

# Analysis of 22 Financial Sustainability Plans

## EXECUTIVE SUMMARY<sup>1</sup>

The GAVI Financing Task Force (FTF) prepared this paper to inform the Board's decision-making about (1) support for increasing government and partner financial commitments to basic health and immunization at country level; and (2) establishing a bridge funding mechanism for Vaccine Fund recipient countries that have been approved for the introduction of combination vaccines.

This report presents summary analyses of immunization program-specific expenditures and financing from 22 financial sustainability plans (FSPs)<sup>2</sup> submitted by Vaccine Fund grant recipients.<sup>3</sup>

A companion report provides detailed findings (Financial Sustainability Plan Analysis: A look across 22 GAVI countries). Data and background information about financial sustainability plans are available on the new website developed under the auspices of the GAVI Financing Task Force at [http://www.who.int/immunization\\_financing/en/](http://www.who.int/immunization_financing/en/). All findings and inferences from the analyses presented here should be considered with a clear understanding of both the strengths and limitations of the data.<sup>4</sup>

### Financial Sustainability Plan Findings

The financial sustainability plans show that:

**1. Total spending is up.** For the 22 countries included in this analysis, overall spending on immunization has increased since the start of GAVI. The total volume of resources available for national immunization programs (NIP) increased by 47 percent, from US \$98 to US \$144 million, when we compare between a year before and a year after Vaccine Fund resources were made available. If routine immunization services are singled out, the corresponding spending has risen by 61 percent, from US \$62 to US \$100 million.

**2. Governments and partners are spending more on vaccines.** In the aggregate, government funding, which represented on average 51 percent of all funding for routine immunization, has increased by 13 percent in the first few years after Vaccine Fund resources were made available. (This average masks large variations within and between countries: for example, while the government of Madagascar increased its spending by US \$450,000, or 41 percent, government spending in The Gambia decreased by US \$210,000, or a 33 percent decrease.) International support for immunization also has risen by 17 percent since Vaccine Fund resources have been made available. However, most of this increase is financing to support the supplemental immunization activities, with international donors funding more than 80 percent of the needs for campaigns. Partners' financing for *routine* immunization services has increased by US \$3 million across the 22 countries, or 9 percent. Fluctuations in government and partner contributions from one year to the next are observed. This unreliability and unpredictability is a core feature of immunization financing.

**3. The overall budget impact of immunization remains modest although introduction of combination vaccines does increase costs substantially and will put pressure on future health budgets.** Despite the increased spending, immunization represents a small share of

total spending on health by both national governments and donor agencies in most countries. In the period before the Vaccine Fund, the NIP represented 4.0 percent of government health spending on average across the 22 countries; in the period after the Vaccine Fund initiated support, the NIP accounted for 5.7 percent of government health spending. In the countries included in this analysis, this translates into about US \$0.39 per capita for routine plus supplemental program-specific costs, or US \$0.27 for routine costs only.

The picture varies significantly depending on the vaccine presentation, with the older, monovalent products being considerably less costly than the newer combinations, not taking into account program efficiencies that may result from the use of combination vaccines. For the countries introducing Hib containing vaccines, the per capita cost of routine plus supplemental program-specific costs is on average US \$0.94; it is US \$0.81 for routine program costs only. The data suggests that requirements for routine immunization increase by a factor of 1.4 if monovalent hep B is introduced, by a factor of two if DTP-hep B vaccine is introduced, and by a factor of almost three if the pentavalent vaccine is added to immunization schedules.

**4. Vaccine costs account for an increasingly large share of National Immunization Program costs.** In countries introducing new and underused vaccines, expenditures on vaccines and injection supplies account for an increasing share of total spending – from 18 percent in Armenia (with hep B mono) to 74 percent in Ghana (DTP-hep B-Hib) of total routine program-specific expenditures between the pre-Vaccine Fund and the Vaccine Fund periods. This increase is a logical consequence of using the current immunization system to deliver new products, and as a result, saving more lives by protecting children against a wider range of diseases.

With respect to future resource requirements, assuming constant (2004-level) prices, on average all vaccines (traditional and new) will account for some 50 percent of program needs. For the countries that have introduced the Hib containing vaccine, new product purchases will account for an estimated 62 percent of future program costs. For tetravalent – again, assuming constant prices – this figure is 48 percent.

**5. Accelerated Disease Control campaigns account for a large share of National Immunization Program costs.** On average across 22 countries, about one-third of total program-specific expenditures are dedicated to campaigns, including the polio eradication and measles control campaigns. In some countries, campaigns account for more than half of NIP-specific spending, which in part reflects the coincidence between the timing of the financial sustainability plan data collection and the campaigns for polio and measles “catch up” and meningitis. Funding for campaigns is largely from external donor sources, such as UNICEF, Rotary, American Red Cross, the UN Foundation and others.

**6. Future financing is vulnerable.** The gap is growing between the resources required and the resources secured; the transition from the Vaccine Fund to other sources of financing for routine immunization is unclear. The findings from these 22 countries show limited signs of any significant phasing-in of alternatives to Vaccine Fund support. With the notable exception of Guyana and possibly Uzbekistan, the resource requirements of an expanded immunization program greatly outstrip anticipated future financing, unless the contributions of both governments and partners increase substantially.

The findings from financial sustainability plan analyses make clear the magnitude of the challenge, and have created a welcome awareness among all parts of the GAVI community about the need for proactive problem-solving. The information reveals a profound tension between the health and equity goals of GAVI, which require that countries are not denied access to new and underused vaccines simply because they have few financial resources; and the financial sustainability goals, which are quite obviously at risk in situations where governments have few resources and/or place little priority on immunization, and are unable to attract additional partner funding. To arrive at a solution that is both conceptually sound and feasible, it is useful to look systematically at the extent to which the original assumptions of GAVI – the basis for the original offer to countries – have been borne out.

### **Revisiting GAVI Assumptions**

At the inception of the Alliance, partners developed a specific and innovative model to transfer resources to low-income countries for the strengthening of immunization programs and the expansion of health opportunities. The model can be roughly described as:

- The Vaccine Fund would provide five-year, time-limited grants for the introduction of new and underused vaccines, and would not renew those commitments. All countries below the \$1000 GNI threshold and with a DTP3 coverage rate of 50 percent or higher would be given equal access to grant resources, regardless of how programs were financed in the pre-Vaccine Fund period.
- At the half-way point in funding (expected to be two and a half years after the first disbursement), governments were to report to GAVI through Financial Sustainability Plans how they would sustain the program expansion in the period after the conclusion of the first phase Vaccine Fund grant.
- The Vaccine Fund would continue, in a second phase, to provide time-limited grants to support additional service delivery improvements and for the introduction of next-generation products, such as rotavirus and pneumococcus conjugate vaccine.

This was expected to be a functional model under the following assumptions:

- Prices of new and underused vaccines would decline over the initial Vaccine Fund grant period so that the future recurrent cost burden would be relatively modest.
- Two and a half years would be sufficient time for national governments to mobilize new resources to permit the phase-out of Vaccine Fund resources.
- Both governments and partners would increase their financial commitments to the NIP to permit the phase-out of Vaccine Fund resources while still adequately covering program costs, regardless of immunization program finance starting point or macroeconomic conditions.

Current information from the financial sustainability plans and other sources permits the GAVI Board to assess the extent to which starting assumptions were borne out.

- Price reduction. In the most recent procurement round, the prices of combination vaccines have increased rather than declined. In the case of tetravalent vaccine, the

price has increased from about US \$1 per dose in 2000 to almost US \$1.32 in 2005 (including shipping and freight). For pentavalent vaccine, the price has increased from slightly less than US \$3.40 per dose in 2000 to about US \$3.80 per dose in 2005 (including shipping and freight). Future declines in prices are expected as new suppliers enter the market. However, the pace and magnitude of those price changes depend on factors that currently are difficult to predict. And under all scenarios, the price of combination vaccines is likely to be significantly higher than the traditional EPI vaccines because of production costs.

- Five years. To date, only two countries have invested local funds to extend the five-year commitment from the Vaccine Fund to an 8- or even 10-year period. This is likely due to slower-than-expected implementation, poor communication, and relatively short planning periods. Within the current climate, the five-year period for funding (effectively 2.5 years once program cost and financing were fully analyzed) is too short a time frame to expect transition to government and other sources of funding. In addition, many countries started at very low levels of government funding for immunization, reflecting limited ability of the immunization program to compete for resources internally. For example, seven of the 11 countries introducing the pentavalent product and four of the six countries now using the tetravalent vaccine funded less than 50 percent of their immunization program with internal government resources *before* the Vaccine Fund grant was approved. Dramatically changing entrenched spending patterns, particularly in very poor countries, can take many years.
- Government and donor contributions. While modest increases have been observed in both government and donor spending on immunization, there is little sign in many countries that the funding increases will be sufficient to meet the significant increases in resource requirements. In part, this has to do with the inability or reluctance of the public sector to make long-term commitments; however, there are not even rhetorical signals that large additional resource flows are likely under current conditions.

It is useful to note that the lack of large-scale mobilization of donor resources comes at a time when many of the same donor agencies that support immunization programs, at some level, are contributing to the Global Fund to Fight AIDS, TB and Malaria, which in turn is providing grant support to many of the same recipient countries. So, for example, Tanzania faces a likely US \$11.2 million financing gap for immunization in 2006, and has been awarded two-year grants of about US \$30.5 million for AIDS programs, US \$12.7 million for malaria programs, and close to US \$1 million for TB programs (totaling US \$44.2 million over two years). Similarly, Rwanda, which faces a US \$1.4 million financing gap for immunization in 2006, has been awarded a total of US \$36.3 million from the Global Fund.

Given these current realities, sustaining the health gains associated with GAVI in most countries that have introduced combination vaccines will require additional resources from the Vaccine Fund and the GAVI partners, structured in a way to (a) provide incentives for greater financial participation by government and partners, comparable to the high social value of immunization; (b) support improvements in program efficiency; and (c) stimulate movement toward more affordable prices for combination vaccines.

## RECOMMENDATIONS FOR CONSIDERATION

The newly analyzed data from 22 financial sustainability plans, combined with a review of the GAVI model and its starting assumptions, implies the need for three actions—the first two are discussed in the following brief on Bridge Financing – namely, that there is a clear and urgent need to develop a bridge financing mechanism and communicate that to representatives affected countries and second, there is a need to modify some GAVI procedures regarding duration of support and starting information and planning requirements. The third action, and considered here, is the need to advocate effectively for more funding from governments and their bilateral and multilateral partners for National Immunization Programs, in the context of better priority-setting.

At this time, the GAVI Board is requested to provide direction on the following:

- (a) What is the likelihood that bilaterals and multilaterals will be able to increase their funding of health and immunization over the near-term? Could the Board ask major bilateral and multilateral assistance agencies about their willingness and ability to increase financing for health and immunization programs? (This would provide input for consideration of future adaptation of the GAVI model.)
- (b) Can the GAVI partnership take specific steps to facilitate increasing external commitments? For example, should the FTF or some other group produce an advocacy brief on the need for more contributions to be used in discussions between the GAVI Secretariat and international funding agencies?

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## ENDNOTES

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<sup>1</sup> This summary is based on the data review and analytic work of Patrick Lydon, World Health Organization (financial sustainability plan Analysis - A Look Across 22 Countries November 2004). The analyses have benefited from on-going technical review and inputs from members of the GAVI Financing Task Force and the Immunization Financing Database Team.

<sup>2</sup> Recognizing the urgency of starting to plan for the financial arrangements after the conclusion of the current round of Vaccine Fund support, GAVI requires that governments receiving Vaccine Fund resources work with program partners to develop a Financial Sustainability Plan (FSP) in their second year of support. The financial sustainability plan is a document that assesses the key financing challenges facing the national immunization program, and describes the government's approach to mobilizing and effectively using financial resources to support medium- and long-term program objectives.

<sup>3</sup> Armenia, Burkina Faso, Burundi, Cambodia, Côte d'Ivoire, The Gambia, Ghana, Guyana, Haiti, Kenya, Kyrgyzstan, Lao PDR, Madagascar, Mali, Mozambique, Rwanda, Tajikistan, Tanzania, Uganda, Uzbekistan, Vietnam, and Zambia

<sup>4</sup> Several caveats are noteworthy:

- Current findings are based on a short observation period (less than 2 years) for 22 countries, which may not be representative either over time or across a broader range of countries; variation across countries with respect to funding for immunization campaigns may particularly limit the ability to calculate meaningful averages;

- Countries introducing new vaccines are at different stages of implementation, and therefore their cost structures are not strictly comparable;
- To permit cross-country comparison, most expenditure data were limited to immunization program-specific figures. Because of the focus on program-specific costs, the contribution of the national government to the immunization program is not fully accounted for, and estimates under-represent spending on key inputs such as personnel and facilities, which are shared across multiple health programs. On average, shared costs account for about 50-60 percent of total immunization program costs. This means that any estimates of costs will be underestimates of the total costs of delivering immunization services;
- Information on financing does not fully capture the original source of funds in cases where money for immunization is channeled through multilateral organizations, pooled funding, or budget support.