determine the amount that a country co-finances for that vaccine.

## 5. Country co-financing requirements for routine vaccines

- 5.1. Countries are not required to co-finance Gavi-supported vaccines for use in immunisation campaigns. Such vaccines are fully financed by Gavi.
- 5.2. All Gavi-supported vaccines for use in routine vaccination programmes are co-financed by Gavi and the country, unless otherwise decided by the Gavi Board for specific vaccines.
- 5.3. Co-financing contributions are not paid to Gavi. The required co-financing amount is converted, using the full Gavi price, into a number of doses that the country is responsible for financing.

### **Low Income Countries**

- 5.4. The co-financing requirement for Low Income Countries is US \$ 0.20 per dose (no annual increase).

### **Phase 1 Countries**

- 5.5. The co-financing requirement for Phase 1 countries for each dose of each co-financed vaccine is the Price Fraction of the relevant year multiplied by the weighted average Gavi price of the presentation used by the country.
- 5.6. When a country transitions from the Low Income Country group to Phase 1, the *total* co-financing amount for the portfolio of co-financed vaccines remains the same in the first year of Phase 1, as it was in the last year of the Low-Income country phase. However, its co-financing requirements for the *individual* vaccines in its portfolio will be calculated by applying the Starting Fraction.
- 5.7. Thereafter, the Price Fraction, which is applied equally across all vaccines, increases by 15% each year, for example from 10% to 11.5%.
- 5.8. For any new vaccine adoptions during Phase 1, co-financing starts at the same Price Fraction as for other vaccines in the portfolio in that year.

### **Phase 2 countries**

- 5.9. When countries transition from Phase 1 to Phase 2, co-financing in the first year of Phase 2 (the ‘grace year’) increases by 15% as it would have in Phase 1.
- 5.10. Beginning the second year of Phase 2, co-financing requirements increase linearly in order to reach 100% of the projected weighted average Gavi price of the vaccine presentations used by the country in the first year without Gavi support. The timeframe for this increase –usually five years –is determined in accordance with the Eligibility and Transition Policy.
- 5.11. For any new vaccine adoptions during Phase 2, co-financing starts at the same Price Fraction as for other vaccines in the portfolio in the year of application. For



such adoptions, countries will be eligible to receive up to four years of Gavi support starting from the date of introduction.

## 6. Timeline for implementation

- 6.1. This Co-Financing Policy will come into effect on 1 January 2016. However, co-financing amounts in the first year of implementation of this policy will be calculated under the previous co-financing policy. From 2016, all approvals and renewals for vaccine support will be governed by this policy.
- 6.2. Co-financing group thresholds are updated annually according to the latest GNI p.c. data, which is released by the World Bank in July of each year. Countries will be informed of any changes to their co-financing grouping and when those changes will take effect.

## 7. Default mechanism

- 7.1. Compliance with the co-financing requirements in accordance with this policy is a condition to receive Gavi vaccine support. For self-procuring countries, compliance is defined by the purchase of the number of doses in the Secretariat's "decision letter" to the country.
- 7.2. A country is considered 'in default' when it has not fulfilled its co-financing commitment for a particular year by 31 December of that year.
- 7.3. Countries in default can apply for, but will not be approved for new vaccine support.
- 7.4. Gavi and the defaulting country shall agree on a payment plan for co-financing arrears, which may be paid in tranches over a set period of time. To come out of default, a country is required to fulfil the co-financing requirement of the current year together with the first tranche of arrears payments relating to the previous year as agreed in the payment plan. Following this payment and until the country has paid all arrears it will be considered a 'late payer'.
- 7.5. If a country does not pay the first tranche of arrears with the co-financing requirement of the current year by 31 December of that year and thus remains in default for more than one year, support for the relevant vaccine will be suspended until all co-financing arrears for that vaccine are paid in full, unless the Board (at its last meeting during the first year of default) considers that exceptional circumstances justify the continuation of such support. At that meeting the Board shall also consider whether other types of support should be affected.

## 8. Primary data sources

- 8.1. GNI per capita (Atlas method) from World Bank classifications
- 8.2. Definition of Low Income Country upper threshold from World Bank classification
- 8.3. Eligibility threshold adjustment for annual inflation using World Bank deflators
- 8.4. Projected weighted average prices of vaccine presentations from Gavi Secretariat
- 8.5. Reports from vaccine procurers on status of co-financing payments

**9. Effective date and review of policy**

- 9.1. This policy comes into effect as of 1 January 2016.
- 9.2. This policy will be reviewed and updated in 2019 or as and when required. Any amendments to this policy are subject to Gavi Board approval.

## Annex B – Details on price-linked co-financing approach

### Price-linked co-financing

This annex summarizes approaches to price linked co-financing that were considered before choosing the option presented in this paper. It then explains how the co-financing fraction of vaccine prices would be set under the proposed policy, how the transition from the current to the new policy would be handled, and what the policy would mean for total country co-financing and for co-financing obligations for newly adopted vaccines.

### **Price-linked co-financing options considered**

Several approaches to linking co-financing obligations to vaccine prices were developed and analyzed. These options differ in their basic structure, in the specific prices to which co-financing would be linked, and in the groups of countries to which the new approach would apply.

#### *Structural options*

Approach 1: In this option (recommended in this paper), co-financing obligations for all co-financed vaccines in a country's portfolio are the same fraction of vaccine price. For example, if the country uses a US \$2.00 pentavalent vaccine and a US \$3.50 PCV, it might pay 10% of each, or US \$0.20 per dose of penta and US \$0.35 per dose of PCV. This approach means that co-financing amounts varies not only between different presentations of the same vaccine but also between vaccines.

Approach 2: In this option, “premiums” or “discounts” would be attached to “base” co-financing obligations for more or less expensive presentations in a vaccine class, but the base rates would remain the same across vaccines, as under current policy. For example, a country that chose to use a more expensive penta presentation might have to pay more than the base rate of US \$0.20/dose, while a country that chose an inexpensive presentation might pay less. Gavi would have flexibility in setting the premiums and discount to further particular objectives. This approach would create incentives to choose less expensive presentations but would not affect choices between vaccines for different diseases.

Approach 1 was chosen primarily for simplicity and ease of communication, as countries would procure a set share of doses across all vaccines in their portfolio. A system of premiums and discounts would be complicated and might be difficult to justify to countries and manufacturers.

#### *Choice of linkage prices*

Co-financing could be linked either to the weighted average prices of the presentations chosen by a country (e.g. pentavalent 10-dose vial or 13-valent PCV vaccine<sup>17</sup>) or to the price of specific products (e.g. 10-dose pentavalent from a particular manufacturer).

---

<sup>17</sup> “Presentation” is defined here as UNICEF Supply Division defines it in accommodating country preferences, to include not only important differences in presentation in the narrow sense (e.g.,

Although linking to specific product prices might have a stronger market-shaping effect, it would require a change in UNICEF Supply Division's practice of following country preference in regard to presentations but not specific manufacturers, which has allowed it to strategically award product shares to particular manufacturers of similar presentations. Moreover, the primary rationale for introducing a link to prices, preparation for transition, is compatible with linking to presentation weighted average prices because this is how it is done for Phase 2 countries. This option is recommended.

### *Country groups*

The option of applying price-linked co-financing to low-income as well as intermediate-group (Phase 1) countries was considered but rejected. The importance of preparing for financial sustainability is greater for Phase 1 countries, which are also, on average, in a stronger position to benefit from the incentives that the new system creates.

### **Price fractions and transition to the new policy**

Under the proposed policy, countries' co-financing obligations would be determined as a fraction of the weighted average price of the vaccine presentation used by the country (for example, "penta, 10-dose vial" or "13-valant PCV"). This fraction would be same for all vaccines in the country's portfolio but would increase by 15% every year, just as co-financing obligations increase by 15% every year for intermediate countries under current policy. For example, if the country's price fraction were 10% in 2017, it would be 11.5% in 2018.

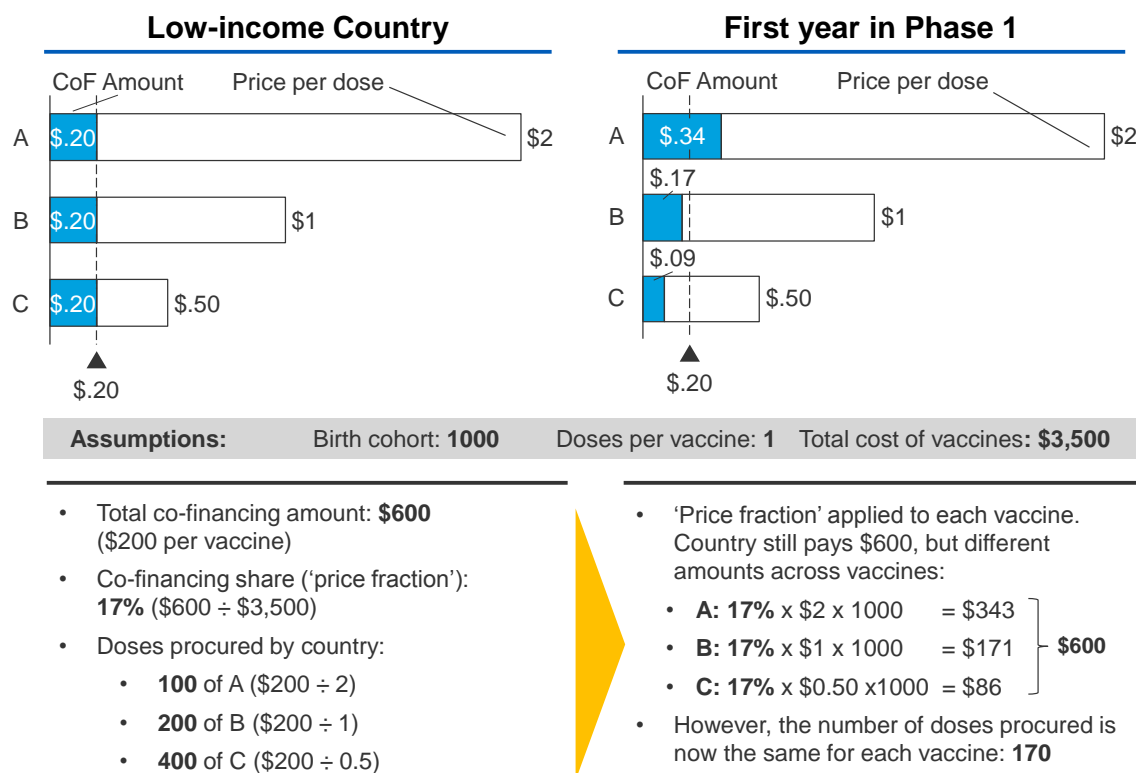
**The new policy would be implemented in two steps in 2016 and 2017.** The starting fraction of price for the first year would be calculated by dividing a country's total co-financing contribution for all co-financed vaccines by the total cost of all co-financed vaccines based on the weighted average prices of the presentations used by the country. The Starting Fraction will be calculated in year 1 of Phase 1 or, for countries already in Phase 1 when this policy becomes effective in 2016. Although the fraction of price would be calculated on the basis of 2016 co-financing and vaccine costs, the actual co-financing obligations in that year would be as required under current policy. Thus countries can be assured that the advent of the new policy will not change their obligations for 2016 in any way. In 2017, countries' co-financing obligation for each vaccine will be determined by the new policy, as a fraction of price, with the fraction set as the 2016 fraction increased by 15%. This will result in changed obligations for particular vaccines, but little or no change in total co-financing obligations from the amount under current policy.<sup>18</sup> Figure X illustrates in simplified form how the price fraction would be set and the implications for co-financing for particular vaccines.

---

number of doses per vial) but also difference in vaccine design with a class (e.g. 10-valent versus 13-valent PCV).

<sup>18</sup> A country's total co-financing in 2017 could be different from its projected co-financing under current policy if it introduces a new vaccine in 2017. Since its obligations for this vaccine would be \$0.20/dose under current policy but a fraction of price under the new policy, it will pay more if the new vaccine is relatively expensive.

Figure X:



According to current GNI projections, 15 countries are expected to be in Phase 1 in 2016; three are expected to enter Phase 2 in 2017 which an additional 3 countries enter Phase 1. The starting fraction of price for these countries ranges from 6.5% to 18.9%, although most are clustered around the median of 11.5% (see Table 1). The most important determinant of the starting fraction is how long a country has been in the intermediate co-financing group and therefore building up its co-financing under current policy: of the four countries with starting fractions above 13%, all but one (Chad) were in the intermediate group in 2012, when the current policy came into effect, while the three that enter below 9% enter in 2016 or 2017. Portfolio composition also matters: countries whose portfolios consist of relatively expensive vaccines will on average begin at a lower fraction of price.

Table 1: Projected Fraction of Price for Co-financing for Phase 1 Countries between 2016 and 2020

Country	Fraction of price in 2016 (%)	Fraction of price in 2017 (%)	Fraction of price in 2020 (%)	Projected vaccine adoptions	Year of projected adoptions	Projected fraction of price for projected new adoptions <sup>19</sup>
Bangladesh <sup>20</sup>	NA	NA	9	Rota, HPV	2018, 2018	7%
Cambodia	NA	7	10	Rota, HPV	2018, 2019	8%, 9%
Cameroon	19	22	33	HPV	2016	19%
Chad	14	16	24	Pneumo, Rota	2108	18%
Cote d'Ivoire	10	12	NA	HPV	2016	10%
Djibouti	11	13	NA			
Kenya	7	9	13	HPV	2016	7%
Kyrgyz Republic	9	11	16	Rota, HPV	2018, 2019	12%, 14%
Lao PDR	10	NA	NA	HPV	2016	10%
Mauritania	10	12	18	HPV	2018	14%
Pakistan	14	16	NA	Rota	2018	18%
Sao Tome and Principe	12	14	NA	HPV	2017	14%

### Implications for countries

The linking of co-financing obligations to vaccine prices, accompanied by stronger communication with countries on multiple dimensions of vaccine and presentation value, including price, is expected to increase country awareness of prices and greater consideration of financial implications of vaccine choices. The rationale behind the policy change is that this increased awareness is an important preparation for the transition out of Gavi support.

The policy change, implemented as described here, would have relatively little effect on total country co-financing and thus on the affordability of co-financing for from countries. By design, the total co-financing amount in 2016 under the new policy will be the same

<sup>19</sup> Fractions in parentheses are for vaccines adopted either in 2016 or in the year a country enters Phase 1.

<sup>20</sup> Bangladesh is projected to enter Phase 1 in 2018.

as under the current policy; similarly, total co-financing for countries entering the group in later years will not change in the first year. Total co-financing under the new policy can diverge from total co-financing under current policy in subsequent years because of the way newly introduced vaccines is handled. Under current policy, co-financing for new vaccines is US \$0.20 per dose, while under the new policy it would be the same fraction of price as other vaccines in the country's portfolio in that year. Thus co-financing for the new vaccine, and total co-financing, will be higher under the new policy if the new vaccine is relatively expensive and the country fraction is high, lower if the new vaccine is relatively inexpensive or the fraction low. According to current vaccine introduction and price forecasts, total co-financing under the new policy would differ substantially (by more than 20%) from obligations under the current policy for one country, Chad. Chad's total obligations in 2020 would be about 60% higher than under current policy, as a result of its projected introduction of two relatively expensive vaccines in 2018 (rotavirus and PCV).

The change in co-financing for newly introduced vaccines could potentially affect adoption decisions. In particular, it could discourage the adoption of more expensive vaccines, notably HPV. There are 12 projected HPV introductions by countries in Phase 1 in the 2016-2020 period. Seven of these introductions are in 2016 (6 countries) or in a country's first year in phase 1 (1 country) and in these cases the HPV co-financing fraction does not effect total co-financing and is therefore unlikely to discourage adoption. Of the remaining 5 HPV adoptions, 4 are at fractions of price below 15%, while Sudan's projected introduction in 2020 would begin at 21% of price. The co-financing rates are certainly considerably higher than US \$0.20/dose under current policy, but remain a small fraction of what these countries will have to pay as soon as the second year of Phase 2..

Since under the new policy co-financing obligations would be based on the weighed average price of the presentation the country uses, the policy creates an incentive for countries to switch to lower-cost presentations. In the short term, the only vaccine for which multiple presentations with significantly different prices are available is pentavalent. Of the 21 countries expected to spend time in Phase 1 during 2016-2020, 14 currently use a higher-cost 1- or 2-dose presentation, and the 1-dose presentation is currently more than 50% more costly than the 10-dose vial. The savings in pentavalent co-financing from switching could thus be significant, although the effect on total co-financing would in most cases be modest.

As new products become available, the price signal conferred by price-linked co-financing could become important in other vaccine markets and could in theory play an important market-shaping role.

Annex C: graphs and data tables

Table 1: List of countries in default 2008-2014 (total number of consecutive years in default)

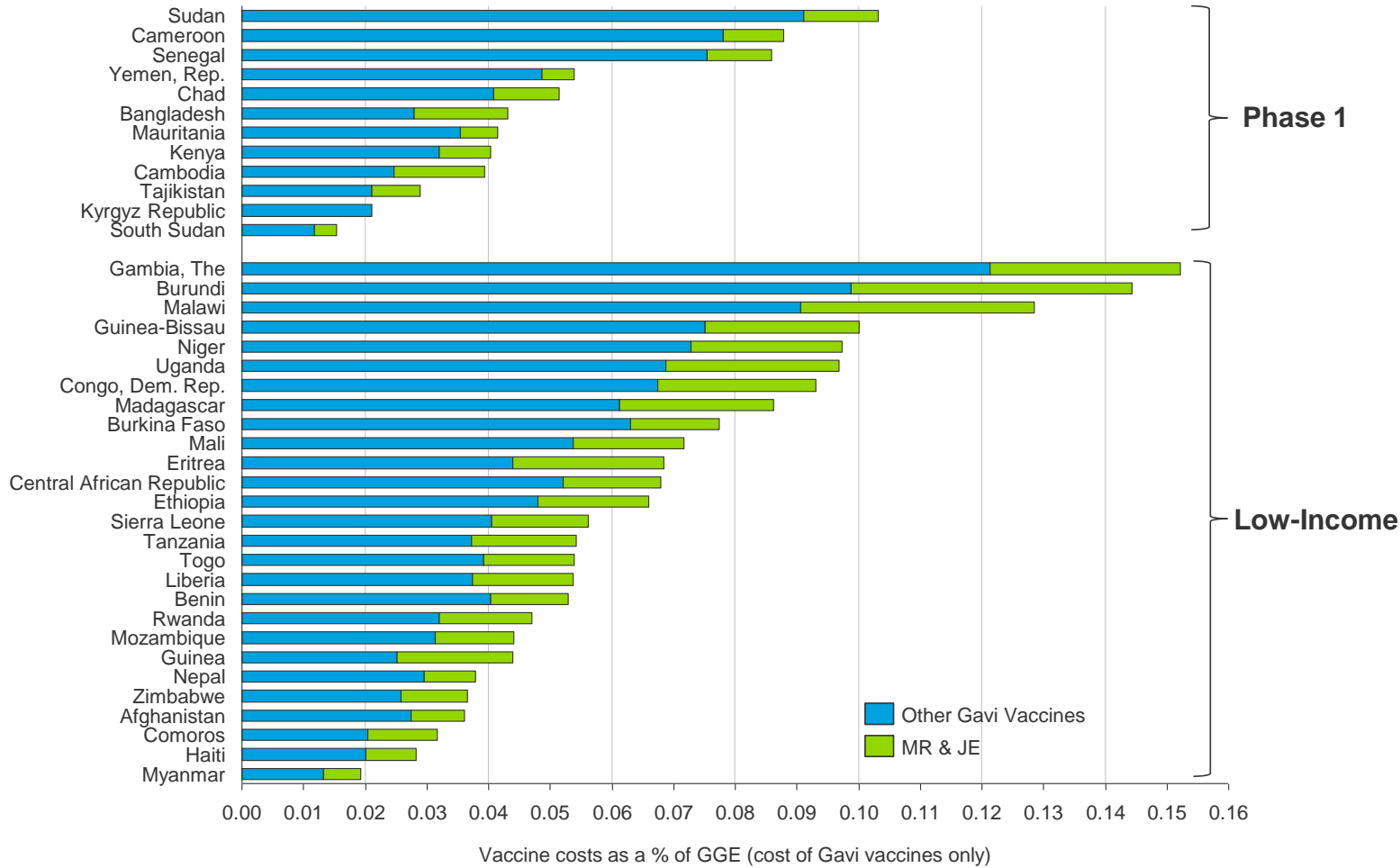
2008	2009	2010	2011	2012	2013	2014
CAR	CAR	CAR	Angola	Afghanistan	Afghanistan (2)	Angola (4)
Chad	Cote d'Ivoire	DRC	CAR	Angola	Angola	Congo Rep. (3)
Gambia	DRC	Georgia	DRC	CAR (5)	Cameroon	DRC
Guinea-Bissau	Guinea	Guinea	Togo	Congo Rep.	Congo Rep.	Cote d'Ivoire
Guinea	Uzbekistan	Guinea-Bissau		DRC (4)	Djibouti	Djibouti (2)
Kiribati		Kenya		Guinea	Ghana	Ghana (2)
Lesotho		Niger		Niger	Guinea (2)	Guinea-Bissau
Pakistan				Pakistan	Kenya	Haiti
				Sudan	Kiribati	Lesotho
					Kyrgyzstan	Kenya (2)
					Pakistan	Papua New Guinea
					Sierra Leone	Pakistan (3)
					Solomon Is.	Sudan South
					Zimbabwe	Tanzania
						Uganda
						Vietnam
						Zimbabwe (2)

Two consecutive years not paying on time

More than two consecutive years not paying on time

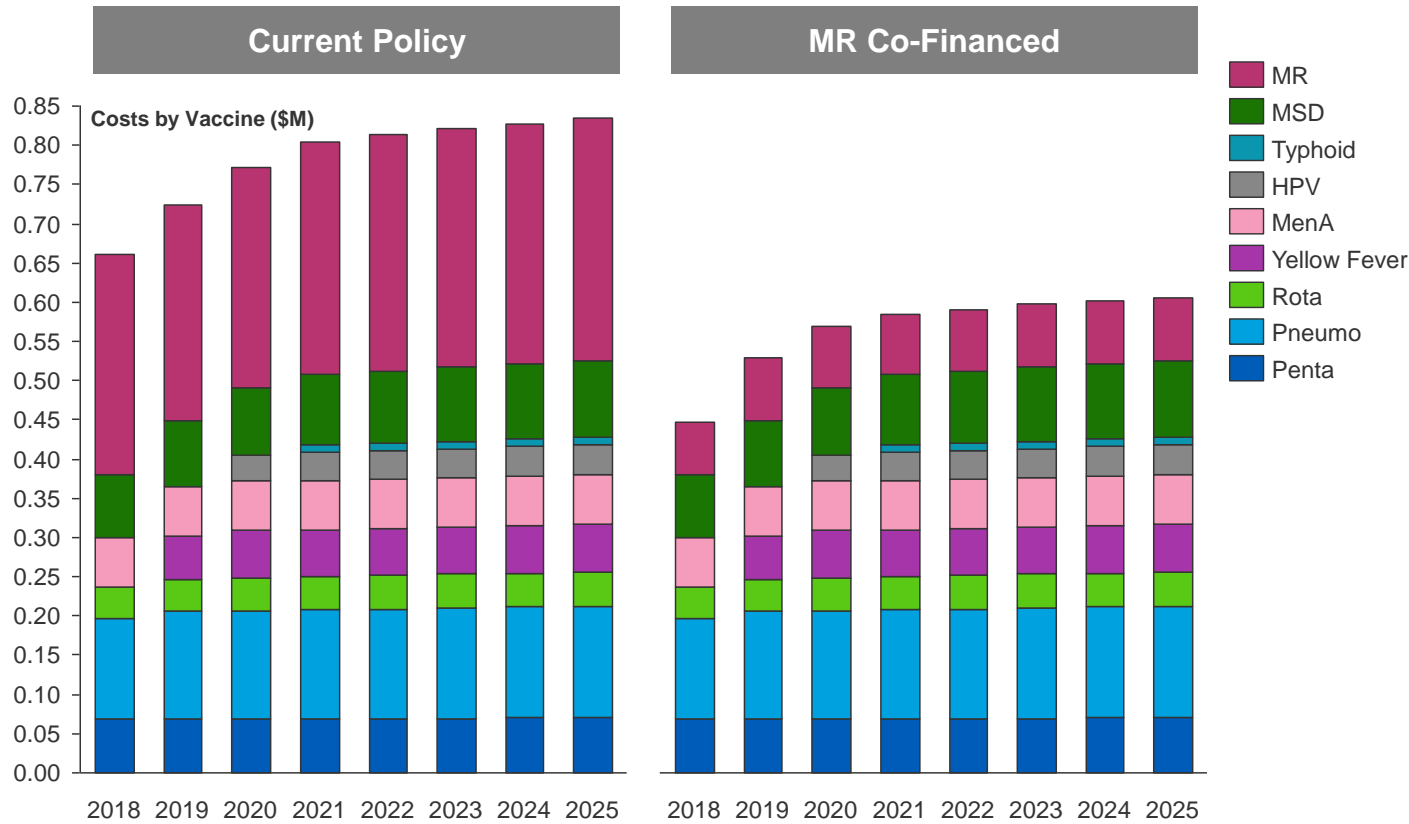


Figure 1: Vaccine costs to Phase 1 and Low-Income Countries as a share of GGE<sup>21</sup>, 2020



<sup>21</sup> General Government Expenditures

**Figure 2: Country cost of Gavi-supported vaccines under current policy (full country financing of routine MR), and country cost under MR co-financing scenario, Eritrea example**



Under Gavi's current policy, countries fully finance MR following a Gavi-supported campaign