

EXECUTIVE SUMMARY

Introduction

The GAVI Alliance is comprised of partners from the private and public sectors, dedicated to improving health and saving the lives of children through the support of widespread vaccine use. It was created in 1999 as a partnership between multilateral organizations such as WHO, UNICEF, the World Bank and the Bill and Melinda Gates Foundation, bilateral aid organizations, developing country governments, research institutes, civil society and vaccine manufacturers. Under the first phase of GAVI (2000-2005), GAVI adopted a mission of “saving children’s lives and protecting people’s health through the widespread use of safe vaccines, with a particular focus on the needs of developing countries.” During Phase 1, GAVI supported country governments with monetary support through its immunization services support (ISS) program, and in-kind provisions of new and underused vaccines (NVS) and related injection safety equipment (INS). GAVI also undertook initiatives at the global level to support development and introduction of new vaccines, as well as to advocate for increased attention and funding to immunization.

This evaluation was commissioned by the GAVI Board, to examine specific research questions that were developed through a consultative process, thus representing ones where there was broad interest from a variety of stakeholders. Some issues that were later identified as areas of interest, such as the value-for-money of partner-led activities funded by GAVI, were not addressed. Abt began work its work November 2007. An independent Steering Committee provided guidance throughout the implementation of the evaluation. The objectives of this evaluation as specified in the RFP were:

- To identify and learn from the successes and weaknesses of GAVI in Phase 1, including how well it has evolved and learned from experience over the period 2000-2005;
- To contribute to the refinement or adjustment of GAVI policies in the next strategic phase of work; and
- To document the impact and to evaluate the efficiency and effectiveness of the GAVI Alliance’s use of resources during Phase 1.

We organized the research questions posed in the RFP along a framework encompassing program results, organizational structure, management approaches, and lastly cross cutting principles that underpin GAVI’s mission and impact.

Approach and Methods

We used quantitative and qualitative data analysis to address the questions in the RFP. We relied primarily on quantitative data to examine the results of GAVI activities, including country approvals, funding disbursements, immunization coverage data, and vaccine prices. This data is from a variety of sources including WHO, UNICEF, Joint Reporting Forms, World Bank, and the GAVI Secretariat.

To evaluate GAVI’s organizational structures, management approaches, and cross-cutting principles, we conducted interviews of key informants representing GAVI Alliance and GAVI Fund Boards, Working

Group and task team members, GAVI Secretariat staff and independent experts and researchers. Additionally, we held discussions at Regional Working Group (RWG) and EPI Managers' meetings, and conducted country visits to six countries selected to represent outliers, such as higher or weaker performers, stronger management or suspected mismanagement. Related to ADIP management and vaccine pricing and supply, we selected another group of informants comprised of ADIP staff, ADIP Management Committee Members and Permanent Observers, vaccine manufacturers and other partners. Informant interviews were conducted using semi-structured interview guides that were targeted for different types of informants.

We also reviewed internal GAVI documentation, relevant GAVI-commissioned studies and evaluations, as well as external evaluations of GAVI's performance and impact. To the extent that the evaluation questions given to us had been addressed by previous studies and evaluations, we relied on those findings.

An earlier draft of this report was provided to informants for review – all comments were compiled and are included as an annex to this report. Any factual errors brought to our attention through this review process have been corrected. Comments that represent a difference of interpretation or opinion may or may not have been incorporated, however, all comments are presented in the annex.

As specified in the RFP, this evaluation is limited to Phase 1. We considered information on more current developments as provided in GAVI documentation and other evaluations, and incorporated this information if necessary to develop recommendations that reflect the current reality, or to adequately address some of the questions posed. For example, RFP questions related to the ADIPs could not be adequately addressed if we were to ignore developments and information after 2005, including the findings of the GAVI-commissioned ADIP evaluation. However, our data collection was not intended to represent findings related to Phase 2, nor do we evaluate Phase 2 performance.

Overview of Findings

Programs and Activities

During Phase 1, GAVI significantly increased access to immunization, and expanded use of new vaccines through its support to immunization programs in recipient countries. Nearly all eligible countries applied for ISS and INS funding, while 79% of eligible countries applied for HepB vaccine. Uptake of Hib vaccine and YF vaccine was lower, with 25% and 50%, respectively, of eligible countries applying for support. In aggregate, coverage rates increased in GAVI countries during the course of Phase 1 – the DTP3 coverage rate increased from 64% to 71%, HepB3 coverage rate increased from 16% to 46%, and Hib3 coverage rate increased from 1% to 7%. Nonetheless, there is room for improvement of ISS funding to improve the design of the reward incentive, and to provide support to underperforming countries. (*text Sections 4.1.1, 4.1.2, and 4.1.3*)

Overall, ISS and NVS support, adjusted for number of infants, favored LICUS, lower coverage, and lower income countries. In contrast, INS support was distributed nearly proportional to the distribution of infants across country groups, with modestly higher allocations in higher coverage, non-LICUS, and higher income countries. Disparities in immunization coverage based on urban/rural residence and gender were reduced during Phase 1, and changes can be correlated to GAVI funding. However, there was no reduction in disparities based on mother's education or birth order. There is evidence that wealth-based disparities in immunization coverage also decreased during GAVI Phase 1, but this is based on data from five countries only, and is not statistically significant. Despite the overall achievements, there is great variability on a country by country level, and GAVI has not developed effective approaches for facilitating support to underperforming countries. (*text Section 4.1.4*)

The cost per additional child immunized with DTP3 was \$8.31, while the cost per pertussis death averted was \$933. The cost per child reached with HepB/Hib/YF vaccine was \$5.31 – data limitations prevent us from calculating cost per death averted by new vaccine. The lack of cost data disaggregated by vaccine is a very important finding, as it prevents GAVI from accurately evaluating the cost effectiveness of the programs and vaccines that it supports. During Phase 1, GAVI contributed to 15.8 million additional children immunized with DTP3, 90.5 million additional children immunized against HepB, 14.1 million against Hib, and 13 million against yellow fever. The additional children immunized resulted in preventing 1.48 million future deaths from HepB, 141,000 future deaths from pertussis, and 112,000 premature deaths from Hib among the cohort of children born in 2001-2005. Using statistical analysis to calculate the portion of children immunized that can be attributed to GAVI interventions, 2.4 million children were immunized with DTP3, and 40.2 million children immunized with HepB3 during Phase 1. *(text Sections 4.1.5 and 4.3.1)*

GAVI's results in influencing vaccine pricing and supply are more mixed. GAVI's improvements in forecasting and procurement mechanisms, and its long-term funding did attract additional vaccine suppliers, although they were not pre-qualified until after Phase 1. The prices for the two vaccines that represented the bulk of the NVS program did not decline during Phase 1. Given GAVI's preference for vaccine presentations for which there were only single suppliers, its assumption that market forces would bring down vaccine prices was unrealistic. The ADIPs were successful in compiling the disease burden data to support introduction of the vaccines, and advocating for their use. However, little work has been done to tackle important in-country introduction issues (such as cold chain, storage or logistics), which are critical for vaccine introduction. *(text Sections 4.2 and 4.3.3)*

GAVI and its partners were successful in positioning immunization as a centerpiece in international development. Immunization is more prominent within the health literature, and is recognized as a core health service. Significant achievements include aligning immunization with achievement of MDG4, securing the IFFIm, and ensuring funding for Pneumococcal vaccine through the AMC. Given how quickly decisions were made, its loose strategic framework, and the technical challenges of some activities, GAVI's Phase 1 results are impressive. *(text Section 4.3.4)*

Organizational Structures

The GAVI Alliance was designed as an unincorporated partnership governed by a Board consisting of representatives from stakeholders, relying on partner organizations to implement activities. The GAVI Fund was created as a companion organization, with the legal status required to accept, manage, and disburse funding for GAVI Alliance activities, as well as to provide oversight on the GAVI Alliance. The two Boards had very different cultures – with the GAVI Alliance Board being consensus-driven and cognizant of political positions of Board members, while the Fund Board embodied a culture that focused primarily on the final results. Both the GAVI Alliance and the GAVI Fund had minimal management staff. The GAVI Alliance relied on a Working Group, various task teams, and Independent Review Committees for technical analysis, policy development, and program oversight. The WG and task forces were important fora for critical input and debate, and partnership and trust-building. *(text Section 5.1)*

During the course of Phase 1, GAVI undertook incremental governance changes aimed at managing the growing size and complexity of its programs without diminishing the original partnership principles. Two key weaknesses of its governance structure that were never resolved were poorly defined roles and responsibilities of stakeholders and management entities, and poor accountability given the dual GAVI Alliance and GAVI Fund roles. Although GAVI did not always adhere to principles of good governance, its partners were committed and engaged, and its structures were sufficient to allow quick decision making, innovation and flexibility, and open debate and self-assessment. *(text Section 5.2)*

GAVI was successful in gaining and maintaining the commitment of its partners, and continuously sought ways to ensure stakeholder input. A true partnership emerged not only among the most senior leaders in setting broad principles, but among the technical staff of partner organizations who worked together in policy setting, and at regional and country level to support implementation. The effectiveness of the partnership rested on the partners' common purpose, trust and commitment, and strong leadership, which made up for shortfalls in areas such as clarity of partner roles and responsibilities, clear governance structures, and accountability mechanisms. The challenge will be to find ways to formalize relationships and responsibilities without losing the initial enthusiasm and commitment that made the partnership succeed. *(text Section 5.3)*

Management Approaches

Until the introduction of the investment case approach in 2005, GAVI had no formal framework to guide decision making – its early decision making was driven by the need for quick decisions and quick results. The investment case approach instilled rigor to analysis of new activities, but its value was limited by the absence of a strategic framework for resource allocation. Although GAVI has made efforts to consider country priorities and promotes country planning and ownership in some ways, its policies strongly encourage countries to apply for new vaccines. GAVI did not always have strong data and analyses, or universal support, for all its policies. During Phase 1, 18% of GAVI funding was allocated to increasing access to immunization services, 73% to expanding use of new vaccines, 4% to accelerated disease control, and 4% to accelerating development and introduction of new vaccines. It does not appear that these allocations were based on consideration of strategic priorities, activity costs, potential impact, and cost effectiveness. Although GAVI's approach of country-led programming prevented it from making firm programming allocations, its implementation policies (country qualification criteria for NVS and ISS, amount of ISS reward funding, etc.) certainly influenced programming allocations. *(text Section 6.1)*

The incremental organizational changes that took place during Phase 1, particularly the diminution of the WG and task forces, and expansion of the Secretariat, may affect partner ownership of decision-making, reducing the level of commitment at technical and implementation levels of partner organization. The process of group discussions within task forces and the WG had its flaws, but the majority of informants, as well as other studies, found they were important for technical debate, producing the challenging, self-questioning and innovative characteristics that were recognized to be positive attributes under Phase 1. *(text Section 6.1.5)*

Effective communication was difficult in the early years because of the large amount of information for dissemination, and the under-developed communications mechanisms. The WG, RWGs, and ICCs played important roles in facilitating communications among partners at all levels. There is room for improvement in communications between Board members and their constituents, and on the GAVI website. *(text Section 6.2)*

Management of support to recipient countries improved significantly over Phase 1, and is generally considered strong. Nonetheless, there was room for improvement related to follow-up of country specific issues identified through evaluations, indicated on APRs, or reported by the IRCs. In-country mechanisms for monitoring use of funds were not effective in some countries. GAVI's largest investment, NVS, has never been subject to evaluation that incorporates review of program design, implementation, and cost effectiveness. Although GAVI does not appear to score well on the OECD Aid Effectiveness indicators, it does act in ways that reflect the principles of the Paris declaration. *(text Section 6.3)*

GAVI lacked a clear strategy, specific activities, or defined roles and responsibilities related to advocacy. Despite its success in fund raising, many respondents believe that GAVI has not fully carried out its responsibility as the global advocate for immunization. Management of the ADIPs relied on a

Management Committee that many perceive as inappropriately staffed and operating under a poorly-defined scope of work, with limited engagement with the GAVI Board or GAVI Secretariat. GAVI lacked an evaluation policy and framework, and an evaluation plan during Phase 1. The organizational and management challenges that GAVI faced during Phase 1 are very similar to ones identified during the evaluation of the first five years of the GFATM, such as lack of clarity in vision, strategy, and management processes. *(text Sections 6.4 and 6.5)*

Sustainability Approach

GAVI's approach to sustainability was based on a three-pronged strategy encompassing: 1) supporting financial sustainability at country level; 2) influencing vaccine supply and demand to reduce prices; and, 3) developing innovative financing sources. GAVI-introduced Financial Sustainability Plans (FSP) represented the first time NIPs became aware of the full cost of the immunization program. The process for development also broadened the group of stakeholders with responsibility for immunization to include Ministries of Finance. Total funding for immunization increased during Phase 1, mostly as a result of GAVI funding, and mostly for new vaccines. For countries that introduced pentavalent vaccine, immunization program costs totaled 9.2% of government health expenditures. Despite adopting country level sustainability as a core element of its strategy, and much effort to support countries toward sustainability, limited progress was made. Funding flows for immunization have changed such that many bilateral donors, who had previously funded immunization through assistance programs in individual countries, now direct all assistance through GAVI, making it more difficult for countries to generate increased funding from in-country donors. *(text Section 7.1)*

At the global level, GAVI had limited success in influencing vaccine pricing, and had no strategy for influencing vaccine markets in order to obtain more favorable pricing while maintaining vaccine security. In the area of innovative financing, GAVI has had important accomplishments. The IFFIm secured \$1.23 billion of new funding for GAVI. The AMC provides \$1.5 billion for pneumococcal vaccines, as well as an innovative approach for managing supply and pricing. The reality is that funding at these levels eclipses even the most optimistic expectations of recipient country contributions. *(text Sections 4.2.2 and 4.3.4)*

GAVI's commitment to the principle of sustainability is closely linked to its long term vision and strategy. GAVI's funding commitments to date indicate that introducing new vaccines are its highest priority. Its current co-financing policy also encourages countries to apply for more expensive pentavalent vaccine because the minimum co-financing requirement is less than the cost of existing vaccines that they would have to finance themselves. Such policies to promote new vaccine uptake may meet GAVI's short term objectives, but there are no long range agreements on the appropriate level of financial responsibility to be assigned to countries, or projections of GAVI's own ability to continue financing these and other newer vaccines. *(text Sections 6.1.6 and 8.4)*

GAVI's Value-added

GAVI remained true to its principle of added-value, improving, but not replacing, the efforts of its partners. GAVI facilitated great leaps in coordination and consensus building – it is credited with creating a spirit of collaboration and a cohesive immunization agenda. GAVI also made full use of its unique flexibility in accessing funds to raise global immunization funding to unprecedented levels. GAVI pursued innovative approaches to address challenging problems, including ISS funding and ADIPs. GAVI partners realize that for all the strengths and skills of the partner institutions, none of them could have accomplished these results. *(text Section 7.2)*

Because GAVI relied on some degree of ambiguity to build consensus, differences remain among partners around strategic priorities. While it is unlikely that everyone will ever fully agree on the

priorities, GAVI can play an important role in advancing this discussion by providing the data and analysis needed to support decision making, and facilitating open discussions around strategic decisions and resource allocations such that the final policies represent compromises that all partners support. GAVI must decide with its partners the areas where its own Secretariat adds value in management and coordination, versus areas where its partners are better suited to carry out activities. Partner involvement in policy setting and decision making is still critical for creating the atmosphere that characterized Phase 1, that produced the collaboration and innovation which made GAVI successful. GAVI's voice as a global advocate for immunization, representing all the relevant stakeholders to promote the use of vaccines, is a core part of its added value – however, it has primarily used its voice for global level fundraising, and has underutilized its position to build country level ownership and commitment, closely linked with its sustainability strategy. (text Sections 6.1, 6.4.1 and 7.2)

Conclusions and Recommendations

Based on the findings from Phase 1, we propose the following recommendations going forward. These recommendations seek ways to build on strengths and to address weaknesses. The recommendations are grouped into seven broad areas that represent important elements for GAVI's future success, and are prioritized within each of the seven broad areas.

Improving Support to Countries

1. GAVI ISS support has improved DTP3 coverage rates across the set of recipient countries, but there is significant variability at country level, and GAVI has not been effective at supporting underperforming countries. GAVI should focus more attention on improving performance in underperforming countries, working with in-country partners to provide additional support. *Focusing on a few priority countries, the GAVI Secretariat should initiate discussions with partners at country and regional level to identify critical problems, develop individualized solutions, and identify sources of additional inputs. The GAVI Board should institute a mechanism to regularly review progress in underperforming countries.*
2. Overall, GAVI's management of its support to countries is effective, but there is room for improvement in areas such as translation of documents, notification of funding transfers, and better communication of the rationale for IRC recommendations. *The GAVI Secretariat should propose a process for ensuring resolution of problems identified within recipient countries that includes briefings for the Country Support Team of problems identified through one-time evaluations, improving Country Support Team and Finance and Administration coordination regarding funding transfers, and most importantly establishing a process for regular internal review of the problems identified and resolution status.*
3. The ADIPs were effective in compiling data to support new vaccine introduction, and advocating for their use. However, the key weakness of the ADIP model was that it did not adequately prepare countries for vaccine introduction. *The GAVI Secretariat should ensure that the Accelerated Vaccine Introduction project incorporates all the elements of support required at country level (in logistics, cold chain, and other areas) for introduction of Pneumococcal and Rotavirus vaccines, convening independent reviewers.*
4. Although financial monitoring was adequate in the majority of recipient countries, there were countries where ISS funds were used inappropriately. At the same time, the flexibility of GAVI funding, and the minimal reporting burden at country level, were important advantages of GAVI support that should be maintained. GAVI's Transparency and Accountability Policy represents a clear direction forward. *The GAVI Secretariat should ensure appropriate implementation procedures, including specifying response procedures for reported improprieties or other noncompliance.*

Improving Strategic Decision Making

5. GAVI allowed countries to set their own priorities for use of ISS funding, but its overall policies governing support to countries strongly promoted adoption of new vaccines. GAVI did not always have strong scientific evidence, or universal support for all of its strategic policies – such as Hib introduction. As a result, there was a perception that GAVI pushes new vaccines inappropriately. GAVI must ensure that its positions and policies have strong scientific foundations and widespread support throughout its partner organizations, and must seek additional ways to allow countries to set priorities for themselves regarding how to improve its immunization programs, particularly as it embarks on new activities. *The GAVI Board should commission an independent review of how the package of country support feeds into GAVI’s global strategic priorities and whether those priorities correspond to country level priorities, incorporating input from a broad group of recipient countries, feeding into a review of the design of the package of GAVI support to countries. Policy changes to consider include more differentiation among countries eligible to apply for new vaccines – for example, whereas countries with DTP3 coverage rates above 50% were able to apply for HepB, Hib and YF vaccine, that coverage rate might be increased for countries applying for more expensive Pneumococcal vaccine – thus encouraging lower coverage countries to continue to strengthen their existing program before adding more vaccines.*
6. GAVI’s decision making in the early years of Phase 1 focused on speed and results, without an overall strategic framework. To some extent, the lack of clarity may have reflected lingering differences in priorities among partners. Strategic planning has improved significantly with the Phase 2 Strategic Plan and Roadmap, and current workplans include budgets for activities to be undertaken in support of different strategic objectives. Nonetheless, there appears to be limited discussion to prioritize GAVI’s strategic objectives, and to assess the costs required to meet the objectives that takes into consideration their expected impact. *The GAVI Secretariat should provide to the GAVI Board additional information on projected program and workplan costs for achieving various objectives, ensuring that the relative allocations among activities are in line overall strategic priorities, and supported by all partners.*
7. GAVI was not able to provide vaccine cost data disaggregated by vaccine, which limited ability to conduct cost effectiveness analysis of NVS funding – this data is necessary not only for internal programming decisions but also effective advocacy. GAVI realized the importance of this issue and has undertaken steps in Phase 2 to address it. *The GAVI Secretariat should ensure that the current information provided by UNICEF is sufficient to allow accurate cost effectiveness evaluation of its programs.*

Strengthening Evaluation Mechanisms

8. Although GAVI’s NVS represented its largest investment under Phase 1, it has not been independently evaluated, examining components such as program design, implementation, and cost effectiveness. *The GAVI Board should commission an evaluation of NVS including program design, implementation, and cost effectiveness, as well as assesses how it fits into GAVI’s overall strategic framework.*
9. Under Phase 1, GAVI lacked a clear evaluation policy, evaluation framework, and indicators for evaluation – as a result, this evaluation is being completed approximately three years after the end of Phase 1. *The GAVI Board should commission a team to ensure there is partner consensus on the evaluation framework, indicators, and process for Phase 2, so that evaluation of Phase 2 can be conducted in a timely fashion to inform the next phase of GAVI’s work.*
10. One of the core strengths of the partnership under Phase 1 was the high level of commitment and goodwill. At the same time, however, its partner roles and responsibilities and organizational structures were not always clear and were under constant change. To address this weakness,

GAVI has appropriately turned more attention to formalizing the partnership agreements and organizational structures in recent years, but focus should now return to ensuring and revitalizing partner goodwill and commitment. *To maintain appropriate focus on these issues, the GAVI Board should ensure that the Phase 2 evaluation framework includes indicators to evaluate partner satisfaction and commitment, and ensure there is broad partner consensus on appropriate evaluation indicators.*

Ensuring an Effective Partnership

11. Partners believed that GAVI was successful at consensus building because it provided avenues for technical debate and input from partners at the technical and implementation level, necessary both for innovation and consensus building, resulting in programming innovations such as ISS funding and the ADIPs. In the midst of the current reorganization, GAVI should ensure that such mechanisms for partner inputs are integrated into the governance and management structure. *The GAVI Board should examine the structures for technical debate among the partners within the new governance arrangements, consulting with technical and implementation level representatives of partner institutions to solicit their feedback to the currently proposed structures. The GAVI Board should also ensure that the Phase 2 evaluation framework includes evaluation of the effectiveness of structures for coordinating partner technical inputs.*
12. GAVI was generally successful in building trust between partners, which was critical to its success in Phase 1. Nonetheless some issues reflecting lack of trust and understanding, as well as lack of transparency were identified. More open communications would help to alleviate these issues. *The GAVI Secretariat should present a proposal to partners outlining additional ways to ensure that all substantive discussions among partners and with Secretariat staff, including those that occur outside of Board meetings, are shared as openly as possible – either with notes posted for public access on the GAVI website, or on a protected website that all partners can access.*
13. Under Phase 1, it was difficult for developing country Board members to represent their constituents. This weakness is identified across GHPs, and GAVI has tried to address the situation by providing additional support to these Board members. Other ways to solicit country inputs should be explored, not only limited to Board level representation, and taking advantage of partner-coordinated regional events. *The GAVI Secretariat should coordinate with partners to take advantage of opportunities presented by regional meetings to engage in substantive dialogue with countries, and propose a plan for how those discussions would feed into global level decision-making.*
14. During much of Phase 1, the Secretariat was not adequately staffed to manage all of GAVI's activities effectively. In response, the Board has expanded the Secretariat staff to take on additional responsibilities, which may also create discomfort with partners if it appears that the Secretariat is taking over partner efforts. A study was commissioned in 2006 to examine the structure and functions of the Secretariat, and a follow-on study is planned. There should be an ongoing regular mechanism for ensuring that the structure of the Secretariat (size, staffing, role and authority) serves the partnership effectively. *The GAVI Board should ensure the development of a framework and regular process for assessing the Secretariat's structure and performance, ensuring adequate input from GAVI partners.*

Maximizing Added Value

15. In Phase 1, GAVI built credibility as an honest broker and neutral technical expert – overall, its policies were the result of technical debate and consensus involving a variety of partners. There had long been broad support and recommendations for most of GAVI's activities – strengthening immunization programs, introducing Hepatitis B, and improving injection safety – the debate focused on technical strategy. There were still strategic areas, however, where differences of

opinion remained throughout Phase 1. GAVI should do more to advance consensus by providing strong data and analysis to support strategic decision making, and allowing sufficient debate and deliberation so that all partners buy into the final policy decision. *The GAVI Board should ensure there is open access to deliberations and discussions regarding new vaccine policies, mechanisms for ensuring inputs from a broad variety of perspectives, and appropriate analysis to support its policies. The GAVI Board should also request that the Phase 2 evaluation framework incorporate inputs from a variety of perspectives regarding GAVI's effectiveness as an honest broker and technical expert.*

16. While GAVI has been very successful in fund raising during Phase 1, less attention has been paid to building ownership and increasing funding commitments at country level, and strengthening broad commitment to the overall immunization agenda. GAVI must transition from advocacy focused on fund raising and introducing vaccines, to a clear strategy at country level and within the international community that focuses on the additional efforts required from partners and other agencies to improve immunization program performance. There has also been criticism that GAVI has not increased total funding for immunization, merely redirected it to GAVI. *The GAVI Secretariat should work with partners to develop a clear advocacy strategy with targeted messages, particularly at country level. Additionally, the GAVI Board should commission a study that analyzes the historical funding flows for immunization, incorporating data at global, regional and country level, to assess whether total funding for immunization has increased since the inception of GAVI, as well as develops a methodology for reporting on future funding changes.*

Understanding Vaccine Market Dynamics

17. Under Phase 1, GAVI was not very successful at influencing vaccine supply and pricing. Phase 1 demonstrated that it takes a long time to increase vaccine supply – it was eight years between the inception of GAVI and the availability of a second pentavalent vaccine supplier. The ultimate impact on prices is yet to be seen. GAVI must increase its efforts to understand the vaccine market, in order to develop realistic long term pricing projections and goals – this work should be integrated into GAVI's ongoing workplan, with appropriate outputs used to inform strategic planning. *The GAVI Board should commission an in-depth analysis of the vaccine markets that includes analysis of the production costs, technical complexities of various vaccines, transferability of technology, other barriers to entry and demand forecasts, in order to inform procurement strategy, strategic planning, and sustainability policy.*
18. GAVI's vaccine strategy in Phase 1, based on the assumption that creating and demonstrating a market for vaccines in developing countries would attract new suppliers, create competition, and lower prices, did not come to fruition. GAVI must recognize that it is participating in markets with few buyers and sellers and high entry barriers, and develop alternative approaches for procurement of new vaccines that provide sufficient incentives to manufacturers and ensures vaccine security. While GAVI has taken various studies of the vaccine market and the procurement agent function, more should be done to investigate new approaches, since this is a critical component of GAVI's long term mission. *The GAVI Board should commission a study of innovative ways to structure procurement of new vaccines (other than short term fixed price contracts) that may be more advantageous over the long term.*

Reassessing Strategies for Sustainability

19. Lack of long range planning and conflicting objectives (promoting new vaccines vs. improving sustainability) have limited the progress toward financial sustainability at country level. GAVI should reassess its sustainability definition and approach to ensure there is broad partner agreement on the importance of sustainability relative to adding new vaccines, and to develop a long term financing plan for all vaccines. *The GAVI Board should appoint a team to coordinate*

work in this area, starting with a partners meeting to solicit input and build consensus on appropriate principles and policies, leading to development of a sustainability strategy that may incorporate a revised definition of sustainability, revision of the co-financing policy, and new vaccine procurement strategy.