

Evaluation of the GAVI Alliance Co-financing Policy

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Dimitrios Gouglas, MSc

Klara Henderson, PhD, MCom (independent consultant)

Jens Plahte, PhD, MA

Christine Årdal, MBA

John-Arne Røttingen, MD, PhD, MSc, MPA

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Contents

Ac	knowl	edger	ments	1
Ac	ronym	s and	abbreviations	2
Ex	ecutive	e Sum	ımary	4
1.	Introduction			8
	1.1.	Back	ground	8
	1.2.	Eval	uation scope and objectives	9
2.	Met	hodo	logy	10
	2.1. Evaluation Framework			10
	2.2.	Eval	uation methods	10
3.	Find	lings		13
	3.1.	Deve	elopment process and policy design	13
	3.1.	1.	Use of evidence and analyses in policy design and revision processes	14
	3.1.	2.	Assumptions underpinning the policies	16
	3.1.	3.	Alignment with other GAVI Alliance policies	18
	3.1.	4.	Country ownership and financial sustainability	19
	3.2.	Impl	ementation and support	31
	3.2.	1.	Financial planning and decision making for vaccine co-financing	32
	3.2.2.		Mobilising resources to meet co-financing requirements	35
	3.2.	3.	Supporting the co-financing policy implementation	40
	3.2.	4.	Policy monitoring.	44
	3.3.	Inte	rmediate results and implications of the co-financing policy	46
	3.3.	1.	Co-financing generated and country compliance to-date	46
	3.3.	2.	Drivers behind defaults	48
	3.3.	3.	Incentivising country ownership	52
	3.3.4.		Placing countries on track to financial sustainability	57
4.	Less	ons f	or the future	61
5.	Rec	ommo	endations	64
	5.1.	Poli	cy design recommendations	64
	5.2. Impl		ementation recommendations	65
	5.3.	Inte	rmediate results and implications recommendations	65
6.	Ann	exes.		67
An	nex 1:	Buru	ndi case study	67

Annex 2: Ghana case study	73
Annex 3: Moldova case study	80
Annex 4: Country co-financing funding sources	85
Annex 5: List of consulted experts	90
Annex 6: Survey responses from WHO, UNICEF and EPI/MoH country officials	92
Annex 7: Evaluation questions	94
Annex 8: EPI/MoH country official survey templates	96
Country official survey TEMPLATE 1	96
Country official survey TEMPLATE 2	102
Country official survey TEMPLATE 3	107
Country official survey TEMPLATE 4	112
Country official survey TEMPLATE 5	118
Annex 9: UNICEF/WHO country office survey templates	124
UNICEF country office survey template	124
WHO country representative survey	128
Annex 10: List of countries with a history of co-financing	132
Annex 11: Detailed methodology	133
Annex 12: The original co-financing policy (operational from 2008 – 2011)	139
Annex 13: The revised co-financing policy (operational 2012 – present)	142
References	1/16

Figures

Figure 1. Number of countries co-financing and total co-financing contributions (US\$, 2008-2013).	5
Figure 2. Co-financing as share of GAVI Alliance funding by country group, 2008-2013	23
Figure 3. Co-financing as share of government vaccine expenditure (GVE) (%)	24
Figure 4. Co-financing as share of EPI routine expenditure (2009-2013).	25
Figure 5. Co-procurement steps for vaccine co-financing through UNICEF SD	27
Figure 6. Average lead times in between UNICEF SD procurement processing actions for co-financi	ing,
2009-2013	29
Figure 7. Technical assistance provided to countries in response to co-financing implementation, a	IS
perceived by country EPI official survey respondents.	41
Figure~8.~Number~of~countries~co-financing~and~total~co-financing~contributions~(US\$,~2008-2013).	. 47
Figure 9. Drivers behind country defaults, by defaulter country grouping, 2008-2013	. 49
Figure 10. Vaccine programmes co-financed by intermediate countries, 2008-2013	51
Figure 11. Reported main reasons for countries' introduction of their most recently introduced GA	۱VI-
funded vaccine under the co-financing policy.	53
Figure 12. Cumulative co-financing and internal vs external traditional vaccine expenditures for	
graduating countries with data, 2009-2013	55
Figure 13. Cumulative co-financing and internal vs external traditional vaccine expenditures for	
intermediate countries with data, 2009-2013.	
Figure 14. Cumulative co-financing and internal vs external traditional vaccine expenditures for lov	
income countries with data, 2009-2013.	55
Figure 15. Implications on procurement due to co-financing, as reported by country EPI/MoH office	ial
survey respondents	56
Figure 16. Number of vaccines introduced; and vaccine costs as percentage of EPI routine costs	
(excluding salaries, per diems, and program management); 8 graduating countries with data, 2008	
2013	
Figure 17. Number of vaccine programmes co-financed and total co-financing (US\$) by Burundi pe	
year, 2008-2013	
Figure 18. Burundi co-financing as a share (%) of GAVI Alliance funding (by programmatic year), 20	
2013	
Figure 19. Burundi's General Government Health Expenditure and Government Vaccine Expenditu	
2008-2012.	
Figure 20. Number of vaccine programmes co-financed and total co-financing (US\$) by Ghana per	
year, 2008-2013	
Figure 21. Ghana co-financing as a share (%) of GAVI Alliance funding (by programmatic year), 200	
2013	
Figure 22. Ghana's General Government Health Expenditure and Government Vaccine Expenditure	
2008-2012.	
Figure 23. Number of vaccine programmes co-financed and total co-financing (US\$) by Moldova policy 2000 2013	
year, 2008-2013	. 80
Figure 24. Moldova co-financing as a share (%) of GAVI Alliance funding (by programmatic year),	۰.
2008-2013.	. 81
Figure 25. Moldova's General Government Health Expenditure and Government Vaccine Expenditure, 2008-2012	04
EVNERALITE ALIAN-ALIA	21

Tables

Table 1: Evaluation framework	10
Table 2. Actions applying depending on length of country default	26
Table 3. Co-financing countries grouped by their co-financing funding mechanisms, 2012-2013	36
Table 4. Actions taken by countries to meet co-financing requirements, as reported by country	
EPI/MoH official survey respondents	39
Table 5. Examples of reasons for granting flexibilities under the co-financing policy, 2008-2013	45
Table 6. Countries having defaulted on their co-financing obligations by default cluster, 2008-2013	3.48
Table 7. How co-financing would be prioritised in case of no GAVI Alliance support, as perceived b	у
WHO/UNICEF country office survey respondents.	54
Table 8. Assessments of Burundi's priority based on five types of measurable prioritisation and	
commitment	70
Table 9. Assessments of Ghana's priority based on five types of measurable prioritisation and	
commitment	77
Table 10. Assessments of Moldova's priority based on five types of measurable prioritisation and	
commitment	83
Table 11. Countries co-financing through direct government funding and no pooled fund in place.	85
Table 12. Countries co-financing through government funding, with pooled funds for health secto	
financing in place	87
Table 13. Countries co-financing commitments through direct government funding, but fully	
externally dependent for payment of traditional vaccines in the last one to two years	89
Table 14. Countries fully externally dependent for both their co-financing commitments and their	
traditional vaccines in the last one to two years	89
Table 15. Responses from WHO, UNICEF and EPI/MoH country offices in low income countries in	
survey	92
Table 16. Responses from WHO, UNICEF and EPI/MoH country offices in intermediate countries in	1
survey	93
Table 17. Responses from WHO, UNICEF and EPI/MoH country offices in graduating countries in	
survey	93
Table 18. Distribution of survey templates across country groupings	136
Table 19. Response rates in country survey	136
Table 20. Literature search #1, criteria and results	137
Table 21. Literature search #2, criteria and results	137

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Acronyms and abbreviations

AMC Advance Market Commitment

AMP Agence de Médecine Préventive

APR Annual Progress Report

AVI TAC Accelerated Vaccine Introduction Technical Assistance Consortium

BCG Bacille Calmette Guérin vaccine; BCG-vaccine

CAR Central African Republic

CE Cost Estimate

CMYP Comprehensive Multi-Year Plan
CRO Country Responsible Officer
CSO Civil Society Organisation
CTA Country Tailored Approach
DRC Democratic Republic of Congo

DTP Diphtheria-Tetanus-Pertussis vaccine

DTP3 The full three dose schedule of the DTP vaccine

EPI Expanded Programme on Immunisation

EU European Union

EVM Effective Vaccine Management

FSA Fiscal Space Analysis

FSP Financial Sustainability Plan
GDP Gross Domestic Product

GGHE General Government Health Expenditure

GNI Gross National Income

GVE Government Vaccine Expenditure

HepB Hepatitis B vaccine

HiB Haemophilus B vaccine

HPV Human Papillomavirus Vaccine

ICC Interagency Coordinating Committee

IF&S Task Team Immunisation Financing and Sustainability Task Team

IMF International Monetary Fund
IPV Inactivated Polio Vaccine

IRC Independent Review Committee

JE Japanese Encephalitis vaccine

JRF Joint Reporting Form

LIC Low Income Country

LMIC Lower Middle Income Country

MCV2 Measles-Containing Vaccine 2nd dose

MDG Millennium Development Goals

MeSH Medical Subject Heading

MoF Ministry of Finance
MoH Ministry of Health

MM Measles-Mumps vaccine
MR Measles-Rubella vaccine
MSF Médecins Sans Frontières
NHA National Health Account

NITAG National Immunisation Technical Advisory Group

NVS New and Underused Vaccines Support

OECD Organisation for Economic Co-operation and Development

OECD DAC OECD Development Assistance Committee

OPV Oral Polio Vaccine

PAHO Pan American Health Organization

PAHO RF Pan American Health Organization's Revolving Fund

PCV Pneumococcal Conjugate Vaccine

penta pentavalent vaccine: DTP + HiB + HepB

PPC Policy & Programme Committee

RfP Request for Proposals

rota rotavirus vaccine

SWAp Sector Wide Approach

tetra tetravalent vaccine: DTP + HepB

Tt Tetanus toxoid vaccine

UK United Kingdom
UN United Nations

UNICEF United Nations Children's Fund

UNICEF SD UNICEF Supply Division
WAP Weighted Average Price

WB World Bank

WHO World Health Organization

YF Yellow Fever Vaccine

Executive Summary

The GAVI Alliance is a vaccine-financing partnership that has financed the purchase of over 1 billion doses of new and underused vaccines in 73 developing countries. With the objective of contributing to in-country financial sustainability, the GAVI Alliance implemented a co-financing policy in 2007, with the expectation that even the poorest countries could purchase a small amount of vaccines. A revised co-financing policy came into effect in 2012, with an additional objective of strengthening country ownership of vaccine financing. A total of 68 countries have co-financed GAVI-supported vaccines from 2008 to 2013, with a combined total of US\$ 254.7 million for the six-year period.

Scope and methods

This document is an independent evaluation, commissioned by the GAVI Secretariat in 2014, with the main task of assessing the design, implementation and intermediate results of the GAVI Alliance cofinancing policy (both versions). This includes identification of lessons learnt and recommendations to help inform the 2014-2015 revision of GAVI policies, including the co-financing policy.

To perform this assessment we used five main types of data: 1) literature and document review, 2) in-depth consultations with identified immunisation financing experts, 3) e-mail based surveys sent to Ministry of Health officials, UNICEF and WHO country representatives, 4) in-country interviews with all immunisation-related stakeholders in three countries (Burundi, Ghana and Moldova), and 5) exploratory data analysis of economic and vaccine-related financial information gathered from the GAVI Secretariat, UNICEF Supply Division and extracted from specified databases.

Main findings

In our assessment, the following important messages emerge from our investigation. **Firstly, the GAVI Alliance co-financing policy is an innovative mechanism in the field of global health.** In a concrete and practical manner it is employing the principles that 1) poor countries should make tangible commitments as a precondition for external financial support, and 2) that the longer term goal of providing external earmarked support, like for instance GAVI support, is for the countries to become increasingly responsible for sustaining the financing by their own means and actions. We observe that the GAVI Alliance's strategic goal is to put countries on a track towards financial sustainability, while at the same time conceding that many partner countries will remain donor-dependent in both the medium and long term.

Policy design and revision processes have been characterised by extensive analyses and consultations. Due to the novelty of co-financing the assumptions of the original co-financing policy were partly rooted in normative beliefs and not entirely grounded in evidence. However, the last policy revision process was founded on sound evidence and realistic assumptions. In our view, the GAVI Alliance has been steadily increasing the participation of partner country representatives in their consultation processes, thereby both responding to some initial criticism of top-down paternalism and working towards greater partner country ownership of vaccine financing.

To date, co-financing requirements have been affordable for the partner countries, evidenced by the low number of defaulting countries who mainly defaulted due to procedural issues, not due to insufficient resources. Nevertheless, we are concerned that steep increases in co-financing (Figure 1),

caused both by the introduction of new vaccines and by annual co-financing increases for the intermediate and graduating groups, could outpace the increases in the national immunisation budgets, with a potential result of increasing numbers of defaults and graduated countries unable to sustain their vaccine portfolio. Indeed, 2013 was the year with the highest number of defaulting countries since the launch of the co-financing policy (2008). Therefore, we have recommended that the five-year graduation period be re-evaluated.

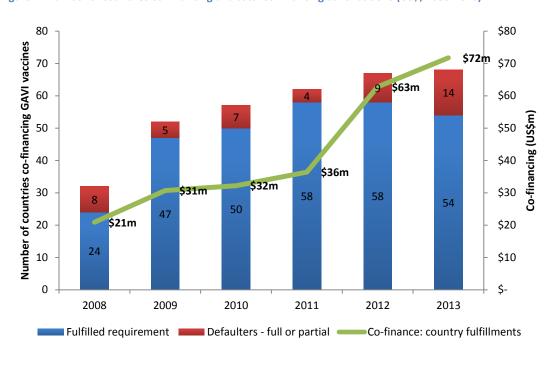


Figure 1. Number of countries co-financing and total co-financing contributions (US\$, 2008-2013).

Author's own calculation

Data source: GAVI Secretariat co-financing database

Figure includes 68 GAVI-eligible countries with history of co-financing, from 2008 to 2013

Note: The data included in the graph is limited to those countries for which data was available.

The default mechanism is a fair and appropriate mix of penalties and incentives, with the potential to apply flexibilities for those countries in crisis. The repercussions of default are taken seriously by countries, and, therefore, the default rule reinforces country ownership.

The monitoring and support mechanisms are appropriate and effective. The Immunisation Financing and Sustainability (IF&S) Task Team, an independent body tasked with monitoring compliance with the co-financing policy, is an important design element, and its autonomy and integrity will become increasingly valuable if, in fact, a trend of more countries defaulting materialises. The coordination and communication between the IF&S Task Team and the GAVI Secretariat could be improved, and the role of the country offices of the partner organisations UNICEF and WHO (and the World Bank) needs some clarification and strengthening.

Lastly and most importantly, to a high degree, and in multiple ways, the co-financing policy contributes to country ownership of vaccine financing and sustainable financing of vaccines. In terms of ownership the co-financing policy, through the GAVI Alliance members of the GAVI Secretariat, UNICEF and WHO, helps build capacities in planning, vaccine introduction decision

making and procurement, and it contributes to strengthening linkages between ministries. A large cohort of countries will graduate from GAVI support after 2016 and all have reported that they will manage to sustain their current vaccine portfolio. However, 14 % stated that this was possible only due to external donor assistance and 50 % were concerned of their ability to procure at affordable prices. Although expenditures on vaccine purchases occupy a disproportionate share of total EPI budgets for the graduating countries, that share is constant over time, suggesting that increasing EPI budget allocations are keeping pace with increasing co-financing requirements. Across all country groupings the co-financing policy has contributed to capacity-building in procurement and budgetary processes.

However, there is a worrying trend that the low income countries, in particular, are stretching to introduce the full GAVI portfolio of vaccines (as relates to their local disease burden) without the expectation that they will one day be required to pay higher rates of co-financing per dose. This willingness to introduce the full GAVI portfolio may cause co-financing to eventually displace other self-financed health interventions and programmes.

Despite these challenges, the overall picture is that the **co-financing policy is a significant contributing factor to country ownership and financial sustainability**.

Recommendations

Based upon our findings and lessons learnt, we suggest the following recommendations for consideration by the GAVI Alliance and the co-financing policy review team. The abbreviated recommendations are listed below.

- 1. The GAVI Alliance should arrange for broader country government participation in the upcoming policy revision process, particularly including participants from Ministries of Finance.
- 2. Policy revisions should continue to be performed in an integrated way for the co-financing, eligibility, fragility and graduation policies. We note that this is being done with the present revision.
- 3. The policy revision team should test alternate time periods and consider adjustments to the five-year ramp-up period for graduating countries. This could at least take into account: (a) Portfolio of current and upcoming vaccines and these vaccines' projected pricing trends; (b) the GNI/capita level some countries start 'graduating' at (particularly those on the lower end of the spectrum); (c) extent of access to GAVI prices and effective procurement services post-graduation; (d) differential timeline requirements for countries facing major prioritization or willingness-to-pay constraints.
- 4. If co-financing is postponed for whatever reason (as in the case of HPV vaccine demonstrations), countries should still be required to evaluate the financial impact of future co-financing obligations.
- 5. Efforts should be made to link in partner countries' statistical offices at least annually so that EPI and MoF officials are kept abreast of changes in GNI.
- 6. The policy review team should explore possibilities for the GAVI Secretariat to align its procedures with the budget cycles and fiscal years of each recipient country.

- 7. To ensure the best possible planning, co-financing policy revisions should synchronise as much as possible with countries' immunisation planning cycles.
- 8. The composition of the independent co-financing policy monitoring team should be reviewed while paying specific attention to the knowledge and competence needed in assisting countries obtain financial sustainability. The World Bank should be highly encouraged to reengage.
- 9. The current implementation of considering and granting flexibilities (where appropriate) regarding compliance to the co-financing policy should be continued.
- 10. The policy review team should assess what steps may be taken to assist countries who face an impending election or other transformative event to avoid default in times of major change.
- 11. The policy review team should assess what steps may be taken to further assist countries with national procurement capacities, such as how graduating countries transition from UNICEF Supply Division to self-procurement.
- 12. In monitoring and evaluation of countries' co-financing the CROs and the IF&S Task Team should pay special attention to countries that are in the process of introducing additional vaccines.
- 13. The policy review team should reassess the role of Interagency Coordinating Committee as signatories on GAVI documents, given that ICCs are high level advisory and decision making bodies with heavily packed agendas, sometimes lacking immunisation-specific capacity.

1. Introduction

1.1. Background

The GAVI Alliance is a vaccine-financing partnership that has financed the purchase of over 1 billion doses of new and underused vaccines, reaching 440 million children in developing countries and preventing 6 million future deaths since 2000. Today, the GAVI Alliance is supporting 10 new and underused vaccine products and is working to deliver on its promise of preventing 4 million future deaths by 2015 within a 'GAVI market' of about 79 million (the size of the GAVI Alliance birth cohort). Since 2000, the GAVI Alliance has disbursed US\$ 5.4 billion, and it has committed US\$ 8.4 billion in programme support until 2016 to 73 developing countries.

Since its inception, one of the areas of the GAVI Alliance's focus has been the financial sustainability of vaccines and vaccination programmes. It has argued that co-financing can incentivise countries towards ownership and financial sustainability for their purchases of vaccines. This has been the basic rationale behind introducing its co-financing policy.

Since early operations the GAVI Alliance has supported voluntary co-financing, meaning that GAVI-supported countries purchase a certain amount of their own vaccines. The GAVI Alliance launched its first formal co-financing policy in 2007, requiring countries to start co-financing when introducing new vaccines from 2008, and to co-finance existing vaccines beyond the first five years (or equivalent). Beyond country cost sharing, the aim was to enhance countries' capacity for informed decision-making, by obliging them to develop comprehensive multi-year plans (cMYPs), encouraging, in this way, countries to integrate vaccine financing into wider national budgets and national health plans.

In this initial version, co-financing was calculated on the basis of a formula separating countries into groupings, which reflected countries' ability to pay according to gross

Co-Financing Policy (2008)

Fragile: those included in World Bank's IDA post-conflict country criteria

- USD 0.10 per dose for first vaccine
- USD 0.15 per dose for all subsequent vaccines

Poorest: those classified by UN Least Developed Countries

- USD 0.20 per dose for first vaccine
- USD 0.15 per dose for all subsequent vaccines

Intermediate: GNI/capita < US\$1,000 but not amongst "Poorest"

- USD 0.30 per dose for first vaccine
- USD 0.15 per dose for all subsequent vaccines

Least Poor: GNI/capita > US\$1,000

- USD 0.30 per dose for first vaccine
- USD 0.15 per dose for all subsequent vaccines
- 15% per dose annual increase

Co-Financing Policy (2012)

Low income: GNI/capita at or below World Bank low income threshold

USD 0.20 per dose

Intermediate: GNI/capita above World Bank low income threshold but below GAVI eligibility threshold

- USD 0.20 per dose
- 15% per dose annual increase

Graduating: GNI/capita above GAVI eligibility threshold

5-year transition to full vaccine price in increments of 20%

¹ Pentavalent vaccines (penta); Pneumococcal vaccine (PCV); Rotavirus vaccine (Rota); Human Papillomavirus vaccine (HPV); Inactivated Polio vaccine (IPV); Japanese Encephalitis vaccine (JE); Menngitis A vaccine (MenA); Measles-Rubella vaccine (MR); Measles Second Dose vaccine (MSD); Yellow Fever vaccine (YF)

national income per capita (GNI/capita) thresholds and UN classifications. Certain vaccines would be exempt and provided free of charge for a five year period (e.g. measles second dose), whereas the hepatitis B vaccine, whose price had declined to levels deemed as affordable, would no longer be supported. Countries could pay their co-financing commitments either via existing mechanisms and agreements with UNICEF and the PAHO Revolving Fund, or via alternative mechanisms which would have to be approved by the GAVI Alliance during new vaccine support applications. Countries not fulfilling their co-financing commitments would enter into default, with support for the specific vaccines suspended after one year of co-payment default, and other types of support suspended following two years of default. In exceptional circumstances, the GAVI Alliance would exempt countries facing extreme difficulties.

The original co-financing policy was reviewed in 2010 after two years of implementation, to assess early experience. ⁽⁷⁾ The result of the review was a revised co-financing policy, which came into effect in January 2012. The main changes of the policy were to ensure that economically stronger countries paid a higher share of vaccine costs in order to ease their transition to graduation from GAVI Alliance support and to simplify co-financing levels, moving away from variable co-financing for first and subsequent vaccines. ⁽⁸⁾ The revised policy encompassed new country groupings, co-financing levels aligned with the eligibility policy and a clear trajectory to "graduate" from GAVI Alliance support for graduating countries. Co-financing continued to apply to only specific vaccines. The revised policy stipulated that it would be reviewed in 2014, two years after implementation.

1.2. Evaluation scope and objectives

In January 2014, the GAVI Alliance commissioned a team of policy analysts at the Norwegian Institute of Public Health through an open tender to conduct an independent evaluation of the revised cofinancing policy. The purpose of this evaluation was to review the design, implementation and intermediate results of the policy as well as to generate learning which can inform the policy review and potential update. The key question this evaluation aims to address is to what extent the GAVI Alliance is on track to achieve its policy objectives related to country ownership and financial sustainability for countries' immunisation programmes.

This is a retrospective analysis of the co-financing policy. Other policies like eligibility and graduation are only discussed where they relate to co-financing. The GAVI Alliance has commissioned a separate policy review to examine alternative design scenarios for the future, building on the retrospective evaluation findings of this report as well as independent analysis.

2. Methodology

2.1. Evaluation Framework

The evaluation approach was finalised during a one-month inception phase comprising a preliminary review of documents, preliminary interviews with key GAVI Alliance officials and stakeholders involved in the design of the policy and process of its development over time, ² and introductory meetings with the GAVI Secretariat and key officers in Geneva, Switzerland.³

Based on the evaluation areas noted in the Request for Proposals and clarifications by the GAVI Secretariat during the inception phase of the project, our evaluation framework is described in Table 1.

Table 1: Evaluation framework

Development process and design	How has the co-financing policy evolved in relation to needs and priorities, and how adequately has the current policy been designed to address issues and trade-offs highlighted during the revision process?
Implementation	How has the current co-financing policy been implemented at the country level?
Support and monitoring	How has the current co-financing policy been supported, and its progress monitored, by the GAVI Secretariat and Alliance partners at the global level?
Results and implications	How has the current co-financing policy performed against its anticipated results of increasing country ownership and ensuring financial sustainability?
Lessons learnt	What are the lessons learnt from policy implementation to date, which can sustain, or contribute to, policy successes in the future?
Recommendations	What are the recommendations for moving forward with the co-financing policy, based on stakeholder experiences and empirical evidence?

2.2. Evaluation methods

To perform this assessment we gathered and analysed five different types of data.

1. Literature and document review. We performed a literature search in PubMed and EconLit (Ovid) for all articles published between 1990 and 2010 containing the MeSH terms "developing countries" and "immunisation programs/economics". These broad MeSH terms were chosen in

² Logan Brenzel (Gates Foundation, previous World Bank), Gian Gandi (UNICEF), Rob Hecht and Helen Saxenian (R4D).

³ Mercy Ahun, Abdallah Bchir, Lidija Kamara (WHO), Santiago Cornejo, Pär Eriksson, Judith Kallenberg, Raj Kumar, Véronique Maeva Fages, Laura Stormont, Michel Zaffran (WHO).

- order to ensure that all papers related to immunisation financing were reviewed. We also searched for all articles in PubMed and EconLit (Ovid) containing "GAVI" in the title or abstract, and all articles in Google Scholar containing "GAVI Alliance" and "co-financing". We reviewed the abstracts, and included all relevant papers in our detailed review. Lastly, we reviewed documentation provided by the GAVI Alliance regarding the co-financing policy and related policies.
- 2. Expert consultations. We performed in-depth consultations with 56 experts representing the following groups⁴: 1) Last policy revision task team; 2) IF&S Task Team; 3) GAVI Alliance experts; 4) Industry representatives; 5) Civil society representatives; 6) Bilateral donors; and 7) GAVI Secretariat Country Responsible Officers (CROs).
- 3. Country-level surveys. A survey was sent to all countries with a history of co-financing (plus Haiti), with the exception of those where country visits were planned (Burundi, Congo Republic, Ghana, Guinea-Bissau and Moldova). The survey was completed for each country visited (Burundi, Ghana and Moldova) based upon the interview feedback. Country visits unfortunately did not happen in Congo Republic and Guinea Bissau. We knew this early enough to send a survey to Guinea Bissau, but not in the case of Congo Republic. Therefore, the survey was sent to 68 countries in total. We received survey responses from a total of 48 EPI managers and Ministry of Health affiliates, 49 UNICEF country officers, and 52 WHO country representatives, giving an overall response rate of 73 %. We received a response from at least one source in all 68 countries⁵.
- 4. Country case studies. We aimed to visit five countries representing different criteria. We wanted to learn from the experiences of graduating countries, defaulting countries and those who are paying co-financing but not for their traditional vaccines. Using these criteria we selected five countries: Burundi (meeting its co-financing commitments but not paying for traditional vaccines), Congo Republic (graduating with previous defaults), Ghana (defaulting for the first time in 2013), Guinea Bissau (previous defaults) and Moldova (graduating). Due to scheduling difficulties and time constraints we were only able to visit three countries (Burundi, Ghana and Moldova). In each country we performed in-depth interviews with the EPI team, the Ministry of Health, the Ministry of Finance, civil society and donors.
- 5. Quantitative data analyses. We explored and analysed co-financing data gathered from the GAVI Secretariat (received on February 28th 2014 and May 19th 2014). We also extracted and analysed the following data: government expenditure data on vaccines through the WHO/UNICEF Joint Report Format Database on immunisation financing (downloaded on February 17th 2014); EPI routine expenditures and sources of financing data from WHO cMYP immunisation financing database; government expenditure data on health from WHO National Health Accounts database (downloaded on April 1st 2014); economic growth and aid flow data from the World Bank and public debt data from the IMF. In an attempt to make consistent comparisons across years, only countries that had complete data for every year were included in the related analysis across different sections of the report, and any countries missing data from at least one of the data sources were removed. This allowed for an analysis of changes of relevant variables over time. Whenever displaying time series data we are using the country groupings as of 2013. In other

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⁴ For more details see annex 5 'List of consulted experts'.

⁵ More on country grouping specific response rates in "Annex 6: Survey responses from WHO, UNICEF and EPI/MoH country offic". Note that the respondents were granted full anonymity. Therefore, we are restricted from stating country names in the text whenever the information provided derives from the survey only.

words, countries that have transitioned between groupings in the time period in question are depicted as if belonging to their 2013 grouping throughout that time period.

Our findings are based upon the triangulation of the above mentioned data. For more description regarding our methods, please see Annex 11: Detailed methodology.

The key limitations of this assessment are:

- Ambitious timeline. There is a wealth of data and different analyses that could be done to assess the co-financing policy. As agreed with the GAVI Secretariat and clearly set out in the request for proposal (RfP), we had four months to perform our analysis and write the draft report. This included finalising surveys, translating them into French, Portuguese and Spanish and then following up; organising country visits; planning and conducting the expert consultation interviews; and securing the necessary quantitative data. Certainly additional analyses could have been performed but there simply was not time to do so.
- Data quality challenges. We utilised many different data sources as identified in the methods above. The data from the GAVI Secretariat and UNICEF SD was complete but never final. This makes data analysis a challenge since the data can updated at any time. JRF and cMYP data are self-reported with little data validation performed. There are also many gaps. In order to make consistent comparisons with this JRF, cMYP, and National Health Accounts data, our samples only included those countries that had data for the entire analysis period. Those who consistently report data may have better data. Therefore, these data sets may be skewed by countries with stronger systems in place and may also be skewed by data entry errors. We have tried to accommodate for this by utilising several sources for the relevant analysis.
- Survey non-completion. Although our survey response rate (73%) is quite high and encompasses responses from all countries with a history of co-financing (except Congo Republic), this is not a complete response rate. Additionally, this is self-reported data regarding a relatively technical subject matter so there is room for misinterpretation of the survey questions by the respondents.
- Country groupings. In the graphs where we show country groupings, we used the country groups as defined in the Co-Financing Policy (2012) for simplicity and clarity purposes. There were different country groupings in the Co-Financing Policy (2008) and, of course, countries can transition from one group to another. Therefore, the reader is advised to remember that these groupings pertain to a country's grouping in 2012 and 2013.
- Country consultations. We anticipated visiting five countries as a part of the country case studies.
 Unfortunately we were unable to visit two countries due to pending elections or other reasons.
 Both countries that we were unable to visit were previous defaulting countries. Therefore, we were unable to obtain the detailed data that we hoped regarding the complexities of default.
- GAVI Alliance-centric respondents. Since co-financing is a rather technical topic, it was difficult to find individuals not directly involved in the policy that were sufficiently informed, particularly regarding the process of policy revision. The majority of experts interviewed were directly involved in either the creation or the revision of the policy. The case study participants had little or no memory of the review process. Therefore, there is likely a bias in favour of the two versions of the co-financing policies.

3. Findings

3.1. Development process and policy design

The main question of the Evaluation Framework (page 10) being addressed in this chapter is: *How has the co-financing policy evolved in relation to needs and priorities, and how adequately has the current policy been designed to address issues and trade-offs highlighted during the revision process?* This includes the following questions from the request for proposal (RfP):

- To what extent was the design of the original and revised policies informed by robust evidence and analyses as well as appropriate consultations?
- To what extent were the implicit and explicit assumptions, underpinning both the original and revised co-financing policies at the time of their design, robust and appropriate?
- To what extent is the co-financing policy well aligned with other GAVI Alliance policies, in particular, the eligibility and graduation policies?
- To what extent are the design of current co-financing policy, its objectives and principles appropriate and sufficient to lead to country ownership of vaccine financing and financial sustainability? In terms of i) Scope; ii) Country groupings; iii) Co-financing levels; iv) Default mechanisms; v) other design elements as deemed appropriate by the evaluators.

Box 1. Summary of findings in section 3.1.

- The co-financing policy (2008) was informed by detailed analyses building on country-level pilots that tested different design scenarios but lacked sufficient consultation of in-country stakeholders. Due of the novelty of co-financing the assumptions behind the co-financing policy (2008) were not entirely grounded in evidence, but partly in normative beliefs.
- The co-financing policy (2012) was informed by detailed analyses and comprehensive
 consultations and was an improvement on the process used to develop the original co-financing
 policy. Its assumptions were appropriate for the vaccine portfolio of 2010. However, since the
 revision occurred after the revision of the eligibility and graduation policies, the new co-financing
 policy was constrained to decisions already made.
- The fragility and immunisation policy is an improvement in the handling of fragile countries struggling to meet their co-financing requirements. Whereas we recognise that it should be difficult to grant exceptions, the implementation of the policy may be too onerous to react in a timely fashion.
- Sustainable financing is defined by the GAVI Alliance to include both domestic and external funds. Due to the uncertainty related to donor funds, we do not believe that donor funds can be classified as sustainable in the long term.
- The GAVI Alliance has no definition for the intermediate objective of the co-financing policy (2012) – country ownership. By not defining country ownership, it is difficult to assess performance.
- Not all GAVI-supported vaccines require co-financing. The exceptions create confusion with the
 result that countries are not always assessing the financial implications of introducing a new
 vaccine.

- The simplification of country groups in the co-financing policy (2012) on the basis of a standardised metric of countries' ability-to-pay (GNI/capita) has led to a more rational classification of countries.
- Co-financing levels are equitably structured across country groups, and contribute to country ownership.
- Intermediate countries are on the path to financial sustainability for the cheaper vaccines.
- Co-financing levels are rising but still affordable.
- The default mechanism is a fair and appropriate mix of incentives and penalties that encourages countries to take greater ownership of their vaccine financing obligations.
- Co-procurement is an innovative design element of the co-financing policy, which encourages country ownership of vaccine financing.
- The timing of some of the co-procurement process actions are not well aligned to countries' fiscal years and budgeting cycles.
- Co-procurement implies that the actual price of the co-procured vaccines can differ from the price estimates used to calculate co-financing requirements in the decision letter. Allowing countries to meet their co-financing obligations in either dollar amounts or in vaccine doses when co-procuring through UNICEF SD is a good design safeguard against unanticipated vaccine costs.
- We support the policy revision team's decision in 2010 that co-financing amounts for low income countries should not be linked to vaccine prices.

3.1.1. Use of evidence and analyses in policy design and revision processes

The co-financing policy (2008) design process

In 2004 a special task force comprised of technical and policy advisory members was established to support countries to factor in financial sustainability when introducing new vaccines. (9) The team was tasked to increase country ownership, decrease vaccine-related costs, and develop evidence around decision-making for (and accelerating) vaccine introductions. 6 In 2005 the GAVI Alliance Board decided that countries must contribute in some way to the purchasing of their vaccines. This decision initiated a model called "bridge financing" where the main principle was to place countries on a trajectory from GAVI Alliance support to financial sustainability. The basis for the bridge financing model was a series of economic models developed by the World Bank. The bridge financing model was piloted in several countries but assessed as difficult to implement and not formally adopted across GAVI countries. However, it provided a powerful discussion platform and a detailed analytical framework leading to the formulation of the co-financing policy (2008).

In 2006, the GAVI Board decided to group countries in broad categories based on GNI and other criteria (see analysis in section 3.1.4 below), and agreed that co-financing by countries should aim at financial independence whereas financial independence would most likely not be achieved by 2015

⁶ Meeting hosted by CGD's Global Health Policy Research Network, 15 September 2004, Center for Global Development in Washington, DC, USA.

for some countries. In 2007 GAVI approved the new co-financing levels until 2010, with the new objective to increase demand and to promote national ownership and responsibility of co-financing.

The co-financing policy (2008) was informed by detailed analyses and country-level pilots that tested different design scenarios but lacked sufficient consultation of in-country stakeholders.

The analyses and testing of the assumptions of the policy (see section 3.1.2) in low-income countries like Mozambique appear to be robust through the bridge financing analyses, as reported through the stakeholder interviews and based upon reports to the GAVI Board. However, as evidenced by the consultations around bridge financing and previous policy review documentation, the reiterative process of designing the policy created some challenges in communicating the policy to countries effectively. This is supported by views of some consultation experts responsible for communications at the time of the co-financing policy development who pointed out that the policy had been communicated to countries before the GAVI Alliance had actually decided on scope and other policy design parameters. Without clarity on co-financing policy procedures by the GAVI Alliance, consultation efforts contributed to communication challenges and variable levels of understanding of policy operations across countries.

The co-financing policy revision process

As part of the GAVI Alliance Board's decision to adopt the co-financing policy in 2008, the Board requested that the policy be reviewed two years after its implementation, to assess early experience. The purpose of the review was to conduct a comprehensive assessment of the policy and to provide countries with a clear set of co-financing levels beyond 2010, in line with clearly articulated strategic and policy objectives.

The review process was launched in early 2010, and took place over a 12-month period. Two teams were set up to implement the review:

- A technical analysis team, consisting of GAVI Secretariat staff and consultants from The Results for Development Institute (R4D), with the mandate to analyse co-financing policy performance since launch, and recommend changes to the objectives and the design of the policy.
- A Co-Financing Task Team set up under the auspices of GAVI Alliance's Policy & Programme
 Committee (PPC), responsible for the oversight of the work conducted by the technical analysis
 team, and for the active engagement of stakeholders. It included representatives from recipient
 countries, donors, industry and civil society.

A number of consultations were conducted throughout the 12-month review process with donors, countries, the IF&S Task Team and independent experts in health financing and health/immunisation planning & budgeting. UNICEF hosted a workshop in Dakar, Senegal, to get feedback from African countries on the policy. 16 African countries were represented. The World Bank hosted a second workshop in London, UK, to get feedback from Asian countries on the policy. Nine countries⁷ were represented. Additional country delegations were conducted by GAVI Alliance staff and civil society organisations representatives (CSOs). Consultations were conducted under the leadership of the

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⁷ Bangladesh, Bhutan, Cambodia, Laos, Liberia, Nepal, Nigeria, Rwanda and Sri Lanka.

⁸ Armenia, Azerbaijan, Bangladesh, Georgia, Moldova, Nepal, Sri Lanka, Uzbekistan.

WHO at regional EPI meetings and GAVI Secretariat Country Responsible Officers discussed the policy in various committee meetings at Ministerial level in some countries.

The co-financing policy revision was informed by detailed analyses and comprehensive consultations and was an improvement on the process used to develop the original co-financing policy.

The co-financing policy revision process was an improvement on the process used to generate the original co-financing policy (2008). Firstly, the 12-month timeframe allowed for sufficient time to conduct technical analyses and stakeholder consultation. This view is shared by most of the members of the Policy Revision Task Team. Secondly, the break-down of the revision process into two phases allowed for a step-by-step approach to be followed, whereby the principles and objectives of the revised policy would be discussed first, followed by analyses of the structural parameters of the new policy. Thirdly, the division of tasks between a technical analysis team and an oversight body representing different constituencies encouraged the deployment of new analytical approaches, such as the Fiscal Space Analysis, to determine countries' ability-to-pay and to define improved country groupings and simplified co-financing levels; and provided the space for a broader engagement in high level consultations by GAVI Alliance partners and stakeholders representing different constituencies. The two workshops in Senegal and in the UK, as well as the WHO consultations during regional EPI meetings provided appropriate platforms for the involvement of EPI managers and country stakeholders.

Despite these improvements, we believe that the process could have been further improved by the inclusion of stakeholders from Ministries of Finance, a point also raised by some consultation experts. Moreover, in-country consultation processes coordinated by Inter-Agency Coordinating Committee (ICC) sub-groups, could have played a critical role in advocating and creating the participatory environment for the new co-financing policy, although this would have taken considerably longer to implement. Finally, more realism in the discussions on the basic assumptions of the co-financing policy would have been helpful, in particular regarding the five-year ramp-up and the ability of the poorest countries to pay the co-financing requirements.

3.1.2. Assumptions underpinning the policies

The assumptions of the co-financing policy (2008)

Based upon the document review, we have identified the following key assumptions of the cofinancing policy (2008):

- All countries regardless of GNI per capita level are able to pay, although the amounts may vary.
- A low per dose amount for low income countries is not going to be a bottleneck to the introduction of vaccines.
- Co-financing encourages countries to prioritise vaccines, creates demand for vaccines and places countries on track towards financial sustainability.
- Demand created through GAVI Alliance financing increases the market size which leads to vaccine price reductions, which can make vaccines affordable for GAVI countries after five years of GAVI Alliance support (this assumption underpins the GAVI Alliance model as such).

- All countries can co-procure through UNICEF SD or PAHO RF or through own mechanisms for those able to self-procure.
- Countries can meet their co-financing requirements without using funds allocated for the financing of traditional vaccines.

Due to the novelty of co-financing, the assumptions of the co-financing policy (2008) were not entirely grounded in evidence but partly in normative beliefs.

We found little evidence, either through the literature review or through stakeholder interviews that could be a basis for the abovementioned assumptions. Indeed one research article⁽¹²⁾ from 2005 argued that the GAVI Alliance failed to learn from mistakes from previous immunisation programs such as the Vaccine Independence Initiative, which was "successful in increasing self-reliance of middle income countries in financing their routine vaccine needs, less so for poorer countries". One member of the Policy Revision Team stated that it was not clearly demonstrated whether cofinancing was an incentive or a barrier to financial sustainability. Consultation experts also pointed out that certain assumptions could have been more clearly stated. In this sense, the policy assumptions appear to have been relatively normative in nature.

According to Chauke-Moagi and Mumba⁽¹⁴⁾ introducing new vaccines at the expense of already poorly functioning traditional vaccination rates was a concern for the GAVI Alliance. Hence, the GAVI Alliance implemented the requirement of a minimum coverage of 50 percent, and later 70 percent, for DTP3 as a criterion for funding new vaccines.

Additionally, as previous GAVI Alliance evaluations have stated, given that many of the vaccine presentations in the GAVI Alliance portfolio had only one supplier in and prior to 2008, the assumption that market forces would bring down vaccine prices was unrealistic. This finding is supported also in recent literature. GAVI has already reacted to this reality by including a market shaping goal in its 2011-2015 strategy which has initiated a number of tactics to reduce vaccine prices.

The assumptions of the co-financing policy (2012)

Based on document review, the key assumptions of the revised co-financing policy were largely the same as the original with the exception that it was no longer assumed that vaccine prices would be reduced and the inclusion of the following:

- A small but steady increase of co-financing requirements above the minimum requirement for intermediate countries will ensure a smooth transition towards financial sustainability.
- A gradual ramp up of co-financing requirements linked to target vaccine prices for graduating countries will guarantee these countries' trajectory towards financial sustainability without GAVI Alliance support after five years.

These assumptions were grounded in the previous two years' experience with co-financing as well as the detailed analyses, like Fiscal Space Analysis (17), and consultations stated previously.

The assumptions of the co-financing policy (2012) were appropriate for the vaccine portfolio of 2010.

Fiscal Space Analysis was a useful new tool to test the assumptions regarding countries ability to pay the co-financing requirements. It added another layer of feasibility by including multiple vaccines (eight in total⁹). Several experts, including some of the Policy Revision Task Team members, commended the utility of the Fiscal Space Analysis in the policy revision process, but they also pointed out the limitation that although it provides some information about the theoretical fiscal space, it does not take into account what is actually politically possible. We would like to add that it also does not differentiate between donor and domestic resources, which is important when evaluating the certainty of the available fiscal space.

The five-year graduation period had already been decided through the revised eligibility policy (which was approved in 2009 and became effective in 2011). One expert commented that there were no analyses performed that could verify this schedule as realistic. (Please see the next section regarding the alignment with other GAVI Alliance policies.)

3.1.3. Alignment with other GAVI Alliance policies

Policy revisions were not simultaneous

The country eligibility policy, which determines which countries are eligible for GAVI Alliance support, was approved in 2009 and became effective as of 2011. The graduation policy, which lays out the steps for transition from GAVI Alliance support, was reviewed and implemented at the same time. So both related policies pre-empted the co-financing policy revision in 2010. The eligibility policy introduced revised national income related pre-conditions for countries' eligibility to GAVI Alliance support, including annual updating procedures.

The co-financing policy (2012) was confined to decisions already approved through the eligibility and graduation polices.

The eligibility policy specifies that a graduating country is one whose "GNI per capita is above the applicable eligibility threshold and that can no longer apply for new vaccine or cash-based programme support, but continues to receive existing Board-approved multi-year commitments for vaccines and/or cash-based programmes from GAVI." Since GAVI Alliance financing commitments were from 2011 to 2015 (i.e., five years), some members of the Policy Revision Task Team felt that they were constrained by a five-year graduation timeframe, before having a chance to consider its feasibility. As evidenced by expert interviews, graduating country survey responses and country visits, this five-year timeline is often perceived to be too steep.

The GAVI Secretariat has already acknowledged the importance of joined up policy revisions. For instance, the prospective policy review currently under way is jointly examining the co-financing, eligibility and graduation policies. (5, 20-24) We agree with this alignment and applaud GAVI for already implementing the solution.

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⁹ Yellow fever, pentavalent, rotavirus, pneumococcal, Japanese encephalitis, rubella, typhoid and human papillomavirus

The fragility and immunisation policy is an improvement in the handling of fragile countries struggling to meet their co-financing requirements. Whereas we recognise that it should be difficult to grant exceptions, the implementation of the policy may be too onerous to react in a timely fashion.

The fragility and immunisation policy, which was approved in 2012 and implemented in 2013, aims to improve vaccination coverage in a subset of countries with particularly challenging circumstances; and to protect immunisation systems and existing GAVI support in GAVI-eligible and graduating countries in case of emergency events. The policy specifies two different pathways for extending flexibilities, including short term flexibilities or the application of a country tailored approach.

We believe that the flexibilities for co-financing contained within the fragility and immunisation policy are an important advance, allowing GAVI Alliance to recognise different levels of fragility. The co-financing policy (2008) labelled countries as fragile, giving them access to the lowest co-financing obligations. The potential flexibilities of the fragility and immunisation policy, viewed from the limited perspective of co-financing, offers an official path to have co-financing amounts not only reduced but also waived. This is appropriate in the most extreme cases like civil war, where there is no official government. Standing firmly to the principle of co-financing in this case could be viewed as parochial. CROs have reported that obtaining a co-financing waiver is extremely onerous. Whereas it should not be easy to obtain a waiver for co-financing, the process should not be so difficult that access to vaccines in these fragile countries is impeded.

3.1.4. Country ownership and financial sustainability

This section relates to the design of the co-financing policy and how its design builds country ownership and financial sustainability. To read more regarding how the policy's implementation realises these topics, please see Sections 3.3.3 and 3.3.4.

Definitions and objectives

The co-financing policy (2012) has an overall objective to "put countries on a trajectory towards financial sustainability" with an intermediate objective of enhancing country ownership of vaccine financing for those countries with an extended time frame for achieving financial sustainability.

The GAVI Alliance's definition of "financial sustainability" has remained unchanged since 2001. It is: "Although self-sufficiency is the ultimate goal, in the nearer term sustainable financing is the ability of a country to mobilise and efficiently use domestic and supplementary external resources on a reliable basis to achieve current and future target levels of immunisation performance." (15) Therefore, a country that finances its traditional vaccines and/or co-financing requirements with donor money is, by definition, financially sustainable.

There is no formal definition of country ownership. The 2010 PPC report to the GAVI Board did specify that: "Co-financing can still help to prepare these countries by building procurement and budgetary processes while strengthening ownership of immunisation decisions, even if the eventual goal of financial sustainability is still distant. As such, country capacity building and ownership are intermediate goals that can be supported by the co-financing policy." (26)

Sustainable financing is defined by the GAVI Alliance to include both domestic and external funds. Due to the uncertainty related to donor funds, we do not believe that donor funds can be classified as sustainable in the long term.

Given that donor support is inherently unpredictable (it is dependent upon annual funding cycles, donor politics and the global economy), "genuine" sustainable financing can only be achieved by a high degree of self-financing. However, low income countries with significantly constrained immunisation budgets are not likely to be able to self-finance the more expensive vaccines, like HPV, pneumococcal and rotavirus. Instead, it is acknowledged that many low income countries will be donor dependent in the long term. (17)

The GAVI Alliance has no definition for the intermediate objective of the co-financing policy (2012) – country ownership. By not defining country ownership, it is difficult to assess performance.

There are many different perspectives on what should be included under country ownership. According to some experts "country ownership" should be defined as a high level of institutionalisation of the national immunisation program. In this view, ownership is seen not as a goal, but as a means to the end of self-sufficiency. Institutionalisation in this context refers to domestic accountability, operational linkages between MoH, MoF and parliament, creation of separate budget lines, legislation on immunisation, increased domestic revenue generation, as well as (a high degree of) self-financing of immunisation programme. Others have less stringent definitions. Without a definition, GAVI is unable to assess if it is meeting its intermediate objective.

To perform this evaluation, it was necessary for us to clarify our own interpretation of country ownership, as one comprising of at least the following elements¹⁰: a country's priority-setting mechanisms, political commitment, prioritisation of domestic funding for both new and traditional vaccines, and procurement capacity.

Inconsistent inclusion of new vaccines into co-financing policy scope

To date, co-financing requirements have applied to pentavalent (penta), rotavirus (rota), pneumococcal (PCV), and yellow fever routine (YF). As of 2014, co-financing will also apply to measles-rubella routine (MR), Japanese encephalitis routine (JE), and human papillomavirus vaccine routine (HPV). Co-financing does not apply to measles second dose, campaigns for yellow fever, JE, MR catch up and meningitis A,¹¹ and the soon to be introduced inactivated polio vaccine (IPV), where it is only encouraged. (5) Co-financing also does not apply to vaccines that are being piloted in country, like HPV.

Not all GAVI-support vaccines require co-financing. The exceptions create confusion with the result that countries are not always assessing the financial implications of introducing a new vaccine.

The result of inconsistent co-financing rules, as pointed out by some CROs, is that some countries are not evaluating the financial implications of vaccines where co-financing is not required (or not yet

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¹⁰ This is merely a working definition which the GAVI Alliance should refine further, based on consultations among partners.

¹¹ GAVI finances catch-up campaigns on the basis that countries self-finance the introduction of these into their routine immunisation programmes.

required). The GAVI paperwork does not assist here. For example, there is no reference to co-financing in the Application Form for Country Proposals for HPV demonstration projects. There is no reference to future co-financing implications for HPV in decision letters, nor a place to acknowledge that the current co-financing amount for a demonstration project is zero. In the case studies, we found little evidence that countries had begun to calculate the co-financing implications of HPV, even though they were actively planning to roll-out HPV in the near future.

Additionally the rationale for excluding certain vaccines like MR previously, and campaigns for yellow fever and meningitis A, are unclear. This creates the risk that countries decide to introduce vaccines because of co-financing versus full self-financing trade-offs, rather than due to public health needs, even when countries do assess financial implications. For instance, a low income country survey respondent stated that the country had planned to introduce measles rubella vaccine in 2015 but due to high cost of the vaccine and that there was no co-financing at the time, the proposal was shelved, and the country instead opted for measles second. One consultation expert from the GAVI Secretariat pointed out that the different rules make the policy more complex. The expert pointed out that, given the low price of the MR vaccine, it may be more sensible for countries to fully finance the vaccine rather than to co-finance it.

Country groupings

Under the co-financing policy (2012) countries are divided into three groups: low income¹², intermediate¹³ and graduating¹⁴, based on their ability to pay, determined by GNI per capita¹⁵. This is a simplification to the original policy, which had four groups, classifying countries into fragile¹⁶, poorest¹⁷, intermediate¹⁸ and least poor¹⁹.

As stated in Section 3.1.3, we believe that replacing the "fragile" grouping in the co-financing policy (2008) with the fragility and immunisation policy (2013) represents an improvement, in that country cases are assessed in a tailored manner, recognising challenges with fragile states that go beyond just co-financing.

The simplification of country groups on the basis of a standardised metric of countries' ability-to-pay (GNI/capita) has led to a more rational classification of countries.

A number of experts commented on the shortcomings of the GNI per capita:

- Firstly, that GNI is not necessarily an accurate proxy for a country's ability to pay; "A government is not necessarily wealthy just because the country is."
- Secondly, it was argued that the GNI calculations are sometimes quite crude estimates, and not based on comprehensive country data analysis. GNI/capita can suddenly change based

¹⁴ >US\$ 1,550 (eligibility threshold) GNI/capita.

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¹² ≤US\$ 1,025 GNI/capita, based on World Bank low income country definition.

¹³ US\$ 1,026 to US\$ 1,550 GNI/capita.

¹⁵ Country group classifications are revised annually based on World Bank data published in July of each year ¹⁶ Based on World Bank IDA post-conflict country criteria.

¹⁷ Based on the UN classification of Least Developed Countries (LDCs).

¹⁸ Based on a GNI/capita < US\$ 1,000 threshold, and not in the UN list of LDCs.

¹⁹ Based on a GNI/capita > US\$ 1,000 threshold.

- upon the formal reassessment of a country's underlying economy. This has recently happened in Ghana (2010) and Nigeria (2014), propelling both countries into higher groupings overnight. This is a concern since many Sub-Saharan African countries have not had their base economic data reassessed in the last ten or more years. (32)
- Thirdly, some experts wanted to take additional indicators into account, for instance poverty
 or domestic inequity indicators. These experts expressed their concern for the large deprived
 populations that live in GAVI ineligible countries, or that will soon live in GAVI graduated
 countries. This point was demonstrated in the Moldova case study that has a semiindependent region, Transnistria, with low vaccination coverage rates.

The Global Fund to Fight AIDS, Tuberculosis and Malaria has implemented a combined eligibility and co-financing policy based not only on a country's income level but also on its burden of disease and the targeted intervention. This makes the policy considerably more complex but may be appropriate given the Global Fund's financing of a diverse set of activities. In our view, the mandate of the GAVI Alliance is more straightforward. Structural economic problems are outside the remit of GAVI, and a GAVI co-financing policy targeted to one sub-population group is not recommended. Rather better routines for proactive GNI/capita monitoring and early country notification, transition planning and budgeting may be warranted.

We believe that a single indicator of ability-to-pay, GNI/capita, has allowed for a more rational classification of countries on the basis of a measure that is simple, transparent, equitable, and easy to understand. According to the PPC it avoids issues of variability in calculation methods, time horizons and definitions across different indices for different country groupings. (31) Moreover, the annual revision of the GNI/capita thresholds keeps the grouping up-to-date. The static nature of the original policy's country group classifications was an inequitable arrangement as some countries paid less than others, despite their relatively high GNI/capita (e.g. Angola, Congo Republic and Bhutan all transferred from fragile countries in the 2008 policy to graduating countries under the 2012 policy).

Co-financing levels

The co-financing level is determined by the country grouping. Co-financing levels are designed to increase progressively as countries transition from low income to intermediate and then to graduating.²⁰ The rationale of this tiered co-financing approach is to create co-financing levels that are affordable for countries and equitable across country groupings. The co-financing levels inherently promote some level of country ownership as all countries must contribute. Therefore, each new vaccine introduction comes at a price that must be acknowledged and budgeted for.

Co-financing levels are equitably structured across country groups and contribute to country ownership.

Co-financing levels are progressive across country groups. As demonstrated in Figure 2, graduating countries are paying a significantly greater share of GAVI Alliance funding then intermediate or low-

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²⁰ Low income countries pay a flat rate of US\$ 0.20 per dose. Intermediate countries start from a flat rate of US\$ 0.20 per dose, then steadily increase at an annual 15 % rate. Graduating countries start from a 20 % of the projected full vaccine in five years from point of entry in the group, then steadily increase at the same rate annually until it reaches 100%.

income countries. Low-income countries have remained relatively static, as would be expected given their fixed co-financing amount per dose²¹.

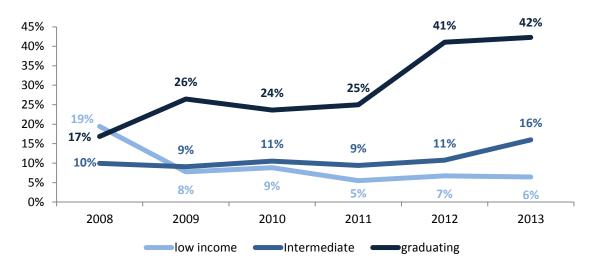


Figure 2. Co-financing as share of GAVI Alliance funding by country group, 2008-2013.

Author's own calculations (Co-financing/GAVI disbursement funding)
Data source: GAVI Secretariat co-financing database, and GAVI disbursement by programme year
Figure includes the 68 GAVI-eligible countries with history of co-financing
Note: The data included in the graph is limited to those countries for which data was available.

In our view, the distribution of co-financing across the groupings in 2013 seems equitable in that higher income countries contribute more than lower income countries. Moreover, the steady increase since the last policy revision is an indicator of increased financial commitment.

Intermediate countries are on the path to financial sustainability for the cheaper vaccines.

For those countries that remain in the intermediate grouping for a number of years, their cofinancing requirement will eventually surpass the actual vaccine price due to the annual 15 % increase. This will take ten years for the currently priced US\$ 0.70 yellow fever vaccine and nine years for the US\$ 0.55 MR vaccine. (29) We do not see this as a challenge for the co-financing policy, assuming that countries will start direct procurement (without GAVI support) of any vaccine upon observing this outcome. In other words, whenever this outcome occurs, in our view it will contribute to financial sustainability.

Co-financing amounts are rising but co-financing levels are still perceived affordable.

Co-financing amounts have increased from US\$ 21 million in 2008 to US\$ 72 million in 2013. Figure 3 below shows that co-financing amounts as a percentage of government vaccine expenditure are also rising, particularly for graduating and intermediate countries. Low-income countries have stayed at about the same level. During the same time period, government vaccine expenditure as a percentage

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²¹ The 2008 data in the figure represents Kenya, Korea DR, Krygyz Republic, Tajikistan and Zimbabwe who were all in the intermediate group of the co-financing policy (2008) but transitioned to low-income in the co-financing policy (2012)

of total government expenditure for health has remained fairly constant at around 0.5 %.²² In 2012, according to data retrieved from the WHO/UNICEF Joint Report Format (JRF) and WHO National Health Accounts (NHA) databases, only four countries were close to or exceeded the 1 % Fiscal Space Analysis benchmark established by the co-financing policy revision technical analysis team in 2010.²³ Three countries had government vaccine expenditure levels of 0.9 % out of government health expenditures in 2012,²⁴ and two countries had levels of 0.8 %.²⁵ Three additional countries had levels of 0.7 %.²⁶ This is occurring as countries introduce additional vaccines (all groupings) and as co-financing amounts increase over time (intermediate and graduating groups).

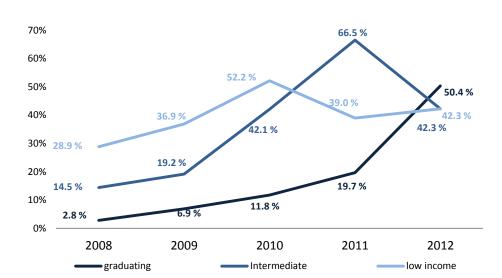


Figure 3. Co-financing as share of government vaccine expenditure (GVE) (%).

Author's own calculations

Data sources: GAVI Secretariat co-financing database; WHO/UNICEF JRF database; WHO National Health Accounts database Figure includes 28 countries, for which GVE data was available for all years between 2008 and 2012.²⁷

Note: The data included in the graph is limited to those countries for which data was available.

Interestingly though, co-financing as a percentage of EPI routine expenditure (Figure 4) has not changed dramatically across all three groupings. GVE includes the vaccine expenditure for new, traditional and campaign vaccines. This includes the cost of the actual vaccines as well as related supplies (syringes, etc.), whereas EPI routine expenditure includes both the product and operational costs for all non-campaign vaccines, covered by government, GAVI or non-GAVI donor sources.

²⁶ Azerbaijan, Burundi, and Ethiopia.

²² It is important to remember that portions of the co-financing amounts are paid for with external funds (i.e., not out of the government vaccine expenditure). Additionally JRF is self-reported data with little validation. Only 28 out of 68 countries had complete JRF data for all years from 2008 to 2012.

²³ Bangladesh, Burkina Faso, Pakistan, and Yemen.

²⁴ Chad, DRC, and Gambia.

²⁵ Mali and Tanzania.

²⁷ Azerbaijan, Bangladesh, Benin, Burkina Faso, Burundi, Cambodia, Cameroun, Congo Republic, Cote d'Ivoire, Georgia, Guyana, Honduras, Indonesia, Lao PDR, Madagascar, Mongolia, Mozambique, Nepal, Moldova, Rwanda, São Tomé and Principe, Senegal, Solomon Islands, Togo, Tanzania, Uzbekistan, Vietnam, Yemen.

Therefore, co-financing is taking up an ever larger percent of the product costs but not of the overall immunisation budget.

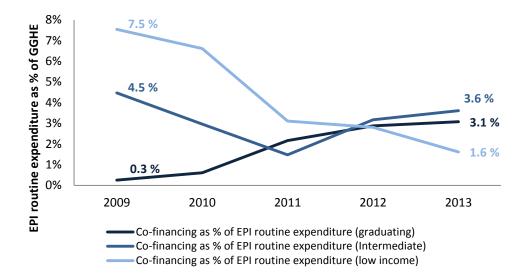


Figure 4. Co-financing as share of EPI routine expenditure (2009-2013).

Author's own calculations

Data sources: GAVI Secretariat co-financing database; cMYP immunisation financing database; WHO National Health Accounts database

Figure includes 52 countries, for which cMYP EPI routine expenditure data was available for all years between 2009 and 2013. Note: The data included in the graph is limited to those countries for which data was available.

In line with the above, country EPI officials have reported through the survey that most do not perceive co-financing levels as high. Specifically, co-financing levels are not perceived as too high in relation to immunisation budgets by 65 % (17/26) of low income country official respondents, 58 % (7/12) of intermediate country respondents, and 90 % (9/10) of graduating country respondents.

We support the policy revision team's decision that co-financing levels for low income countries should not be linked to vaccine prices.

One of the big issues during the last policy revision process was whether or not co-financing should be linked to vaccine prices, according to some experts. Although not specifically asked about their opinion on this issue, several experts voluntarily argued that co-financing should be linked to price for all country groupings. However, other experts disagreed. They recalled that the main rationale for delinking co-financing from price for the intermediate and low income countries was that it would slow down uptake of new vaccines, and as such it would have a detrimental public health impact.

In our opinion this issue was best addressed during the previous revision when countries had adopted relatively few vaccines (i.e. penta). Now that low income countries have gone forward and

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²⁸ Afghanistan, Angola, Armenia, Azerbaijan, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cameroun, CAR, Chad, Congo Republic, Cote d'Ivoire, Djibouti, DRC, Eritrea, Ethiopia, Gambia, Georgia, Ghana, Guinea-Bissau, Haiti, Indonesia, Kenya, Kiribati, Korea DR, Kyrgyz Republic, Liberia, Madagascar, Malawi, Mali, Mauritania, Moldova, Niger, Nigeria, Pakistan, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Somalia, Sri Lanka, Sudan, Tajikistan, Tanzania, Timor-Leste, Togo, Uzbekistan, Yemen, Zambia, Zimbabwe.

introduced the expensive PCV and rota vaccines as well as are demonstrating the even more expensive HPV vaccine, changing co-financing levels now may have a destabilising effect across a large swath of countries. We would urge extreme caution here.

Default mechanism

The rule of default introduced a penalty to countries not fulfilling their co-financing commitments. According to the policy, countries enter default by not fulfilling their co-financing commitments by 31st December of the respective calendar year. Countries are no longer in default once they have co-procured the outstanding amounts. The repercussions of default are given in Table 2. Every January or February, the Immunisation Financing & Sustainability (IF&S) Task Team evaluates the co-financing payments from the previous year to assess whether countries defaulted and the reasons for the default.

Table 2. Actions applying depending on length of country default.

In default within previous calendar year	Remaining in default for over a year	Remaining in default for over two years
 Secretariat advises on country status and allows 30 calendar days for response Countries can still apply for additional new vaccines and other GAVI Alliance support but will not be approved until they have paid their arrears GAVI Alliance partners work with countries to resolve default situation In-depth country assessments conducted in special cases and grace period potentially provided (see section on flexibilities on page 44) 	GAVI Alliance sup- port for specific vaccine is suspended	GAVI Alliance support for all vaccines can be potentially suspended as well as other consequences determined by the Board (such as suspension of cash support)

The default mechanism is a fair and appropriate mix of of incentives and penalties that encourages countries to take greater ownership of their vaccine financing obligations.

The default rule allows a fair amount of time to conform without serious consequences and to build political support for any funding gap. For instance, nine country official survey respondents from countries with history of default stated that following the receipt of official notification of default by the GAVI Secretariat, they double-checked their accounts and coordinated with the UNICEF country office to ensure correct payment was made to the right account. Four respondents stated that they transferred funds to cover the claimed difference immediately. Only one respondent stated that the country reprogrammed funds from other non-GAVI-funded routine vaccines.

In addition, out of the 34 remaining country official survey respondents addressing whether any actions would be performed if they were to receive an official notification of default in the future: 14 respondents stated that a solution would be negotiated so that the supply of GAVI-funded routine vaccines would not be interrupted; 11 respondents stated that no new GAVI-funded routine vaccines would be introduced, if their country defaulted on its co-financing requirements; seven respondents stated that after one year their country would lose access to all GAVI-funded routine vaccines; two respondents stated that a donor would cover their co-financing commitments.

From our interviews in Burundi it was clear that government officials took the default rule seriously. The value of the GAVI financed vaccines was perceived to be so large that the government would ensure that a default never happened.

Experts reported that the default rule is a necessary and appropriate component of the co-financing policy. Several experts stressed the balance between effective sanctioning and maintenance of high immunisation rates; "The policy must have some teeth, although they don't need to be very sharp."

Co-procurement

Co-financing is essentially co-procurement of GAVI-supported vaccines by countries.²⁹ Except for GAVI countries in Latin America³⁰ that procure through the PAHO Revolving Fund and a select few countries that currently self-procure through national mechanisms³¹, the majority of countries coprocure GAVI-supported vaccines through the UNICEF Supply Division.

The co-procurement process through UNICEF SD involves five main steps:³²

Figure 5. Co-procurement steps for vaccine co-financing through UNICEF SD.



Co-procurement is an innovative design element of the co-financing policy, which encourages country ownership of vaccine financing.

²⁹ GAVI encourages countries to procure the required co-financing amount through UNICEF Supply Division (SD) or PAHO's Revolving Fund, in the case of Latin American countries. Countries are also allowed to self-procure. In any case, countries are encouraged to follow national procedures and regulations for the fulfilment of the co-financing requirements, and are obliged to select vaccines from the list of WHO pre-qualified products. The only exception to self-procurement to date is the procurement of the pneumococcal vaccines (PCV). All countries are required to procure these vaccines through UNICEF SD in order to access the agreed price under the AMC agreement.

³⁰ Bolivia, Guyana, Honduras, Nicaragua.

³¹ e.g. Azerbaijan, Indonesia, Pakistan, Vietnam

³² The procurement process starts with the issuing of a decision letter, a binding agreement between the GAVI Secretariat and the partner country in question, based on which the two parties are required to finance their share of the relevant GAVI-supported vaccine(s). The GAVI Secretariat sends the signed decision letter to its national government counterparts (Minister of Health and EPI staff, copying in Ministry of Finance, GAVI CROs, UNICEF SD). The country confirms commitment to procure through UNICEF SD and communicates the desired timing of procurement in an official request for a cost estimate to UNICEF SD. UNICEF SD includes this into its monthly demand forecasts to manufacturers. UNICEF SD issues the cost estimate, including procurement service charges. The country transfers funds, or reprograms funds already existing in its respective UNICEF SD account to complete the payment of its co-financing obligation. Upon full payment of requirements made, UNICEF SD releases the cost estimate for procurement action. Vaccines are delivered when the country asks for them to be delivered. The country pays the invoice to the supplier freight forwarder after the vaccines have been delivered. In recent years, UNICEF SD has initiated an additional step to this standardised process. It now sends a pre-filled request form for a cost estimate to some countries, prioritising these that have a poor record of timely response to co-financing requirements.

The process is designed with the intention to allow countries to keep ownership of the decision process to procure, while encouraging them to build procurement capacity at the country level. Countries co-procuring through UNICEF SD can choose whether to meet their co-financing requirements by either paying the dollar or dose amount stated in the decision letter.

Several experts confirmed their support for the co-procurement requirement. It is interesting to note, however, that among these, those who had no objections whatsoever were either GAVI Secretariat staff or GAVI donor organisation representatives. All the WHO Regional Focal Points who commented on this, although overall positive, had reservations related to the administrative burden placed on country EPI offices. The EPI office administrative capacity was also the main concern of those few experts that were critical of the co-procurement requirement. Some experts also pointed out that countries choosing to self-procure could face various hurdles related to increased procurement costs and vaccine prices. In line with the majority of experts, and despite the concern for administrative capacity, we assess the co-financing requirement to be conducive to the development of such capacities, and consequently, to country ownership.

The timing of some of the co-procurement process actions are not well aligned to countries' fiscal years and budgeting cycles.

Co-financing requires that the amounts stipulated in the decision letters have a corresponding budget allocation within the overall MoH budget. Several survey respondents and case studies interviewees, supported by some experts, have mentioned that the timing of decision letters and cost estimates can impact on countries' ability to plan and budget for vaccine procurement, as well as on management of stocks on a year-on-year basis. In total, about a third of all country EPI official survey respondents reported problems related to timing aspects such as the mismatch between the decision letters issue date and the country's fiscal year. Our analysis³³ suggests that the co-procurement process through UNICEF SD does not affect countries' ability to pay their co-financing requirements on time but that the timing of decision letters can create some challenges for countries.

Figure 6^{34} demonstrates that decision letters are being issued progressively later. Across all countries, decision letters for the year 2009 were issued, on average, 40 days prior to the start of the calendar year 2009. In 2013 they were issued, on average, 64 days after the beginning of that calendar year.

Decision letter revisions, as well as an increasing volume of decision letters and level of detail required therein over time (more countries, more vaccine programmes co-financed, more information included therein) appear to have been contributing factors to this trend. Decision letter revisions may occur when countries require more or less of a specific vaccine, delay the introduction of a vaccine or change the preferred presentation of the vaccine.

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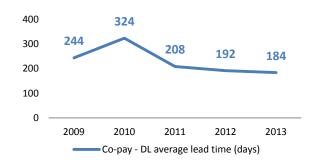
³³ Data source: UNICEF SD' co-financing database on timelines of decision letters issued, cost estimates issued and co-payments fulfilled.

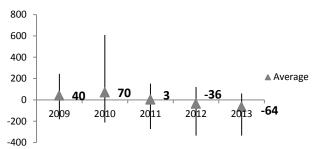
³⁴ Analysis includes only co-financing commitments actioned through the UNICEF SD. The analysis excludes self-procurers and countries using the PAHO Revolving Fund. The analysis also excludes data where dates of cost estimates issued or final co-payments or last fund transfers made were missing.

Figure 6. Average lead times in between UNICEF SD procurement processing actions for co-financing, 2009-2013.

Average lead time between Decision Letters issued and last fund transfers to UNICEF SD, 2009-2013 (days)

Average lead time between Decision Letters and beginning of co-financing calendar year, 2009-2013 (days)





Author's own calculations

Data sources: GAVI Secretariat co-financing database; UNICEF SD

Figure excludes countries procuring vaccines through the PAHO Revolving Fund or through self-procurement mechanisms. Figure also excludes UNICEF SD procurement processing actions, where country payments were never made. Finally, figure excludes 2008 as decision letter issue dates were not made available on time to include in the analysis.

Note: The data included in the graph is limited to those countries for which data was available.

Survey respondents also commented on the timing of the decision letters. For instance, one low income country official survey respondent stated: "the decision letter is mostly late. When the request gets tangled into the long government procedures it can only be completed in the next financial year". Another low income country official survey respondent stated: "The financial year of the government differs from the timeline for payment of government contribution which presents difficulty with accessing budgeted funds". Another graduating country official survey respondent stressed that: "The decision letters with the approved co-financing amount for the following fiscal year have no standardised delivery date; this conflicts with the times and national planning processes. The planning and budgeting process for the upcoming fiscal year is carried out in the month of May (8 months in advance) and the decision letter is received normally between the months of October through December".

Delays in decision letters reduces the time available for countries to fulfil their requirements, contributing to mismatches with some countries' annual planning and budgeting cycles for vaccines, and creating challenges for timely releases of funds in response to co-financing obligations. We have noted that the GAVI Alliance is in the process of addressing this issue with its "Grant Application and Monitoring Review Redesign" (GAMR), where it is considering tailoring the decision letters issue dates to the fiscal cycles of each country. In our view, solving this problem is becoming increasingly important with the increasing co-financing amounts.

Figure 6 also demonstrates that the average lead time between decision letters and co-payments to UNICEF SD has decreased. Specifically, the average lead time between decision letter issue dates and co-payments or last fund transfers made to UNICEF SD has decreased from 244 days in 2009 to 184 days in 2013. This could be interpreted as a display of greater commitment by countries to co-financing obligations, or/and of overall improvements in the efficiency of the co-procurement process.

Pricing aspects

Co-procurement implies that the actual price of the co-procured vaccines can differ from the price estimates used to calculate co-financing requirements in the decision letter. Allowing countries to meet their co-financing obligations in either dollar amounts or in vaccine doses when co-procuring through UNICEF SD is a good design safeguard against unanticipated vaccine costs.

The use of weighted average price (WAP) estimates for co-financing requirement calculations in decision letters creates price differentials between actual prices of vaccines at point of co-procurement and price estimates included in decision letters. The risk is greatest for graduating countries, as their requirements are linked to target vaccine prices. The risk to all countries increases as: 1) countries start to self-procure, which means that they do not have access to GAVI prices or are protected by the market power of UNICEF SD; 2) co-financed share of doses increases over time, particularly for intermediate and graduating countries; 3) manufacturers of a specific vaccine increase the price offered to UNICEF SD, creating greater differentials between WAP estimates and actual prices specific suppliers offer at point of co-procurement. Potential implications of this risk are for countries to overestimate, or underestimate the amount of dollars required to satisfy co-financing requirements. This can create some confusion to countries' efforts to plan and budget accurately on a year-on-year basis, using the decision letter as their budgeting baseline tool. For example, the different presentations of penta vaccines varied from US\$ 1.61 to US\$ 2.57 in 2014.

To partly mitigate the above risks, the co-procurement through UNICEF SD has been designed in a way that countries can choose whether to meet their co-financing requirements by either paying the dollar amount or the number of doses given in the decision letter. This is only applicable for vaccines purchased through UNICEF SD as countries who self-procure pay significantly higher prices for the same vaccines.

To explore the impact of using WAP, we examined a sample of 40 vaccine (and presentation specific) co-payment purchase contracts between countries and UNICEF SD during 2012 and 2013³⁵, including eight graduating countries. We limited the sample to the countries for which we had available data from the GAVI Secretariat and UNICEF SD.³⁶ Of course, the variation may only be found for vaccines that are supplied by multiple manufacturers and come in multiple presentations (penta, YF). The highest variation above the WAP in the decision letter and the actual price paid was 34% for penta in 2013 for two countries. On the other hand, the biggest variation below the WAP and the actual price turned out to be 51 % of the WAP estimate.

In our view, the above findings suggest that allowing countries to meet their co-financing obligations in either dollar amounts or in vaccine doses is a good design safeguard. It protects against unexpected price increases. This design features also enables the decision letters to continue to use WAP, which simplifies administrative processes.

³⁵ Self-procurers and countries procuring through the PAHO Revolving Fund are excluded from the analysis due to lack of data. We are also aware that PAHO's "most favored nation clause" commits manufactures to offer the lowest price worldwide for their products to all country members of the procurement mechanism. Further analysis would be required to examine the impact of different procurement actors on prices and costs to countries co-financing vaccines, which falls outside the scope of the current study. PAHO has issued waivers to GAVI in the past to lift this requirement so that GAVI may get lower prices.

³⁶ Analysis includes four vaccines: PCV, penta, rota, YF.

Co-procurement generates additional procurement processing costs, which countries may not be fully aware of when planning and budgeting for vaccines.

Co-financing requirements do not contain costs and fees of procurement agents, such as contingency buffers and handling fees in the case of UNICEF SD. These are extra costs countries are required to pay on top of the co-financing requirements. The cumulative cost of these charges³⁷ in a single co-financing year can be, in the case of poor planning and budgeting, enough to create budget shortfalls³⁸. Although injection supplies and devices, as well as freight and insurance estimates, are included in decision letters and in co-financing requirement calculations, handling fees and the UNICEF SD buffer are not. We recognise that such procurement processing costs would be difficult to incorporate in co-financing calculations since these differ from agent to agent. For transparency purposes, as well as for helping countries that procure through UNICEF SD in vaccine budgeting and planning, it would be helpful for decision letters to provide an annex on the agency's charges and the financing requirement implications for countries.

3.2. Implementation and support

The main question of the Evaluation Framework (page 10) being addressed in this chapter is: How has the current co-financing policy been implemented at the country level, and how has it been supported, and its progress monitored, by the GAVI Secretariat and Alliance partners at the global level? This includes the following RfP questions:

- To what extent are countries undertaking appropriate financial analyses and planning to inform their decision to apply for GAVI Alliance support vaccines?
- To what extent are co-financing requirements affecting national decision-making processes for vaccine introductions in-countries?
- To what extent have the co-financing policy and planned activities associated with its implementation been carried out by the GAVI Secretariat and by partners as designed?
- How timely, relevant and clear has communication between the GAVI Alliance and countries been in relation to co-financing and efforts to improve ownership and / or financial sustainability?
- What actions have countries undertaken to mobilise the required resources to meet the terms of the co-financing policy? What have been the positive and negative consequences of these actions?
- To what extent has the role played by partners or the Secretariat, including through the Immunisation Financing & Sustainability (IF&S) Task Team been relevant, timely and appropriate for supporting countries to understand and implement the policy?

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³⁷ UNICEF SD charges a 10% buffer and a tiered handling fee (3% for least developed countries; 3.5% for non-least developed countries).

However, to our knowledge, no country has defaulted on its co-financing commitments due to such reason to-date.

Box 2. Summary of findings in section 3.2.

- Countries are undertaking sufficient financial analyses and planning to inform decisions to apply for GAVI Alliance vaccine introduction support. The GAVI Alliance reporting requirements facilitate this analysis and planning process.
- The extent to which co-financing requirements are affecting national decision-making processes remains unclear.
- Countries predominantly draw resources for co-financing from central and district government budgets, which may or may not be partially financed by donors. Others utilise pooled funds, which may be more predictable funding sources, especially for low income countries. However, as an earmarked approach to health financing, they undermine improved planning and budgeting processes across all programmatic areas. Very few countries are fully donor funded for cofinancing.
- At least 17 countries generally meet their GAVI Alliance co-financing commitments, yet have received external financial assistance for traditional vaccines in 2012 and/or 2013. These less expensive vaccines are paid for by development partners, typically UNICEF.
- Actions such as the creation of budget lines for vaccines help with more predictable budgeting but are not sufficient to avoid default.
- UNICEF, WHO and development partners are significant contributors in support of the cofinancing policy implementation via technical, resource mobilisation and advocacy assistance, but often feel resource-constrained in their duties. Proactive engagement of UNICEF country offices in the monitoring of co-financing policy implementation contributes to countries fulfilling their co-financing obligations. However, UNICEF country offices in graduating countries do not give high priority to co-financing policy implementation in relation to their other tasks. WHO country offices monitor co-financing policy implementation in reaction to notifications by partners and do not feel they have a formal role in this process.
- The GAVI Secretariat has been investing an increasing amount of resources to support the implementation of the co-financing policy.
- Monitoring of the co-financing policy implementation has been effective through the Immunisation Financing & Sustainability (IF&S) Task Team although the World Bank should reengage with specific responsibilities.
- The flexibilities extended by the IF&S Task Team are appropriate in giving priority to rational operation of immunisation programs.

3.2.1. Financial planning and decision making for vaccine co-financing

Comprehensive multi-year plans (cMYPs) for national immunisation programmes, introduced in 2005, are the first step in the planning process and a requirement for countries applying for GAVI Alliance support of new vaccine introductions³⁹. cMYPs are planning tools used by countries for projecting costs and financing needs of immunisation programmes over a five-year period. They

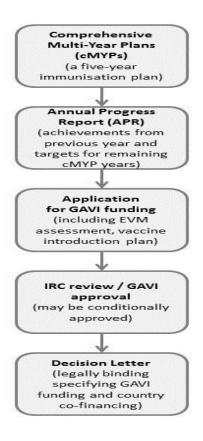
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³⁹ The drawing in the right margin depicts the GAVI Alliance's process and planning requirements, from comprehensive multi-year plans (cMYPs) to binding decisions on the GAVI Alliance vaccine funding and country co-financing.

contain all vaccines to be introduced during this period, respective costs and co-financing levels. Like every national planning tool, cMYPs take time (2-3 years) to develop and finalise. (30) cMYPs replaced the Financial Sustainability Plans (FSPs) with the intent that cMYPs would be more useful as prospective planning and budgeting tools.

Some experts compared the FSPs and the cMYPs. It was noted that although the FSPs had the advantage of being more comprehensive and holistic in taking in programmatic perspectives, they suffered the drawback of often being unrealistic, delinked from planning cycles, and that the plans were often not executed or implemented.

In addition to cMYPs, countries are required to produce vaccine introduction plans, including comprehensive vaccination strategies for the introduction of the vaccines, description of surveillance activities, vaccine coverage monitoring and reporting processes, and communication strategies to accompany the introductions; as well as Effective Vaccine Management (EVM) assessments to ensure adequate cold chain capacity, and effective monitoring of the new vaccine introductions.



Countries are undertaking sufficient financial analyses and planning to inform decisions to apply for GAVI Alliance vaccine introduction support. The GAVI Alliance reporting requirements facilitate this analysis and planning process.

To a large extent, cMYPs have been successful in generating useful information about current and expected costs, financing sources, gaps for immunisation and can be used as an advocacy tool. Both the case studies and the country survey results demonstrate that countries view the cMYP as a useful planning tool. According to Ghana's national EPI manager, "the cMYP is very useful for planning, used to guide us. It is used as a dynamic document, revised as we go along, particularly to make decisions, develop next year's plan and to identify resource gaps." Even some GAVI Alliance non-eligible countries, like Namibia, have used cMYPs to estimate how much vaccine financing is affecting their resources. Experts generally accept cMYPs as powerful advocacy and awareness raising tools for immunisation financing in partner countries. One particular utility of the cMYPs identified through the case studies was the value in understanding the total cost of the vaccine (not just their cofinancing component). In our view, the cMYP is a good planning tool.

Currently, 52 out of the 73 GAVI eligible countries⁽³⁴⁾ have active cMYPs (29 low income countries, 12 intermediate countries and 11 graduating countries). Two expired at the end of 2013, six will expire at the end of 2015, and 34 in 2016.⁴⁰ Therefore many countries are currently in a planning process for their next five-year cycles and applications for GAVI Alliance support. In our view, to ensure the best possible planning, co-financing policy revisions should synchronise as much as possible with cMYP cycles. This means that the GAVI Alliance must have a revised co-financing policy in place by, at

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⁴⁰ Source: GAVI Alliance website, various documents.

the latest, the end of 2014, in order to coincide with the cMYP revision of the bulk of recipient countries.

Recent literature-based evidence on issues, opportunities and challenges in introducing vaccines in LMICs suggests that many countries use cMYPs as onetime estimates of introduction-associated costs and financing requirements for accessing GAVI Alliance vaccine support, rather than an ongoing planning tool. (30) This is a risk since cMYPs span across a rather long time period (five years), during which reality can diverge significantly from original cost assumptions and funding need estimates. (35) Many countries' GNI/capita has changed significantly since the last wave of cMYP submissions to the GAVI Alliance (2011), meaning that they have transitioned to be either intermediate or graduating. In these cases the cMYP assumptions could become obsolete. In our view, the Annual Progress Reports (APR) takes over some of the planning activities from the cMYP. The APR requires countries not only to report on activities of the previous year but also to report on the targets of the remaining

Financial Sustainability Plans (FSPs)

Financial Sustainability Plans (FSPs) were a country-led tool to aid the transition in funding from GAVI Alliance.

Countries were required by GAVI to prepare a detailed FSP mid-way through the funding period, providing 10 year projections of future expenditures and financing. FSPs provided GAVI with important data for tracking and monitoring immunisation financing information, including trends and national policy changes. They were seen as instrumental in achieving national financial sustainability, (1).

2) contributing to building in-country capacity in programme costing and financing structures, assisting in building bridges between national cross-institutional actors and setting the agenda for national immunisation programmes (3).

However, according to experts there were major weaknesses with the FSPs. They were performed too late (half-way through the five-year grant), after countries had already made the decision to introduce a vaccine. They also were not aligned with national planning processes. Therefore, it was a great challenge to transition the FSPs from the planning board to practice. The end result was an inability by countries to adequately demonstrate how they would fully finance the vaccines once GAVI Alliance support ended, with large funding gaps remaining. FSPs were replaced with cMYPs in 2005, before the introduction of the co-financing policy.

cMYP years. Another possibility would be to require the countries to assess the co-financing requirements of their existing grouping as well as the higher level grouping in their cMYPs.

The extent to which co-financing requirements are affecting national decision-making processes remains unclear.

Most (9/10) graduating, several low income (17/26) and some (5/12) intermediate country EPI official respondents reported that their government prioritised co-financing within national health plans in order to be able to meet its co-financing commitments and increase ownership of vaccine financing.

Similarly, all countries report alignment of cMYPs to national health plans and strategies in their applications for GAVI Alliance vaccine support. However, during our consultation exercise, one GAVI Secretariat representative pointed out that very few countries in the region of West Africa have

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⁴¹ We reviewed all the latest approved proposals for GAVI NVS support for all countries with history of cofinancing, available for download from the GAVI Alliance website.

actually deployed a financial planning exercise that has been fully integrated in their long-term health sector planning. Several low income and intermediate country EPI official survey respondents confirmed that co-financing has not been included in the countries' annual health system financing plans, but, instead, serve more as a short-term prioritisation tool for vaccines given countries' limited resources.

Literature suggests that many countries have not incorporated cMYPs into their annual plans because they lack confidence in the sustainability of the external financing linked to the cMYPs. (30) During our study visit to Ghana, we noted that the country found it difficult to obtain and quantify partner commitments necessary for the cMYP. "Partners are not able to tell us how much they will commit in advance. In some instances we only know once they have invested the funds." Although this connotes a need for partner and country coordination, the reality is that external funders may not be able to commit due to their shifting domestic political agendas and budgeting cycles.

In our view, it is difficult to assess with any accuracy the true level of alignment of cMYPs with national health planning processes. We would like to point out, however, that sustainable co-financing cannot be guaranteed if immunisation financial planning works in silo from the rest of the health sector in-countries.

3.2.2. Mobilising resources to meet co-financing requirements

Resource mobilisation is a pivotal success factor for the co-financing policy. The resource mobilisation requirements depend on a host of factors: the number of vaccines they introduce with co-financing requirements, the quantity of doses required, the co-financing amounts, and for graduating countries vaccine prices. (36) Resource needs also depend on the operational costs that are associated to vaccine introduction; a cost element that is likely to increase as a result of multiple new vaccine introductions by partner countries. (30)

The types of actions countries undertake to mobilise resources span from short-term efforts to cover their co-financing needs for the year, to longer-term efforts to increase the size and the predictability of the government's immunisation budget allocations.

Our analyses below suggest that most countries have made significant efforts to mobilise resources for meeting their co-financing requirements and ensuring sustainability of their immunisation programmes. This is evidenced by the rapidly expanding co-financing commitments and the relatively few countries that default on their commitments. But there are some counteracting factors that may limit the success of these actions.

Securing co-financing sources

A country's vaccine co-financing requirements can be substantial in comparison to the size of the overall immunisation budget. For example, Burundi's government EPI budget for 2010 was US\$ 331,000 whereas the donor EPI budget was over US\$ 4 million. The GAVI Alliance encourages countries to mobilise internal resources (government funds) to fulfil their co-financing requirements,

as well as external – donor based – resources,⁴² in alignment with the Alliance's definition of financial sustainability. Most GAVI Alliance countries with history of co-financing use government sources to pay for co-financing. Others have developed pooled funds or other special arrangements to pay for their immunisation expenditures. Based on consultations, surveys, data analysis, a review of cMYPs and a review of APRs for the period 2008 to 2013, we have identified three groups of countries, listed in Table 3 below:⁴³

- 1. Countries that pay their co-financing commitments through direct government funding, where government funding can be covered fully or partly by donor funding, but where no pooled fund or other special arrangements are in place
- 2. Countries that pay their co-financing commitments through government funding, but where funding can be covered fully or partly by donor funding, due to the presence of pooled funds for health sector financing
- 3. Countries that have been fully externally dependent for their co-financing commitments in the last one to two years

Table 3. Co-financing countries grouped by their co-financing funding mechanisms, 2012-2013

Country group and co- financing source groupings	Low income	Intermediate	Graduating	
Group 1:	Afghanistan, Benin, Burkina	Cote d'Ivoire,	Angola, Armenia,	
Government co-financing with	Faso, Burundi, Cambodia,	Djibouti, Lao PDR,	Azerbaijan, Bolivia,	
no pooled funds in place	Chad, Comoros, DRC,	Lesotho, Nicaragua,	Congo Republic,	
	Ethiopia, Eritrea, Gambia,	Nigeria, Pakistan,	Georgia, Guyana,	
	Guinea, Guinea-Bissau, Kenya,	Sao Tome, Senegal,	Honduras,	
	Korea DPR, Kyrgyz Republic,	Solomon Islands,	Indonesia, Kiribati,	
	Liberia, Madagascar,	Sudan, Uzbekistan,	Moldova, Sri Lanka,	
	Mauritania, Myanmar, Niger,	Vietnam, Yemen	Timor-Leste	
	Rwanda, Sierra Leone,			
	Tajikistan, Togo			
Total: 52	Total: 25	Total: 14	Total: 13	
Group 2:	Bangladesh, CAR, Malawi,	Cameroun, Ghana,	Bhutan, Mongolia	
Government co-financing	Mozambique, Nepal,	Papua New Guinea,	Bridtan, Wongona	
where funding may be covered	Tanzania, Uganda, Zimbabwe	Zambia		
partly or fully from donors via	, 0			
pooled funds				
Total: 14	Total: 8	Total: 4	Total: 2	
Group 3:	Mali, Somalia			
Fully externally dependent for				
co-financing and for traditional				
vaccines				
Total: 2	Total: 2			

 $^{^{42}}$ Countries are not allowed to use other GAVI-support schemes to cover their co-financing requirements, such as for instance funds under the HSS scheme.

⁴³ Detailed tables are included for each group in Annex 4: Country co-financing funding sources, p. 85.

Countries with no pooled funds in place predominantly draw resources for co-financing from central and district government budgets, which may or may not be partially financed by donors.

The 52 countries in the top row (Group 1) of Table 3 have direct government funding (which may include donor budget support) processes in place to meet their co-financing requirements. For example, Indonesia draws resources from district government authorities, Bolivia draws resources from its national Social Security Scheme, Armenia has complemented resources from non-profit foundations to support its co-financing commitments, and the Solomon Islands pays for vaccines through its National Medical Stores.

Four of the low income countries in Group 1 (Benin, Chad, Guinea and Mauritania) have set up Vaccine Independence Initiatives⁴⁴ to secure a steadier cash flow from the central government for vaccine financing. Benin, Kyrgyz Republic and Sierra Leone draw additional resources from non-profit foundations and other public sector organisations.

Pooled funds may be more predictable funding sources, especially for low income countries. However, as an earmarked approach to health financing, they can undermine improved planning and budgeting processes across all programmatic areas.

The 14 countries in Group 2 have pooled funds for health sector financing, with six of these clearly linked to immunisation financing (Bangladesh, Bhutan, Cameroun, CAR, Malawi, Nepal, Mongolia, Zimbabwe). The remaining eight countries mobilise resources through central government, decentralised government entities and National Medical Stores. Two of the pooled funds linked to immunisation financing are not yet operational (Nepal, Cameroun), and one of them acts as an emergency Trust Fund (CAR) (although this was prior to CAR's country tailored approach). Three low income countries have received international donor assistance in the last year to meet their cofinancing requirements (Donor Health Group in Malawi; World Bank through the Common Basket Fund in Bangladesh; CAR through MSF).

Pooled funds have been beneficial tools for resource mobilisation efforts of countries that have low government revenue generating capacity. As pointed out by one expert, they provide a platform for a systematised approach to external resource mobilisation, which ensures harmonisation and avoidance of duplication of donor funding. And they allow for a coordinated and predictable fundraising process that reflects government priorities and is linked to longer term financial planning for immunisation and health system strengthening.

Another expert pointed out, however, that pooled funds can undermine commitment to government financing of vaccines over time. This is particularly challenging for donor dependent countries (e.g. Zimbabwe with its Health Transition Fund). Burundi and Cameroun are discussing or planning to set up such funds, but there is disagreement of the utility of separate funds dedicated only to immunisation financing. Many experts felt that it was counter-productive with this approach; rather countries should improve their planning and budgeting processes across all programmatic areas and the use of budget line items should be sufficient.

37

⁴⁴ The Vaccine Independence Initiative is a joint venture between UNICEF and WHO allowing pre-delivery financing for countries procuring through UNICEF as well as countries to ultimately pay for the vaccines in local currency.

Very few countries are fully donor funded for co-financing.

Only two countries have stated that they are fully externally financed both for their co-financing commitments and for their traditional vaccines in the last one to two years (Mali and Somalia). They both belong to the low income group and are both fragile states. In both countries donors are supporting non-government entities to pay the co-financing requirements as a result of suspension of governmental budget support from bilateral donors due to political strife.

Of course, many low income countries receive considerable budget support from donors. It was outside the scope of this evaluation to examine overall budget support.

At least 17 countries generally meet their GAVI Alliance co-financing commitments, yet have received external financial assistance for traditional vaccines in 2012 and/or 2013.

Survey respondents from 17 countries acknowledged that they currently do not pay for their traditional vaccines (BCG, measles first dose, OPV, tetanus).⁴⁵ 13 are in the low income group⁴⁶, three are in the intermediate, and one in the graduating group. In other words, increasing GNI per capita does not warrant that the government takes over responsibility for traditional vaccine financing with domestic resources. Nine of the 17 have always met their GAVI Alliance co-financing commitments. Only one low-income country is a recurrent defaulter on GAVI Alliance co-financing.

Based on the survey results and the country case studies it appears that some of these countries have never paid for traditional vaccines; UNICEF has always paid for them. Therefore, some of these countries do not particularly see this as problematic. Rather they view this as a pragmatic way to increase their public health impact (through expanded immunisation coverage) based upon their limited budgets. In our view, this is where the power of the default rule is key. In one country when UNICEF raised the issue (that the country was paying for increasing co-financing commitments to GAVI Alliance but not for the less expensive traditional vaccines) as problematic with government officials, it was portrayed that UNICEF was abandoning the government.

However seven countries, according to the survey, have started to pay for their traditional vaccines in the past few years, three of which clearly stated that this was in response to the introduction of co-financing. So this phenomenon may subside over time or will become less of an issue as the GAVI Alliance takes over the provision of more traditional vaccines such as measles and polio by including MR and IPV in its NVS portfolio.

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⁴⁵ This is self-reported data only provided from one source (the survey). The data has not been validated with UNICEF SD accounts on vaccine procurement processing actions. Therefore, this figure could be potentially underreported.

⁴⁶ 13 countries have reported to be receiving external assistance for traditional vaccine expenditures in the last one to two years, between 2012 and 2013. However three low-income countries have reported assumed responsibility of traditional vaccine financing in the last one to two years in response to co-financing.

Mobilising resources through various actions

Actions such as the creation of **budget lines** for vaccines help with more predictable budgeting but are insufficient to avoid default. **Political support, legislation or/and health plan prioritization of internal** vaccine financing are required.

Table 4. Actions taken by countries to meet co-financing requirements, as reported by country EPI/MoH official survey respondents.

Action taken	Graduating	Intermediate	Low income	Recurrent Defaulter
Creation of a budget line for vaccines / immunisation	90%	83%	88%	100%
Prioritised within national health plans	90%	42%	65%	100%
Initiative has the support of senior political people (Ministerial level and above)	80%	50%	42%	43%
Steadily increasing government vaccine financing as a share of health budget	70%	42%	58%	6 86%
Improving coordination and sense of collective ownership of immunisation planning and budgeting between ministries of health and finance	30%	33%	50%	43%
The Minister of Health has made public statements in last two years in support of the GAVI co-financing policy and national funding of vaccines	60%	17%	35%	43%
Full ownership of financial planning and budgeting for routine vaccines by Ministry of Health, without decisions influenced by Ministries of Finance or other government services	40%	8%	35%	71%
Existence of distinct legislation on vaccine financing or immunisation	30%	17%	8%	0%

Author's own calculations

Data source: Country official survey responses

Table includes responses from 10 graduating, 12 intermediate and 26 low income countries. 47

Survey respondents indicated a number of actions taken to meet their co-financing requirements (see Actions such as the creation of **budget lines** for vaccines help with more predictable budgeting but are insufficient to avoid default. **Political support, legislation or/and health plan prioritization of internal** vaccine financing are required.

⁴⁷ Afghanistan, Angola, Azerbaijan, Bangladesh, Benin, Bhutan, Burundi, Cambodia, Cameroun, DRC, Côte d'Ivoire, Djibouti, Eritrea, Gambia, Georgia, Ghana, Guinea, Guyana, Haiti, Honduras, Indonesia, Kenya, Kiribati, Lesotho, Liberia, Madagascar, Malawi, Mauritania, Moldova, Mozambique, Myanmar, Nepal, Nicaragua, Niger, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Somalia, Sri Lanka, Sudan, Tajikistan, Tanzania, Togo, Uganda, Vietnam, Zambia, Zimbabwe.

Table 4), including ensuring distinct budget lines for vaccines exist in health budgets, prioritising vaccine financing in health sector planning, and facilitating adequate and timely releases of funds through increased coordination between government services and sense of ownership of the process by Ministries of Health. The main positive consequence, according to survey respondents, is more predictable budgeting.⁴⁸

For comparison's sake we also calculated the response rate for the recurrent defaulting countries. Seven of the eleven recurrent defaulting countries responded to this question. Their answers were not markedly different from the other countries. We take this to mean that these actions are helpful but not conclusive in securing the necessary co-financing funds. Some comments that we received in the survey regarding the helpfulness of these actions are:

- A low income country EPI official survey official stated: "The budget line for vaccines has helped the government buy vaccines"; while another reported: "The absence of a specific budget line for co-financing leads to a lengthy and tough negotiation within the Government to secure the funding for each vaccine".
- A low income country official survey respondent stated: "There is a budget line for the payment of traditional vaccines and for co-financing. However, the timely release of funds is a problem, sometimes necessitating a plea to the higher authorities".
- A graduating country WHO official reported that the Minister of Health had to intervene personally every year to get the co-financing payment approved.
- A low income country official stated: "every year the EPI is planning the purchase of vaccines, but those who decide how much to allocate to buy vaccines are elsewhere".

The only action with a noticeable difference between all of the countries and the recurrent defaulting countries was the existence of distinct legislation on vaccine financing and immunisation, although the difference is slight with only two countries from each grouping agreeing compared to no recurrent defaulting countries. One additional low-income country is in the process of endorsing an immunisation act through parliament. McQuestion et al. (28) argues that the goal of sustainable immunisation funding is not reached until immunisation financing is fixed by law. Financing of immunisation defined by law has been realised in the Americas, where governments provide 90 % of immunisation funding as a result of a legislative measures. (28)

3.2.3. Supporting the co-financing policy implementation

The Business Plan specifies the actions to be undertaken to achieve the GAVI Alliance's strategy, including responsibilities for GAVI Secretariat, UNICEF and WHO. We understand that the services that are included in this plan are the basis for the payments from the GAVI Secretariat to UNICEF and WHO. There is one macro activity (3.1.2) related to co-financing. For this activity WHO is responsible for the assessment of, follow up of and additional support to underperforming countries on immunisation financing and expenditure tracking. UNICEF is responsible for support to countries underperforming on immunisation financing.

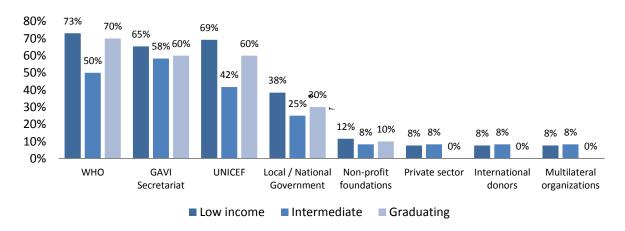
⁴⁸ 48 respondents from EPIs and Ministry of Health affiliates

UNICEF, WHO and development partners are significant contributors in support of the co-financing policy implementation via technical, resource mobilisation and advocacy assistance, but often feel resource-constrained in their duties.

Most WHO/UNICEF country office survey respondents (53/60 low income country respondents; 21/25 intermediate country respondents; 12/19 graduating country respondents) stated that they have offered technical assistance in immunisation sustainability and financial planning in response to the co-financing policy in the past few years. Note that their self-reported activity is higher in lower-income countries. The engagement of the same survey respondents in vaccine need quantification, forecasting and EVM assessments is less but still relatively widespread: 22/68 low income country respondents; 6/25 intermediate country respondents; and 5/19 graduating country respondents confirmed their participation in these processes.

In accordance to WHO/UNICEF country office opinions, country EPI official survey respondents report that the WHO has offered the most technical assistance in response to the co-financing policy, followed by the GAVI Secretariat, UNICEF, and local or national government services, see Figure 7.

Figure 7. Technical assistance provided to countries in response to co-financing implementation, as perceived by country EPI official survey respondents.



Author's own calculations

Data source: Country official survey responses

Figure includes responses from 10 graduating, 12 intermediate and 26 low income countries. 49

WHO and UNICEF country offices are also important immunisation advocates. Our survey findings suggest that several WHO/UNICEF country office country office respondents (41/60 low income; 18/25 intermediate; 10/19 graduating) have offered advocacy and awareness raising assistance on vaccine financing through workshops, political leadership engagement or other activities. Some country offices (20/60 low income; 12/25 intermediate; 10/19 graduating) have provided education, training, and information sharing with country officials in response to co-financing requirements. The

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⁴⁹ Afghanistan, Angola, Azerbaijan, Bangladesh, Benin, Bhutan, Burundi, Cambodia, Cameroun, DRC, Côte d'Ivoire, Djibouti, Eritrea, Gambia, Georgia, Ghana, Guinea, Guyana, Haiti, Honduras, Indonesia, Kenya, Kiribati, Lesotho, Liberia, Madagascar, Malawi, Mauritania, Moldova, Mozambique, Myanmar, Nepal, Nicaragua, Niger, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Somalia, Sri Lanka, Sudan, Tajikistan, Tanzania, Togo, Uganda, Vietnam, Zambia, Zimbabwe.

WHO is also perceived to offer the most advocacy assistance across all country groups, with UNICEF coming in second, although country officials from graduating countries do not feel they receive enough support from UNICEF on this front.

In terms of resource mobilisation assistance, country EPI officials perceive local and national government authorities to play the biggest role (22/60 low income country respondents; 4/25 intermediate country respondents; 11/19 graduating country respondents), followed by the GAVI Secretariat, UNICEF and international donors. Experts provided several examples of the important role played by development partners in advocacy, in building relationships, and in awareness-raising in countries. For instance, the Canadian and Norwegian governments mobilised resources to sustain co-financing in, respectively, Mali and in Malawi. In Uganda, the Sabin Vaccine Institute successfully lobbied with parliamentarians to increase the budget for vaccines. MSF mobilised resources to sustain co-financing in the Central African Republic. In Cameroon, with the help of civil society, the country has started the setup of an earmarked fund for immunisation, pooling resources from government, the private sector and donors.

According to experts, the WHO country offices conduct regular advocacy with Ministry of Health officials and EPI technicians, send reminders to Ministries of Health for fund transfers, and host regular discussions with other partners to improve timely vaccine procurement, including discussions during the quarterly ICC meetings. In several countries (e.g. Madagascar, Malawi, Mozambique, Niger, Guinea, Guinea-Bissau, Pakistan, Sudan) technical missions and immunisation financing assessments have been taking place in accordance to business plan requirements. According to IF&S Task Team meeting minutes, we observe a variable level of satisfaction with the quality and added value of these missions. The most challenging part of these processes is distilling lessons learnt, which can feed into policy improvements in the future. A more systematic assessment of the added value of these missions would be required by the GAVI Alliance.

In our view, from this high-level questionnaire, it appears that UNICEF and WHO are fulfilling their Business Plan roles of technical support and advocacy to all countries, including those underperforming. It appears that neither plays a pivotal role in securing additional financing, but this task is assigned to the GAVI Secretariat in the Business Plan. Our survey confirms that country officials perceive that the GAVI Secretariat is fulfilling this role.

As some experts have indicated, and as several UNICEF and WHO survey respondents have confirmed, the volume of co-financing transactions and policy support requirements is increasing, but the agencies are feeling increasingly constrained by limited budgets and staff allocations to support the policy implementation. A few WHO country officers reported that staff time allocated to technical support of the policy implementation is outside their work plan, and given budget constraints at the organisational level there is a sense of limited human and financial resources to assist in procurement assistance and to facilitate the co-payment process overall.

Proactive engagement of UNICEF country offices in the monitoring of co-financing policy implementation contributes to countries fulfilling their co-financing obligations.

As several UNICEF country-office survey respondents claimed, and as the evidence on countries fulfilling their requirements confirms, we have observed no records of default where UNICEF country offices have explicitly stated that they have taken pro-active intervention and coordination measures

with development partners (WHO, civil society) and with government officials at the Ministry of Health. Quoted measures include monthly email and telephone reminders, quarterly meetings through the ICC, occasional visits at the Ministry of Health, and periodic awareness-raising sessions to parliamentarians.

UNICEF country offices in graduating countries do not give high priority to co-financing policy implementation in relation to their other tasks.

As some experts have indicated, and as the IF&S Task Team has recently observed, (47) UNICEF country offices do not always engage in the monitoring process, despite their central role in co-procurement related activities. Our survey findings demonstrate that it is the UNICEF country offices in low income countries that give highest priority to co-financing policy monitoring and implementation, followed by the intermediate country offices. More than half of the offices in graduating countries give 'somewhat low' or 'low' priority to co-financing monitoring and implementation. This was validated in Moldova where UNICEF SD plays an important role in procuring vaccines for reasonable prices but there is little interaction otherwise.

WHO country offices monitor co-financing policy implementation in reaction to notifications by partners and do not feel they have a formal role in this process. WHO offices use decision letters and APRs as reference points for monitoring co-financing. Co-financing can be discussed during EPI technical working group sessions — which take place on a monthly basis — if need arises. Survey respondents frequently stated that problems with delays in co-payments are discussed during the quarterly ICC meetings, with other development and civil society partners. In some instances, country offices reach out to high level officials at Ministries of Health, or participate in joint missions to countries, in response to GAVI partner requests for assistance. In some countries, WHO offices have been quite active in negotiations with EPI and financial officers at Ministries of Health, to facilitate the understanding of the impact of the delays in co-financing. However, our survey findings suggest that WHO country offices overall do not feel they have a formal monitoring role in the co-financing policy monitoring process.

Resource availability for policy implementation support

The GAVI Secretariat has been investing an increasing amount of resources to support the implementation of the co-financing policy.

There is a general consensus among consultation experts and survey respondents that the GAVI Secretariat is becoming better resourced internally, with staff increasing in numbers and their role in strengthening cooperation with partners, becoming more aware and proactive in follow ups with governments. Since the revision of the co-financing policy, a Co-Financing Policy Officer has been added to the *Financial Sustainability and Graduation Team* of the GAVI Secretariat, which has the primary responsibility for policy implementation. Additional Country Responsible Officers (CROs) have been hired, allowing for a closer follow up of policy implementation at the country level. This is a positive development, since, as our interviews with CROs have demonstrated and as our case studies have confirmed, there are strong relationships between country officials and CROs, who have in-depth knowledge regarding the events and results of his/her countries.

However, some experts raised concerns about CROs' ability to get up to speed with what happens at the country level. For instance, CROs in the past had been loaded with too many countries in their

country support portfolios, making it hard for them to follow up with individual countries in a systematic manner (e.g. visiting each country every year). Their approach to co-financing was mostly reactive, as several CROs have clarified in interviews with us. CROs would receive notifications about potential defaulters in the end of October or beginning of November, and would have two months to follow up with countries to resolve any impending defaults. Recently a more proactive step has been introduced, whereby CROs send out informal reminders to potential defaulters in late summer/early autumn, followed up by the formal reminder letters in October/November for those who have not yet paid. In addition, training sessions particularly tailored to co-financing policy implementation are being conducted by the GAVI Secretariat for newly hired CROs, a reflection of a change in organisational focus of country support programmes and, within those, the role of CROs.

3.2.4. Policy monitoring

Monitoring of the co-financing policy implementation has been effective through the Immunisation Financing & Sustainability (IF&S) Task Team, although the World Bank should reengage with specific responsibilities.

The IF&S Task Team is mandated by the GAVI Secretariat as an independent advisory body to 'monitor country progress on co-financing performance and oversee follow-up actions to support countries in default'. It meets quarterly and is comprised of members from the GAVI Secretariat, the Bill and Melinda Gates Foundation, PAHO, UNICEF, UNICEF SD, WHO and the World Bank (although the World Bank has not participated in the last three years). Since it has been in operation, the IF&S Task Team has obtained significant knowledge of the intricacies of the co-financing policy and its application. The team is currently comprised of individuals whose involvement spans the entire co-financing policy (to 2004 when the issues of financial sustainability were becoming more important). Members serve on an institutional basis, thereby ensuring that the different, relevant voices of the Alliance are heard. No country officials are represented in the IF&S Task Team, as is appropriate since the IF&S Task Team is making country-specific decisions regarding default. The country perspective is present through regional WHO representatives. Although its terms of reference do not explicitly state this, the IF&S Task Team in reality decides if countries are in default.

As the scope of the policy is growing and the volume of co-financing transactions increases, so is the complexity of policy implementation and need for effective monitoring. There is an increasing demand for technical skills, resources, capacities and commitment levels. Experts pointed out that the specialised knowledge in health financing from the World Bank is becoming more important. Yet, the World Bank has no specific duties assigned to it in the Business Plan. (20) If the number of defaulting countries does continue to rise, there seems to be a need for revising the Business Plan to the effect that World Bank is assigned with more specific tasks in providing technical assistance to countries on financial planning and payment compliance. We are informed that the GAVI Alliance foresees an expanded role for the World Bank in the 2015 Business Plan. One expert indicated that WHO Regional Officers could play a more active role since they are, in essence, the voice of the countries.

Flexibilities and exemptions from co-financing policy requirements

The flexibilities extended by the IF&S Task Team are appropriate in giving priority to rational operation of immunisation programs.

The IF&S Task Team has been granting flexibilities to countries regarding default since the launch of the co-financing policy (2008). Flexibilities are made on the basis of country-specific circumstances and case-by-case assessments. The rationale was to provide some sense of security to countries under exceptional constraints or a sense of fairness where delays in vaccine introductions or bottlenecks with vaccine supply occurred. Examples of reasons for flexibilities extended are summarised in Table 5, as identified in IF&S Task Team meeting minutes, PPC documents, consultations with GAVI CROs and other experts. (31, 40-47) Table 5 is not a comprehensive table, as flexibilities granted have not been systematically recorded and there is some lack of continuity when it comes to year-on-year IF&S Task Team meeting minutes and details on country-by-country compliance issues (although the 2012 and 2013 minutes have been major improvements).

Table 5. Examples of reasons for granting flexibilities under the co-financing policy, 2008-2013.

	Examples of reasons behind flexibilities granted in the past	Country examples
1	Vaccines not available for co-procurement	- Guyana (2008, PCV)
		- Nicaragua (2008, PCV)
2	Fulfilment of total co-financing requirement across all vaccines, even	- Mali (2011, PCV vs YF)
	though co-financing requirement not met for a particular vaccine	- Djibouti (2012, PCV vs penta)
3	High shipment / logistic costs but small number of required vaccine doses	- São Tomé (2011)
	(applicable to small countries)	- Bhutan (2012)
4	Legal / procedural bottlenecks between countries and procurement agents	- Guyana (2008, rota)
		- Nicaragua (2012)
5	Country requires less doses than indicated in co-financing requirement	- Korea DPR (2011)
6	Changes in vaccine introduction date	- Cameroon (2008, tetra)
		- Cote d'Ivoire (2008, tetra)
		- DRC (2008, tetra)
		- Mozambique (2008, tetra)
		- Sri Lanka (2009, penta)
		- Vietnam (2009, penta)
7	Suspension of introduction due to alleged adverse events following	- Sri Lanka (2008, penta)
	immunisation	- Bhutan (2009, penta)
8	Overpayment of co-financing commitments in one year is credited to	- Nigeria (2013, penta)
	subsequent year	

In late 2012 a framework was developed for the identification of countries in need of long-term intensified support from the GAVI Alliance, as part of GAVI's new policy on "GAVI and fragile states: a country by country approach". (23) The GAVI Secretariat's rationale for country tailored approaches was to add some flexibility around the GAVI model to help certain countries, allowing for a more indepth assessment of country specific contexts and a systematised approach to granting flexibilities in GAVI support obligations to partner countries. GAVI CROs develop the Country Tailored Approach proposals and recommendations on a country by country basis for approval by the GAVI Board.

To date, two countries have been granted flexibilities related to co-financing under the country-tailored approach: Central African Republic (CAR) and Democratic Republic of Congo (DRC). CAR received a waiver for its co-financing obligations for 2013 because of its political conflict. DRC has had its arrears written off and will negotiate annual co-financing obligations for both traditional and GAVI-supported vaccines up to 2017. We observe that all flexibilities listed in Table 5 have been extended on the basis of a wide range of operational reasons, but not due to funding unavailability. Whereas funding unavailability is examined thoroughly through country-tailored approaches which evaluate all aspects of the country's implementation of GAVI support. In our assessment, this is a rational approach. This approach balances the achievement of two of GAVI Alliance's strategic goals:

Goal 1 – accelerating the uptake and use of underused and new vaccines by strengthening country decision-making and introduction and Goal 3 – increasing the predictability of global financing and improve the sustainability of national financing for immunisation. We also observe that there is a rational division of responsibility between the IF&S Task Team and the GAVI Secretariat. The IF&S Task Team monitors the compliance with the co-financing policy and grants a short-term flexibility (if warranted). In cases of more comprehensive problems, the fragility and immunisation policy takes over, evaluating the broader aspects of childhood immunisation.

3.3. Intermediate results and implications of the co-financing policy

The main question of the Evaluation Framework (page 10) being addressed in this chapter is: How has the current co-financing policy performed against its anticipated results of increasing country ownership and ensuring financial sustainability? The questions covered from the RfP are:

- To what extent is GAVI contributing to increased country (primarily government) ownership and on the trajectory to improve financial sustainability?
- To what extent have countries complied with the policy?
- What have been the positive and negative unintended consequences of the Co-financing policy and its implementation?

Box 3. Summary of findings in section 3.3.

- The total number of co-financing countries and their co-financing contributions has significantly increased from 2008 to today, and an increasing number of countries are paying more than their minimum co-financing requirement. However, the number of defaulting countries is also increasing, due to multiple and complex reasons, many of which can be classified as procedural. There is a concern that the growing size of the GAVI-supported vaccine portfolio may also be causing budgetary stress.
- Countries are prioritising vaccines on the basis of immunisation gains (lives saved) and
 development goals, but are lacking the evidence-based mechanisms which can ensure affordable
 vaccine introduction and sustainable co-financing decisions. They also have high political
 commitment to immunisation, but again this is not enough to ensure financial sustainability.
- Countries are increasingly taking up the responsibility of increasing their domestic financing for both new and traditional vaccines.
- The co-financing policy has improved country efforts to build capacity for vaccine procurement, planning and budgeting for vaccines, and has exposed gaps that require attention by national authorities and international development partners.

3.3.1. Co-financing generated and country compliance to-date

The total number of co-financing countries and their co-financing contributions are increasing. A total of 68 countries⁵⁰ have co-financed GAVI-supported vaccines from 2008 to 2013, with a combined total of US\$ 254.7 million for the six-year period. By the end of 2013, 14 countries out of

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⁵⁰ Excluding Haiti

the 68 (21 %) were classified in default as they had not fulfilled their commitments by the end of the calendar year. As at May 29th 2014, seven still remain in arrears.⁵¹ This represents the highest proportion of countries not meeting co-financing requirements since the first year of implementation of the co-financing policy (see further analysis in section 3.3.2).

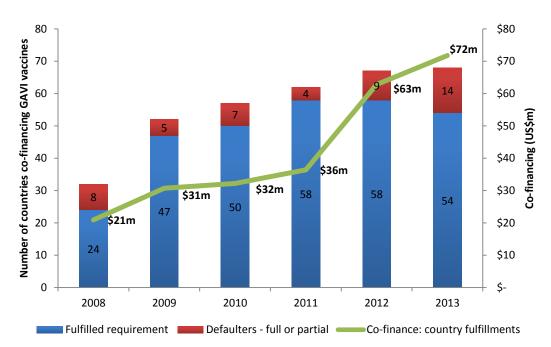


Figure 8. Number of countries co-financing and total co-financing contributions (US\$, 2008-2013).

Author's own calculation

Data source: GAVI Secretariat co-financing database

Figure includes 68 GAVI-eligible countries with history of co-financing, from 2008 to 2013

Note: The data included in the graph is limited to those countries for which data was available.

The increase in co-financing over the last two years reflects two main changes. First, the co-financing policy revision (2012) included an introduction of co-financing levels linked to prices for graduating countries, as well as introduction of year-on-year increases in co-financing for intermediate and graduating countries. Second, 2012 and 2013 witnessed an increase in more expensive vaccines co-financed by partner countries, such as PCV and rota.

Three countries that under the previous classification were in the "fragile" group moved to the graduating group (Angola, Congo Republic and Timor-Leste). Four countries previously classified as "poorest" moved to the intermediate group (Lesotho, Sao Tome, Senegal, and Yemen) and one "poorest" country moved to the graduating group (Bhutan). In addition, Ghana, Lao DPR, Mauritania, Solomon Islands and Zambia all moved from low income to intermediate group by 2012. 52

The number of countries co-financing PCV vaccines almost doubled from 2011 to 2013, and co-financed rota vaccine programmes almost quadrupled.⁵³ Together with the linking of co-financing to

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⁵¹ Afghanistan, Cameroun, Congo Republic, Guinea, Kenya, Pakistan, Zimbabwe

⁵² Mauritania moved back to the low income group in 2013.

 $^{^{\}rm 53}$ Source: GAVI Secretariat co-financing database, various documents.

prices, increased frequency of co-financing of more expensive vaccines explains the steep change of total co-financing from US\$ 36 million in 2011 to US\$ 63 million in 2012. A smoother overall increase however is masked by a single country's (Nigeria) voluntary co-financing of about US\$ 21 million (twice the amount required through its decision letter amount), which accounted for over a quarter of the total co-financing amount in 2013.

The number of countries co-financing more than the minimum requirement is increasing.

41 countries from 2008 to 2013 have paid more than their minimum co-financing obligation in at least one year. 12 countries co-financed above the minimum requirement in 2008, 15 in 2009, 18 in 2010, 16 in 2011, 24 in 2012 and 19 in 2013. Our survey findings suggest that, for 11 of these 41 countries, the ability-to-pay and/or to co-finance above the minimum requirements has been linked to two main factors: the presence of political champions in governments who have been supportive of vaccines; and rapidly increasing health and immunisation budgets.

3.3.2. Drivers behind defaults

The number of countries defaulting on their co-financing commitments is increasing, due to multiple and complex reasons. Many of these can be classified as procedural, followed by lack of clear prioritization by central governments. There is also an emerging concern that the growing size of countries' co-financed vaccine portfolios may also be causing budgetary stress.

Since 2008 26 countries have defaulted one or more times. As Figure 8 displays, 2013 was the year with the highest number of defaulting countries since the launch of the co-financing policy (2008). Some of these countries are recurrent defaulters, i.e. they have defaulted on their co-financing commitments at least twice since the launch of the policy. Others defaulted for the first time in 2013. Some countries have defaulted once in previous years, but have fulfilled their co-financing commitments since. Specifically, based on GAVI Secretariat information, we identified 11 recurrent defaulters, 8 past (and one-off) defaulters, and 7 new defaulters in 2013. As at May 29th 2014, seven countries remain in arrears for 2013.⁵⁴

Table 6. Countries having defaulted on their co-financing obligations by default cluster, 2008-2013.

Default cluster / Country group	Low income	Intermediate	Graduating
Recurrent defaulters	Afghanistan, CAR, DRC, Guinea, Guinea-Bissau, Kenya, Niger	Pakistan	Angola, Congo Republic, Kiribati
New defaulters in 2013	Kyrgyz Republic, Sierra Leone, Zimbabwe	Cameroun, Djibouti, Ghana, Solomon Islands	
Past defaulters	Chad, Gambia, Togo	Cote d'Ivoire, Lesotho, Sudan, Uzbekistan	Georgia

⁵⁴ Afghanistan, Cameroun, Congo Republic, Guinea, Kenya, Pakistan, Zimbabwe

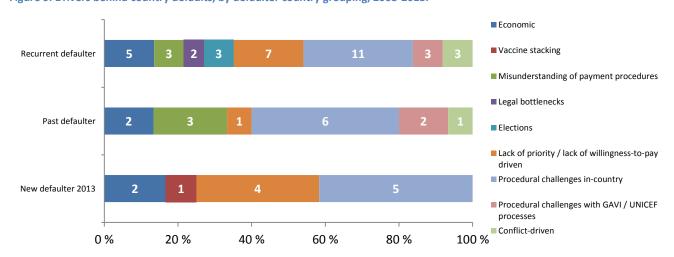


Figure 9. Drivers behind country defaults, by defaulter country grouping, 2008-2013.

Author's own calculation

Data sources: MoH, UNICEF and WHO survey responses; Expert consultations; Annual Progress Reports 2008-2012; IF&S Task Team Minutes 2008-2013

Figure includes 26 GAVI-eligible countries with history of default under the co-financing policy, from 2008 to 2013

Our analysis of reasons for and drivers behind default is mainly based on survey responses from 14 countries out of the total of 26 countries that have a history of default.⁵⁵ The drivers are:

• Procedural: The most commonly cited driver for default across all country clusters is procedural challenges (both in country and with GAVI and UNICEF). In the surveys defaulting countries specified cumbersome, lengthy and unpredictable procedures for the release of funds by the Ministry of Finance as well as lack of control over timely release of funds by the Ministry of Health. Moreover, 12 out of the 26 defaulting countries defaulted in their first year of co-financing. Fe A further three countries defaulted in the second year of introducing co-financing vaccines to the country. This suggests that introductory decision-making and the process of establishing co-financing procedures played a role in default, in the sense that whenever these processes are inadequately executed countries are exposed to default.

Lack of prioritisation: The next largest driver was a lack of prioritisation of immunisation against other budgetary items. As earlier mentioned in Actions such as the creation of **budget lines** for vaccines help with more predictable budgeting but are insufficient to avoid default. **Political support, legislation or/and health plan prioritization of internal** vaccine financing are required.

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These include: Angola, Cameroun, DRC, Côte d'Ivoire, Djibouti, Gambia, Georgia, Ghana, Kiribati, Lesotho, Niger, Sudan, Togo and Zimbabwe. We triangulated these responses with survey responses received from WHO and UNICEF country office representatives in these countries. Overall, we factored in responses received from WHO and UNICEF country respondents for all defaulting countries, with the exception of Congo Republic.

56 Angola, CAR, Chad, Côte d'Ivoire, DRC, Gambia, Guinea, Guinea- Bissau, Kiribati, Lesotho, Pakistan and Uzbekistan

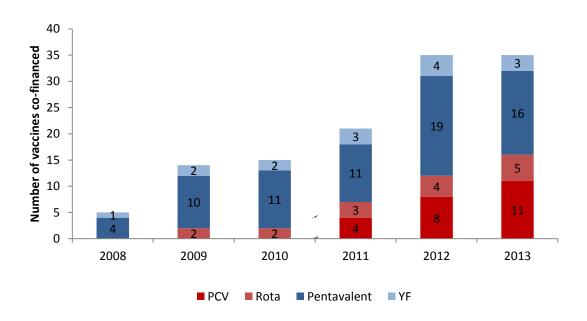
- Table 4 on page 39, a number of actions taken to help secure financial resources are not sufficient to avoid default, as 8 out of 14 respondents reported having senior level political support, and the same amount prioritising co-financing in their health planning processes.
- Conflict: Four countries defaulted because of social and political conflict at home, leading to cash flow shortages and the collapse of the government disbursements.
- Economic: Economic challenges have been reported as reasons behind current or past defaults by six low income countries, two intermediate countries and one graduating country. Fiscal space constraints might be a challenge for some countries. Looking at the percentage of government vaccine expenditure to government health expenditure in 2012 for the 26 defaulting countries that had data, four countries are close to or over the 1 % benchmark (Chad, DRC and Gambia all at 0.9 % and Pakistan at 1.9 %). In discussions with senior officials in Ghana on reasons for the country's default in 2013, economic pressure, including reduced government revenue and declining donor support in health was cited numerous times.
- *Elections*: Three countries falling within the recurrent defaulter cluster have stated that elections were a disruptive force causing delays in fund disbursements for co-financing.
- Legal bottlenecks: Inappropriate legislation on procurement processes can create conditions
 for recurrent defaults. Such problems have occurred in two countries. In Pakistan, cofinancing contributions were delayed in two instances (2008 and 2012) due to legal
 restrictions from procuring through UNICEF, and an embargo posed on the country's EPI
 from purchasing vaccines without an open bidding process.
- Vaccine stacking: While only being cited in one country as a reason for default, we believe that vaccine stacking (or a country increasing the number of vaccines in its GAVI-supported portfolio) is an emerging default driver. Ghana defaulted in 2013 the year following a change in their EPI manager and the introduction two new co-financed vaccines (rota and PCV). Ghana's co-financing commitments more than trebled from US\$ 692,000 in 2011 to US\$ 2.3 million in 2012. The 2013 co-financing figures were on par with 2012 levels (US\$ 2.2 million). This significant financial increase partially contributed to the difficulties Ghana had in completing its co-financing requirements in 2013. Nevertheless, this was not cited as a reason by officials within the country. Congo Republic defaulted in 2012 (and then again in 2013). 2012 was the year it introduced PCV, and its co-financing commitments increased seven-fold, from US\$ 78,000 to US\$ 592,000, partly as a result of having entered the five-year ramp-up period as a graduating country. In 2012 Congo Republic was to pay US\$ 0.82 per dose for the PCV vaccine.

In our estimation, the reasons for default are multiple and complex, and in many cases several factors operate simultaneously. Nevertheless, a range of procedural issues, including lack of understanding of the policy, seems to be the most important factor in country defaults to date. This lack of understanding can to be initiated by numerous factors: a new EPI manager or the promotion to a new country grouping that brings the country over its budgeted co-financing amount. UNICEF SD is working to make the procedures simpler. It now sends pre-filled cost estimate request forms to select countries with a history of delay in meeting co-financing requirements as well as invoice forms to accelerate the process of payment. However, these only go to select countries, those who may be in a position to default. This is a trigger that needs to be further honed with the assistance of CROs who can identify when a country may need special assistance.

The co-financing policy (2012) also helps with those countries transitioning from intermediate to graduating by giving them one year to plan for the impending co-financing increases. It may be beneficial to require countries to work with their statistical offices and report in the APR the projected year that they will move to the next country grouping. This could help to build greater understanding of the ramifications according to the policy. There is a large cohort of countries, potentially as many as ten, that will move from intermediate to graduating in 2014. These countries should be encouraged to create a new cMYP during the transition year.

A more pressing problem is likely the economic stress created by vaccine stacking (on top of the annual increases applied to intermediate and graduating countries). Figure 10 shows the progression of vaccine stacking in the 21 intermediate countries with history of co-financing.





Author's own calculation

Data source: GAVI Secretariat co-financing database

Figure includes countries that have classified as intermediate in one or more years from 2008 to 2013, according to the GAVI Secretariat co-financing database.

As of 2014, co-financing will also apply to measles-rubella routine (MR), Japanese encephalitis routine (JE), and human papillomavirus vaccine routine (HPV). One article (56) found that GAVI-eligible countries were more focused on the window of opportunity for GAVI Alliance financial support than the financial sustainability of the vaccine introduction. Case studies and the survey confirmed that oftentimes earmarked funds can have a significant impact on government priority-setting processes. Indeed, availability of donor funding was reported by 45% of survey respondents to be a main reason for countries' introduction of their most recently introduced GAVI-funded vaccine (Figure 11 on page 53). The case studies reinforced this finding with a very clear message to GAVI Alliance: "we can afford co-financing today and would like to continue to roll out all relevant GAVI-supported vaccines but the continuing escalation of co-financing amounts cannot continue." The total costs and co-financing commitments for all vaccines in the current portfolio in addition to those being

demonstrated should be calculated on the APR to make the magnitude apparent of not only a country's total co-financing obligations but also total GAVI-support. For countries nearing a transition to another country grouping should be required to calculate the amounts for both groupings.

3.3.3. Incentivising country ownership

Country-led vaccine financing is essential for enhancing ownership of immunisation programmes. Country ownership is an intermediate objective of the revised co-financing policy, and is particularly – though not exclusively – relevant for countries that are many years away from graduating from GAVI Alliance support.

In line with the definition that we developed on page 19, we use the following four dimensions to assess country ownership:

- Country-led priority setting and evidence-based decision making for new vaccine introductions with co-financing commitment implications
- Political commitment to immunisation programmes and empowerment of these through institutional coordination between Ministries for immunisation fund releases
- Prioritisation of domestic funding for both new and traditional vaccines
- National procurement capacity building to gradually take ownership of the vaccine procurement planning, tendering and handling process

Country-led priority setting and evidence-based decision making

Countries are prioritising vaccines on the basis of immunisation gains (lives saved) and development goals, but are lacking the evidence-based mechanisms which can ensure affordable vaccine introduction and sustainable co-financing decisions.

The first step to understanding if the co-financing policy is working effectively towards ownership building is to understand whether feasible, evidence-based new vaccine introduction decisions with co-financing commitment implications are being made at the country level, and importantly whether:

- countries are building the skills and authority to perform those decisions and execute associated tasks
- structures and institutions have been put in place to guarantee sufficient and timely government engagement to facilitate smooth execution of decision making processes

The decision making process for new vaccine introductions, and consequently for vaccine cofinancing, usually starts with a reference to a relevant WHO SAGE⁽⁵¹⁾ recommendation, followed by expert group assessments of safety and efficacy, affordability and applicability to the country-specific burden of disease context. Following expert and partner recommendations, governments decide on GAVI Alliance-funded new vaccine introductions based on a number of factors.

According to our country EPI official survey results, the most cited factors for countries to introduce their most recent GAVI-funded vaccine are displayed in Figure 11, with the most common reason by far being immunisation's ability to save lives / impact on reduction of burden of disease.

85% 90% 80% 70% 57% 60% 53% 45% 50% 38% 38% 40% 30% 20% 10% 0% Immunization's High degree of Deemed financially political ability to save lives / effectiveness of sustainable from funding targets impact on reduction vaccines prioritization government sources of burden of disease in the mid-long term

Figure 11. Reported main reasons for countries' introduction of their most recently introduced GAVI-funded vaccine under the co-financing policy.⁵⁷

Author's own calculations

Data source: Country official survey responses

Figure includes responses from 10 graduating, 12 intermediate and 26 low income countries.⁵⁸

Most high income countries, and many middle income countries in Latin America, have well established institutions to execute evidence-based, country-led decision-making. National Immunisation Technical Advisory Groups (NITAGs) are responsible for making recommendations to governments on national immunisation policies and strategies. NITAGs are commonly claimed to limit the influence of interest groups, strengthen the legitimacy and relevance of government decisions, (57) shaping therefore immunisation policies that are supported and adequately prioritised by governments. (58)

Within the set of 68 GAVI Alliance countries with a history of co-financing between 2008 and 2013, we identified 29 countries with NITAGs established on a legislative or administrative basis, ⁵⁹ nine of which are in the graduating group, nine in the intermediate group, and eleven in the low income group. This comprises less than half of the countries that are eligible for GAVI Alliance support. ⁶⁰ In the absence of NITAGs, EPI technical working sub-groups are established in GAVI Alliance countries, usually under the auspices of Inter-Agency Coordinating Committees (ICCs). The ICCs are the key coordinating mechanisms for immunisation services in developing countries, comprised by Ministries of Health, the WHO, UNICEF and other non-governmental and development partners. ⁽⁵⁹⁾

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⁵⁷ Findings are based on 48 country official survey respondents from Ministries of Health.

Afghanistan, Angola, Azerbaijan, Bangladesh, Benin, Bhutan, Burundi, Cambodia, Cameroun, DRC, Côte d'Ivoire, Djibouti, Eritrea, Gambia, Georgia, Ghana, Guinea, Guyana, Haiti, Honduras, Indonesia, Kenya, Kiribati, Lesotho, Liberia, Madagascar, Malawi, Mauritania, Moldova, Mozambique, Myanmar, Nepal, Nicaragua, Niger, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Somalia, Sri Lanka, Sudan, Tajikistan, Tanzania, Togo, Uganda, Vietnam, Zambia, Zimbabwe.

⁵⁹ Data sources: WHO/UNICEF JRF database, cross checked by additional searches through the WHO and SIVAC websites.

⁶⁰ Although one intermediate and three low income countries in Africa are in the process of establishing NITAGs by ministerial decree, under the guidance of the Supporting Independent Immunisation and Vaccine Advisory Committees (SIVAC) initiative.

Whatever the mechanism in place, countries should be assisted in using vaccine efficacy and immunisation cost parameters, as well as information on prices, market trends and relevant analytic tools in the case of graduating countries in particular. (36, 50) Despite their key role in donor harmonisation, ICCs may not be the best platforms for evidence-based, country-led decision making. ICCs are often over-stretched, and cover an extremely broad agenda of development planning and financing issues. Our WHO/UNICEF country office survey findings suggest that in some countries there is a lack of sufficient and/or timely engagement of government authorities in these processes. The case studies echoed this finding where ICCs felt that they were the incorrect body to make technical immunisation decisions. Since the GAVI Secretariat requires that all ICC members sign-off GAVI Alliance countries' applications for new vaccine introductions, this may be a misplaced responsibility. There is currently ongoing work to establish NITAGs in more low and middle income countries through the SIVAC initiative, established in 2008 through funding from the Bill & Melinda Gates Foundation. (61)

Political commitment to immunisation programmes and institutional empowerment

The GAVI-supported countries have high political commitment to immunisation, but this is not enough to ensure financial sustainability.

WHO/UNICEF country office survey findings suggest that countries have increased their political commitment and prioritisation of vaccine financing in health planning and budgeting, in response to co-financing (see Table 7). Only 5 % of low income and 4 % of intermediate respondents stated that their country would not prioritise vaccines. That 55 % of low income respondents indicated that whereas immunisation is a priority for their country, their countries would not be able to continue their existing vaccine portfolio without external assistance confirms that country ownership is an appropriate intermediate objective. Financial sustainability for these countries is still out of reach.

Table 7. How co-financing would be prioritised in case of no GAVI Alliance support, as perceived by WHO/UNICEF country office survey respondents.

How co-financing would be prioritised in case of no GAVI Alliance support, as perceived by WHO/UNICEF country office	Low income	Intermediate	Graduating
survey respondents			
Country has prioritised domestic funding of immunisation and it	5 %	22 %	64 %
would continue to purchase all vaccines implemented today			
Country would prioritise the vaccines, but it would not have the	23 %	17 %	50 %
procurement mechanisms in place to negotiate GAVI prices or to			
plan and procure vaccines without external assistance			
Country could not afford it, although immunisation is a priority for	55 %	30 %	0 %
the country			
Country could not afford it, and it would not have the	33 %	30 %	0 %
procurement mechanisms in place to negotiate GAVI prices or to			
plan and procure vaccines without external assistance			
Country would not prioritise GAVI-funded routine vaccines against	10 %	17 %	0 %
other, more essential vaccines			
Country would prioritise the vaccines, only because it receives	3 %	9 %	14 %
enough external donor assistance which it could redirect to			
vaccine purchases from other areas of public spending			
Country would not prioritise GAVI-funded routine vaccines, or any	5 %	4 %	0 %
vaccines, against other health interventions or areas of public			
spending			

Prioritisation of domestic funding for vaccines

Countries are increasingly taking up the responsibility of financing both new and traditional vaccines.

A third indicator for country ownership of vaccine financing is the degree to which domestic resources are used to finance both new and traditional vaccines. This requires a prioritisation of stable domestic funding for immunisation programmes, and a shift away from donor-dependent attitudes.

Several consultation experts considered full self-financing of traditional vaccines by GAVI-supported countries as a first step to country ownership of vaccine financing.

As our analysis in section 3.2.2 has shown, there are at least 17 countries paying their GAVI Alliance co-financing but receiving external financial assistance for the less expensive, traditional vaccines, although this seems to be a downward trend.

Comparing co-financing data with cMYP immunisation financing data for a sample of 52 countries with a history of co-financing 61 (figures 12 to 14), we observe that, on aggregate, countries across all groupings are increasing their internal expenditures for both new and traditional vaccines. In the case of graduating countries, only one country receives external assistance for traditional vaccine expenditures.

The Sabin Vaccine Institute is also contributing to this process through its Sustainable Immunisation Financing Program initiated in 2007, which is working with fifteen African and Asian countries to establish stable, internal funding for their immunisation programs. In this program the goal of

Figure 12. Cumulative co-financing and internal vs external traditional vaccine expenditures for $\underline{\text{graduating}}$ countries with data, 2009-2013.

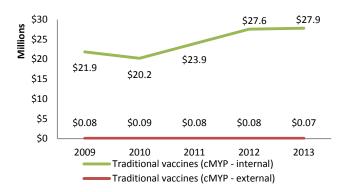


Figure 13. Cumulative co-financing and internal vs external traditional vaccine expenditures for $\underline{intermediate}$ countries with data, 2009-2013.

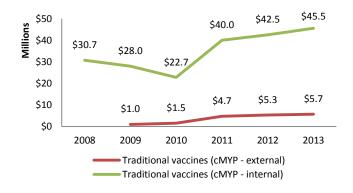
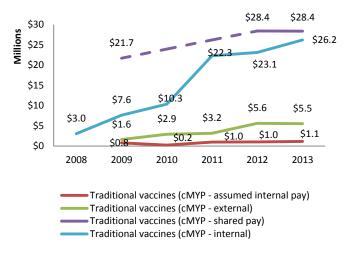


Figure 14. Cumulative co-financing and internal vs external traditional vaccine expenditures for <u>low income</u> countries with data, 2009-2013.



⁶¹ 17 countries are excluded due to lack of cMYP expenditure data in the WHO cMYP immunisation financing database. The analysis is building on the country classifications according to the resource mobilization groupings in section 3.2.2, table 3 (or annex 4 'Country co-financing funding sources' for more details).

establishing stable internal funding for immunisation is being achieved by the institutionalisation measures listed on page 39; improved domestic accountability, establishment of linkages between MoH, MoF and parliament, creation of separate budget lines, and introduction of legislation on immunisation. In our view, lessons from these experiences are highly relevant for understanding how countries may work on a broad front to fulfil the country ownership goal. (28)

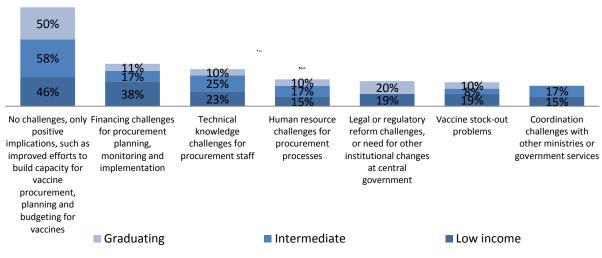
National procurement capabilities

The co-financing policy has improved country efforts to build capacity for vaccine procurement, planning and budgeting for vaccines, and has exposed gaps that require attention by national authorities and international development partners.

Half of the country EPI official survey respondents reported that the co-procurement of vaccines has led to improved efforts to build procurement capacities at home (Figure 15). Most frequent challenges cited by respondents were: technical knowledge and human resource challenges for procurement staff, particularly for low income and intermediate countries; legal or regulatory reform challenges, or need for other institutional changes at central government, particularly for graduating countries; vaccine stock-out problems and coordination issues between government services on procurement, particularly for low income and intermediate countries.

As WHO/UNICEF country office survey respondent suggest, GAVI Alliance countries have, in general, significant procurement capacity challenges. The greatest challenge lies in procurement planning, tendering and handling, followed by procurement staff training and communication gaps between government services or with partner country representatives on vaccine procurement issues. As these responses also suggest, the challenges do not surface as long countries procure through UNICEF SD.

Figure 15. Implications on procurement due to co-financing, as reported by country EPI/MoH official survey respondents.



Author's own calculations. Data source: Country official survey responses. Figure includes responses from 10 graduating, 12 intermediate and 26 low income countries. ⁶²

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⁶² Afghanistan, Angola, Azerbaijan, Bangladesh, Benin, Bhutan, Burundi, Cambodia, Cameroun, DRC, Côte d'Ivoire, Djibouti, Eritrea, Gambia, Georgia, Ghana, Guinea, Guyana, Haiti, Honduras, Indonesia, Kenya, Kiribati,

Countries can be largely protected from procurement capacity shortfalls, as long as they utilise UNICEF SD procurement services. However, as countries move towards graduation, these shortfalls become more critical. Their national legal frameworks do not always allow countries to continue to use UNICEF SD as a procurement agent because UNICEF does not participate in tenders. Whereas this is understandable from UNICEF's perspective since proposal writing is time-consuming, it is problematic since good governance requires open, competitive tendering processes. GAVI Alliance actively works with graduating countries to identify and plan solutions to procurement problems through graduation assessments. Through the case studies these reported as helpful tools. However, in our opinion, the process should likely be started earlier, with intermediate countries with strong economic growth.

Few countries have attempted to self-procure (e.g. Georgia, Azerbaijan and Moldova) and they all have experienced significant difficulties with implementing sound and cost-efficient procurement processes for vaccines. GAVI through UNICEF is able to negotiate extremely low prices due to its large market as well as excellent credit rating. Graduating countries are unable to match these prices through self-procurement. For example, Moldova, with an annual birth cohort of about 40,000, has little negotiating power and is not in a position to initiate a pooled procurement mechanism with neighbouring countries. GAVI Alliance is attempting to delay this reality by negotiating with manufacturers to extend GAVI's prices to graduated countries for a period of time.

Assessment of country ownership

The majority of the experts were of the opinion that the co-financing policy is contributing to country ownership, although no common definition of ownership was used as benchmark. Without a definition, it is difficult to perform an assessment of country ownership. If this is something that GAVI Alliance wants to measure, we would recommend that a definition is developed.

In our view, the co-financing policy is supporting greater country ownership as we defined it on page 52, although we are uncertain that this ownership is placing countries on a trajectory to financial sustainability. There is still considerable dependence both on donor financing and the ability to access affordable vaccine prices as well as insufficient country-led priority setting mechanisms.

3.3.4. Placing countries on track to financial sustainability

Financial sustainability in the context of the co-financing policy concerns the "ability of a country to mobilise and efficiently use domestic and supplementary external resources on a reliable basis to achieve current and future target levels of immunisation performance". ⁽⁸⁾ Since country ownership is offered in the policy as an intermediate objective for those countries many years from financial sustainability, we will examine financial sustainability primarily through the lens of graduating countries.

Lesotho, Liberia, Madagascar, Malawi, Mauritania, Moldova, Mozambique, Myanmar, Nepal, Nicaragua, Niger, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Somalia, Sri Lanka, Sudan, Tajikistan, Tanzania, Togo, Uganda, Vietnam, Zambia, Zimbabwe.

There are 15 graduating countries with history of co-financing 63 , accounting for 23 vaccine programmes co-financed in total in 2013, in comparison to five vaccine programmes co-financed in total in 2008. 64

Expert opinion was divided on the question of whether the co-financing policy contributes to financial sustainability. Several experts argued in the affirmative, pointing out that the policy is gradually facilitating improved operational linkages between ministries, along with capacity building. Several experts argued, on the contrary, that 1) countries are still highly dependent on donors, and that donor funding is inherently unsustainable, 2) in many countries the policy is not properly understood, or 3) at present it is too early to determine if countries have achieved financial sustainability. However, these comments span all country groupings.

The surveys also offered a somewhat positive assessment with 64 % of graduating countries in Table 7 on page 54 indicating that they will continue to purchase all vaccines implemented today with domestic funding, although 14 % acknowledged that they could only continue because they receive enough external donor assistance. Half of the graduating countries were concerned about their ability to negotiate affordable prices. In reality financial sustainability is highly dependent upon the prices available to the countries. As stated previously, many graduating countries (e.g. Armenia, Bhutan, Moldova, Georgia, Kiribati, Timor-Leste) have small markets and limited negotiating power. They will undoubtedly pay higher prices for vaccines when they lose access to the GAVI prices.

Only three out of the 15 graduating countries are recurrent defaulters (Angola, Congo Republic and Kiribati). Therefore, 80 % are successfully managing their increasing co-financing obligations. We performed a high-level fiscal space analysis of the graduating countries, by examining co-financing amounts in relation to the EPI routine immunisation programme expenditures and government vaccine expenditures. The analysis is based on the collation of data from five different sources. We included for consistency sake all countries for which data was available from all sources for all years (i.e., eight graduating countries, so a little over half of the graduating countries but including the three recurrent defaulters).

Figure 16 below shows that for these eight graduating countries vaccine purchases have made up approximately 60 % of the total EPI costs (which excludes salaries, per diems and program management) over the past five years. Over the same period EPI routine programme expenditures have increased, driven by increased vaccine expenditures. This is partly because the number of cofinanced vaccines has increased over that period, and partly because the increase in co-financed vaccines is in part constituted by the relatively expensive PCV. At the same time internal financing as a share of total EPI routine programme resource requirements has dropped from 94% in 2009 to 64% in 2013, partly reflected by the increased share of GAVI funding but partly also reflected by the increase in funding gaps and probable (i.e. not secured) financing over time. In other words, in these countries the total EPI budget allocations have kept pace with the steady increasing expenditures on

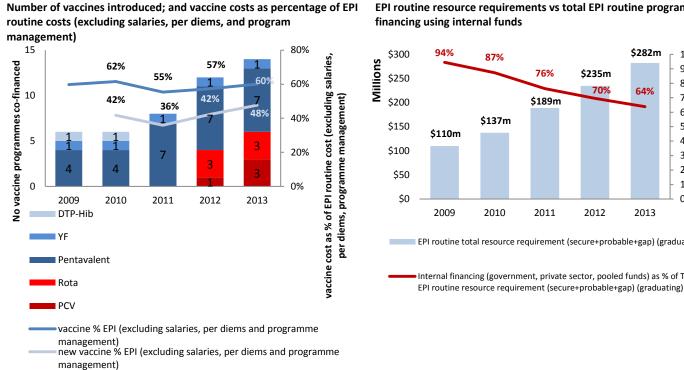
⁶³ Angola, Armenia, Azerbaijan, Bhutan, Bolivia, Congo Republic, Georgia, Guyana, Honduras, Kiribati, Moldova, Mongolia, Sri Lanka, Timor-Leste.

⁶⁴ Three vaccine programmes were not co-financed in 2013 as countries defaulted on their co-payment requirements (Congo Republic for PCV and penta; Kiribati for PCV).

⁶⁵ GAVI Secretariat; WHO/UNICEF Joint Report Format Database; WHO National Health Accounts; WHO cMYP immunisation financing database.

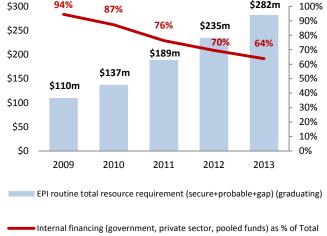
vaccine purchases but there appears to be an increasing budgetary stress for EPI routine programmes to be supported by domestic funds.

Figure 16. Number of vaccines introduced; and vaccine costs as percentage of EPI routine costs (excluding salaries, per diems, and program management); 8 graduating countries with data, 2008-2013.



EPI routine resource requirements vs total EPI routine programme

\$282m



Author's own calculations

Data sources: GAVI Secretariat co-financing database; WHO's cMYP immunization financing database Figures include 8 GAVI-eligible graduating countries with history of co-financing, from 2008 to 2013: Angola, Armenia, Azerbaijan, Congo Republic, Georgia, Indonesia, Kiribati and Moldova

Disclaimer: Due to issues with data availability consistently across all GAVI eligible countries, it is important to note the sample of countries used for each graph to ensure correct interpretation by the reader.

In the last two years (2012-2013), ten graduating countries⁶⁶ have started co-financing PCV, rota or both vaccines. ⁶⁷ One graduating country, Congo Republic, is currently co-financing four vaccines (penta, PCV, YF, rota). As Saxenian et al. (36) estimate, "to pay for these four vaccines, Congo's cofinancing will need to increase from about US\$ 90,000 in 2011 to US\$ 3.0 million in 2015 and US\$ 4.0 million in 2016. This is estimated to account for 0.8 % of the Ministry of Health's budget in 2015 and 1.0 % in 2016". This percentage does not factor in the cost of other routine vaccines. Congo Republic has defaulted in 2012 and in 2013.

Another graduating country, Kiribati, is co-financing two vaccines (penta since 2008; PCV since 2013). The country defaulted in 2008, the first year of co-financing penta. The country also defaulted in 2013, the first year of co-financing PCV. As the country stated in its cMYP, "penta introduction increased total vaccine costs from US\$ 20,000 to US\$ 40,000 in 2009. With graduation this implies

59

⁶⁶ Angola, Armenia, Azerbaijan, Bolivia, Congo Republic, Georgia, Guyana, Honduras, Kiribati, Moldova ⁶⁷ Bolivia and Honduras have been co-financing rota since 2008.

doubling of government budget for vaccines at point of full-financing. If Kiribati introduces planned new vaccines (PCV-13, HPV and rotavirus) in routine immunisation, the total vaccine supply and logistics will increase from US\$ 39,032 in 2010 to US\$ 303,486 in 2015".

A third graduating country, Moldova, is co-financing three vaccines (penta, rota, PCV). As Saxenian et al. (36) state, "Moldova's co-financing is projected to rise from about US\$ 50,000 in 2011 to US\$ 1.1 million in 2018". As the country has clarified during our study visit, "expensive vaccines almost doubled the cost of the programme. The annual increase of 20 % per target vaccine price is very sharp increase. If the cost doubles, then the Ministry of Finance wants to see clearly demonstrable benefits. This is difficult for some vaccines, such as PCV".

Financial sustainability is also impacted by other donors exiting the graduating countries. For example, our case study found that Moldova is experiencing a simultaneous donor exit, including not only the GAVI Alliance but also The Global Fund for AIDS, Tuberculosis and Malaria⁶⁸ and EU support for health. This creates significant financial stress since the amount of government financing to maintain the current public health interventions must increase precipitously. The Ministry of Finance estimates that the public health budget must increase by as much as 15 % to replace previous donor funds.

Assessment of financial sustainability

Although the high share of the total EPI costs spent on vaccine purchases is somewhat discomforting, the above analysis suggests that the present population of graduating countries, when observed as a group, are on the track towards financial sustainability of vaccines, given that countries can secure reliable funding to support co-financing and therefore reduce budgetary stress for their EPI routine programmes. However, regardless of macro-economic trends in growth, health and vaccine expenditures, financial sustainability will always depend on the prioritisation and willingness-to-pay for vaccines. From the survey results, the quantitative data and case studies, it appears that countries will be able to successfully graduate from GAVI support, so long as they can still access GAVI prices. We recommend that the policy review team examines options for graduated countries to still access low prices.

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⁶⁸ Both lower and middle income countries are eligible for funds from The Global Fund to Fight AIDS, Tuberculosis and Malaria, however, only for specific populations or interventions, i.e., not for the entire country.

4. Lessons for the future

The co-financing policy has raised awareness and the profile of vaccines in countries, and has contributed to increased country ownership of vaccine financing. Graduating countries are on track towards sustainable vaccine financing with country-led resources, given that they can manage to negotiate prices similar to those available through the GAVI Alliance. Throughout the report, we have identified a number of drivers and barriers to policy implementation. Although we have drawn specific conclusions and lessons learnt throughout the different sections, this section summarises some key factors to the implementation of the co-financing policy in the future.

In our estimation the key factors that sustain or contribute to the co-financing policy success are:

- Financial sustainability needs affordable vaccine costs for routine immunisation programmes and trends in health and immunisation expenditures that can support increasing costs over time. As our analysis in section 3.1.4 has shown, the introduction of new and more expensive vaccines is driving the increase in total routine vaccine costs as the largest cost item in EPI routine programmes. At the same time, as EPI routine programme resource requirements are increasing, internal financing as a share of routine programmes is decreasing. This is concerning if the increases do not continue to keep pace with the increases in co-financing.
- Co-financing requires **efficient co-procurement processes** that minimise the costs of vaccines, align with national budgets and create incentives for improved national procurement capacities. As our analysis in sections 3.3.3 and 3.3.3 has shown, procurement efficiencies through the UNICEF SD mechanism have improved, as lead times between decision letters, cost estimates and co-payments have shortened, signalising improved response rates of countries to the co-procurement requirement and proactive measures by UNICEF to mobilise the timely response of countries. Exposure to vaccine specific and purchase related procurement costs have incentivised countries to plan and budget more accurately. However, attention is required on the timing of the different co-procurement steps and countries' annual budgeting cycles. Greater clarity is needed around additional procurement costs which countries should take into account early in their planning and budgeting efforts for vaccines.
- Successful co-financing needs **proactive**, **country-led**, **financial analysis and planning**, which is linked to broader health sector planning, and accounts for changing external funding and policy trends on a continuous basis. As our analysis in section 3.1.2 has shown, cMYPs span across a long period of time, during which reality can differ from assumptions and estimates on cost and financing. Countries therefore need to be proactive in continuously updating their financing needs and expenditures vis-à-vis their planning, linking co-financing to broader immunisation planning and prioritising it within national health plans, if country ownership and financial sustainability notions are to be strengthened. Co-financing policy changes, or financing opportunity changes need to be factored in on a continuous basis, as part of a clear risk strategy that aims at a mid- to long- term transition from donor-based to increased domestic funding. Technical support from the WHO, UNICEF and other development partners, is pivotal for the sound planning, especially in the case of low income and intermediate countries. This assistance however should not crowd-out country-led efforts, which should be better linked to decisions for vaccine introductions and forecasts of financing implications

both in terms of vaccine financing and in terms of vaccine introduction-associated costs to routine immunisation programmes.

Co-financing needs adequate and reliable sources of funding, which are not just in the form of short-term actions to meet year-on-year requirements, but are combined with longer term efforts to increase health and immunisation expenditures. As our analysis in section 3.2.2 has shown, countries are utilising both domestic and international donor assistance to meet their co-financing requirements. Very few countries are drawing external resources to cover the full cost of both traditional vaccines and co-financing requirements; these countries are mostly fragile countries. However, at least 17 countries that generally meet their co-financing requirements, receive external financial assistance for traditional vaccines. The existence of budget lines for vaccines and co-financing, prioritisation of co-financing in immunisation and national health planning, high level advocacy to government services and donors, and greater ownership of the financing process by Ministries of Health are all budgetary measures which can help countries mobilise resources but do not guarantee against default. In the long term measures that secure an increasing share of vaccine financing through government revenue are pivotal for a more stable trajectory to self-sufficiency of vaccine financing. The introduction of the full GAVI portfolio without sufficient analysis of the total future cofinancing commitments can create a potential barrier to the sustainability of country-led vaccine financing. As our analysis in section 3.3.4 has shown, increasing numbers of vaccine introductions with co-financing requirements suggest increased vaccine-introduction associated costs and budget space implications for routine immunisation programmes. This brings GAVI's catalytic role of accelerating vaccine introductions in tension with the cofinancing policy's objective of financial sustainability of vaccine financing through country-led resources. Overlooking these costs can create serious budgetary bottlenecks and put countries' compliance with the policy at risk, especially when new and expensive vaccines are continuously stacking onto routine immunisation schedules.

In our estimation the key barriers to the co-financing policy success are:

- Significant change to a country's co-financing amounts or processes can impact policy
 fulfilment. Changes can include new staff, new vaccine introductions or promotion to a new
 country grouping. It can also be the result of elections of political conflict. CROs, as the
 conduit to the country, need to watch out for these types of changes and try to assist
 countries early with uncertainties or procedural issues.
- Lack of access to GAVI prices and UNICEF SD procurement services can impact the financial sustainability of graduating countries. As our analysis in section 3.3.4 has shown, access to prices, procurement capacities and legal bottlenecks to procurement services can hinder country efforts towards financial sustainability, especially those facing graduation from GAVI support. For countries attempting to self-procure, equivalent prices to UNICEF and GAVI will be impossible to obtain. Moreover, single country markets are small, their market knowledge and purchasing power are limited. These constraints, combined with legal restrictions on countries' ability to use international procurement agents, can seriously hinder countries' efforts for sustainable vaccine financing.

• The lack of consistency of the co-financing policy across GAVI-supported vaccines weakens country ownership. As our analysis in section 3.1.4 has shown, the rationale behind co-financing exceptions for certain vaccines is unclear. Moreover, the fact that some countries have never paid for traditional vaccines and they do not see this as problematic, as our analysis in section 3.2.2 has shown, signalises an entrenched donor-dependent attitude which requires change if countries are to increase ownership of vaccine financing in the future.

5. Recommendations

This section focuses on recommendations for the improvement of the co-financing policy, based on findings generated and lessons for the future identified in previous sections of the report. The goal is to inform the GAVI Alliance policy review process and to ensure that lessons learnt and formative conclusions are taken on board. Our recommendations revolve around four areas of evaluation: policy design; implementation; monitoring; results and implications. The section primarily focuses on recommendations based on our own assessment of consultation-based, survey-based and empirical data analysis findings.

Based upon our evaluation findings we would recommend that the policy revision process consider the following points.

5.1. Policy design recommendations

- 1. The GAVI Alliance should arrange for broader country government participation in the upcoming policy revision process, particularly including participants from Ministries of Finance. Additionally it is important to include expertise from countries from each grouping as well as those countries who have struggled with the policy to date. Greater participation will create realistic expectations about country performance by the GAVI Alliance and contribute to deepening ownership and commitment to the GAVI Alliance policies from the countries.
- 2. Policy revisions should continue to be performed jointly for the co-financing, eligibility, fragility and graduation policies. We note that this is being done with the present revision.
- 3. The policy revision team should test alternate time periods and consider adjustments to the five-year ramp-up period for graduating countries. This could at least take into account: (a) Portfolio of current and upcoming vaccines and these vaccines' projected pricing trends; (b) the GNI/capita level some countries start 'graduating' at (particularly those on the lower end of the spectrum); (c) extent of access to GAVI prices and effective procurement services post-graduation; (d) differential timeline requirements for countries facing major prioritization or willingness-to-pay constraints. As documented in our findings, we have repeatedly heard that this time period is too short to provide a smooth transition to financial sustainability, especially given the simultaneous exit of many donors. It would likely be beneficial if the GAVI Alliance could initiate discussions with The Global Fund for AIDS, Tuberculosis and Malaria, PEPFAR, the World Bank and others to evaluate the possibilities of coordination. Likewise, transition from the intermediate to the graduating group should be subject to some prospective analyses in order to proactively assist countries that face particularly high cost increases from one year to the next. This could include such practices as requiring countries that change groupings to update their cMYPs accordingly.
- 4. The GAVI Alliance should consider the application of the co-financing policy across all GAVI-funded vaccines. If it is decided to continue with exceptions (as in the case of HPV demonstration projects), the rationale should be clearly communicated. However, countries should be required to evaluate the financial impact of these vaccines so that when co-financing starts (or the price of the vaccine is reduced to the point that countries take full procurement responsibility) the total

financial implications are understood prior to the new vaccine introduction. In this light, the GAVI Alliance should conduct analysis to determine a satisfactory budget space benchmark that EPI routine immunisation programmes ought to secure in order for vaccines to be deemed financially sustainable prior to introduction.

- 5. Despite its disadvantage of being unpredictable, using GNI per capita as a country grouping criterion has the virtues of simplicity, transparency and data availability. However, many countries in Sub-Saharan Africa have not performed an assessment of their economy in more than a decade, and could be subject to the sudden and profound impact of graduating to a higher income group. Efforts should be made to link in partner countries' statistical offices at least annually so that EPI and MoF officials are kept abreast of this risk.
- 6. The policy review team should explore possibilities for the GAVI Secretariat to align their procedural schedule (e.g. with decision letters) with the budget cycles and fiscal years of each recipient country, in order to avoid adding complexities and time pressure to in-country planning and budgeting processes. We have been notified that the Secretariat has already begun this work. This analysis should also include the timeframe that countries are allowed to meet their co-financing requirements. The design of the decision letters could be slightly improved to, e.g. give greater transparency regarding UNICEF SD's charges (i.e. handling fees and the UNICEF SD buffer charge). It may also be helpful to include an executive summary for higher level policy makers and officials.

5.2. Implementation recommendations

- 7. To ensure the best possible planning, co-financing policy revisions should synchronise as much as possible with cMYP cycles. This means that the GAVI Alliance must have a revised co-financing policy in place by, at the latest, the end of 2014, in order to coincide with the cMYP revision of the bulk of recipient countries.
- 8. The composition of the IF&S Task Team should be reviewed while paying specific attention to the knowledge and competence that is required to carry out its independent mandate. The presence of a World Bank team member is particularly important given the importance of economic factors in a cause of default. The recent, improved documentation of the IF&S Task Team meetings is a good practice.
- 9. The current implementation of co-financing flexibilities in that, to date, countries under extreme social and political conflict circumstances have been granted flexibilities and even exempted from default implications should be continued.

5.3. Intermediate results and implications recommendations

10. The policy review team should assess what steps may be taken to assist countries who face an impending election or other transformative event, including measures like prepayment, to avoid default in times of major change.

- 11. The policy review team should assess what steps may be taken to further assist countries with national procurement capacities, such as how graduating countries transition from UNICEF Supply Division to self-procurement.
- 12. In monitoring and evaluation of countries' co-financing the CROs and the IF&S Task Team should pay special attention to countries that are in the process of change, i.e., new EPI managers, promotion to the next country grouping, introducing additional vaccines. Countries that experience more than a 200 % increase (tripling) of their co-financing requirements from one year to the next as a result of vaccine introductions are particularly vulnerable to default.
- 13. The policy review team should reassess the role of Interagency Coordinating Committee as signatories on GAVI documents. Given that some ICCs have little immunisation-specific technical competencies and heavily packed agendas, our analysis has found that ICCs are likely not the appropriate bodies to authorise and certify that the necessary decision-making analysis has taken place. Perhaps the role of NITAGs should be reassessed to take over this function.

6. Annexes

Annex 1: Burundi case study

Setting

The aim of the Burundi case study was to perform an in-depth assessment of different aspects of the policy's implementation processes, results and impact at the country level for a low income country that has consistently met its GAVI Alliance co-financing commitments but at the same time does not pay for its traditional vaccines. We met with representatives from the civil society, EPI programme, Ministry of Finance, Ministry of Health, UNICEF and WHO in April 2014.

Introduction

Depending upon the source, Burundi is ranked as either the second or third poorest country in the world with a GNI/capita of US\$ 240 in 2012 according to the World Bank. As such it is classified as "low income" under the current co-financing policy and was previously "fragile" according to the co-financing policy (2008). Despite its limited finances, Burundi has always met its co-financing commitments, even with its expanded vaccine portfolio (see Figure 17).

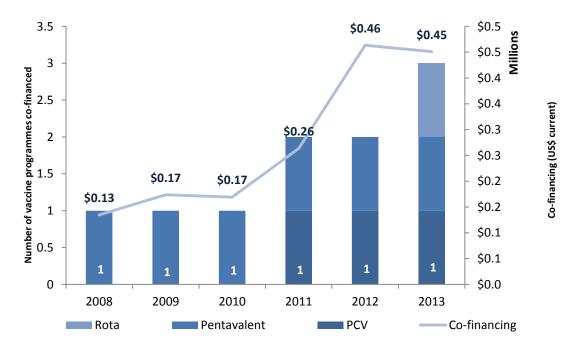
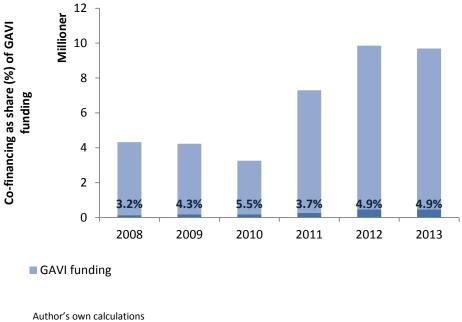


Figure 17. Number of vaccine programmes co-financed and total co-financing (US\$) by Burundi per year, 2008-2013.

Author's own calculations

Data sources: GAVI Secretariat co-financing database

Figure 18. Burundi co-financing as a share (%) of GAVI Alliance funding (by programmatic year), 2008-2013.

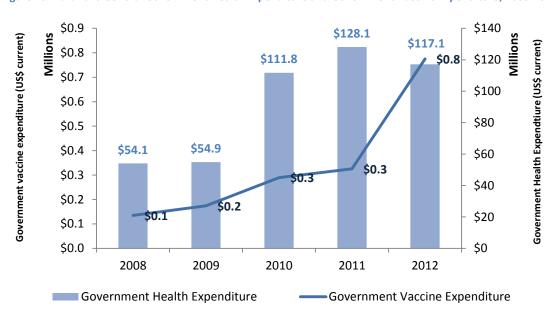


Author's own calculations

Data sources: GAVI Secretariat co-financing database

According to the World Bank Burundi is growing at about 4 % per year, meaning that it is likely to remain under the "low income" classification for several years to come. Its vaccine portfolio currently includes measles, pentavalent, pneumococcal, rotavirus and HPV is being piloted, and Burundi can be applauded for achieved high immunisation rates (96 % DTP3 in 2012). According to WHO Burundi's government expenditure on health is 13.7 % of total government expenditure in 2012, which is slightly under the 15 % target of the Abuja Declaration on Health Spending but is a respectable level.

Figure 19. Burundi's General Government Health Expenditure and Government Vaccine Expenditure, 2008-2012.



Author's own calculations

Data sources: GAVI Secretariat co-financing database; WHO National Health Accounts; WHO/UNICEF JRF database

Extent to which co-financing has incentivised country ownership and financial sustainability

According to Burundi's Comprehensive Multi-Year Plan (2011-2015), the EPI budget is overwhelmingly donor financed (more than 90 %), including financing from the GAVI Alliance, UNICEF and WHO. However, the government's share of the EPI budget has increased from 1 % (US\$ 27,000) in 2003 to 7 % (US\$ 331,000) in 2010. This share has also increased with the introduction of pneumococcal in 2011 and rotavirus in 2013 since the government's co-financing now exceeds US\$ 400,000, which is only one component of the EPI budget. The government's contribution to the EPI budget in 2014 is planned to about US\$ 650,000 (see Figure 19).

Country ownership can be demonstrated through priority-setting and decision-making processes, political commitment, prioritisation of domestic funding for all vaccines, and national procurement capacity building.

Burundi demonstrates strong country ownership in regards to priority-setting for immunisation and political commitment. Vaccines are awarded a high (if not the highest) prioritisation within the health budget. There is a budget line for GAVI Alliance co-financing. Even when co-financing commitments come in higher than budgeted, monies are made available to meet its co-financing commitments. The EPI team takes ownership of the planning and reporting processes (detailed below), and the Second Vice President has been a strong vocal advocate, participating in all new vaccine launches.

Traditional vaccines (BCG, first dose measles, OPV, TT) are also highly valued, but these have always been paid for by UNICEF. According to Burundi's 2012 Annual Progress Report, the country's cofinancing payments for GAVI-supported vaccines (US\$ 429,775) are twice the value of traditional vaccines paid by UNICEF (US\$ 179,272). UNICEF struggles to understand why Burundi prioritises the introduction of new vaccines with co-financing commitments over the financing of the less expensive traditional vaccines.

The governmental officials that we interviewed continually stressed that Burundi must maximise the public health impact for each Burundian franc spent. Meeting its co-financing commitments to the GAVI Alliance allows Burundi to provide much more expensive vaccines than its budget would otherwise allow for. In 2013 Burundi's co-financing represented 3 % of the total vaccine cost for pneumococcal, 8 % of pentavalent and 9 % of rotavirus (see Figure 18). This is a significant return on investment. However, this return is only achieved by meeting the co-financing requirements. Burundi takes its commitments very seriously and officials repeatedly stressed that Burundi would never default on its commitments to the GAVI Alliance. This co-financing expectation has never been present for traditional vaccines. If Burundi suddenly needed to start paying for traditional vaccines, these funds may displace the funding of other healthcare services. If Burundi could find a means to self-finance its traditional vaccines, this would strengthen Burundi's country ownership of immunisation.

Extent to which analyses, priority setting exercises and planning are conducted to inform decision making processes on new vaccine introductions

The GAVI Alliance's regular reporting requirements have built in-country capacity in regards to planning and procurement skills, with no stock outs reported for 2012. GAVI, however, could improve its reporting requirements by ensuring that eventual co-financing amounts are always assessed. In the case of pilots, no co-financing calculation or assessment is required. Therefore, Burundi, who has implemented an HPV pilot and is planning roll-out in 2015, has not yet assessed the co-financing commitments for HPV. Not only should the individual vaccine's co-financing requirements be assessed but also the compounded co-financing amounts of the total vaccine portfolio.

Burundi's priority-setting process seems to be influenced by the availability of external financing. This can be a rational decision given the modest level of national funding. In this respect, co-financing may be a driver to increase the national EPI budget.

Table 8. Assessments of Burundi's priority based on five types of measurable prioritisation and commitment.

Elements	Burundi		
Strategy: Formal documentation	Burundi's National Health Development Plan 2006-2010		
of intentions and commitments to	includes a strong focus on immunisation, not only for children		
immunisation, such as national	but also for women of child-bearing age.		
planning documents and	The EPI schedule includes 10 antigens for vaccine-preventable		
strategies	diseases and the piloting of one additional (HPV). According to Burundi's cMYP, EPI started in one region in 1980, with support from the WHO, UNICEF and USAID. It was then gradually rolled out to include the entire country by 1985. Immunisation of women of child-bearing age was added in 1986 to help eliminate neonatal tetanus. In 2003, vitamin A supplementation was introduced into routine immunisation. In 2014, the EPI programme includes diphtheria, tetanus, pertussis, viral hepatitis B, paediatric pneumonia caused by H. influenza type B, poliomyelitis, tuberculosis, measles, meningitis, rotavirus, pneumococcal and the piloting of human papillomavirus.		
Institutions: Institutional	There is a budget line for co-financing. The budget is approved		
commitment in the form of formal	by Parliament in November/December with an opportunity to		
and established structures in	get approval for revisions in June. Otherwise budget line		
place to implement immunisation,	modifications are rare and require agreement between the		
such as: legislation, existence of	Ministers of Finance and Health.		
budget line items for			
immunisation and extent of MoH-			
MoF-parliament linkages			
Public commitment: Public and	The Second Vice President has been a strong vocal advocate,		
political statements made by	participating in all new vaccine launches.		
senior political leaders			
Self-financing: Own financial	The government of Burundi has always met its co-financing		
resources invested in	commitments to the GAVI Alliance, despite sizable increases in		
immunisation	co-financing due to new vaccine introductions. UNICEF has		
	always paid for Burundi's traditional vaccines.		
Monitoring and evaluation	Burundi's DTP3 coverage (pentavalent) was 96 % in 2012.		

Extent to which policy successes can be sustained, including following GAVI Alliance support exit

Due to increasingly tight budgets, the government has started a process of regularly reviewing its cofinancing commitments across all sectors and ranking them in terms of value-add. Those that come out lowest are in jeopardy of non-payment if there is a budget shortfall. The GAVI Alliance is assessed as high value-add. In Burundi's case co-financing is not leading to self-sufficiency but this was likely never the expectation. Burundi makes extraordinary efforts to stretch its budget for the co-financing amounts in order to maximise the public health benefit. If GAVI financing were to suddenly disappear, Burundi would struggle to maintain its current vaccine portfolio.

Extent to which GAVI Alliance partners have communicated the policy and supported the policy's implementation

Burundi is appreciative of the GAVI Alliance's communication methods. There was a strong message that the GAVI Alliance invests the time and effort to ensure that countries understand expectations and reporting requirements. In addition, the reporting has assisted to build up planning capacity and knowledge.

The EPI team has a solid understanding of the policy, especially: 1) that a country must finance a specified portion of its GAVI-supported vaccine portfolio and 2) the implications of default. Lesser understood parts of the policy are the eligibility timelines (if GAVI Alliance support is time-limited) and the impact of increasing GNI/capita. Burundi last reviewed the underlying basis for its economic measurement statistics (i.e., the base data for GNI) in 2006. (32) In terms of Sub-Saharan Africa, this is relatively recently, and helps to ensure that there are no sudden jumps in economic grouping. Therefore, a thorough understanding of the different country groupings may not be necessary at this time.

Summary

Burundi demonstrates country ownership of immunisation, with the only opportunity for further strengthening to be self-financing of its traditional vaccines. Immunisation is awarded a high prioritisation within the health budget and there is a budget line for GAVI Alliance co-financing. The EPI team takes ownership of the planning and reporting processes, and the Second Vice President has been a strong vocal advocate, participating in all new vaccine launches.

Lesson learnt: It must be recognised that low income countries will take a pragmatic approach to the distribution of their modest funds, attempting to maximise the public health benefit for the available government contribution. Therefore, potential repercussions of not meeting commitments play a strong role in the government's allocation of finances.

Lesson learnt: When a country's public healthcare system is fragile, the promise of external, earmarked funds can drive the priority-setting process. The GAVI Alliance and other external funders should be especially cognizant of the relationship between earmarked financing and priority-setting.

Co-financing is not leading to self-sufficiency, but this was likely never the expectation. Burundi makes extraordinary efforts to stretch its budget for the co-financing amounts in order to maximise

the public health benefit. If GAVI financing were to suddenly disappear, Burundi would struggle to maintain its current vaccine portfolio.

Lesson learnt: Self-sufficiency may not be a goal for low income countries, nor taking on increasing financial burden for the same public health benefit.

Annex 2: Ghana case study

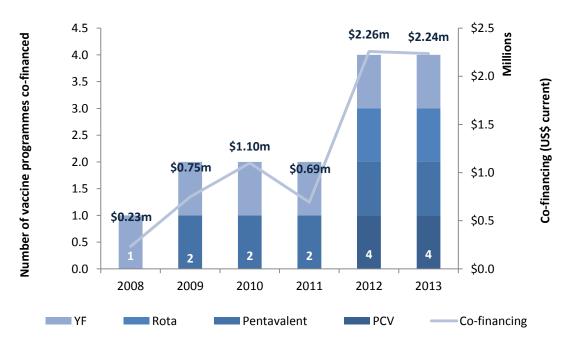
Setting

The aim of the Ghana case study was to do an in-depth assessment of different aspects of the policy's implementation processes, results and impact at the country level for an intermediate country that had previously met its GAVI Alliance co-financing commitments as well as paid for traditional vaccines, but was delayed in payment for 2013 to be temporarily placed in default. We attended Ghana's National Health Summit in May 2014 and spoke with representatives from EPI, Ministry of Health, UNICEF and WHO.

Introduction

Under GAVI country groupings, Ghana started as an intermediate country and then was proposed to be low income as a result of the policy revision in 2012. However, as a result of performing a formal re-assessment of its economy, Ghana suddenly became a lower-middle income country by World Bank definitions in November 2010. This automatically promoted Ghana into the intermediate co-financing group of GAVI-eligible countries in 2012 and subsequently to the graduating group as of 2014.

Figure 20. Number of vaccine programmes co-financed and total co-financing (US\$) by Ghana per year, 2008-2013.



Author's own calculations

Data sources: GAVI Secretariat co-financing database

\$45.0 \$45.0 \$40.0 \$35.0 Co-financing as share (%) of GAVI funding \$30.0 \$25.0 \$20.0 \$15.0 \$10.0 \$5.0 38.3% 6.1% 19.5% 6.2% 13.1% 9.0% \$0.0 2008 2009 2010 2011 2012 2013

Figure 21. Ghana co-financing as a share (%) of GAVI Alliance funding (by programmatic year), 2008-2013.

■ GAVI funding

Author's own calculations

Data sources: GAVI Secretariat co-financing database

Donor support for health sector in Ghana has held relatively steady in relation to the total health budget (22 % - 27 % per year) over the 2009-2012 period, but dropped (to 6 %) in 2013 reflecting a reduction in donor support and an increase in internally generated funds. Government health expenditure has been increasing steadily reaching US\$ 1.2 billion in 2012.

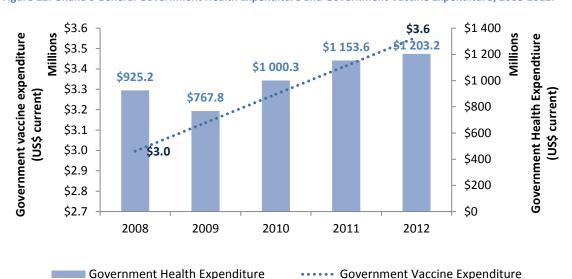


Figure 22. Ghana's General Government Health Expenditure and Government Vaccine Expenditure, 2008-2012.

Author's own calculations

Data sources: GAVI Secretariat co-financing database; WHO National Health Accounts; WHO/UNICEF JRF database
Disclaimer: JRF data gaps for GVE 2009-2011 - Government Vaccine Expenditure values for 2009, 2010 and 2011 are imputed

Extent to which co-financing has incentivised country ownership and financial sustainability

Ghana's health priorities demonstrate a long-term commitment to immunisation and its co-financing obligations. In 2012, Ghana, with GAVI Alliance support, was the first country to simultaneously introduce PCV and rota. Its positive experiences with the introduction of two new vaccines (penta and YF) in 2002 and steadily increasing coverage rates between 85 % and 90 % since 2007, made key players within Ghana confident that their skills and systems could successfully support the introduction of the two new vaccines in 2012. The country was also very conscious of meeting MDG 4 to reduce under 5 mortality. The vaccines for PCV and rota were newly available and affordable under the GAVI Alliance co-financing model, allowing Ghana to broaden its vaccination schedule earlier than might have been otherwise possible.

New and underused vaccines comprise a significant and growing proportion of vaccine expenditure. Co-financing investments increased three-fold between 2011 and 2012 (see Figure 20) with the addition of the country's co-financing program for PCV (US\$ 859k) and rota (USD 498k) at USD 0.20 a dose. Since the start of the co-financing policy Ghana has paid US\$ 0.10 per dose above the requirement for the yellow fever vaccine (at US\$ 0.30 per dose).

Ghanaian stakeholders with a long involvement in the area explained the historical situation. In 2001 a financial sustainability plan (FSP) was developed for penta, which would incrementally increase the Government of Ghana's payments over the 2002 – 2011 period, with the Government of Ghana taking on full financial responsibility by 2011. However, the changing policy climate at GAVI Alliance (bridge financing in 2007-2008 and the subsequent co-financing policy (2008)) disrupted Ghana's commitment and strategy, with the result that the FSP goals were dropped.

Increased government investment on vaccine procurement necessitates greater involvement of more senior officials within the MoH and MoF. As this investment continues to rise, attention should be paid to ensuring appropriate senior officials are involved. The Ministry of Health does the resource allocation for the bulk of the budget, and commodities, including vaccines and the cofinancing portion, are given a high priority and earmarked. In Ghana's experience an earmarked budget does not always translate to release of funds at the necessary time. Ghana's late payment of co-financing for two vaccines in 2013 (which were paid for in the first half of 2014) was the result of numerous factors, including lower than budgeted government revenues, the recently attained lower-middle income status was promoting donor exit, precipitously increasing co-financing costs (US\$ 692,000 in 2011 to US\$ 2.3 million in 2012) due to new vaccine introductions. The government's fiscal year ends at same time as the co-financing deadline (the end of calendar year) and given revenues were down, there was no new governmental financial period from which to draw the required funds. This was further exacerbated by the retirement of the EPI manager.

The co-financing policy has brought to the fore the value of planning, budgeting and forecasting and raised the profile of vaccinations and their costs with middle level officials and some senior officials.

Ghana demonstrates strong country ownership through priority-setting and decision-making processes, political commitment, prioritisation of domestic funding for all vaccines, and national procurement capacity building. However, the financial sustainability of Ghana's immunisation

programme needs to be carefully managed due to the rapid ascension through the GAVI country groupings.

Extent to which analyses, priority setting exercises and planning are conducted to inform decision making processes on new vaccine introductions

The GAVI Alliance Interagency Coordinating Committee (ICC) in Ghana is chaired by the Director General of the Ghana Health Service with all major health development partners and private organisations represented on the committee. The ICC has responsibility to ensure that the country's Comprehensive Multi Year Plan is on track. In 2009 the ICC decided to introduce the two new vaccines in 2012. These decisions were made based on the disease burden, estimated infant deaths and the health and economic benefits expected to be realised. The initial cost estimates were done including running costs, cold chain capacity additions and additional man hours required. The Director of Procurements said "even though it was going to shoot the EPI budget up, we thought the expenditure was justified."

Relevant stakeholders in Ghana reported that the GAVI Alliance was not initially supportive of Ghana's proposal to simultaneously introduce two vaccines. Ghana assessed that introducing a vaccine would cause a disruption to the system, requiring staff training, updates to systems and other new processes and requirements. They agreed that introducing two vaccines simultaneously could results in some economies of scale. In the end, the two proposals were accepted, as the GAVI Alliance was buoyed by a successful funding round, and asked Ghana "Can you do it?" and Ghana replied "Yes".

All key government stakeholders interviewed nominated immunisation as the top or very close to the country's number one health priority. Priorities are determined each year in the lead up to and at the National Health Summit through dialogue within government agencies (Ghana Health Services and teaching hospitals, etc.) and with partners. Maintaining political prioritisation was identified by stakeholders as an ongoing challenge on two fronts. First, there is a high turn-over of political leaders, meaning at each change senior officials need to re-invest time to educate leaders on the role, opportunity and importance of immunisation (and the associated co-financing arrangement). Second, immunisation is a victim of its own success; when no outbreaks occur, some leaders do not recognise the value of immunisation.

Extent to which policy successes can be sustained, including following GAVI Alliance support exit

In Ghana's case willingness and ability to pay is high and can be sustained if the following conditions continue: 1) GVE to GGHE has room to increase, and increases could come in the form of new vaccines or be limited to incremental rises in line with Ghana's intermediate status; 2) Political support is maintained despite political change and economic challenges; 3) The individual responsible for co-financing sits in the MOH and has the authority to contribute to priority-setting agendas and to authorise co-financing payments; 4) Vaccine funds continue to be earmarked and payments made in the first quarter of the government's financial year. However, it remains to be seen if Ghana will be able to sustain the full financing of its immunisation portfolio within five years given its rapidly increasing total government vaccine expenditure (see Figure 22).

Table 9. Assessments of Ghana's priority based on five types of measurable prioritisation and commitment.

Elements	Ghana
Strategy: Formal	Ghana has five health policy objectives – under health
documentation of intentions and commitments to	objective 4: Intensify prevention and control of
	communicable and non-communicable diseases, Ghana
immunisation, such as	tracks penta 3 vaccine coverage.
national planning documents and strategies	Ghana acknowledges the very close link between immunisation and its achievement of MDG4.
and strategies	EPI schedule now includes 12 antigens for vaccine preventable diseases. They were introduced in 1978 (BCG,
	OPV, DTP (removed in 2002), measles, Tt); in 1992 (YF); in
	2002 (penta); in 2012 (MenAfriVac (in North, removed in
	2013), MCV2, PCV, rota); and in 2013 (HPV). Penta, YF and
	HPV are co-financed.
Institutions: Institutional	ICC established with Director General of the Ghana Health
commitment in the form of	Service as chair. It meets quarterly, with government the
formal and established	leader, UNICEF and WHO partners supporting. There is a
structures in place to	budget line item for vaccines.
implement immunisation,	
such as: legislation, existence	
of budget line items for	
immunisation and extent of	
MoH-MoF-parliament linkages	
Public commitment: Public	Immunisation, and specifically support for the GAVI
and political statements made	Alliance and the co-financing policy are publically
by senior political leaders	supported by the current and previous Presidents of Ghana:
	2012 - President Atta Mills, attended a special
	ceremony to mark the first-time a GAVI-eligible
	country has introduced two vaccines at the same time.
	2013 - President Mahama was an ambassador for the
	GAVI Alliance by co-chairing the GAVI Alliance midterm review meeting in 2013.
	• 2014 – President Mahama endorsed the leadership
	declaration of Immunise Africa 2020 publicly,
	"Immunisation is one of the most important
	investments we are making in our children and in their
	futureWe are committed to ensuring that vaccine
	programmes in Ghana will be sustainable and that our
	children will be protected from potentially fatal
	diseases."
Self-financing: Own financial	The Government of Ghana has met its GAVI Alliance co-
resources invested in	financing commitments (albeit late for 2013) and pays for
immunisation	its traditional vaccines.
Monitoring and evaluation	Ghana's DTP3 coverage (pentavalent) was 86.0 % in 2013
	and 88 % in 2012.

Extent to which GAVI Alliance partners have communicated the policy and supported the policy's implementation

UNICEF, WHO and the EPI team in the MOH work closely and effectively, with UNICEF and WHO providing technical and procurement support as needed. Within the MOH key implementers of the co-financing policy work effectively together with the senior officials in terms of priority setting, decision-making, resource allocation and reporting outcomes.

Two current issues were identified in relation to resourcing and the co-financing policy. First, the involvement of the EPI manager in some levels of decision-making and their relative degree of influence: the EPI manager is somewhat cut off from priority setting processes within the MOH as a whole and the EPI manager is also put under significant pressure when taking on the task of following up with MOF to ensure payment is made. Second, the increasing levels of investment and eventually the graduation process. While senior officials such as the Minister, Chief Director and Directors of Policy Planning and Monitoring and Evaluation; Procurement and Support; Budget are already involved, their engagement needs to increase given expected increases in investment as it is these senior officials that allocate resources.

Ghana officials commented that the GAVI Alliance is good at country engagement, but more engagement is needed at a higher level, particularly in relation to facilitating commitments and payments.

Summary

Ghana demonstrates strong country ownership of immunisation and is meeting it financing obligations both in terms of traditional vaccines and the co-financing of new and underused vaccines. Key officials within the country are conscious of the long-term investment needed and the rising financial implications. Likewise, officials are very conscious of the total financial cost of the vaccines, and some explicitly stated they look forward to the day Ghanaians can fully pay for the vaccines without relying on the GAVI Alliance.

Lesson learnt: It is important to share the full cost of GAVI-funded vaccines with senior officials within MOH and MOF at time of sign-off on co-financing commitments to build ownership and knowledge of full funding requirements.

As the first country to simultaneously co-finance to new vaccines Ghana's experience can be shared with other countries – as is the case with Tanzania. This experience is valuable for other countries, and the GAVI Alliance, particularly as they enter the decision-making period on new vaccine introduction.

Lesson learnt: Introducing two vaccines simultaneously may save duplicative effort in updating systems and training staff. Co-financing of two new vaccines for introduction should not be a barrier in itself.

EPI managers are key to successful implementation, continuity and expansion of financing for new and underused vaccines, with this growing responsibility, greater authority and influence is warranted. The experience in Ghana captures the importance of their role and highlights the need

for countries, partners and the GAVI Alliance to ensure that person is adequately resourced to do their job fully.

Lesson learnt: It is important that the EPI manager has access to appropriate decision-making levels for priority-setting and release of approved funds. They may not be able to achieve this without the GAVI Alliance playing a catalytic role at senior levels.

Annex 3: Moldova case study

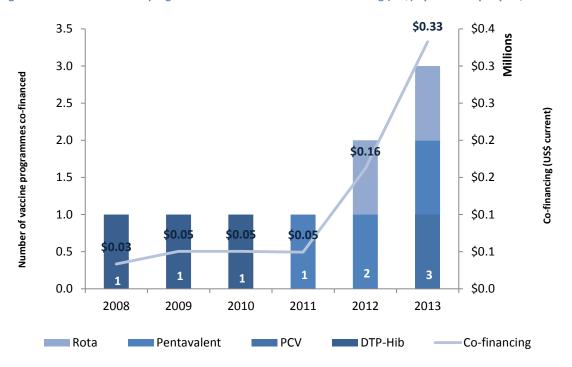
Setting

The aim of the Moldova case study was to perform an in-depth assessment of different aspects of the policy's implementation processes, results and impact at the country level for a graduating country that has consistently met its GAVI Alliance co-financing commitments and pays for its traditional vaccines. We met with representatives from the National Centre for Public Health, Ministry of Finance, Ministry of Health, UNICEF and WHO in April 2014.

Introduction

Moldova has the lowest GNI/capita in Europe at US\$ 2,070 in 2012 and a negative GDP growth rate of -0.8 % according to the World Bank. At the same time it has one of the highest government health expenditures at 13.3 % of total government expenditure (WHO) and has always met its co-financing commitments, despite its full vaccine portfolio (see Figure 23).

Figure 23. Number of vaccine programmes co-financed and total co-financing (US\$) by Moldova per year, 2008-2013.



Author's own calculations

Data sources: GAVI Secretariat co-financing database

1 000 000 900 000 Co-financing as share (%) of GAVI funding 800 000 700 000 600 000 500 000 400 000 300 000 200 000 100 000 9.5% 11.1% 11.0% 12.6% 34.99 56.99 2008 2009 2010 2011 2012 2013 ■ GAVI funding

Figure 24. Moldova co-financing as a share (%) of GAVI Alliance funding (by programmatic year), 2008-2013.

Author's own calculations

Data sources: GAVI Secretariat co-financing database

Moldova transferred from the intermediate to the graduating group when the Co-Financing Policy was revised in 2010. There are varying reports regarding if this escalation was surprising. On the one hand, it was always expected that GAVI Alliance support was time limited. On the other, there was no feeling that the country's fiscal space had increased (see Figure 25). Moldova will graduate from pentavalent and rotavirus support in 2016 and pneumococcal in 2017. Moldova has always met its financial commitments, not only to the GAVI Alliance but also for its traditional vaccines.

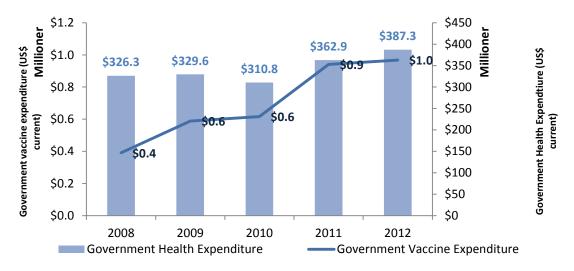


Figure 25. Moldova's General Government Health Expenditure and Government Vaccine Expenditure, 2008-2012.

Author's own calculations

Data sources: GAVI Secretariat co-financing database; WHO National Health Accounts; WHO/UNICEF JRF database

Moldova contains a semi-autonomous region, Transnistria, which is responsible for its own public health spending. The relationship between the region and the central government is strained. Transnistria does not prioritise immunisation highly and therefore has low coverage rates (with two districts reporting DTP3 coverage of less than 50 %). The region began to introduce rotavirus and pneumococcal but stopped due to the cost implications. The central government procures vaccines for Transnistria after receiving payment in full. The government attempts to engage with the Transnistrian public health organisation and advocate for immunisation but to little avail.

Extent to which co-financing has incentivised country ownership and financial sustainability

Moldova demonstrates high country ownership. Immunisation is a high priority intervention, demonstrated by the Minister of Health sitting on The GAVI Alliance's Board.

Moldova manages it vaccines procurement and forecasting through its National Centre of Public Health. However, Moldova is also highly dependent upon the services of UNICEF Supply Division in order to procure affordably priced vaccines. With a small annual birth cohort (about 40,000) Moldova has little negotiating power and is not in a position to initiate a pooled procurement mechanism with neighbouring countries. Moldova is a candidate for EU-membership, but the timing and outcome of this decision are uncertain. There is a significant amount of confusion and uncertainty regarding how long Moldova can continue to use the services of UNICEF Supply Division, considering graduation from GAVI Alliance support and potential EU-membership. There is also uncertainty regarding if there is an EU-based pooled procurement mechanism for vaccines, or at least access to coordinated prices. Lastly, Moldova is interested in introducing new vaccines, like HPV, but cost will be a significant detractor without GAVI Alliance support.

Extent to which analyses, priority setting exercises and planning are conducted to inform decision making processes on new vaccine introductions

The government follows a thorough decision-making process for new vaccine introductions, utilising burden of disease monitoring data and cost-effectiveness studies. All vaccines are methodically evaluated over a period of years. Post-implementation the National Public Health Centre monitors the occurrence of disease and reports the findings. This data, for example, was used to demonstrate the dramatic decrease of rotavirus in children. The National Public Health Centre has used this evidence to champion the use and further investment in vaccines.

Extent to which policy successes can be sustained, including following GAVI Alliance support exit

The government is committed to a minimum of sustaining its existing vaccine portfolio. However, Moldova is experiencing a simultaneous donor exit, including not only the GAVI Alliance but also The Global Fund for AIDS, Tuberculosis and Malaria and EU support for health. This creates significant financial stress since the amount of government financing to maintain the current public health interventions must increase precipitously. The Ministry of Finance estimates that the public health budget must increase by as much as 15 % to replace previous donor funds. If the increase in public spending necessary is too steep, existing services may be cut and tougher priority-setting measures put in place.

Table 10. Assessments of Moldova's priority based on five types of measurable prioritisation and commitment.

Elements	Moldova
Strategy: Formal	According to Moldova's cMYP, the Government issued in
documentation of intentions	2007 the National Health Policy, including specifically
and commitments to	immunisation as a tool to achieve disease prevention and
immunisation, such as	control.
national planning documents	The first National Immunisation Program was approved in
and strategies	Moldova for the years 1994-2000. The EPI schedule in
	2014 includes 12 antigens for vaccine-preventable
	diseases: diphtheria, tetanus, pertussis, viral hepatitis B,
	paediatric pneumonia caused by H. influenza type B,
	poliomyelitis, tuberculosis, measles, mumps, rubella,
	rotavirus and pneumococcal.
Institutions: Institutional	All childhood vaccinations are funded from the state
commitment in the form of	budget with the Ministry of Health (MoH) setting the
formal and established	priorities. There is a budget line item for GAVI Alliance co-
structures in place to	financing. MoH's budget is controlled internally so it can
implement immunisation,	make the necessary internal reallocations if necessary.
such as: legislation, existence	
of budget line items for	
immunisation and extent of	
MoH-MoF-parliament linkages	
Public commitment: Public	Immunisation is a high priority intervention, demonstrated
and political statements made	by the Minister of Health sitting on The GAVI Alliance's
by senior political leaders	Board.
Self-financing: Own financial	The Government of Moldova consistently meets its co-
resources invested in	financing commitments and pays for traditional vaccines.
immunisation	Moldova is on a trajectory to take over full financing of its
	vaccines by 2017.
Monitoring and evaluation	Moldova's DTP3 coverage (pentavalent) was 92 % in 2012.
	This is lower than expected coverage is largely due to the
	semi-independent region, Transnistria, which does not
	highly prioritise immunisation.

All interviewees expressed an interest in a more gradual graduation policy, where co-financing amounts ramped up but at a smaller level, e.g., 10 %. The rationale being that a 20 % increase is substantial, especially with expensive vaccines (see Figure 24). In some instances, this almost doubles the cost of the program. A more gradual increase would help with predictability and sustainability. It would also give more time to adjust to the transformation which is compounded by multiple donors exiting simultaneously.

Extent to which GAVI Alliance partners have communicated the policy and supported the policy's implementation

The GAVI Alliance and its partners have successfully communicated the policy and supported the policy's implementation in Moldova. The country has greatly benefited, reporting that if the GAVI Alliance assistance was not in place, the new vaccines would likely not have been introduced. The government, UNICEF and WHO are pleased with their working relationship.

Summary

Moldova demonstrates high country ownership of immunisation and is on a trajectory to full financing of its vaccines by 2017. However, this will likely not include high immunisation coverage in the semi-autonomous region, Transnistria, who operates its own health service and where prioritisation of vaccines is low.

Lesson learnt: The GAVI Alliance needs to assess if there is any regional exceptions to graduation due to internal conflict. The Global Fund for AIDS, Tuberculosis and Malaria is considering an application for funds to Moldova dedicated specifically for the needs of Transnistria. The GAVI Alliance may consider working with Moldova's Ministry of Health and National Centre of Public Health to set a strategy to improve immunisation rates in Transnistria.

Moldova is highly dependent upon the services of UNICEF Supply Division in order to procure affordably priced vaccines. With a small annual birth cohort (about 40,000) Moldova has little negotiating power and is not in a position to initiate a pooled procurement mechanism with neighbouring countries.

Lesson learnt: The GAVI Alliance has already begun negotiating with vaccine manufacturers so that graduating countries can continue to access GAVI prices for a period of time after graduation. Access to affordably priced vaccines will be tantamount for graduating countries to continue with their existing vaccine portfolio.

Moldova is experiencing a simultaneous donor exit, which creates significant financial stress. Moldova is interested in introducing new vaccines, like HPV, but cost will be a significant detractor without GAVI Alliance support.

Lesson learnt: The GAVI Alliance should re-consider the five-year graduation trajectory based upon the real impact to the country's budget. The financial implications of this rapid increase may force countries to stop providing other health-related interventions, especially if a country is experiencing simultaneous donor exit.

Annex 4: Country co-financing funding sources

Table 11. Countries co-financing through direct government funding and no pooled fund in place.

Co-financing group	Country	Government sources of co-financing	External sources of co-financing and traditional vaccine financing in the past
Graduating	Angola	- Government pays co-financing through central government budget	
Graduating	Armenia	- Government pays part of co-financing - Rostropovich-Vishnevskaya Foundation (RVF) contributed in earlier years - Ani & Narod Memorial Foundation (ANMF) currently contributes to co-financing	
Graduating	Azerbaijan	- Government pays co-financing	
Graduating	Bolivia	- Government pays for co-financing, drawing revenues from the national Social Security Scheme	
Graduating	Congo Republic	- Government pays co-financing	
Graduating	Georgia	- Government pays co-financing - Central government, local government and donors (Vishnevskaya-Rostropovich Foundation (RVF) supported procurement of Immunoglobulin in 2010	
Graduating	Guyana	- Government pays co-financing	
Graduating	Honduras	- Government pays co-financing	
Graduating	Indonesia	- Government pays co-financing, drawing revenues from: central and district government	
Graduating	Kiribati	- Government pays co-financing, drawing revenues from the central government budget	
Graduating	Moldova	- Government pays co-financing through the central government budget	
Graduating	Sri Lanka	- government pays co-financing	
Graduating	Timor-Leste	- government pays co-financing and traditionals	- AusAID financed tetra in 2007, 2008
Intermediate	Lao PDR	- Government pays co-financing	- UNICEF, the government of Korea Rep, and the government of Luxembourg paid for traditionals in the past
Intermediate	Lesotho	- Government pays co-financing, drawing revenues from the central government budget	- donations by GSK, Government of Japan, and Merck Labs for purchase of MMR, penta, HepB and rota until 2009
Intermediate	Nicaragua	- Government pays co-financing through the PAHO Revolving Fund	
Intermediate	Nigeria	- government pays co-financing	
Intermediate	Pakistan	- government pays co-financing through the central government budget (MoF)	
Intermediate	Senegal	- government pays co-financing	
Intermediate	Solomon Islands	- government pays co-financing, through the National Medical Stores	
Intermediate	Uzbekistan	- government pays co-financing, drawing revenues from central and local budgets	- 2009 vaccine purchases covered by: Georgia Government (aid money for MR routine); Turkish International Cooperation Agency (TICA) as aid via WHO for BCG and HepB; RCSSES Economist; UNICEF
Intermediate	Viet Nam	- government pays co-financing	
Intermediate	Yemen	- Government pays co-financing through central government budget (MoPH)	
Low income	Afghanistan	- Government pays co-financing	
Low income	Benin	- Government pays co-financing through	

Co-financing group	Country	Government sources of co-financing	External sources of co-financing and traditional vaccine financing in the past
		Vaccine Independence Initiative	
		- Government share of the EPI budget draws	
		revenues from: HIPC (Heavily Indebted Poverty	
		Countries); revenues from essential medicines	
		sales (Bamako Initiative commitment);	
		donations from government companies	
		through the Benin EPI Foundation	
Low income	Burkina Faso	- Government pays co-financing	
Low income	Cambodia	- Government pays co-financing through central government budget (MoF)	- JICA, UNICEF paid for traditional vaccines in the past, but government has assumed payment of traditionals since co-financing introduction
Low income	Chad	- Government pays co-financing through the Vaccine Independence Initiative	
Low income	Comoros	- Government pays co-financing	- UNICEF paid for traditional vaccines until 2011
Low income	Democratic Republic of Congo	- Government pays for co-financing	- External donors supported traditionals in the past, but the government has assumed payment for the last two years
Low income	Ethiopia	- government pays co-financing	
Low income	Gambia	- Government pays co-financing	
Low income	Guinea	- Government pays co-financing, drawing revenues from: National Development Budget; Vaccine Independence Initiative for cofinancing (only worked well in 2009 and 2010)	- JICA paid for traditionals in 2006; UNICEF paid for traditionals in 2005, 2009, 2010, and 2011
Low income	Kenya	- Government pays co-financing, drawing revenues from: Central government, MoH budget	
Low income	Kyrgyz Rep	- Government pays co-financing since 2009, drawing revenues from; the MoH budget; Republican Centre for Immune Prophylaxis (RCI)	 - Asian Development Bank contributed to 40 % of all vaccines in 2008 - Asian Development Bank contributed to 40% of all vaccines in 2008
Low income	Madagascar	- Government pays co-financing through its health budget	
Low income	Mauritania	- Government pays co-financing, supported by the Vaccine Independence Initiative between MoH and MoF	
Low income	Niger	- government pays co-financing, drawing revenue from HIPC and central government	
Low income	Rwanda	- government pays co-financing	
Lowincomo	Siorra Lagna	- government pays co-financing	
Low income	Sierra Leone	- NGOs contribute to vaccines	
Low income	Tajikistan	- government pays co-financing	- JICA paid traditionals from 2008 to 2011 - Government has assumed payment of traditionals in last two years, since cofinancing introduction
Low income	Togo	- government pays co-financing	 external donors paid a share of traditional vaccines in the past Government has assumed full payment of traditionals since co-financing introduction

Table 12. Countries co-financing through government funding, with pooled funds for health sector financing in place.

Co-financing group	Country	Government sources of co-financing	Co- financing fully externally financed in the last one to two years	External sources of co- financing	External sources of traditional vaccine financing	Financing of traditionals fully externally financed in the last one to two years	Presence of pooled funds
Low income	Nepal	- Government pays co-financing					- SWAp (World Bank, DFID) - Immunisation Fund (under planning)
Intermediate	Cameroun	- Government pays co-financing, drawing revenue from: Debt Reduction and Development Initiative (C2D); Decentralised Territorial Entities					National Fund for Immunisation (under planning)
Graduating	Mongolia	- Government pays co-financing via the National Immunisation Fund			- JICA / UNICEF contributed a small share of funding for traditional vaccines in 2007		National Immunisation Fund
Intermediate	Papua New Guinea	- government pays co-financing					Recurrent / Pooled Fund
Intermediate	Ghana	- Government pays co-financing					SWAp
Low income	Central African Republic	- Government pays co-financing - Assistance has been provided by NGOs to support its 2012 co-financing commitments					Transition Trust Fund
Low income	Tanzania	- government pays co-financing					SWAp
Low income	Uganda	- government pays co-financing, through the National Medical Stores					SWAp
Intermediate	Zambia	- government pays co-financing					SWAp (Common Basket Fund)
Low income	Mozambique	- Government pays co-financing					SWAp (Common Basket Fund)

Co-financing group	Country	Government sources of co-financing	Co- financing fully externally financed in the last one to two years	External sources of co- financing	External sources of traditional vaccine financing	Financing of traditionals fully externally financed in the last one to two years	Presence of pooled funds
Low income	Malawi	- Government pays co-financing, drawing revenues from the Donor Health Group (national and international donors)	YES	- International donors paid co- financing in 2013 via the Donor Health Group			SWAp
Low income	Bangladesh	- government pays part of co-financing		- World Bank contributes to co-financing	- shared by government and donors through the Common Basket Fund		SWAp
Graduating	Bhutan	- government pays co-financing on one:one contribution basis with other donors, through BHTF			- JICA (UNICEF) pays for traditional vaccines	YES	Bhutan Health Trust Fund (BHTF)
Low income	Zimbabwe	- government pays co-financing through Health Transition Fund			- UNICEF pays for traditional vaccines	YES	Health Transition Fund

Table 13. Countries co-financing commitments through direct government funding, but fully externally dependent for payment of traditional vaccines in the last one to two years.

Co-financing group	Country	Government sources of co- financing	External sources of co-financing	External sources of traditional vaccine financing	Financing of traditionals fully externally financed in the last one to two years
Intermediate	Côte d'Ivoire	- Government pays co- financing		- External donors pay for traditional vaccines (source: consultations)	YES
Intermediate	Djibouti	- government pays co- financing		- UNICEF pays for traditional vaccines	YES
Intermediate	São Tomé	- government pays co- financing, drawing revenues from the central government through annual Finance Act		- UNICEF pays for traditional vaccines	YES
Intermediate	Sudan	- government pays co- financing		- UNICEF pays for traditional vaccines	YES
Low income	Burundi	- Government pays co- financing		- UNICEF pays for traditional vaccines	YES
Low income	Eritrea	- government pays co- financing		- UNICEF pays for traditional vaccines	YES
Low income	Guinea Bissau	- Government pays co- financing, drawing revenues from ETDA	- Targeted budgetary support was provided by the government of France for co- financing in 2008 and 2009	- UNICEF pays for traditional vaccines	YES
Low income	Korea DPR	- Government pays co- financing since 2009		- UNICEF pays for traditional vaccines	YES
Low income	Liberia	- Government pays co- financing, drawing revenues from the central government budget		- UNICEF pays for traditional vaccines	YES
Low income	Myanmar	- Government pays co- financing		- UNICEF, WHO and other unspecified Japanese donors pay for traditional vaccines	YES

Table 14. Countries fully externally dependent for both their co-financing commitments and their traditional vaccines in the last one to two years.

Co-financing group	Country	Co-financing fully externally financed in the last one to two years	External sources of co- financing	External sources of traditional vaccine financing	Financing of traditionals fully externally financed in the last one to two years
Low income	Mali	YES	- The government of Canada via UNICEF pays co-financing for 2013 and 2014	- External donors pay for traditional vaccines	YES
Low income	Somalia	YES	- UNICEF/WHO pay co- financing through JHNP	- UNICEF pays for traditional vaccines	YES

Annex 5: List of consulted experts

Last policy revision task team

Paul Fife, NORAD
Gian Gandhi, UNICEF Programme Division
Lidija Kamara, WHO
Maziko Matemba, Health N Rights Education Programme
Violaine Mitchell, Bill & Melinda Gates Foundation
Katinka Rosenbom, UNICEF Supply Division
Helen Saxenian, Results for Development Institute
Meredith Shirey, UNICEF Supply Division
Paul Wilson, Independent Consultant

IF&S Task Team

Logan Brenzel, Independent Consultant
Osman Niyazi Cakmak, WHO Regional Office for Europe
Claudia Castillo, PAHO
Irtaza Chaudri, WHO Regional Office for the Eastern Mediterranean
Santiago Cornejo, GAVI Secretariat
Tine Hein, UNICEF Supply Division
Miloud Kaddar, WHO
Mike McQuestion, Sabin Vaccine Institute
Thomas O'Connell, UNICEF Policy Department
Maria Patyna, GAVI Secretariat
Amos Petu, WHO IST, East and Southern Africa
Claudio Politi, WHO
Katinka Rosenbom, UNICEF Supply Division
Alexis Satoulou-Maleyo, WHO IST, West-Africa

GAVI Alliance experts (past & present)

Mercy Ahun, GAVI Secretariat
Amie Batson, PATH
Abdallah Bchir, GAVI Secretariat
Bruno Bouchet, GAVI Secretariat
Andrew Jones, Bill & Melinda Gates Foundation
Judith Kallenberg, GAVI Secretariat
Hind Khatib-Othman, GAVI Secretariat
Steve Landry, Bill & Melinda Gates Foundation
Michel Zaffran, WHO⁶⁹

-

⁶⁹ Interviewed for the inception phase only.

Industry

Juliman Fuad, Development Countries Vaccine Manufacturing Network
Suresh Jadhav, Serum Institute of India
Olga Popova, International Federation of Pharmaceutical Manufacturers' Associations

Civil society

Ciro De Quadros, Sabin Vaccine Institute

Amy Dietterich, The International Federation of Red Cross

Kate Elder, Médecins Sans Frontières

Clifford Kamara, Sabin Vaccine Institute

Clarisse Loe Loumou, Alternative Santé

Robert Steinglass, John Snow International Inc.

Jean-Bernard Le Gargasson, Agence de Medecine Preventive (AMP)

Bilateral donors

Emmanuel Lebrun-Damiens, Ministry of Foreign Affairs, France Lene Lothe, NORAD

GAVI Secretariat Country Responsible Officers (CROs)

Komi Ahawo

Nilgun Aydogan

Maryse Dugue

Pär Eriksson

Véronique Maeva Fages

Dirk Gehl

Homero Hernandez

Nadia Lasri

Dorte Petit

Alison Riddle

Stephen Sosler

Anne Zeindl-Cronin

Annex 6: Survey responses from WHO, UNICEF and EPI/MoH country officials

Table 15. Responses from WHO, UNICEF and EPI/MoH country offices in low income countries in survey.

Low income countries (n=35)	WHO	UNICEF	EPI/MoH
Afghanistan	Х	Х	Х
Bangladesh	Х	Х	Х
Benin	Х	Х	Х
Burkina Faso	Х		
Burundi			Х
Cambodia	х		Х
CAR	х	Х	
Chad	х	Х	
Comoros	х	Х	
DRC	х	Х	Х
Eritrea	х	Х	Х
Ethiopia		Х	
Gambia	Х	Х	Х
Guinea			Х
Guinea Bissau	Х	Х	
Haiti	х	Х	Х
Kenya	х		Х
Korea DPR	х	Х	
Kyrgyz Rep		Х	
Liberia	Х	Х	Х
Madagascar	х	Х	Х
Malawi	Х	Х	Х
Mali		Х	
Mauritania		Х	Х
Mozambique	Х	Х	Х
Myanmar	х		Х
Nepal	Х	Х	Х
Niger	Х	Х	Х
Rwanda	Х		Х
Sierra Leone	Х	Х	Х
Somalia		Х	Х
Tajikistan	Х	Х	Х
Tanzania	х	Х	х
Togo	Х	Х	Х
Zimbabwe	х	Х	х
Total responses	28	28	26

Table 16. Responses from WHO, UNICEF and EPI/MoH country offices in intermediate countries in survey.

Intermediate countries	WHO	UNICEF	EPI/MoH
(n=19)			
Cameroun	X	X	X
Côte d'Ivoire	X	Х	X
Djibouti	X	Х	Х
Ghana			Х
Lao PDR	X		
Lesotho	X	Х	Х
Nicaragua		Х	Х
Nigeria	X	Х	
Pakistan	X		
Papua New Guinea	X		
São Tomé	X	Х	Х
Senegal	Х		X
Solomon Islands	X	Х	
Sudan (North)	X	Х	Х
Uganda			Х
Uzbekistan	X	Х	
Viet Nam		Х	Х
Yemen	х		
Zambia		Х	Х
Total responses	14	12	12

Table 17. Responses from WHO, UNICEF and EPI/MoH country offices in graduating countries in survey.

Graduating countries (n=14)	WHO	UNICEF	EPI/MoH
Angola	Х	Х	Х
Armenia	Х	Х	
Azerbaijan	х	Х	Х
Bhutan	Х	Х	Х
Bolivia		Х	
Georgia	Х		Х
Guyana			Х
Honduras	Х	Х	Х
Indonesia	Х		Х
Kiribati	Х		Х
Moldova			Х
Mongolia	х	Х	
Sri Lanka	Х	Х	Х
Timor-Leste		Х	
Total responses	10	9	10

Congo Republic is a graduating country, but was excluded from the survey for operational reasons, see page 135.

Annex 7: Evaluation questions

1. Policy Design

Policy development process

a) To what extent was the design of the original and revised policies informed by robust evidence and analyses as well as appropriate consultations?

Design / content of the policy

- b) To what extent were the implicit and explicit assumptions, underpinning both the original and revised co-financing policies at the time of their design, robust and appropriate?
- c) To what extent is the co-financing policy well aligned with other GAVI policies, in particular, the eligibility and graduation policies?
- d) To what extent are the design of current co-financing policy, including but not necessarily limited to those elements listed below, its objectives and principles appropriate and sufficient to lead to country ownership of vaccine financing and financial sustainability?
 - i. Scope
 - ii. Country groupings
 - iii. Co-financing levels
 - iv. Default mechanisms

2. Implementation

- a) To what extent are countries undertaking appropriate financial analyses and planning to inform their decision to apply for GAVI support vaccines?
- b) To what extent are co-financing requirements affecting national decision-making processes for vaccine introduction in countries?
- c) To what extent have the co-financing policy and planned activities associated with its implementation been carried out by the GAVI Secretariat and by partners as designed?
 - i. To what extent have there been flexibilities extended in the implementation of the policy? If so, to what extent were the flexibilities extended appropriate?
 - ii. What were the ramifications of any flexibilities extended?
 - iii. To what extent have the activities funded through the GAVI Alliance Business Plan helped identify key areas that need to be strengthened?
- d) How timely, relevant and clear has communication between the GAVI Alliance and countries been in relation to co-financing and efforts to improve ownership and / or financial sustainability?
- e) What actions have countries undertaken to mobilise required resources to meet the terms of the co-financing policy?
- f) What have been the positive and negative consequences of these actions?
- g) To what extent has the role played by partners or the Secretariat, including through the Immunisation Financing & Sustainability (IF&S) task team been relevant, timely and appropriate for supporting countries to understand and implement the policy?
- h) To what extent has implementation of the policy been appropriately monitored?
- i) To what extent have sufficient resources (both in terms of financing and staff allocation) been made available by the GAVI Secretariat and partners to ensure successful implementation of the policy?

_

3. Intermediate Results

- a) To what extent is GAVI contributing to increased country (primarily government) ownership and on the trajectory to improve financial sustainability
- b) To what extent have countries complied with the policy?
 - i. What are the various factors affecting compliance (e.g.: growing number of vaccines now supported by GAVI, whether countries are in graduation phase, commitments to finance other, non-immunisation health services and health commodities)?
 - ii. How relevant and effective were the actions taken by various Alliance partners and the Secretariat with the non-compliers?
- c) What have been the positive and negative unintended consequences of the Cofinancing policy and its implementation?

4. Lessons for the future

- a) What lessons can be drawn at this stage from the design (including the assumptions made), implementation and intermediate results of the Co-financing policy? In capturing key lessons learned, the evaluation should actively explore, document and assess the following:
 - i. Critical success factors
 - ii. Barriers in design or implementation that may adversely affect the effectiveness of the Co-financing policy to achieve its objectives

5. Recommendations

a) Given the design, implementation, intermediate results achieved, lessons learned and changing context, what recommendations would you make to further improve the Co-financing policy and activities conducted to support its implementation.

Annex 8: EPI/MoH country official survey templates

Country official survey TEMPLATE 170

Some terms and definitions:

Term	Definition	Vaccine examples
GAVI Alliance-funded routine vaccines	Routine vaccines, which are funded by GAVI Alliance and have a co-financing requirement for countries	PCV, Penta, Rota, Yellow fever
Supplementary vaccines	Second dose or campaign related vaccines	IPV, Measles 2nd dose ,MR campaign, MenA campaign
Non-GAVI Alliance-funded routine vaccines	Routine vaccines, which are not funded by GAVI Alliancebut are provided by UNICEF	BCG, OPV, measles
Vaccines	All vaccines	All

Introduction

1.	How familiar are you with the co-financing policy for GAVI-funded routine vaccines? (<i>Please select only one answer, by ticking the relevant box</i>)
	☐ Deep understanding
	☐ Good understanding
	☐ Some understanding
	☐ Little understanding
	☐ No understanding
_	
2.	In your opinion, how easy/difficult has it been for your country to successfully implement the co-financing policy? (Please select only one answer, by ticking the relevant box)
2.	
2.	co-financing policy? (Please select only one answer, by ticking the relevant box)
2.	co-financing policy? (Please select only one answer, by ticking the relevant box) ☐ Very easy
2.	co-financing policy? (Please select only one answer, by ticking the relevant box) ☐ Very easy ☐ Relatively easy
2.	co-financing policy? (Please select only one answer, by ticking the relevant box) Very easy Relatively easy Neither easy or hard

Extent to which co-financing has driven planning and decision making for new vaccine introductions

3. What have been the main reasons to introduce (XXX), your country's most recent GAVI-funded vaccines? (Please select all answers that apply, by ticking all relevant boxes)

⁷⁰ Sent to countries that have not defaulted in the last two years, and that are paying for traditional vaccines, i.e. Armenia, Azerbaijan, Benin, Bolivia, Burkina Faso, Burundi, Cambodia, Ethiopia, Georgia, Guyana, Honduras, Indonesia, Madagascar, Malawi, Mali, Moldova, Mongolia, Mozambique, Nepal, Nicaragua, Papua New Guinea, Rwanda, Senegal, Sri Lanka, Tajikistan, Yemen, Zambia.

	\square High degree of political prioritisation
	☐ Evidence on cost-effectiveness of vaccines
	$\hfill\square$ Deemed financially sustainable from government sources in the mid-long term
	☐ Availability of donor funding
	☐ Ability to meet MDG targets
	$\hfill\square$ Immunisation's ability to save lives / impact on reduction of burden of disease
	☐ Other – please specify:
4.	In order for us to understand how the co-financing policy works with your national planning and budgeting processes, has your country ever encountered difficulties conducting national planning and budgeting due to any of the following reasons? (Please select all answers that apply, by ticking all relevant boxes)
	$\hfill\Box$ Co-payment requirements perceived too high in relation to your immunisation budget
	\Box Timing aspects of GAVI co-financing requirements (e.g. issue date of Decision letter for co-financing too late in the fiscal year, other)
	☐ Other aspects - please explain:
5.	What actions has the government taken to increase its ownership of vaccine financing and/or to meet its co-financing requirements for GAVI-funded routine vaccines? (Please select all answers that apply, by ticking all relevant boxes)
	$\hfill\square$ Initiative has the support of senior political people (Ministerial level and above)
	\Box The Minister of Health has made public statements in last two years in support of the GAVI co-financing policy and national funding of vaccines
	☐ Prioritised within national health plans
	\square Creation of a budget line for vaccines / immunisation
	\square Steadily increasing government vaccine financing as a share of health budget
	\Box Full ownership of financial planning and budgeting for routine vaccines by Ministry of Health, without decisions influenced by Ministries of Finance or other government services
	\square Existence of distinct legislation on vaccine financing / immunisation
	$\hfill\Box$ Improving coordination and sense of collective ownership of immunisation planning and budgeting between ministries of health and finance
	☐ Other -please specify:

Experience with implementing the co-financing policy

6.	Has the co-financing requirement for GAVI-funded routine vaccines generated any challenges
	for your national procurement processes and capacities? (Please select all answers that apply, by ticking all relevant boxes)
	\square No challenges, only positive implications, such as improved efforts to build capacity for vaccine procurement, planning and budgeting for vaccines
	☐ Technical knowledge challenges for procurement staff
	☐ Human resource challenges for procurement processes
	$\hfill\Box$ Legal or regulatory reform challenges, or need for other institutional changes at central government
	$\hfill\Box$ Financing challenges for procurement planning, monitoring and implementation
	☐ Vaccine stock-out problems
	$\hfill\Box$ Coordination challenges with other ministries or government services
	☐ Other - please specify:
7.	What are the primary reasons that the government has been able to procure for the forecasted quantities of GAVI-funded routine vaccines in the last few years? (Please select all answers that apply, by ticking all relevant boxes)
	☐ Budget line for vaccines/immunisation
	☐ Rapidly increasing health/immunisation budget
	$\hfill\square$ Political champion in the government supportive of vaccines/immunisation
	$\hfill \Box$ GAVI co-financing policy has helped mobilise additional resources for vaccines
	☐ The co-financing obligation is insignificant
	$\hfill\square$ We have not been able to procure for the forecasted quantities of vaccines
	☐ Other - please specify:
8.	Is your country considering changing procurement processes for vaccines in the future, in response to your co-financing obligations to GAVI? (Please select only one answer, by ticking the relevant box) □ I don't know
	\square NO
	\square YES, in response to the co-financing requirement to GAVI
	☐ YES, but not in response to the co-financing requirement to GAVI — Please explain:
9.	Has your government always paid for non-GAVI-funded routine vaccines (i.e. traditional vaccines—BCG, OPV, measles)? (Please select only one answer, by ticking the relevant box)
	\square YES, since the launch of our national immunisation programme and/or the inclusion of a government budget line for vaccine financing

	Technical assistance Financial assistance Other (please specify, e.g. advocacy)
12.	Has your country received any technical, financial or other (e.g. advocacy) support in response to co-financing requirements for GAVI-funded routine vaccines? (Please select all answers that apply, by ticking all relevant boxes)
	tent to which resources and/or partnerships have been mobilised to meet co-financing quirements
	☐ Other - please specify:
	\square We would reprogram funds from other areas of donor funding
	$\hfill \square$ We would reprogram funds from other areas of government funding to cover the difference immediately
	\square We would reprogram funds from other health intervention areas
	\square We would reprogram funds from other non-GAVI-funded routine vaccines
	$\hfill\square$ We would transfer funds to cover the claimed difference immediately
	$\hfill\square$ We would double-check our accounts and would coordinate with WHO or the UNICEF country office to ensure correct payment has been made to the right account
11.	In your opinion, how would your country react if GAVI told you that you have not fulfilled your co-financing commitment for the year? (Please select the option that best fits your opinion of your country's likely response, by ticking the relevant box)
	☐ Other - please specify:
	☐ There would be no repercussions
	\square A donor would cover our co-financing commitments
	$\hfill \square$ A solution would be negotiated so that the supply of GAVI-funded routine vaccines would not be interrupted
	\square After one year of default we would lose access to all GAVI-funded routine vaccines
	\square No vaccines at all would be introduced
	\square No new GAVI-funded routine vaccines would be introduced
10.	In your opinion, what would be the repercussions if your country defaulted on its co-financing commitments? (Please select all answers that apply, by ticking all relevant boxes)
	☐ Other - please specify:
	\square NO, donors have started paying in the last few years, since the introduction of co-financing for GAVI-funded routine vaccines
	\square NO, donors have always paid for non-GAVI-funded routine vaccines
	☐ YES, but only in the last few years, since the introduction of co-financing for GAVI —funded routine vaccines

Local / National Government			
GAVI Secretariat			
UNICEF			
WHO			
Private sector procurement agents			
Non-profit foundations			
International donors			
Multilateral organisations			
Other (please specify)			
I don't know			
 13. If your country had to fully finance GAVI-funded routine vaccines (i.e. xxx) would it continue to purchase these vaccines? (Please select only one answer, by ticking the relevant box) No, we would not prioritise GAVI-funded routine vaccines against other, more essential vaccines No, we would not prioritise GAVI-funded routine vaccines, or any vaccines, against other health interventions or areas of public spending 			
	afford it, although immun		·
	afford it, and we would no s or to plan and procure v	·	·
•	oritise the vaccines, but w AVI prices or to plan and p	•	
•	\Box Yes, we would prioritise the vaccines, only because we receive enough external donor assistance which we could redirect to vaccine purchases from other areas of public spending		
	ritised domestic funding o s implemented today	f immunisation and we w	ould continue to
\square Other - please spe	ecify:		
•	at steps is the governmen AVI-funded routine vaccin	•	

100

apply, by ticking all relevant boxes)

GAVI Alliance Co-Financing Policy Evaluation

15.	If you could change something about GAVI's co-financing policy, what would you change and why? Please explain:
	☐ Other – please specify:
	$\hfill \square$ Advocacy and awareness raising actions in collaboration with NGOs
	$\hfill\square$ Innovative financing strategies and mobilisation of additional donor resources
	$\hfill \square$ Additional budget allocations from other government sources of funding
	☐ Additional budget allocations from the Ministry of Health

Country official survey TEMPLATE 271

Some terms and definitions:

Term	Definition	Vaccine examples	
GAVI-funded routine vaccines	Routine vaccines, which are funded by GAVI and have a co-financing requirement for countries	PCV, Penta, Rota, Yellow fever	
Supplementary vaccines	Second dose or campaign related vaccines	IPV, Measles 2nd dose ,MR campaign, M campaign	
Non-GAVI-funded routine vaccines	Routine vaccines, which are not funded by GAVI but are provided by UNICEF	BCG, OPV, measles	
Vaccines	All vaccines	All	

Introduction

1.	How familiar are you with the co-financing policy for GAVI-funded routine vaccines? (<i>Please select only one answer, by ticking the relevant box</i>)		
	☐ Deep understanding		
	☐ Good understanding		
	☐ Some understanding		
	☐ Little understanding		
	☐ No understanding		
_ 2.	In your opinion, how easy/difficult has it been for your country to successfully implement the co-financing policy? (Please select only one answer, by ticking the relevant box)		
	☐ Very easy		
	☐ Relatively easy		
	☐ Neither easy or hard		
	☐ Relatively difficult		
	☐ Difficult		
	tent to which co-financing has driven planning and decision making for new vaccine roductions		
3.	What have been the main reasons to introduce (XXX), in your country's most recent GAVI-funded vaccine? (Please select all answers that apply, by ticking all relevant boxes)		
	☐ High degree of political prioritisation		
	☐ Evidence on cost-effectiveness of vaccines		
	$\hfill \square$ Deemed financially sustainable from government sources in the mid-long term		

⁷¹ Sent to countries that have not defaulted in the last two years, and are not paying for traditional vaccines, i.e. Bangladesh, Bhutan, Comoros, Eritrea, Haiti, Korea DPR, Lao PDR, Liberia, Myanmar, São Tomé, Somalia, Timor-Leste.

	\square Availability of donor funding
	☐ Ability to meet MDG targets
	$\hfill\square$ Immunisation's ability to save lives / impact on reduction of burden of disease
	☐ Other – please specify:
4.	In order for us to understand how the co-financing policy works with your national planning and budgeting processes, has your country ever encountered difficulties conducting national planning and budgeting due to any of the following reasons? (Please select all answers that apply, by ticking all relevant boxes)
	$\hfill\Box$ Co-payment requirements perceived too high in relation to your immunisation budget
	\Box Timing aspects of GAVI co-financing requirements (e.g. issue date of Decision letter for co-financing too late in the fiscal year, other)
	☐ Other aspects - please explain:
5.	What actions has the government taken to increase its ownership of vaccine financing and/or to meet its co-financing requirements for GAVI-funded routine vaccines? (Please select all answers that apply, by ticking all relevant boxes)
	$\hfill\square$ Initiative has the support of senior political people (Ministerial level and above)
	\Box The Minister of Health has made public statements in last two years in support of the GAVI cofinancing policy and national funding of vaccines
	☐ Prioritised within national health plans
	☐ Inclusion of a budget line for vaccines / immunisation
	$\hfill \square$ Steadily increasing government vaccine financing as a share of health budget
	\Box Full ownership of financial planning and budgeting for routine vaccines by Ministry of Health, without decisions influenced by Ministries of Finance or other government services
	$\hfill\square$ Existence of distinct legislation on vaccine financing / immunisation
	$\hfill\Box$ Improving coordination and sense of collective ownership of immunisation planning and budgeting between ministries of health and finance
	☐ Other -please specify:
Ex]	perience with implementing the co-financing policy Has the co-financing requirement for GAVI-funded routine vaccines generated any challenges for your national procurement processes and capacities? (Please select all answers that apply, by ticking all relevant boxes)
	\square No challenges, only positive implications, such as improved efforts to build capacity for vaccine procurement, planning and budgeting for vaccines
	☐ Technical knowledge challenges for procurement staff

	☐ Human resource challenges for procurement processes
	$\hfill\Box$ Legal or regulatory reform challenges, or need for other institutional changes at central government
	$\hfill\Box$ Financing challenges for procurement planning, monitoring and implementation
	☐ Vaccine stock-out problems
	\square Coordination challenges with other ministries or government services
	☐ Other - please specify:
7. –	Is your country considering changing procurement processes for vaccines in the future, in response to your co-financing obligations to GAVI? (Please select only one answer, by ticking the relevant box) I don't know
	\square NO
	\square YES, in response to the co-financing requirement to GAVI
	$\hfill\square$ YES, but not in response to the co-financing requirement to GAVI — Please explain:
8.	If the government has stopped paying for non-GAVI-funded vaccines (i.e. traditional vaccines—BCG, OPV, measles) in the last couple of years, why has it stopped? (Please select only one answer, by ticking the relevant box)
	☐ This question doesn't apply, the government has always paid for its non-GAVI-funded vaccines
	$\hfill\square$ Needed less vaccines than forecast, but able to procure those
	\square There was an external source of funding
	\square No allocation or insufficient government funds
	☐ Allocated government funds were not disbursed
	☐ Allocated funds were reallocated to another vaccine programme; if so, which vaccine programme was prioritised (e.g. OPV or measles campaign)?
	$\hfill\Box$ Allocated funds were reallocated to another non-vaccine commodity/programme; if so, which commodity/programme was prioritised?
	☐ Reallocated vaccine budget to co-financing
	☐ Other - please specify:
9.	In your opinion, what would be the repercussions if your country defaulted on its co-financing commitments? (Please select all answers that apply, by ticking all relevant boxes)
	\square No new GAVI-funded routine vaccines would be introduced
	\square No vaccines at all would be introduced
	☐ After one year of default we would lose access to all GAVI-funded routine vaccines

$\hfill \square$ A solution would be negotiated so that the supply of GAVI-funded routine vaccines would not be interrupted					
\square A donor would cover our co-financing commitments					
☐ There would be no repercussions					
\square Other - please spe	ecify:				
co-financing commit	O. In your opinion, how would your country react if GAVI told you that you have not fulfilled your co-financing commitment for the year? (Please select the option that best fits your opinion of your country's likely response, by ticking the relevant box)				
	e-check our accounts and ect payment has been m	would coordinate with Wlade to the right account	HO or the UNICEF country		
\square We would transfe	er funds to cover the clair	med difference immediate	у		
\square We would reprog	ram funds from other no	on-GAVI-funded routine va	ccines		
\square We would reprog	ram funds from other he	ealth intervention areas			
☐ We would reprog immediately	ram funds from other ar	eas of government funding	to cover the difference		
\square We would reprog	\square We would reprogram funds from other areas of donor funding				
\square Other - please spe	ecify:				
Extent to which resources and/or partnerships have been mobilised to meet co-financing requirements 1. Has your country received any technical, financial or other (e.g. advocacy) support in response to co-financing requirements for GAVI-funded routine vaccines? (Please select all answers that apply, by ticking all relevant boxes)					
apply, by ticking all r	irements for GAVI-funde				
apply, by ticking all r	irements for GAVI-funde				
Local / National	irements for GAVI-funder relevant boxes)	ed routine vaccines? (Pleas	Se select all answers that Other (please specify,		
	irements for GAVI-funder relevant boxes)	ed routine vaccines? (Pleas	Se select all answers that Other (please specify,		
Local / National Government	irements for GAVI-funder relevant boxes)	ed routine vaccines? (Pleas	Se select all answers that Other (please specify,		
Local / National Government GAVI Secretariat	irements for GAVI-funder relevant boxes)	ed routine vaccines? (Pleas	Se select all answers that Other (please specify,		
Local / National Government GAVI Secretariat JNICEF	irements for GAVI-funder relevant boxes)	ed routine vaccines? (Pleas	Se select all answers that Other (please specify,		
Local / National Government GAVI Secretariat JNICEF WHO Private sector	irements for GAVI-funder relevant boxes)	ed routine vaccines? (Pleas	Se select all answers that Other (please specify,		
Local / National Government GAVI Secretariat JNICEF WHO Private sector procurement agents	irements for GAVI-funder relevant boxes)	ed routine vaccines? (Pleas	Se select all answers that Other (please specify,		

Multilateral organisations						
Other (please specify)						
I don't know						
purchase these vacc	Final 12. If your country had to fully finance GAVI-funded routine vaccines (i.e. xxx) would it continue to purchase these vaccines? (Please select only one answer, by ticking the relevant box)					
vaccines			,			
	t prioritise GAVI-funded ro or areas of public spendir	•	accines, against other			
\square No, we could not	afford it, although immur	nisation is a priority for o	ur country			
\Box No, we could not afford it, and we would not have the procurement mechanisms in place to negotiate GAVI prices or to plan and procure vaccines without external assistance						
\square Yes, we would prioritise the vaccines, but we would not have the procurement mechanisms place to negotiate GAVI prices or to plan and procure vaccines without external assistance						
\square Yes, we would prioritise the vaccines, only because we receive enough external donor assistance which we could redirect to vaccine purchases from other areas of public spending						
$\hfill\Box$ Yes, we have prioritised domestic funding of immunisation and we would continue to purchase all vaccines implemented today						
☐ Other - please sp	☐ Other - please specify:					
13. In your opinion, what steps is the government willing to take to be able to pay its co-finance commitments for GAVI-funded routine vaccines in 2014-2015? (Please select all answers the apply, by ticking all relevant boxes)						
\square Additional budge	t allocations from the Min	istry of Health				
\square Additional budge	t allocations from other go	overnment sources of fur	nding			
\square Innovative financ	ing strategies and mobilisa	ation of additional donor	resources			
\square Advocacy and aw	\square Advocacy and awareness raising actions in collaboration with NGOs					
☐ Other – please sp	ecify:					
14. If you could change	something about GAVI's	co-financing policy, wha	t would you change and			

why? Please explain:

Country official survey TEMPLATE 372

Some terms and definitions:

Term	Definition	Vaccine examples
GAVI-funded routine vaccines	Routine vaccines, which are funded by GAVI and have a co-financing requirement for countries	PCV, Penta, Rota, Yellow fever
Supplementary vaccines	Second dose or campaign related vaccines	IPV, Measles 2nd dose ,MR campaign, MenA campaign
Non-GAVI-funded routine vaccines	Routine vaccines, which are not funded by GAVI but are provided by UNICEF	BCG, OPV, measles
Vaccines	All vaccines	All

Introduction

1.	How familiar are you with the co-financing policy for GAVI-funded routine vaccines? (Please select only one answer, by ticking the relevant box)
	☐ Deep understanding
	\square Good understanding
	\square Some understanding
	☐ Little understanding
	☐ No understanding
2.	In your opinion, how easy/difficult has it been for your country to successfully implement the co-financing policy? (Please select only one answer, by ticking the relevant box)
	☐ Very easy
	☐ Relatively easy
	☐ Neither easy or hard
	☐ Relatively difficult
	☐ Difficult
	ent to which co-financing has driven planning and decision making for new vaccine roductions
3.	What have been the main reasons to introduce XXX, your country's most recent GAVI-funded vaccine? (Please select all answers that apply, by ticking all relevant boxes)
	\square High degree of political prioritisation
	☐ Evidence on cost-effectiveness of vaccines
	$\hfill\square$ Deemed financially sustainable from government sources in the mid-long term
	☐ Availability of donor funding

⁷² Sent to countries that have defaulted once, and are paying for traditional vaccines, i.e. Cameroun, Chad, Côte d'Ivoire, Ghana, Kenya, Kyrgyz Rep, Lesotho, Mauritania, Nigeria, Solomon Islands, Tanzania, Togo, Uganda, Uzbekistan, Viet Nam.

	☐ Ability to meet MDG targets
	$\hfill\square$ Immunisation's ability to save lives / impact on reduction of burden of disease
	☐ Other – please specify:
4.	In order for us to understand how the co-financing policy works with your national planning and budgeting processes, has your country ever encountered difficulties conducting national planning and budgeting due to any of the following reasons? (Please select all answers that apply, by ticking all relevant boxes)
	$\hfill\Box$ Co-payment requirements perceived too high in relation to your immunisation budget
	\Box Timing aspects of GAVI co-financing requirements (e.g. issue date of Decision letter for co-financing too late in the fiscal year, other)
	☐ Other aspects - please explain:
5.	What actions has the government taken to increase its ownership of vaccine financing and/or to meet its co-financing requirements for GAVI-funded routine vaccines? (Please select all answers that apply, by ticking all relevant boxes)
	\square Initiative has the support of senior political people (Ministerial level and above)
	\Box The Minister of Health has made public statements in last two years in support of the GAVI cofinancing policy and national funding of vaccines
	☐ Prioritised within national health plans
	\square Inclusion of a budget line for vaccines / immunisation
	\Box Steadily increasing government vaccine financing as a share of health budget
	\Box Full ownership of financial planning and budgeting for routine vaccines by Ministry of Health, without decisions influenced by Ministries of Finance or other government services
	\square Existence of distinct legislation on vaccine financing / immunisation
	$\hfill\Box$ Improving coordination and sense of collective ownership of immunisation planning and budgeting between ministries of health and finance
	☐ Other -please specify:
Ex]	perience with implementing the co-financing policy Has the co-financing requirement for GAVI-funded routine vaccines generated any challenges for your national procurement processes and capacities? (Please select all answers that apply, by ticking all relevant boxes)
	\square No challenges, only positive implications, such as improved efforts to build capacity for vaccine procurement, planning and budgeting for vaccines
	\square Technical knowledge challenges for procurement staff
	☐ Human resource challenges for procurement processes

	☐ Legal or regulatory reform challenges, or need for other institutional changes at central government
	$\hfill\Box$ Financing challenges for procurement planning, monitoring and implementation
	☐ Vaccine stock-out problems
	$\hfill\Box$ Coordination challenges with other ministries or government services
	☐ Other - please specify:
7.	What are the primary reasons that the government has previously defaulted on co-financing? (Please select all answers that apply, by ticking all relevant boxes)
	$\hfill\square$ Lack of clarity from the GAVI Alliance on co-financing requirements and processes
	$\hfill\square$ Lack of understanding of co-financing requirements and processes by the government
	$\hfill\square$ No longer a political champion in the government supportive of vaccines/immunisation
	☐ Reforms (e.g. decentralisation, privatisation)
	\square No allocation or insufficient funds
	☐ Co-financing obligation is too large
	\square Allocated funds for co-financing were not disbursed
	☐ Disbursements were delayed but eventually disbursed
	☐ Allocated funds were reallocated to another vaccine programme; if so, which vaccine programme was prioritised (e.g. OPV or measles campaign)?
	$\hfill\Box$ Allocated funds were reallocated to another non-vaccine commodity/programme; if so, which commodity/programme was prioritised?
	$\hfill\Box$ Primary sources of funding was time-limited external source (e.g. short-term philanthropic, bilateral donor grant)
	☐ Other - please specify:
8. _	Is your country considering changing procurement processes for vaccines in the future, in response to your co-financing obligations to GAVI? (Please select only one answer, by ticking the relevant box) □ I don't know
	\square NO
	\square YES, in response to the co-financing requirement to GAVI
	\square YES, but not in response to the co-financing requirement to GAVI – Please explain:
9.	Has your government always paid for non-GAVI-funded routine vaccines (i.e. traditional vaccines—BCG, OPV, measles)? (Please select only one answer, by ticking the relevant box)
	☐ YES, since the launch of our national immunisation programme and/or the inclusion of a government budget line for vaccine financing

\square YES, but only in the routine vaccines	ne last few years, since the	e introduction of co-financ	ing for GAVI –funded		
\square NO, donors have	always paid for non-GAVI-	funded routine vaccines			
☐ NO, donors have GAVI-funded routine		ew years, since the introd	uction of co-financing for		
\square Other - please spe	ecify:				
co-financing commit	•	when GAVI told you that yect the option that best fit. ont box)	•		
	ed our accounts and coord ent was made to the right	dinated with WHO or the laccount	UNICEF country office to		
\square We transferred fu	inds to cover the claimed	difference immediately			
☐ We reprogramme	ed funds from other non-G	GAVI-funded routine vaccir	nes		
☐ We reprogramme	ed funds from other health	n intervention areas			
☐ We reprogramme immediately	$\hfill \square$ We reprogrammed funds from other areas of government funding to cover the difference immediately				
$\hfill \square$ We reprogrammed funds from other areas of donor funding					
$\hfill \square$ A solution was negotiated so that the supply of GAVI-funded routine vaccines would not be interrupted					
☐ Other - please spe	☐ Other - please specify:				
Extent to which resources and/or partnerships have been mobilised to meet co-financing requirements 11. Has your country received any technical, financial or other (e.g. advocacy) support in response to co-financing requirements for GAVI-funded routine vaccines? (Please select all answers that					
apply, by ticking all r	Technical assistance	Financial assistance	Other (please specify,		
	recriffical assistance	rillalicial assistance	e.g. advocacy)		
Local / National Government					
GAVI Secretariat					
UNICEF					
WHO					

Private sector

procurement agents

why? Please explain:

Non-profit foundations					
International donors					
Multilateral					
organisations					
Other (please specify)					
I don't know					
Final 12. If your country had to fully finance GAVI-funded routine vaccines (i.e. xxx) would it continue to purchase these vaccines? (Please select only one answer, by ticking the relevant box) No, we would not prioritise GAVI-funded routine vaccines against other, more essential					
vaccines					
•	\square No, we would not prioritise GAVI-funded routine vaccines, or any vaccines, against other health interventions or areas of public spending				
\square No, we could not afford it, although immunisation is a priority for our country					
	\square No, we could not afford it, and we would not have the procurement mechanisms in place to negotiate GAVI prices or to plan and procure vaccines without external assistance				
•	\square Yes, we would prioritise the vaccines, but we would not have the procurement mechanisms in place to negotiate GAVI prices or to plan and procure vaccines without external assistance				
\square Yes, we would prioritise the vaccines, only because we receive enough external donor assistance which we could redirect to vaccine purchases from other areas of public spending					
•	\square Yes, we have prioritised domestic funding of immunisation and we would continue to purchase all vaccines implemented today				
\Box Other - please spe	ecify:				
commitments for G	13. In your opinion, what steps is the government willing to take to be able to pay its co-financing commitments for GAVI-funded routine vaccines in 2014-2015? (Please select all answers that apply, by ticking all relevant boxes)				
\square Additional budget	t allocations from the Mi	nistry of Health			
\square Additional budget	allocations from other g	government sources of fund	ding		
\square Innovative financi	ng strategies and mobili	sation of additional donor	resources		
\square Advocacy and aw	areness raising actions in	collaboration with NGOs			
\Box Other – please sp	ecify:				
14. If you could change	something about GAVI's	co-financing policy, what	would you change and		

Country official survey TEMPLATE 473

Some terms and definitions:

Term	Definition	Vaccine examples
GAVI-funded routine vaccines	Routine vaccines, which are funded by GAVI and have a co-financing requirement for countries	PCV, Penta, Rota, Yellow fever
Supplementary vaccines	Second dose or campaign related vaccines	IPV, Measles 2nd dose ,MR campaign, MenA campaign
Non-GAVI-funded routine vaccines	Routine vaccines, which are not funded by GAVI but are provided by UNICEF	BCG, OPV, measles
Vaccines	All vaccines	All

Introduction

1.	How familiar are you with the co-financing policy for GAVI-funded routine vaccines? (<i>Please select only one answer, by ticking the relevant box</i>)
	☐ Deep understanding
	☐ Good understanding
	\square Some understanding
	☐ Little understanding
	☐ No understanding
_ 2.	In your opinion, how easy/difficult has it been for your country to successfully implement the co-financing policy? (Please select only one answer, by ticking the relevant box)
	□ Very easy
	☐ Relatively easy
	☐ Neither easy or hard
	☐ Relatively difficult
	☐ Difficult
	ent to which co-financing has driven planning and decision making for new vaccine roductions
3.	What have been the main reasons to introduce (xxx) in your country's most recent GAVI- funded vaccine? (Please select all answers that apply, by ticking all relevant boxes)
	☐ High degree of political prioritisation
	☐ Evidence on cost-effectiveness of vaccines
	$\hfill\square$ Deemed financially sustainable from government sources in the mid-long term
	☐ Availability of donor funding

⁷³ Sent to countries that have defaulted once, and are not paying for traditional vaccines, i.e. Afghanistan, CAR, DRC, Djibouti, Guinea, Guinea Bissau, Niger, Sierra Leone, Sudan (North), Zimbabwe.

	☐ Ability to meet MDG targets
	$\hfill\square$ Immunisation's ability to save lives / impact on reduction of burden of disease
	☐ Other – please specify:
4.	In order for us to understand how the co-financing policy works with your national planning and budgeting processes, has your country ever encountered difficulties conducting national planning and budgeting due to any of the following reasons? (Please select all answers that apply, by ticking all relevant boxes)
	$\hfill\Box$ Co-payment requirements perceived too high in relation to your immunisation budget
	\Box Timing aspects of GAVI co-financing requirements (e.g. issue date of Decision letter for co-financing too late in the fiscal year, other)
	☐ Other aspects - please explain:
5.	What actions has the government taken to increase its ownership of vaccine financing and/or to meet its co-financing requirements for GAVI-funded routine vaccines? (Please select all answers that apply, by ticking all relevant boxes)
	\square Initiative has the support of senior political people (Ministerial level and above)
	\Box The Minister of Health has made public statements in last two years in support of the GAVI co-financing policy and national funding of vaccines
	☐ Prioritised within national health plans
	☐ Inclusion of a budget line for vaccines / immunisation
	\Box Steadily increasing government vaccine financing as a share of health budget
	\Box Full ownership of financial planning and budgeting for routine vaccines by Ministry of Health, without decisions influenced by Ministries of Finance or other government services
	$\hfill\Box$ Existence of distinct legislation on vaccine financing / immunisation
	$\hfill\Box$ Improving coordination and sense of collective ownership of immunisation planning and budgeting between ministries of health and finance
	☐ Other -please specify:
Ex]	perience with implementing the co-financing policy Has the co-financing requirement for GAVI-funded routine vaccines generated any challenges for your national procurement processes and capacities? (Please select all answers that apply, by ticking all relevant boxes)
	\square No challenges, only positive implications, such as improved efforts to build capacity for vaccine procurement, planning and budgeting for vaccines
	\square Technical knowledge challenges for procurement staff
	☐ Human resource challenges for procurement processes

	Legal or regulatory reform challenges, or need for other institutional changes at central government
	$\hfill\Box$ Financing challenges for procurement planning, monitoring and implementation
	☐ Vaccine stock-out problems
	\square Coordination challenges with other ministries or government services
	☐ Other - please specify:
7.	What are the primary reasons that the government has previously defaulted on co-financing? (Please select all answers that apply, by ticking all relevant boxes)
	$\hfill\square$ Lack of clarity from the GAVI Alliance on co-financing requirements and processes
	$\hfill\square$ Lack of understanding of co-financing requirements and processes by the government
	$\hfill\square$ No longer a political champion in the government supportive of vaccines/immunisation
	☐ Reforms (e.g. decentralisation, privatisation)
	☐ No allocation or insufficient funds
	☐ Co-financing obligation is too large
	\square Allocated funds for co-financing were not disbursed
	☐ Disbursements were delayed but eventually disbursed
	☐ Allocated funds were reallocated to another vaccine programme; if so, which vaccine programme was prioritised (e.g. OPV or measles campaign)?
	$\hfill\square$ Allocated funds were reallocated to another non-vaccine commodity/programme; if so, which commodity/programme was prioritised?
	\Box Primary sources of funding was time-limited external source (e.g. short-term philanthropic, bilateral donor grant)
	☐ Other - please specify:
8. –	Is your country considering changing procurement processes for vaccines in the future, in response to your co-financing obligations to GAVI? (Please select only one answer, by ticking the relevant box) I don't know
	\square NO
	\square YES, in response to the co-financing requirement to GAVI
	\square YES, but not in response to the co-financing requirement to GAVI – Please explain:
9.	If the government has stopped paying for non-GAVI-funded vaccines (i.e. traditional vaccines—BCG, OPV, measles) in the last couple of years, why has it stopped? (Please select only one answer, by ticking the relevant box)
	☐ This question doesn't apply, the government has always paid for its non-GAVI-funded vaccines

\square N	eeded less vacci	nes than forecast, but able	e to procure those	
□ ті	here was an exte	ernal source of funding		
\square N	o allocation or in	nsufficient government fui	nds	
\Box A	llocated governr	ment funds were not disbu	ırsed	
		vere reallocated to anothe pritised (e.g. OPV or measle	• •	o, which vaccine
		vere reallocated to anothe time was prioritised?	r non-vaccine commodity,	/programme; if so, which
□R	eallocated vacci	ne budget to co-financing		
□ 0	ther - please spe	ecify:		
co-fi	nancing commit	widid your country react was: ment for xxx? (Please sele wase, by ticking the relevan	ect the option that best fit	•
		ed our accounts and coord ent was made to the right		JNICEF country office to
\square W	e transferred fu	ınds to cover the claimed o	difference immediately	
\square W	/e reprogramme	d funds from other non-G	AVI-funded routine vaccir	nes
\square W	/e reprogramme	d funds from other health	intervention areas	
	/e reprogramme ediately	d funds from other areas	of government funding to	cover the difference
\square W	/e reprogramme	ed funds from other areas	of donor funding	
	solution was ne rupted	gotiated so that the suppl	y of GAVI-funded routine	vaccines would not be
□o	ther - please spe	ecify:		
requirer 11. Has y to co	Extent to which resources and/or partnerships have been mobilised to meet co-financing requirements 11. Has your country received any technical, financial or other (e.g. advocacy) support in response to co-financing requirements for GAVI-funded routine vaccines? (Please select all answers that apply, by ticking all relevant boxes)			
		Technical assistance	Financial assistance	Other (please specify,
				e.g. advocacy)
Local / N Governm				
GAVI Sec	cretariat			

UNICEF				
WHO				
Private sector	П		П	
procurement agents				
Non-profit foundations				
International donors				
Multilateral organisations				
Other (please specify)				
I don't know				
Final				
12. If your country had	to fully finance GAVI-fund	ed routine vaccines (i.e.	xxx) would it continue to	
purchase these vacc	ines? (Please select only o	ne answer, by ticking the	relevant box)	
☐ No, we would not vaccines	prioritise GAVI-funded ro	utine vaccines against oth	ner, more essential	
	\Box No, we would not prioritise GAVI-funded routine vaccines, or any vaccines, against other health interventions or areas of public spending			
\square No, we could not afford it, although immunisation is a priority for our country			r country	
\square No, we could not afford it, and we would not have the procurement mechanisms in place negotiate GAVI prices or to plan and procure vaccines without external assistance			•	
☐ Yes, we would prioritise the vaccines, but we would not have the procurement mechanism place to negotiate GAVI prices or to plan and procure vaccines without external assistance				
•	oritise the vaccines, only be could redirect to vaccine	_		
\square Yes, we have prio	ritised domestic funding o s implemented today			
☐ Other - please spe				
13. In your opinion, what steps is the government willing to take to be able to pay its co-financi commitments for GAVI-funded routine vaccines in 2014-2015? (Please select all answers that apply, by ticking all relevant boxes)				
☐ Additional budget	t allocations from the Mini	istry of Health		
\square Additional budget	t allocations from other go	overnment sources of fund	ding	
☐ Innovative financi	ing strategies and mobilisa	ntion of additional donor i	resources	

1 /1	If you could change compathing about CAVII's so financing policy, what would you shange an
	☐ Other – please specify:
	☐ Advocacy and awareness raising actions in collaboration with NGOs

GAVI Alliance Co-Financing Policy Evaluation

14. If you could change something about GAVI's co-financing policy, what would you change and why? Please explain:

Country official survey TEMPLATE 574

Some terms and definitions:

Term	Definition	Vaccine examples
GAVI-funded routine vaccines	Routine vaccines, which are funded by GAVI and have a co-financing requirement for countries	PCV, Penta, Rota, Yellow fever
Supplementary vaccines	Second dose or campaign related vaccines	IPV, Measles 2nd dose ,MR campaign, MenA campaign
Non-GAVI-funded routine vaccines	Routine vaccines, which are not funded by GAVI but are provided by UNICEF	BCG, OPV, measles
Vaccines	All vaccines	All

Introduction

1110	
1.	How familiar are you with the co-financing policy for GAVI-funded routine vaccines? (<i>Please select only one answer, by ticking the relevant box</i>)
	☐ Deep understanding
	☐ Good understanding
	☐ Some understanding
	☐ Little understanding
	☐ No understanding
_ 2.	In your opinion, how easy/difficult has it been for your country to successfully implement the co-financing policy? (Please select only one answer, by ticking the relevant box)
	□ Very easy
	☐ Relatively easy
	☐ Neither easy or hard
	☐ Relatively difficult
	☐ Difficult
	tent to which co-financing has driven planning and decision making for new vaccine roductions
3.	What have been the main reasons to introduce (XXX) in your country's most recent GAVI-funded vaccine? (Please select all answers that apply, by ticking all relevant boxes)
	\square High degree of political prioritisation
	☐ Evidence on cost-effectiveness of vaccines
	$\hfill \square$ Deemed financially sustainable from government sources in the mid-long term
	☐ Availability of donor funding

⁷⁴ Sent to countries that have defaulted more than once, i.e. Angola, Congo Republic, Gambia, Kiribati, Pakistan.

	☐ Ability to meet MDG targets
	$\hfill\square$ Immunisation's ability to save lives / impact on reduction of burden of disease
	☐ Other – please specify:
4.	In order for us to understand how the co-financing policy works with your national planning and budgeting processes, has your country ever encountered difficulties conducting national planning and budgeting due to any of the following reasons? (Please select all answers that apply, by ticking all relevant boxes)
	$\hfill\Box$ Co-payment requirements perceived too high in relation to your immunisation budget
	\Box Timing aspects of GAVI co-financing requirements (e.g. issue date of Decision letter for co-financing too late in the fiscal year, other)
	☐ Other aspects - please explain:
5.	What actions has the government taken to increase its ownership of vaccine financing and/or to meet its co-financing requirements for GAVI-funded routine vaccines? (Please select all answers that apply, by ticking all relevant boxes)
	\square Initiative has the support of senior political people (Ministerial level and above)
	\Box The Minister of Health has made public statements in last two years in support of the GAVI co-financing policy and national funding of vaccines
	☐ Prioritised within national health plans
	☐ Inclusion of a budget line for vaccines / immunisation
	\Box Steadily increasing government vaccine financing as a share of health budget
	\Box Full ownership of financial planning and budgeting for routine vaccines by Ministry of Health, without decisions influenced by Ministries of Finance or other government services
	\square Existence of distinct legislation on vaccine financing / immunisation
	$\hfill\Box$ Improving coordination and sense of collective ownership of immunisation planning and budgeting between ministries of health and finance
	☐ Other -please specify:
Ex]	perience with implementing the co-financing policy Has the co-financing requirement for GAVI-funded routine vaccines generated any challenges for your national procurement processes and capacities? (Please select all answers that apply, by ticking all relevant boxes)
	\square No challenges, only positive implications, such as improved efforts to build capacity for vaccine procurement, planning and budgeting for vaccines
	\square Technical knowledge challenges for procurement staff
	☐ Human resource challenges for procurement processes

	Legal or regulatory reform challenges, or need for other institutional changes at central government
	$\hfill\Box$ Financing challenges for procurement planning, monitoring and implementation
	☐ Vaccine stock-out problems
	\square Coordination challenges with other ministries or government services
	☐ Other - please specify:
7.	What are the primary reasons that the government has previously defaulted on co-financing? (Please select all answers that apply, by ticking all relevant boxes)
	$\hfill\square$ Lack of clarity from the GAVI Alliance on co-financing requirements and processes
	$\hfill\square$ Lack of understanding of co-financing requirements and processes by the government
	$\hfill\square$ No longer a political champion in the government supportive of vaccines/immunisation
	☐ Reforms (e.g. decentralisation, privatisation)
	☐ No allocation or insufficient funds
	☐ Co-financing obligation is too large
	\square Allocated funds for co-financing were not disbursed
	☐ Disbursements were delayed but eventually disbursed
	☐ Allocated funds were reallocated to another vaccine programme; if so, which vaccine programme was prioritised (e.g. OPV or measles campaign)?
	$\hfill\square$ Allocated funds were reallocated to another non-vaccine commodity/programme; if so, which commodity/programme was prioritised?
	\Box Primary sources of funding was time-limited external source (e.g. short-term philanthropic, bilateral donor grant)
	☐ Other - please specify:
8. –	Is your country considering changing procurement processes for vaccines in the future, in response to your co-financing obligations to GAVI? (Please select only one answer, by ticking the relevant box) I don't know
	\square NO
	\square YES, in response to the co-financing requirement to GAVI
	\square YES, but not in response to the co-financing requirement to GAVI – Please explain:
9.	If the government has stopped paying for non-GAVI-funded vaccines (i.e. traditional vaccines—BCG, OPV, measles) in the last couple of years, why has it stopped? (Please select only one answer, by ticking the relevant box)
	☐ This question doesn't apply, the government has always paid for its non-GAVI-funded vaccines

\square N	eeded less vacci	nes than forecast, but able	e to procure those	
□ ті	here was an exte	ernal source of funding		
\square N	o allocation or in	nsufficient government fui	nds	
\Box A	llocated governr	ment funds were not disbu	ırsed	
		vere reallocated to anothe pritised (e.g. OPV or measle	• •	o, which vaccine
		vere reallocated to anothe time was prioritised?	r non-vaccine commodity,	/programme; if so, which
□R	eallocated vacci	ne budget to co-financing		
□ 0	ther - please spe	ecify:		
co-fi	nancing commit	widid your country react was: ment for xxx? (Please sele wase, by ticking the relevan	ect the option that best fit	•
		ed our accounts and coord ent was made to the right		JNICEF country office to
\square W	e transferred fu	ınds to cover the claimed o	difference immediately	
\square W	/e reprogramme	d funds from other non-G	AVI-funded routine vaccir	nes
\square W	/e reprogramme	d funds from other health	intervention areas	
	/e reprogramme ediately	d funds from other areas	of government funding to	cover the difference
\square W	/e reprogramme	ed funds from other areas	of donor funding	
	solution was ne rupted	gotiated so that the suppl	y of GAVI-funded routine	vaccines would not be
□o	ther - please spe	ecify:		
requirer 11. Has y to co	Extent to which resources and/or partnerships have been mobilised to meet co-financing requirements 11. Has your country received any technical, financial or other (e.g. advocacy) support in response to co-financing requirements for GAVI-funded routine vaccines? (Please select all answers that apply, by ticking all relevant boxes)			
		Technical assistance	Financial assistance	Other (please specify,
				e.g. advocacy)
Local / N Governm				
GAVI Sec	cretariat			

UNICEF			
WHO			
Private sector procurement agents			
Non-profit foundations			
International donors			
Multilateral organisations			
Other (please specify)			
I don't know			
12. If your country had to fully finance GAVI-funded routine vaccines (i.e. xxx) would it continue to purchase these vaccines? (Please select only one answer, by ticking the relevant box) No, we would not prioritise GAVI-funded routine vaccines against other, more essential vaccines No, we would not prioritise GAVI-funded routine vaccines, or any vaccines, against other health interventions or areas of public spending No, we could not afford it, although immunisation is a priority for our country No, we could not afford it, and we would not have the procurement mechanisms in place to negotiate GAVI prices or to plan and procure vaccines without external assistance Yes, we would prioritise the vaccines, but we would not have the procurement mechanisms in place to negotiate GAVI prices or to plan and procure vaccines without external assistance Yes, we would prioritise the vaccines, only because we receive enough external donor assistance which we could redirect to vaccine purchases from other areas of public spending Yes, we have prioritised domestic funding of immunisation and we would continue to purchase all vaccines implemented today			
 ☐ Other - please specify: 13. In your opinion, what steps is the government willing to take to be able to pay its co-financing commitments for GAVI-funded routine vaccines in 2014-2015? (Please select all answers that apply, by ticking all relevant boxes) 		• •	
\square Additional budget	t allocations from the Mini	istry of Health	
☐ Additional budget	t allocations from other go	overnment sources of fund	ding
\square Innovative financi	ing strategies and mobilisa	ntion of additional donor r	resources

□ Advocacy and awareness raising actions in collaboration with NGOs
 □ Other – please specify:
 14. If you could change something about GAVI's co-financing policy, what would you change and

GAVI Alliance Co-Financing Policy Evaluation

why? Please explain:

Annex 9: UNICEF/WHO country office survey templates

UNICEF country office survey template

Int 1.	roduction How familiar are you with the co-financing policy for GAVI-funded routine vaccines? (Please select only one answer, by ticking the relevant box)
	☐ Deep understanding
	☐ Good understanding
	☐ Some understanding
	☐ Little understanding
	☐ No understanding
2.	In your opinion, how easy/difficult has it been for the country to successfully implement the co-financing policy? (Please select only one answer, by ticking the relevant box)
	☐ Very easy
	☐ Relatively easy
	☐ Neither easy nor hard
	☐ Relatively difficult
	☐ Difficult
3.	In your opinion, how high/low of a priority is the monitoring and implementation of the co- financing policy in relation to other activities of the UNICEF country office in the country? (Please select only one answer, by ticking the relevant box)
	☐ Very high
	☐ Somewhat high
	☐ Neither high nor low
	☐ Somewhat low
	□ Low

Implementation arrangements

4. In your opinion, what are the challenges faced by the country in implementing the co-financing policy? (Please select all answers that apply, by ticking all relevant boxes)

	☐ Timely and sufficient engagement of the government in decision making on suitable and preferred vaccine presentations / formulations to be made available
	☐ Government's ability to pay its co-financing commitments, due to:
	☐ High volume of total copayment commitments
	$\hfill\Box$ Lack of understanding of co-payment obligations and default implications
	☐ Timelines for co-procurement through UNICEF
	☐ Hard currency issues
	☐ Other - Please explain:
	\square Vaccine procurement capacities of the government, such as:
	\square procurement planning, tendering and handling
	\square procurement staff training
	$\hfill \square$ communication processes between Ministries or with the UNICEF country office
	☐ Other key areas - Please explain:
5.	Do you take any out-of-the ordinary measures to help the country address the challenges identified above? Please explain:
	what measures do you take to monitor country payments, or to follow up with the government if behind in co-payments, for GAVI-funded routine vaccines? Do you coordinate with other partners, such as WHO representatives, GAVI officials, or civil society partners? Please explain:
7.	If you have provided assistance in the last two years (2012-2013) to improve the country's procurement capacity to meet co-financing requirements for GAVI-funded routine vaccines, can you please specify the type of assistance offered? (Please select all answers that apply, by ticking all relevant boxes)
	☐ Staff training
	☐ Procurement planning, tendering and handling
	☐ Vaccine delivery
	☐ Other - Please explain:
8.	Do you offer any other assistance to the country in response to co-financing requirements for AVI-funded routine vaccines? (Please select all answers that apply, by ticking all relevant boxes)
	☐ Education and training

	☐ Advocacy and awareness raising (through workshops or other activities)
	\square Technical assistance in immunisation planning and financing
	\Box Financial assistance (to deal with hard currency problems or other reasons)
	☐ Other - Please explain:
9.	How frequently do you update UNICEF PD, the GAVI Secretariat, WHO Representatives or other civil society actors on the progress of GAVI-funded routine vaccine procurement, bottlenecks, unforeseen challenges, other issues (please specify)? How do you share this information? Please explain:
Im	plications
	In your opinion, what are the implications of introducing the co-financing requirement for the GAVI-funded routine vaccines in the country? (Please select all answers that apply, by ticking all relevant boxes)
	$\hfill\Box$ Increased political commitment by the government, and/or prioritisation of vaccine financing in national health planning and budgeting
	$\hfill\square$ Improved procurement capacities at the government level
	$\hfill\square$ Improved coordination and sense of country ownership of immunisation planning and budgeting by the government
	$\hfill\Box$ Increased cost of vaccines co-procured by the government
	☐ Increased procurement costs for the government
	$\hfill\square$ Increased costs for monitoring and support by the UNICEF Country Office
	☐ Other - Please explain:
11.	In your opinion, if the country had to fully finance its GAVI-funded routine vaccines, would it continue to purchase these vaccines? (Please select only one answer, by ticking the relevant box)
	☐ Yes, it would prioritise the vaccines, but it would not have the procurement mechanisms in place to negotiate GAVI prices or to plan and procure vaccines without external assistance
	\square Yes, it would prioritise the vaccines, only because it receives enough external donor assistance which it could redirect to vaccine purchases from other areas of public spending
	$\hfill\Box$ Yes, it has prioritised domestic funding of immunisation and it would continue to purchase all vaccines implemented today
	$\hfill\square$ No, it would not prioritise GAVI-funded routine vaccines against other, more essential vaccines
	☐ No, it would not prioritise GAVI-funded routine vaccines, or any vaccines, against other health interventions or areas of public spending

\square No, it could not afford it, although immunisation is a priority for the country
\square No, it could not afford it, and it would not have the procurement mechanisms in place to negotiate GAVI prices or to plan and procure vaccines without external assistance
☐ Other - Please explain:

Final

- 12. If you could change something about GAVI's co-financing policy, what would you change and why? Please explain:
- 13. In view of assessing the country's own experience from implementing the co-financing policy, we are planning on reaching out to the following government officials. Could you kindly confirm whether these officials, or any other suitable officials, are the most appropriate ones to contact?
- [Insert contact details of EPI Managers and Planning & Budgeting Officers (names / emails / telephone)]

WHO country representative survey

Introduction

1.	How familiar are you with the co-financing policy for GAVI-funded routine vaccines? (Please select only one answer, by ticking the relevant box)
	☐ Deep understanding
	☐ Good understanding
	☐ Some understanding
	☐ Little understanding
	\square No understanding
2.	In your opinion, how easy/difficult has it been for the country to successfully implement the co-financing policy? (Please select only one answer, by ticking the relevant box)
	□ Very easy
	☐ Relatively easy
	☐ Neither easy nor hard
	☐ Relatively difficult
	☐ Difficult
3.	In your opinion, how high/low of a priority is the monitoring and implementation of the co- financing policy in relation to other activities of the WHO in the country? (Please select only one answer, by ticking the relevant box)
	□ Very high
	☐ Somewhat high
	☐ Neither high nor low
	☐ Somewhat low
	□ Low
	plementation arrangements In your opinion, what are the challenges faced by the country in implementing the co-financing policy? (Please select all answers that apply, by ticking all relevant boxes)
	\Box Timely and sufficient engagement of the government in decision making on suitable and preferred vaccine presentations / formulations to be made available
	$\hfill \Box$ Government's ability to pay its co-financing commitments, due to:
	☐ High volume of total copayment commitments

	\square Lack of understanding of co-payment obligations and default implications
	\square Timelines for co-procurement
	☐ Other - Please explain:
	\square Vaccine procurement capacities of the government, such as:
	\square procurement planning, tendering and handling
	\square procurement staff training
	\square communication processes between Ministries or with the WHO
	☐ Other key areas - Please explain:
5.	Do you take any out-of-the ordinary measures to help the country address the challenges identified above? Please explain:
	What measures do you take to monitor country payments, or to follow up with the government if behind in co-payments, for GAVI-funded routine vaccines? Do you coordinate with other partners, such as UNICEF country offices, GAVI officials, or civil society partners? Please explain:
7.	procurement capacity to meet co-financing requirements for GAVI-funded routine vaccines,
	can you please specify the type of assistance offered? (Please select all answers that apply, by ticking all relevant boxes)
	ticking all relevant boxes)
	ticking all relevant boxes) ☐ Staff training
	ticking all relevant boxes) ☐ Staff training ☐ Procurement planning, tendering and handling
8.	ticking all relevant boxes) ☐ Staff training ☐ Procurement planning, tendering and handling ☐ Vaccine delivery
8.	ticking all relevant boxes) ☐ Staff training ☐ Procurement planning, tendering and handling ☐ Vaccine delivery ☐ Other - Please explain: Do you offer any other assistance to the country in response to co-financing requirements for GAVI-funded routine vaccines? (Please select all answers that apply, by ticking all relevant
8.	ticking all relevant boxes) Staff training Procurement planning, tendering and handling Vaccine delivery Other - Please explain: Do you offer any other assistance to the country in response to co-financing requirements for GAVI-funded routine vaccines? (Please select all answers that apply, by ticking all relevant boxes)
8.	ticking all relevant boxes) Staff training Procurement planning, tendering and handling Vaccine delivery Other - Please explain: Do you offer any other assistance to the country in response to co-financing requirements for GAVI-funded routine vaccines? (Please select all answers that apply, by ticking all relevant boxes) Education and training

9. How frequently do you update the WHO Regional Office, the GAVI Secretariat, UNICEF Representatives or other civil society actors on the progress of GAVI-funded routine vaccine procurement, bottlenecks, unforeseen challenges, or other issues in relation to co-financing? How do you share this information? Please explain:

Implications

10.	In your opinion, what are the implications of introducing the co-financing requirement for the GAVI-funded routine vaccines in the country? (Please select all answers that apply, by ticking all relevant boxes)
	$\hfill\Box$ Increased political commitment by the government, and/or prioritisation of vaccine financing in national health planning and budgeting
	$\hfill\square$ Improved procurement capacities at the government level
	$\hfill\square$ Improved coordination and sense of country ownership of immunisation planning and budgeting by the government
	\square Increased cost of vaccines co-procured by the government
	\square Increased procurement costs for the government
	\square Increased costs for monitoring and support by the WHO
	☐ Other - Please explain:
11.	In your opinion, if the country had to fully finance its GAVI-funded routine vaccines, would it continue to purchase these vaccines? (Please select only one answer, by ticking the relevant box)
	\square Yes, it would prioritise the vaccines, but it would not have the procurement mechanisms in place to negotiate GAVI prices or to plan and procure vaccines without external assistance
	\square Yes, it would prioritise the vaccines, only because it receives enough external donor assistance which it could redirect to vaccine purchases from other areas of public spending
	$\hfill\square$ Yes, it has prioritised domestic funding of immunisation and it would continue to purchase all vaccines implemented today
	$\hfill\square$ No, it would not prioritise GAVI-funded routine vaccines against other, more essential vaccines
	\square No, it would not prioritise GAVI-funded routine vaccines, or any vaccines, against other health interventions or areas of public spending
	\square No, it could not afford it, although immunisation is a priority for the country
	\square No, it could not afford it, and it would not have the procurement mechanisms in place to negotiate GAVI prices or to plan and procure vaccines without external assistance
	☐ Other - Please explain:

Final

- 12. If you could change something about GAVI's co-financing policy, what would you change and why? Please explain:
- 13. In view of assessing the country's own experience from implementing the co-financing policy, we are planning on reaching out to the following government officials. Could you kindly confirm whether these officials, or any other suitable officials, are the most appropriate ones to contact?
- [Insert contact details of EPI Managers and Planning & Budgeting Officers (names / emails / telephone)]

Annex 10: List of countries with a history of co-financing

The following 69 countries have co-financed one or several vaccines as an obligation under the initial (2008-2011) and revised (2012-2013) GAVI Alliance co-financing policies from 2010 to 2014.

Afghanistan Ghana Nicaragua

Angola Guinea Niger

Armenia Guinea Bissau Nigeria

Azerbaijan Guyana Pakistan

Bangladesh Haiti Papua New Guinea

Benin Honduras Rwanda

Bhutan Indonesia São Tomé

Bolivia Kenya Senegal

Burkina Faso Kiribati Sierra Leone

Burundi Korea DPR Solomon Islands

Cambodia Kyrgyz Rep Somalia

Cameroun Lao PDR Sri Lanka

CAR Lesotho Sudan (North)

Chad Liberia Tajikistan

Comoros Madagascar Tanzania

Congo Republic Malawi Timor-Leste

Côte d'Ivoire Mali Togo

Djibouti Mauritania Uganda

DRC Moldova Uzbekistan

Eritrea Mongolia Viet Nam

Ethiopia Mozambique Yemen

Gambia Myanmar Zambia

Georgia Nepal Zimbabwe

Annex 11: Detailed methodology

Data triangulation

To the extent possible, we have triangulated the evidence generated from the five different sources of information described here. Specifically, for each evaluation question, we have attempted to match co-financing data evidence with evidence generated from surveys targeting country officials, and evidence generated through similar questions in surveys targeting WHO representative and UNICEF country office respondents. We have added a second layer of validation through matching survey responses and data findings with open-ended questions in our expert consultations. Wherever possible, we have tried to validate statements and survey findings with evidence generated in the published or grey literature and unpublished GAVI Alliance documents and papers submitted to the GAVI Alliance Board. Finally, the country case studies have built on a similar set of questions included in the surveys and consultation questionnaires, following a more open-ended, and in-depth format of information collection.

We recognise that obtaining accurate answers to sensitive issues such as behavioural predispositions to co-financing defaults, access to GAVI Alliance financial support and willingness-to-pay for vaccines by countries, is very challenging. Therefore we have attempted to seek answers to these issues by addressing a number of different questions, the collective answers to which would give us a weighted finding which we could report with greater confidence on these issues.

Experts and GAVI Secretariat staff consultations

During the inception phase of the project a limited number of key stakeholder interviews were carried out, with the main aim of gathering advice and relevant information on how to design and prepare the data collection phase of the project.

Based on the input from the inception phase interviews and consultations with GAVI Alliance officials we prepared a list of prospective interviewees, with a total of 56 experts and an additional 17 GAVI Secretariat Country Responsible Officers (CROs). The interviewees were grouped as follows:

- Last policy revision task team
- IF&S Task Team
- GAVI Alliance experts (past & present)
- Industry
- Civil society
- Bilateral donors
- GAVI Secretariat Country Responsible Officers (CROs)

The rationale for selecting the experts is as follows. First, one group, including the policy revision team, key individuals who were part of the original Financing Task Force that decided on the original policy, as well as previous GAVI Alliance CEOs and advisors involved in the development process, were consulted in order to better understand the rationale and technical thinking as to the design of the current policy, challenges and opportunities relevant at the time, and trade-offs between options at the time. Second, we included members of the current IF&S Task Team, as well as GAVI Secretariat officials (including all CROs) and GAVI Alliance partners at central level (UNICEF, WHO, World Bank, Gates Foundation) to assess implementation procedures, enforcement arrangements and monitoring issues, partner coordination and communication efforts, etc. Third, we included current GAVI

Alliance Board members, industry representatives, civil society partners, bilateral donors and independent experts, in order to better understand current thinking and ideas for future direction of the policy.

We prepared customised interview guides for each group and distributed them as attachments to email request. The email requests carried basic information about the evaluation project, and the experts were promised full anonymity. We requested a telephone conversation of an estimated duration of one hour, and we invited the recipients to propose a convenient time. Subsequent email correspondence fixed the dates and times for the interviews. Non-responders were re-contacted with up to two reminder emails.

During the data collection phase itself we interviewed a total of 56 individuals. This figure comprises 44 experts and 12 CROs. Six individuals declined to participate and there were 11 non-responders.

Interviews were conducted by telephone. In our end one or two persons participated in the talks. One expert responded to the interview guide in writing only. One inception phase interview was eventually included among the consultation interviews. Some experts that we interviewed during the inception phase were interviewed once more during the consultations. During the talks we were taking notes, and on that basis we prepared written summaries of the interviews. In a few instances, responding to requests by the expert, we shared a draft summary with the interviewee and had it returned with edits, comments and additional information, which was then duly included in the final summary.

The summaries were then imported into the Nvivo™ software, which is specifically designed to process and analyse qualitative free text data. We processed the data in four iterations. First, we coded responses to questions on the questionnaires, thus effectively sorting the responses by questions. The responses were coded into a total of 89 *question* nodes, each representing a question on one of the seven customised questionnaires that were used for the different expert groups.

Second, identical or similar questions across the different questionnaires were merged, thus reducing the number of *question* nodes to 29. After finalising this stage all expert responses coded to any specific merged *question* node could be generated and read as one continuous text.

Third, treating one *question* node at a time we coded statements to specific *keywords* (or 'nodes'), some of which were predefined and some of which were created during the data processing. This made it possible to generate a collection of all expert statements associated to any specific keyword. Upon finalising this stage 189 nodes, among them 62 nodes for statements related to individual countries, had been created and coded with content (only a handful of predefined nodes had no content coded to them). For instance, the node 'decision letters' contained all statement made about Decision letters: in this case a total of 20 statements made by 13 different experts.

Fourth, we coded selected statements from the various *keyword* nodes to appropriate *themes* nodes that were relevant to the different sections, evaluation questions, issues and analyses in the report. In this process the number of *keyword* nodes increased to 212. The *theme* nodes counted a total of 17 with a total of 149 sub-nodes upon finalising the report. For instance, the *'Policy revision process' theme* node had nine sub-nodes assigned to it; one of which was *'Process was overall good'* (seven statements by six experts were judged to express agreement to that position) and another was *'Weaknesses in the process'* (seven statements by five experts).

Fifth, in connection to each *theme* we prepared a brief *memo* containing a summary of the expert statements on that *theme*. For instance, based on the statements that were coded to the different sub-nodes assigned to the *'Policy revision process'* node one *memo* about the policy revision process was written and linked to that node. Memos were then shared among the team members. Any relevant information in the *memos* we then included in the report. Upon finalising this project 14 *memos* had been written, and part of their content included in the report. We developed additional *themes* and *memos* throughout the entire writing process until the day of submission.

For each iteration we copied the coding ('nodes') in order to preserve our 'footprints' throughout the four iterations, in case an audit should be performed. All coding was done manually by one of the evaluation team members.

Quantitative data analysis

We conducted an exploratory data analysis of the following:

- Co-financing data gathered from the GAVI Secretariat (received on May 19th 2014)
- GAVI funding disbursements by programme year from the GAVI Secretariat (received on February 28th 2014)
- Government expenditure data on health and vaccines extracted through the WHO/UNICEF Joint Report Format Database on immunisation financing, downloaded from WHO's site at: http://apps.who.int/immunization_monitoring/globalsummary/indicators?ir%5Ba%5D=on&c ommit=Ok+with+the+selection on February 17th 2014; local currency values were converted into US dollars using conversation rates from IMF. A quality review of the JRF data resulted in some data entry errors corrections. E.g. local currency had been specified within the JRF data when the size of the figures indicated it was reported in US\$s in comparison to other years for the same country. Less than five such changes were made. Note: Data was only available up to 2012.
- cMYP data from WHO cMYP immunisation financing database
- EPI routine expenditures from WHO National Health Accounts database (downloaded on April 1st 2014)
- GNI data from the World Bank and debt data from the IMF

In an attempt to make consistent comparisons across years, only countries that had complete data for every year of the analysis were included. In other words, any countries missing data from at least one of the data sources were removed from the related analysis. Whenever displaying time series data we are using the country groupings as of 2013. In other words, countries that have transitioned between groupings in the time period in question are depicted as if belonging to their 2013 grouping throughout that time period.

Survey

We conducted two related surveys: one was sent to country EPI managers and Ministry of Health contacts and the second was sent to UNICEF and WHO country representatives. 69 countries have a history of co-financing (see Annex 10: List of countries with a history of co-financing). 68 countries were sent the surveys, three (Burundi, Ghana and Moldova) by country visits. The one excluded

country, Congo Republic, was scheduled for a country visit that in the end did not happen. This happened too late in the process to send an e-mail survey to Congo Republic.

We developed five different survey form templates for the EPI offices survey. Only a few of the questions were modified or replaced in the different templates. The different templates were distributed among country groups according to their mode of traditional vaccines financing and their default history, see Table 18. Survey forms were translated into French, Portuguese, Russian, and Spanish.

Table 18. Distribution of survey templates across country groupings.

Template Template 1	Criterion Sent to countries that have not defaulted in the last two years, and that are paying for traditional vaccines	Countries Armenia, Azerbaijan, Benin, Bolivia, Burkina Faso, Burundi, Cambodia, Ethiopia, Georgia, Guyana, Honduras, Indonesia, Madagascar, Malawi, Mali, Moldova, Mongolia, Mozambique, Nepal, Nicaragua, Papua New Guinea, Rwanda, Senegal, Sri Lanka, Tajikistan, Yemen, Zambia
Template 2	Sent to countries that have not defaulted in the last two years, and are not paying for traditional vaccines	Bangladesh, Bhutan, Comoros, Eritrea, Haiti, Korea DPR, Lao PDR, Liberia, Myanmar, São Tomé, Somalia, Timor-Leste
Template 3	Sent to countries that have defaulted once, and are paying for traditional vaccines	Cameroun, Chad, Côte d'Ivoire, Ghana, Kenya, Kyrgyz Rep, Lesotho, Mauritania, Nigeria, Solomon Islands, Tanzania, Togo, Uganda, Uzbekistan, Viet Nam
Template 4	Sent to countries that have defaulted once, and are not paying for traditional vaccines	Afghanistan, CAR, DRC, Djibouti, Guinea, Guinea Bissau, Niger, Sierra Leone, Sudan (North), Zimbabwe
Template 5	Sent to countries that have defaulted more than once	Angola, Congo Republic, Gambia, Kiribati, Pakistan

We made additional templates for the survey of the UNICEF and WHO country offices. Again, some questions were identical to the EPI offices survey, while others were modified or replaced. Both the UNICEF and WHO templates were in English only.

For all three surveys survey forms were distributed as MS-Word attachments by email, with an accompanying introduction letter from the GAVI Alliance. Respondents were promised full anonymity. This encouraged respondents to be more straightforward in their responses, but has limited our scope for providing identifiable country specific information in the report. We sent up to two reminder emails to non-responders, and after that we reminded all remaining non-responders by telephone.

Country grouping specific response rates for the three surveys

Table 19. Response rates in country survey.

Country grouping	WHO	UNICEF	EPI/MoH	Overall
Low income	80 %	80 %	74 %	-

Intermediate	74 %	63 %	63 %	-
Graduating	71 %	64 %	71 %	-
All countries (n=68)	76 %	75 %	71 %	73 %

We received survey responses from a total of 48 EPI managers and Ministry of Health affiliates; 49 UNICEF country officers; and 52 WHO country representatives (Annex 6: Survey responses from WHO, UNICEF and EPI/MoH country offic), which represents an overall response rate of 73 %. This is exceptionally high, and speaks to the general robustness of our survey data. The response rates are high (\geq 63 %) for all groupings in all three surveys, so survey responses are highly representative for all groupings. We received at least one response from either of the three country offices for all 68 countries, which is to say that we have survey data for all countries in the survey. Note that the respondents were granted full anonymity. Therefore, we are restricted from stating country names in the text whenever the information provided derives from the survey only.

We entered all responses into Excel spreadsheets. We translated responses into English, whenever needed. Tables and graphs were generated and other analyses were performed using the spreadsheets. Relevant findings were then included in the report.

Literature review

We performed a literature search as laid out below, with the results as indicated.

The first search had the objective of reviewing all literature regarding economics and immunisation.

Table 20. Literature search #1, criteria and results.

Source	Search Criteria	Results	
PubMed	PubMed ("developing countries"[MeSH Terms] AND "immunisation programs/economics"[Mesh Terms]) AND ("1990"[PDAT] : "2007"[PDAT])		
PubMed	("developing countries"[MeSH Terms] AND "immunisation programs/economics"[Mesh Terms]) AND ("2007"[PDAT] : "2010"[PDAT])	27	
PubMed	("economics, pharmaceutical"[MeSH Terms] AND "developing countries"[MeSH Terms]) AND ("1990"[PDAT]: "2010"[PDAT])	24	
EconLit (Ovid)	developing countries.mp. [mp=heading words, abstract, title, country as subject] AND immunisation.mp. [mp=heading words, abstract, title, country as subject]	21	
The referer	The references of all relevant articles were reviewed to include any additional relevant articles.		

The second search had the objectives of synthesising and assessing evidence 1) on experience with implementing the co-financing policy (barriers, success factors, challenges and opportunities), and 2) on extent to which co-financing has incentivised country ownership and financial sustainability.

Table 21. Literature search #2, criteria and results.

Source	Search Criteria	Results
PubMed	GAVI[Title/Abstract]	203
EconLit	GAVI.mp. [mp=heading words, abstract, title, country as subject]	7

Google	GAVI Alliance AND "co-financing"	194
Scholar		

We reviewed the abstracts, and included all relevant papers in our detailed review. First, titles and abstracts we screened and relevant papers were retrieved. Reference lists in the retrieved papers were searched to identify further eligible studies. Next, relevant papers were read in full and main topics were identified. Content considered relevant was included in a spreadsheet, and subsequently written into the report wherever deemed appropriate.

Lastly, we reviewed documentation provided by the GAVI Alliance regarding the co-financing policy and related policies. This review process was more need-driven and consequently a pragmatic and less structured approach was applied.

Country visits

We aimed to visit five countries representing different criteria. We wanted to learn from the experiences of graduating countries, defaulting countries and those who are paying co-financing but not for their traditional vaccines. During the inception phase we discussed the criteria as well as potential candidates with the GAVI Secretariat. The final countries selected were Burundi (meeting its co-financing commitments but not paying for traditional vaccines), Congo Republic (graduating with previous defaults), Ghana (defaulting for the first time in 2013), Guinea Bissau (previous defaults) and Moldova (graduating). Due to scheduling difficulties and time constraints we were only able to visit three countries (Burundi, Ghana and Moldova). In each country we performed in-depth interviews with the EPI team, the Ministry of Health, the Ministry of Finance, civil society and donors. The interview templates were based on the surveys (found in Annex 8: EPI/MoH country official survey templates and Annex 9: UNICEF/WHO country office survey templates). Additional questions were added as appropriate. During the interview, either one or two individuals took notes. These notes were then finalised into a record of each interview. A translator attended all meetings in Burundi and Moldova. Based upon these meeting records, the case summaries were written up (Annex 1: Burundi case study, Annex 2: Ghana case study and Annex 3: Moldova case study) and the survey questionnaires were completed by a member of the research team.

Annex 12: The original co-financing policy (operational from 2008 – 2011)

ANNEX B

Policy brief

GAVI Alliance new vaccine co-financing policy

1. Goal and scope of the policy

The objective of co-financing is to enhance evidence-based decision making and help countries achieve financial sustainability for their national immunisation programmes. From 2008, all countries will progressively co-finance GAVI-supported vaccines.

2. Definition of terms

'Co-financing' means that countries share the cost of GAVI-supported vaccines.

3. Guidelines and procedures

Definition of co-financing

Co-financing is when countries share their vaccine cost with the GAVI Alliance. From 2008, countries are required to start co-financing when introducing new vaccines, and to co-finance existing vaccines beyond the first five years (or equivalent).

Required co-financing amounts

Countries have been divided into four groups according to their expected ability to pay. These are the poorest (GNI / capita < US \$ 1,000 and classified by the UN as 'least developed country'), the intermediate (GNI / capita < US \$ 1000 but not 'least developed country'), and the least poor countries (GNI / capita > US \$ 1,000). A fourth group comprises 'fragile states'. Different levels of co-financing apply to the different country groups as presented in the table below.

Minimum co-financing levels per dose of vaccine

(single or combination, including Yellow Fever)

	Examples	Co-financing per dose (US\$)			
Vaccine		Poorest	Intermediate	Least Poor	Fragile States
No. 1	1st vaccine, single or combination vaccines (including yellow fever)	\$0.20	\$0.30	\$0.30 (+15% annually)	\$0.10
No. 2 and 3	2 nd and 3 rd additional vaccine (single or combination)	\$0.15	\$0.15	\$0.15 (+15% annually)	\$0.15

1

ANNEX B

The co-financing amounts are minimum amounts. The GAVI Alliance encourages countries to co-finance at higher levels to progress more rapidly towards financial sustainability for their immunisation programmes.

Country classification

Please see the annex for an overview of country classification for co-financing levels.

Definition of first, second and third vaccine

A vaccine is due for co-financing if (i) it is a new vaccine, approved for introduction in the country by the GAVI Board in 2007 or later; or (ii) the country has already received 5 years of full GAVI support (or the equivalent in value spread over a longer time period) for the vaccine, and wishes to continue GAVI support for the vaccine. The vaccine defined as the first vaccine for co-financing is the vaccine which first becomes due for cofinancing — either because it is new or because the first five years' worth of support has passed.

For example, a country completes five years of full support for yellow fever vaccine at the end of 2008. The country has been approved for continued support for yellow fever vaccine, but because it has received five years of full support, co-financing is required from 2009. The same country introduces pentavalent vaccine in 2008, and this vaccine, being new, is therefore due for co-financing from the start. Pentavalent will therefore count as the first vaccine in the package because it became due for co-financing first (in 2008), whereas the yellow fever vaccine must be co-financed from 2009 and therefore counts as the second vaccine in the package.

Calculation of co-financing amount

The amount a country is required to co-finance is calculated by multiplying the required number of vaccine doses by the relevant co-financing level. GAVI provides vaccines 'bundled' with vaccine safety materials such as auto-disable syringes, and GAVI pays for this also for vaccines purchased in fulfillment of the co-financing commitment.

In order to calculate the co-financing amounts, countries should use the simple worksheets contained in the application form (for new vaccines) and the annual progress report to GAVI (for continuing vaccine support) to determine their co-financing requirement. Co-financing tables have been added to the report form to help countries calculate their required co-payment. GAVI support will continue as it is today but will be reduced by the co-financed amount, as calculated by the country and confirmed by GAVI in its decision letter to the country.

Co-financing payment and documentation

Countries co-financing commitments are fulfilled when countries have procured, with non-GAVI funds, the appropriate number of vaccine doses as indicated by GAVI in the decision letter to the country. Countries do therefore NOT pay their co-financing amounts to GAVI.

Taking into account countries' differing planning and procurement cycles, countries can procure at any time during the year, as long as the co-financing requirement for a given year is fulfilled by 31st December of that year.

ANNEX B

UNICEF and PAHO will provide documentation to GAVI on country procurement in fulfillment of cofinancing commitments. Countries that choose other procurement mechanisms will be required to document their fulfillment of co-financing commitments.

Default

If a country does not fulfill its co-financing commitment by 31 December of the concerned year, it enters into default with GAVI. The GAVI Secretariat will inform the country of this in writing early in the following year. The country will then have 30 days to respond to this letter in writing, stating the reasons for the default status, and the remedial actions that the country will undertake to fulfill the co-financing requirement.

The GAVI Secretariat and partners will work to support the country to come out of default and fulfill its co-financing commitments. However, if the country remains in default for more than one year, the GAVI Board may suspend support for the concerned vaccine until the co-financing arrears are paid in full. If the country remains in default for two years or more, the Board may decide to suspend other types of GAVI funding, such as immunisation systems support (ISS) and health system strengthening support (HSS) as well.

In exceptional circumstances, such as severe natural, economic, social or political difficulties, that prevent a country from fulfilling their co-financing commitments, the GAVI Board may grant a grace period or an exemption to the country. Such Board decisions will be based on a country assessment conducted with the government, GAVI and GAVI partners.

Revisions to the co-financing levels

The current co-financing levels will remain at least until 2010. The co-financing policy is new, and lessons and experiences made by countries and partners will inform an evaluation of the policy planned for 2010. The co-financing policy will be revised based on the outcomes of the evaluation.

For questions on the co-financing policy, please contact co-financing policy questions@gavialliance.org

Information current as of August 2008

Annex 13: The revised co-financing policy (operational 2012 – present)

GAVI		
GAVI Alliance Revised Co-financing	Version No.: 1.0	Page 1 /4
Policy		

DOCUMENT ADMINISTRATION

VERSION NUMBER	APPROVAL PROCESS	DATE
1.0	MD: Nina Schwalbe, Policy and Performance	
	Reviewed by: GAVI Programme and Policy Committee	22 October 2010
	Approved by: GAVI Alliance Board	01 December 2010
		Effective from: 01 December 2010
		Review: in 2014

GAVI		
GAVI Alliance Revised Co-financing	Version No.: 1.0	Page 2 /4
Policy		

Revised Co-Financing Policy

1. Objectives

- 1.1. The overall objective of the co-financing policy is to put countries on a trajectory towards financial sustainability in order to prepare them for phasing out of GAVI support for new vaccines, recognising that the time frame for attaining financial sustainability will vary across countries.
- 1.2. The intermediate objective for countries with an extended time frame for achieving financial sustainability is to enhance country ownership of vaccine financing.

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 are in default on their co-financing.

3. Principles

- 3.1. All countries shall contribute to new vaccine support.
- 3.2. Co-financing should represent new and additional financing; countries should not use funds allocated for financing other vaccines.
- 3.3. This policy aims to assist countries with their long term planning.

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 moving average, priceadjusted conversion factor.
- 4.2. "Co-financing": GAVI-eligible countries and GAVI contribute to the costs of vaccines.
- 4.3. "Graduating country": A country whose GNI per capita crossed the applicable eligibility threshold and that can no longer apply for new vaccine or cash-based programme support, but continues to receive support for Programmes that have been endorsed for GAVI funding when the country was still eligible.
- 4.4. "**Graduated country**": A country whose GNI per capita has crossed the eligibility threshold and that can no longer apply for new vaccine or cash-based programme

GAVI		
GAVI Alliance Revised Co-financing	Version No.: 1.0	Page 3/4
Policy		

support from GAVI, and whose GAVI multi-year commitments for vaccines and/or cash-based programmes have ended.

- 4.5. "**Graduation process**": The period of time after a country is no longer eligible to apply for GAVI support (and becomes a graduating country) until all GAVI support ends (and the country becomes a graduated country).
- 4.6. "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.

5. Country co-financing groups

- 5.1. **Low Income group**: Countries with GNI per capita at or below the World Bank low-income threshold. Co-financing obligation in 2012 and thereafter: 20 cents per dose (no annual increase).
- 5.2. *Intermediate group*: Countries with GNI per capita above the World Bank low-income threshold but below the GAVI eligibility threshold. Co-financing level in 2012: 20 cents per dose, or the amount per dose paid in 2011, whichever is higher. Thereafter, the co-financing amount per dose increases by 15% each year. For any new vaccine adoptions, the co-financing amount would start at 20 cents per dose, and increase by 15% annually. When countries in the future transition from the low income to the intermediate group, they would start at 20 cents per dose for vaccines, followed by 15% annual increases.
- 5.3. Graduating group: Countries with GNI per capita above the GAVI eligibility threshold, who are still receiving GAVI support. Starting in 2012, co-financing obligations shall increase over four years from rates paid in 2011 in order to reach 100% of the vaccine price in 2016, the year after GAVI support ends. For countries adopting a new vaccine in 2012 (and therefore with no history of co-financing payments for that vaccine), co-financing per dose would equal 20% of the projected 2016 vaccine price (projected price for GAVI countries, unless a set of price projections for GAVI graduates could be developed by the GAVI Alliance). Support for countries that enter the graduating group after 2012 would be phased out in the same manner and over the same number of years as support for countries that were ineligible in 2011.

6. Timeline for implementation, grace period, and updates

- 6.1. Countries will be informed of the co-financing country grouping they are a part of for 2012 and the corresponding co-financing obligations for 2012 following the December 2010 GAVI Alliance Board meeting. These initial classifications will be done according to 2009 GNI per capita data, which were released by the World Bank in July 2010. The calendar year 2011 is a "grace year" whereby countries are informed of their new co-financing group and prepare their budgets for the new obligation requirements for 2012.
- 6.2. Co-financing group thresholds will be updated annually according to the latest GNI p.c. data, which is released by the World Bank in July of each year. Co-financing country

GAVI		
GAVI Alliance Revised Co-financing	Version No.: 1.0	Page 4/4
Policy		

grouping updates will be made by September of each year. Countries will then be informed of any changes to their co-financing grouping and when those changes will take effect. Countries will have the following calendar year as a grace period to prepare their budgets following their change in co-financing grouping. The new co-financing obligations will take effect in the calendar year following the grace year.

7. Default mechanism

- 7.1. Co-financing payments in accordance with this policy are a condition to receive GAVI vaccine support. Fulfillment of the co-financing commitment is determined by the country's purchase of the number of doses set out in the GAVI Secretariat's "decision letter" to the country, or the corresponding dollar amount for vaccines (excluding handling fees, freight, and buffer charges). 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 enters into default when it has not fulfilled its co-financing commitment for a particular year by 31 December of that year.
- 7.3. Countries can apply for, but will not be approved for new vaccine support, when they are in default of their co-financing commitment.
- 7.4. If a country remains in default for more than one year, the GAVI Board may suspend support for the relevant vaccine until the co-financing arrears are paid in full.
- 7.5. There are exceptional circumstances that can prevent a country from fulfilling its cofinancing commitments due to severe natural, economic, social, or political difficulties. In these cases, the GAVI Board may grant a grace period or exemption on a base-bycase basis.

8. Primary data sources

- GNI per capita (Atlas method) from World Bank classifications
- Definition of Low Income Country upper threshold from World Bank classification
- Eligibility threshold adjustment for annual inflation using World Bank deflators
- 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 December 2010.
- 9.2. This policy will be reviewed and updated in 2014 or as and when required. Any amendments to this policy are subject to GAVI Alliance Board approval.

References

- 1. Kaddar M, Lydon P, Levine R. Financial challenges of immunisation: a look at GAVI. Bulletin of the World Health Organization. 2004;82(9):697-702.
- 2. Kamara L, Milstien JB, Patyna M, Lydon P, Levin A, Brenzel L. Strategies for financial sustainability of immunisation programs: A review of thestrategies from 50 national immunisation program financial sustainability plans. Vaccine. 2008;2008(26):6717-26.
- 3. GAVI Alliance. Financial sustainability for immunisation in the poorest countries: lessons from GAVI 2000-2006. Geneva: GAVI Alliance, 2007.
- 4. GAVI Alliance. GAVI facts and figures. Statistics measuring the GAVI Alliance's impact on global immunisation 2014 [04.06.2014]. Available from: http://www.gavialliance.org/advocacy-statistics/.
- 5. GAVI Alliance. New and underused vaccines support 2014 [04.06.2014]. Available from: http://www.gavialliance.org/support/nvs/.
- 6. GAVI Alliance. GAVI Alliance Board meetining 17-18 November. GAVI Alliance Eligibility Policy 2009 [02.06.2014]. Available from:
- http://r4d.org/sites/resultsfordevelopment.org/files/resources/GAVI Alliance Eligibility Report 20091 114.pdf.
- 7. GAVI Alliance. GAVI Alliance Board Meeting, 30 November 1 December 2010 2010 [02.06.2014]. Available from: http://www.gavialliance.org/About/Governance/GAVI-Board/Minutes/2010/30-November/Minutes/Co-financing-Policy-Revisions/.
- 8. GAVI Alliance. Co-financing policy 2014 [04.06.2014]. Available from: http://www.gavialliance.org/about/governance/programme-policies/co-financing/.
- 9. Milstien JB, Kamara L, Lydon P, Mitchell V, Landry S. The GAVI Financing Task Force: one model of partner collaboration. Vaccine. 2008;26(51):6699-705.
- 10. GAVI Alliance. Proposed New Vaccine Financing Policies. GAVI Board Report. GAVI Alliance Board teleconference, 28 July 2006 2006. Available from:
- http://www.gavialliance.org/resources/tel 28Jul2006 VaccineFiPols.pdf.
- 11. Muraskin W. The Global Alliance for Vaccines and Immunisation: Is It a New Model for Effective Public-Private Cooperation in International Public Health? American Journal of Public Health. 2004;94(11):1922–5.
- 12. Hardon A, Blume S. Shifts in global immunisation goals (1984–2004): unfinished agendas and mixed results. Social science & medicine. 2005;60(2):345-56.
- 13. GAVI Alliance. Request for decision on no cost extension of Civil Society Organisation (CSO) type A support", PPC meeting, 17-18 February 2010. 2010.
- 14. Chauke-Moagi BE, Mumba M. New vaccine introduction in the East and Southern African sub-region of the WHO African region in the context of GIVS and MDGs. Vaccine. 2012;30:C3-C8.
- 15. Chee G, Molldrem V, Hsi N, Chankova S. Evaluation of GAVI Phase 1 Performance. Bethesda, MD: Abt Associates Inc.; 2008.
- 16. Gilchrist SAN, Nanni A. Lessons learned in shaping vaccine markets in low-income countries: a review of the vaccine market segment supported by the GAVI Alliance. Health Policy and Planning. 2013;28(8):838-46.
- 17. Saxenian H, Cornejo S, Thorien K, Hecht R, Schwalbe N. An analysis of how the GAVI alliance and low-and middle-income countries can share costs of new vaccines. Health Affairs. 2011;30(6):1122-33.
 18. Maurice J. First countries to be recipients of GAVI funds. Bulletin of the World Health Organization. 2000;78(12):1477-8.
- 19. Implications of the Model on Bridge Financing Policies January 1, 2006. Unpublished document. 20. GAVI Alliance. The GAVI Alliance Strategy and Business Plan 2011-2015 2013 [04.06.2014]. Available from: http://www.gavialliance.org/library/publications/pledging-conference-for-immunisation/4--gavistrategy---business-plan/.
- 21. GAVI Alliance. GAVI Alliance Country Eligibility Policy 2009 [04.06.2014]. Available from: http://www.gavialliance.org/library/gavi-documents/policies/gavi-alliance-country-eligibility-policy/
- 22. GAVI Alliance. GAVI Alliance Graduation Policy 2009 [04.06.2014]. Available from: http://www.gavialliance.org/about/governance/programme-policies/graduation/.

- 23. GAVI Alliance. GAVI Alliance Fragility and Immunisation Policy 2012 [04.06.2014]. Available from: http://www.gavialliance.org/library/gavi-documents/policies/fragility-and-immunisation---a-country-by-country-approach/.
- 24. GAVI Alliance. The GAVI Alliance Vaccine Supply and Procurement Strategy for the period 2011-2015. 2011.
- 25. Alliance G. Key Work Areas and Deliverables: GAVI Alliance 2013-2014 Business Plan. Report to the GAVI Alliance Board, 4-5 December 2012 2012. Available from:
- $\frac{http://www.gavialliance.org/Library/Documents/GAVI-documents/Strategy/GAVI-Business-Plan-2013-2014--Background-narrative/.$
- 26. GAVI Alliance. Co-financing Policy Revision: Principles and Objectives. Doc 07 Co-financing Policy Revision. Report to the GAVI Alliance Board Meeting, 16-17 June 2010 2010 [04.06.2014]. Available from: http://www.gavialliance.org/About/Governance/GAVI-Board/Minutes/2010/16-June/Minutes/Co-financing-Policy-Revision/.
- 27. Glassman A. Beyond methods and studies: Building institutions for better public spending on vaccination. Vaccine. 2013;31, Supplement 3(0):C10-C1.
- 28. McQuestion M, Gnawali D, Kamara C, Kizza D, Mambu-Ma-Disu H, Mbwangue J, et al. Creating sustainable financing and support for immunisation programs in fifteen developing countries. Health Affairs. 2011;30(6):1134-40.
- 29. UNICEF. Product menu for vaccines supplied by UNICEF for the GAVI Alliance 2014 [05.06.2014]. Available from: http://www.unicef.org/supply/files/Product Menu March 2014.pdf.
- 30. Gordon WS, Jones A, Wecker J. Introducing multiple vaccines in low-and lower-middle-income countries: issues, opportunities and challenges. Health policy and planning. 2012;27(suppl 2):ii17-ii26.
- 31. GAVI Alliance. GAVI Alliance Programme and Policy Committee Meeting, 17-18 Feb 2010. Doc 03 Cofinancing Policy Rev. Unpublished document. 2010.
- 32. Jerven M. Poor numbers: how we are misled by African development statistics and what to do about it. Ithaca and London: Cornell University Press; 2013.
- 33. UN-OHRLLS. About LDCs: UN Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States; 2014 [08.06.2014]. Available from: http://unohrlls.org/about-ldcs/.
- 34. GAVI Alliance. Vaccine co-financing, Frequently Asked Questions (June 2013) 2013.
- 35. Brenzel L. Historical Analysis of the Comprehensive Multi-Year Plans in GAVI-Eligible countries (2004-2015): Joint Collaboration Between the Bill & Melinda Gates Foundation and the World Health Organization; 2012 [05.06.2014]. Available from:
- http://www.who.int/immunisation/programmes systems/financing/analyses/Historical cMYP Analysis 2012.pdf.
- 36. Saxenian H, Hecht R, Kaddar M, Schmitt S, Ryckman T, Cornejo S. Overcoming challenges to sustainable immunisation financing: early experiences from GAVI graduating countries. Health Policy and Planning. 2014.
- 37. Alliance G. Immunise Africa 2020 2014 [13.06.2014]. Available from: http://www.gavialliance.org/immunise-africa/.
- 38. Lydon P, Levine R, Makinen M, Brenzel L, Mitchell V, Milstien JB, et al. Introducing new vaccines in the poorest countries: what did we learn from the GAVI experience with financial sustainability? Vaccine. 2008;26(51):6706-16.
- 39. GAVI Alliance. Part II. Strategic Goals and Cross-Cutting Issues GAVI Alliance Strategy and Business Plan 2011-2015 2010.
- 40. GAVI Alliance. Final Meeting Minutes Immunisation Financing and Sustainability (IFS) Task Team Meeting 26 January to 28 January 2009 GAVI Secretariat, 2,Chemin des Mines, GENEVA. Unpublished document 2009.
- 41. GAVI Alliance. Programme and Policy Committee (PPC) Meeting 15-16 April 2009 2009 [16.06.2014]. Available from: http://www.gavialliance.org/about/governance/gavi-board/programme-policy-committee/2009/programme-and-policy-committee-meeting,-15-16-april-2009,-final-minutes/.
- 42. GAVI Alliance. Immunisation Financing and Sustainability Task Team 13 & 14 January 2010 Meeting Minutes 2010.
- 43. GAVI Alliance. Programme and Policy Committee meeting February 2010 GAVI Co-financing Policy Revision: Discussion Note and Draft Project Plan. Unpublished document 2010.
- 44. GAVI Alliance. IF&S Task Team face to face meeting 20-21 January 2011 2011.
- 45. GAVI Alliance. Immunisation Financing and Sustainability Task Team 31 January 1 February 2012, Geneva Face-to-Face Meeting Minutes 2012.

46. GAVI Alliance. Immunisation Financing and Sustainability Task Team 23 - 24 July 2013, UNICEF, New York, Face-to-Face Meeting Minutes 2013.

47. GAVI Alliance. Immunisation Financing and Sustainability Task Team meeting 3 – 5 February 2014 WHO, Copenhagen, Face-to-Face Meeting Minutes 2014.

48. International Monetary Fund. The Joint World Bank–IMF Debt Sustainability Framework for Low-Income Countries 2014 [18.06.2014]. Available from:

https://www.imf.org/external/np/exr/facts/pdf/jdsf.pdf.

49. World Bank. Ghana Overview 2014 [08.06.2014]. Available from:

http://www.worldbank.org/en/country/ghana/overview#1.

50. GAVI Alliance. Building ownership and sustainability: country co-financing of vaccines 2011 [05.06.2014]. Available from: http://www.gavialliance.org/Library/Publications/Pledging-conference-for-immunisation/7--Building-ownership-and-sustainability--country-co-financing-of-vaccines/.

51.WHO. Immunisation, Vaccines and Biologicals . Strategic Advisory Group of Experts (SAGE) on Immunisation 2014 [05.06.2014]. Available from: http://www.who.int/immunisation/policy/sage/en/. 52. Bryson M, Duclos P, Jolly A, Bryson J. A systematic review of national immunisation policy making processes. Vaccine. 2010;28(Suppl. 1):A6-12.

53. Burns J, Mitrovich R, Jauregui B, Matus C, Andrus J. Descriptive analysis of immunisation policy decision making in the Americas. Revista Panamericana de Salud Pública 2009;26:398-404.

54. Rossi IA, Zuber PLF, Dumolard L, Walker DG, Watt J. Introduction of Hib vaccine into national immunisation programmes: A descriptive analysis of global trends. Vaccine. 2007;25(41):7075-80. 55. Shearer JC, Stack ML, Richmond MR, Bear AP, Hajjeh RA, Bishai DM. Accelerating Policy Decisions to Adopt <italic>Haemophilus influenzae</italic> Type b Vaccine: A Global, Multivariable Analysis. PLoS

Med. 2010;7(3):e1000249.

56. Burchett H, Mounier-Jack S, Griffiths U, Biellik R, Ongolo-Zogo P, Chavez E, et al. New vaccine adoption: qualitative study of national decision-making processes in seven low-and middle-income countries. Health policy and planning. 2012;27(suppl 2):ii5-ii16.

57. Gautier L, Faye PC, Senouci K, Mongbo MYA, Benjamin JA, Wachsmuth I, et al. Scaling-up the development of national immunisation technical advisory groups in the Economic Community of West African States: role of a regional organisation, the West African Health Organisation. International Journal of Behavioural and Healthcare Research. 2013;4(3):222-41.

58. Gessner BD, Duclos P, DeRoeck D, Nelson EAS. Informing decision makers: experience and process of 15 National Immunisation Technical Advisory Groups. Vaccine. 2010;28:A1-A5.

59. GAVI Alliance. Glossary F-J 2014 [05.06.2014]. Available from:

http://www.gavialliance.org/glossary/f-j/.

60. Kaddar M, Schmitt S, Makinen M, Milstien J. Global support for new vaccine implementation in middle-income countries. Vaccine. 2013;31:B81-B96.

61. (SIVAC) SNIIaVAC. About Us 2014 [05.06.2014]. Available from: http://www.sivacinitiative.org/about-sivac.