Kyrgyzstan
Case Study

The Global Alliance for Vaccination and Immunization
Health Systems Strengthening Tracking Study

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September 2009

Acknowledgements

This study was prepared by the team of the Health Policy Analysis Unit within the Centre of Health System Development (CHSD), with the technical support of Bernt Andersson from InDevelop-IPM. We wish to gratefully acknowledge all who supported this study. We would like to extend our deep gratitude to all the specialists/experts involved in the GAVI HSS implementation process at the national and oblast levels, including in the Chui, Issyk-kul and Jalalabad oblasts. In particular, we would like to personally thank Mr. Sabyrjan Abdykerimov (Deputy Minister, Focal Point for GAVI HSS in Kyrgyzstan), Ms. Olga Safona (RCI), Ms. Asel Adjaparova (Technical Coordinator of GAVI HSS in Kyrgyzstan) and Melitta Jakab (Adviser, WHO EURO) for their active participation and significant contributions. We acknowledge the work of InDevelop-IPM for their ongoing support throughout the course of this study. Finally, we would like to thank the Global Alliance for Vaccines and Immunizations for their financial and technical support in strengthening the health system in Kyrgyzstan.

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Acronyms

ADB	Asian Development Bank
ADP	Additional Drug Package
CHSD	Centre for Health System Development
CSO	Civil Society Organizations
DFID	Department For International Development, United Kingdom
DHRCI	Department of health reform coordination and implementation
DSSES	Department of state sanitary-epidemiological surveillance
FAP	Feldsher-obstetrician unit
FGP	Family Group Practitioners
FMC	Family Medicine Centre
GFTMH	The Global Fund on TB, Malaria and HIV/AIDS
ICC	Intersectoral Coordinating Committee
ISS	Immunization Service Strengthening
HPC	Health Policy Council
HSS	Health System Strengthening
HPAP	Health Policy Analysis Unit, CHSD
KR	Kyrgyz Republic
KSHRSP	Kyrgyz-Swiss Health Reform Support Project
KSMA	Kyrgyz State Medical Academy
KSMIPGT&CE	Kyrgyz State Medical Institute of Post-Graduate Training and Continuous Education
LSA	Local state administration
MCH	Maternal and child health care
MDG	Millennium Development Goal
MHIF	Mandatory Health Insurance Fund
MOF	Ministry of Finance
MoH	Ministry of Health
MTBF	Medium-Term Budget Framework
PHC	Primary Health Care
POW	Plan of Work
RMIC	Republican Medical Information Centre
RCI	Republican Center of Immune-prophylaxis
RHIC	Republican Health Information Center, MoH of the KR
SDC	Swiss Agency for Development and Cooperation
SGBP	State-Guaranteed Benefit Package

SES	Sanitary-Epidemiological Surveillance Service
SIDA	Swedish International Development Cooperation Agency
SWAp	Sector-Wide Approach
UNICEF	United Nation International Children's Emergency Fund
USAID	United States Agency for International Development
VHC	Village Health Committees
VPDs	Vaccine Preventable Diseases
WB	World Bank
WG	Working group
WHO	World Health Organization

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Executive Summary

The Global Alliance for Vaccines and Immunization (GAVI) was launched in 2000 to increase immunization coverage and reverse widening global disparities in access to vaccines. The partnership includes governments in industrialized and developing countries, the United Nations Children's Fund (UNICEF), World Health Organization (WHO), World Bank, non-governmental organizations (NGOs), foundations, vaccine manufacturers, and public health and research institutions working together to achieve common immunization goals. Health system strengthening (HSS) grants are a relatively new addition to GAVI's funding portfolio. The GAVI Alliance created this new funding window in 2005 based on a multi-country study that identified system-wide barriers to higher immunization coverage. Currently, a total of US $800 million is available from GAVI for HSS to help countries address difficult health systems issues such as management and supervision; health information systems; health financing; infrastructure and transportation; and health workforce numbers, motivation and training.

The GAVI Secretariat, along with its inter-agency HSS Task Team, sought an interim assessment of the HSS application and early implementation experience, with a focus on how countries are planning, budgeting and implementing their programs. With this purpose, GAVI awarded JSI Research and Training, Inc. (JSI) a contract to work with its partner organization in Sweden, InDevelop-IPM, to jointly implement the tracking study. The HSS tracking study was designed to provide real-time evidence from the country level regarding the technical, managerial, and policy processes of GAVI HSS grant implementation. The tracking study spanned a period of 13 months (August 2008 to September 2009) and produced Case Studies in six HSS-recipient countries. Kyrgyzstan is one of the six.

The Kyrgyz Republic is a relatively young state, formed as the result of the dissolution of the Soviet Union in 1991. Its rough terrain impacts not only population settlement patterns but also the ability to deliver services, particularly to remote rural areas. Kyrgyzstan's population in 2006 was approximately 5.2 million, with an annual growth rate of 1.32 percent. The population is concentrated in small areas in the north and southwest in the Chu (north-central), Fergana (south-western), and Talas (north-western) valleys. About two-thirds of the population live in rural areas. Kyrgyzstan, a multi-ethnic society, is also a low-income country, with a GDP per capita of US $433 in 2004[1]. In the early 1990s, the level of socio-economic development in Kyrgyzstan was drastically decreased—leading to a significant reduction in living standards in the country, a growth in unemployment, and an increase in the level of poverty. However, recently, there is a trend of economic growth and decreased poverty levels that creates a favourable environment for health sector reforms.

After Kyrgyzstan gained independence, its health sector, along with other sectors, faced the problem of insufficient financial resources and the inability to maintain the excessive infrastructure, with a predominance of hospital care and specialization of health services, inherited from the Soviet period. The basic principles of Soviet health care were universal access and free health services. However, inherent in the health system was hyper-centralized management, high level of bureaucracy, lack of flexibility, fragmentation and duplication of health care delivery, inefficient methods of financing and the need to maintain a bulky infrastructure which did not allow provision of the declared principles of universal access and absence of payment.

The study used both qualitative and quantitative methods to obtain comprehensive information about HSS proposal development and early implementation experience. Methods included in-depth interviews to (a) assess proposal development using a standard Tracking Study Interview Guideline that was adapted to the Kyrgyz context and to (b) analyze early implementation, using three questionnaires targeted towards individuals responsible for HSS management and implementation at the national, oblast and rayon levels. These questionnaires, developed by the research team, were semi-structured containing open- and closed-ended questions. The questionnaires were piloted and then administered. In addition, document reviews

[1] Kutzin J. 2001. "A Descriptive Framework for Country-level Analysis of Health Care Financing Arrangements." Health Policy 56 (3): 171-204.

were carried out on national, regional and district financial and programmatic reports. These materials provided detailed implementation-level information on financial flows and management practice as well as technical achievements.

Data sources included institutions and individuals that receive resources under GAVI HSS, administer and/or coordinate those resources or provide input to activities of the GAVI HSS components. In total, about 30 individual and group interviews were carried out across the country. Three oblasts and rayons were purposively selected for inclusion in the study. Criteria for selection included distance from the capital, Bishkek (some close and others remote) and rayon-level implementation of specific components of the GAVI HSS grant, notably an economic incentive pilot for primary care staff.

The main goal of the country's current health reform, Manas Taalimi (2006-2010), is to improve the health status of the population through the creation of a responsive, efficient, comprehensive and integrated system of individual and public health care service delivery and through increased responsibility of every citizen, family, society, state power and public administrative body for the health of each person and for society in general. Objectives of the reform are to:

- achieve fairness and accessibility to health services;
- decrease the financial burden of health care for the population;
- increase the effectiveness of the health delivery system;
- improve the quality of the health delivery system; and
- increase the responsiveness and transparency of the health system.

Two of the major areas of activities identified in the reform program are supported by the GAVI HSS grant: (1) support to Village Health Committees (VHCs), aimed at increasing population and community involvement in coping with health-related problems and (2) HSS support for salary incentives for health workers performing vaccination services.

The implementation of Manas Taalimi is taking place under the Sector-wide Approach (SWAp), led by the Ministry of Health (MoH) and its development partners. Development partners provide their support to the sector strategy either through budget support—from so-called joint financiers that include the World Bank, KfW (German aid agency), Department for International Development (DfID), Swiss Agency for Development and Cooperation (SDC) and Swedish International Development Cooperation Agency (SIDA)—or through parallel financing—from WHO, United States Agency for International Development (USAID), and the Global Fund on Tuberculosis, Malaria and HIV/AIDS (GFTMH).

The main donors supporting the immunization program in Kyrgyzstan are as follows:

- WHO provides technical assistance as well as financial support to develop a country Multi-Year Program (cMYP), analytical work and other related documents.
- GAVI provides funds to procure new vaccines.
- UNICEF provides financial support in various areas, such as secure practice of vaccines, cold chain, and training.
- USAID (through the program ZdravPlus) assists in improving the awareness of the population about immunization issues. SDC and SIDA work with Village Health Committees in the area of immunization.

In addition, from 2005 to 2008, the Asian Development Bank (ADB) provided financial support to procure vaccines and equipment for cold chains.

The national immunization program is integrated into the "public health" component within Manas Taalimi. Immunization is part of the delivery of individual and population-based services in the framework of priority programs in Manas Taalimi for the reduction of child mortality through evidence-based health care services. Public health services in Kyrgyzstan are provided by the Sanitation and Epidemiologic Surveillance Service (SES) and Health Promotion Centers (HPCs). SES is responsible for health securing and HPC for health promotion. Infectious disease surveillance and sanitary inspection and control are carried out by the Department of State Sanitary-Epidemiological Surveillance (DSSES). The Republican Center of Immune-prophylaxis (RCI) was created by the MoH in 1994 to strengthen immunization services in the country.

Based on data from the Mid-term Review of Manas Taalimi in May 2008, the percentage of children vaccinated according to the national immunization calendar was found to be high, at 95.8 percent in 2007, although this represents a decline from the previously observed coverage of 99 percent. This decline is most likely due to increasing internal migration. Internal migrants, mostly in the capital Bishkek, constitute a pocket of under-coverage in terms of vaccination.

To preserve immunization advantages as a particularly valuable component of PHC and to maintain its optimal structure in the period of health care system reforms—as well as to formulate basic strategies, goals and objectives in compliance with the global goals of immunization and strategic framework for 2006-2015 recommended by WHO and UNICEF—cMYP, the National Program of Immuno-prophylaxis for 2006-2010, was developed.

In August 2006, WHO invited Kyrgyzstan to apply for GAVI HSS, and the process of application preparation was initiated. In March 2007 (within less than half a year), the application was reviewed and approved. The application process was led by the Intersectoral Coordinating Committee (ICC) and the Deputy Minister. A working group, established on 18 August 2006, was composed of multiple stakeholders, including representatives from the public health sector in general and immunization services (e.g., SES, RCI) and service delivery and broader health system representatives (e.g., MoH, Mandatory Health Insurance Fund [MHIF], Center for Health System Development [CHSD]). RCI and MHIF were actively involved and led the working group, while the CHSD provided research input and technical assistance. In addition, WHO, UNICEF, and the USAID-funded ZdravPlus Project provided technical input on behalf of the wider group of development partners. Having all three parties in the working group created a balanced composition of main stakeholders. Three representatives from WHO and one from the ZdravPlus Project provided significant time and added international experience to the group. However, because the group was large, a smaller core group of five people was identified to put the application together. The process of developing the application lasted from August to October 2006.

Within the health sector in Kyrgyzstan, ICC executes the coordination functions regarding immunoprophylaxis. Moreover, the HPC also reviews/coordinates some issues related to immunoprophylaxis if needed. Both organizations were in existence before the GAVI HSS application process was initiated. The ICC is a national technical coordination committee for immunization issues that was constituted in December 2000. Its membership is presented in the box below.

ICC Membership

Chair: Deputy Minister since April 2008.

Secretary: Deputy Director of the RCI.

Members: Representatives from:

- the DSSEC, MHIF,
- other departments and centers within the MoH, and
- international and civil society organizations: USAID, WHO, UNICEF, World Bank, Soros Foundation, Association for Health Promotion, Kyrgyz-Swiss-Swedish Project (KSSP), ZdravPlus (USAID), and ADB. The committee meets on a quarterly basis or as needed.

A number of factors contributed to a technically sound application even though the time available for writing it was limited. From the beginning and throughout the process, there was strong political support from senior-level government, with the Deputy Minister supervising the work and the Health Policy Council approving the application. Technical assistance, already available in the country and provided by the development partners and other members of the working group, was of a high quality. As a result, the proposal took only three months to develop. The creation of the working group and provision of the technical assistance were facilitated by the already existing cooperation among development partners in SWAp. The active involvement of ICC in the process was another positive element, as ICC contributed to the formulation and identification of the needs in the components.

Manas Taalimi's strong policy framework and existing efforts to strengthen the health system facilitated proposal development. Studies that could be used for identifying barriers to immunization and other PHC services were used. The development of the application was further facilitated by the existing processes and competencies within MoH for planning, financing and monitoring. One example was the existing system developed within SWAp to monitor progress of the health reform program, which could be used, in a slightly modified form, for the GAVI HSS proposal.

Existing studies report that barriers to access and use of primary health care services remain due to lack of providers in remote areas, low salaries and motivation of health care personnel, migration of health care workers to the capital and abroad, and low awareness of entitlements, especially among poor and vulnerable populations. Despite improvements, the poor quality of primary health care—due to less then ideal conditions at the facility level, lack of functioning equipment, and insufficient training/ qualifications of staff—also remains a problem. Although overall immunization coverage is high, there are specific pockets of under-coverage. These are particularly relevant for follow-up vaccines such as DPT-3 for children in rural areas and from poor families, and among urban migrants arriving to the cities from poor rural areas. These pockets of under-coverage are directly connected with access barriers and quality issues. While the immunization program has been strengthened in the past, the overall public health service delivery system and surveillance capacity remain underdeveloped due to low salaries, weak coordination mechanisms with other health improvement structures, under-investment in transportation and the cold chain, and outdated monitoring mechanisms.

The goal of the GAVI HSS grant is to remove health system barriers in order to improve the population's health status—particularly for children from rural areas, poor families and vulnerable groups—through enhancing the effectiveness of primary care and public health services to provide high-quality preventive and curative services and to improve and maintain immunization coverage.

The GAVI HSS proposal has five components; its total budget for 2007–2010 is US $1,153,745.

Table 1: Budget for HSS Support

Component	Budget (USD)
1. Strengthening political commitment to immunization and financial sustainability	41,328
2. Improving the physical infrastructure and working conditions of primary care and public health services	239,996
3. Improving access to high-quality primary care through capacity building, improved management, and introduction of economic incentives	680,465
4. Strengthening routine monitoring of immunization activities and coverage at the level of primary care and public health	77,060
5. Social mobilization and active involvement of the population in prevention and health promotion	73,200
6. Administration, accounting, reporting	41,696
TOTAL	**1,153,745**

As proposed in the application, two positions were established within the MoH to coordinate the implementation of GAVI HSS grant activities: Technical Coordinator and Financial Manager. The Technical Coordinator works closely with all the MoH departments, agencies and bodies involved in GAVI HSS implementation on a regular basis and provides a link for the GAVI Secretariat between health summits as required. Reviewing the implementation and budget for the previous year's Annual Progress Report is done by the Technical Coordinator and presented to the HPC for approval before being sent to the GAVI Secretariat. The issues related to financial management are coordinated by the Financial Manager. The work of both specialists is supervised by the Deputy Minister, Chief Sanitary Doctor of Kyrgyzstan, who is the GAVI focal point, and by HPC and ICC.

The analysis of the early implementation process of GAVI HSS showed the following:

GAVI HSS is targeting several components of the health system: human resources (training and incentives), infrastructure (warehouses repair), equipment (vehicles, refrigerators, etc.) and delivery of immunization services through the primary health care level (performance-based funding). The activities will benefit both the immunization-specific component of the health system and the wider primary health system, and is expected to increase immunization coverage, particularly by addressing under-served areas and the migrant population.

Geographically, the GAVI HSS grant is implemented nationwide and does not target specific regions or districts. The GAVI HSS grant is part of a wider joint donor program for HSS activities and complements what the Government and other donors are doing. It will therefore be difficult to attribute any changes in the health outcome indicators to the implementation of the GAVI HSS proposal.

Achievements to Date

- Overall management and coordination mechanisms are adequately carried out in accordance with the GAVI HSS application. Some activities have already been implemented, and others are in the process of being implemented. The process of reviewing the implementation and budget for the previous year by HPC before submitting it to the GAVI Secretariat reflects well on the coordination and management of this program. However, some parts of the management process still need improvement. To strengthen coordination of some of the activities under the project, staff working on implementation of the project need greater exposure to the international organizations active in this field in Kyrgyzstan.
- To support the implementation of this program, technical assistance is provided by WHO, the Zdrav Plus project (USAID) and SIDA/SDC. This collaborative effort contributes to program activities and the streamlining of the health system in Kyrgyzstan.
- The GAVI HSS grant is implemented in coordination with Manas Taalimi and on-going health system strengthening initiatives within the SWAp framework.
- The GAVI HSS program is fully harmonized with other development partners' strategies and planning processes.
- The most innovative mechanism in the Kyrgyz health system, performance-based funding, which aims to retain health personnel in rural areas, has been introduced. The study to evaluate the impact of this mechanism is underway; the first results will be available by the end of this year.
- The sustainability of GAVI HSS grant activities after its completion is not clearly identified, with the exception of the sub-component, "performance-based payment incentives," in which the GAVI HSS funds will be replaced with MHIF funds.
- The procedures of planning and budgeting are align with the proposed in the application. However, the process of financial flows differs from that was proposed in the application: All financial flows related to GAVI HSS should be integrated into the SWAp mechanism. However, because the MoH faced problems with allocating funds from the investment budget, the GAVI HSS funds have been taken out of the SWAp to avoid negative consequences in implementing GAVI HSS (see more on this in the Case Study).
- Approximately 73 percent of planned funds were used from the first tranche due to the delay in receiving the funds from the GAVI HSS Secretariat; 11 percent of the second tranche, received in July 2008, has been used. The indicators of GAVI HSS performance in Kyrgyzstan are reviewed by ICC and HPC. In addition, GAVI HSS is monitored two times a year during joint reviews of Manas Taalimi before the health summits.

The GAVI HSS program is fully harmonized with other development partners' strategies and planning processes. For example, the activities of the GAVI HSS are included in the revised cMYP for immunization. Consequently, GAVI HSS was reviewed during joint reviews of Manas Taalimi progress in May 2009. The indicators for monitoring the GAVI HSS program are included in the main monitoring and evaluation package.

GAVI HSS funds are incorporated into Manas Taalimi and contribute to the implementation of health strengthening efforts. Other donors contribute to the strategy through budget support or separate financing of part of Manas Taalimi. The calculated cost for all HSS activities of Manas Taalimi relevant to immunization is about US $10 million over the period 2007-2010. The contribution from GAVI HSS is about

10 percent. The major funding comes from the SWAp joint financiers (60 percent). Other contributors are WHO, UNICEF, USAID and the SDC.

In general, the current system of financial management has been able to efficiently provide financing for activities under the GAVI HSS grant. Until now, there were no cases of an organization having problems with using the present system of funding. The only problem the country faced during early implementation of the grant was a slight delay in disbursement of GAVI funds. Thus, the first tranche of funds was provided only in September 2007, the second in June 2008, and the third in March 2009. As a result, the 2007-8 funds were not spent on schedule. The delay of tranches was caused by the necessity of finding new arrangements for transferring the GAVI HSS funds to Kyrgyzstan because the funds could not flow into the SWAp pool. A discussion with the World Bank and other joint financiers was undertaken, and the decision was made that GAVI HSS funds should be transferred to the special account of the MoH in the Central Treasury, an account opened specially for GAVI HSS funds. Thus, the procedure of finding the best solution to the other technical issues related to opening the new account affected the timing for receiving the first tranche and those that followed. Almost 73 percent of funds in the first tranche were utilized. Regarding the funds received in the second tranche, it is worth noting that implementation of planned activities had begun by the end of 2008. This occurred because funds from the first tranche were still being used in 2008. Thus, by May 2009, only 11 percent of funds from the second tranche were utilized.

Actual implementation of planned activities was partly influenced by external factors beyond the control of on-site managers and partners. For example, service delivery and Action Plan implementation did not start until 2008 due to bottlenecks in actual program timeframes and in procurement by the central level of MoH. This delay in turn resulted in changes to some of the planned procurements; e.g., the number of vehicles to be procured had to be reduced due to increased prices. Another factor was the introduction of the Pentavalent vaccine, which slowed down the development of some of the GAVI HSS-funded activities. The Pentavalent vaccine introduction in Kyrgyzstan has been in progress for nearly two years. This vaccine is expected to have valuable implications for both vaccination management and performance as it is a substitute for several vaccines that require complicated management. However, the transition, being quite a complicated one, affected the workloads of officials and linear staff who are also involved in several GAVI HSS program activities.

The delayed start of the GAVI HSS in Kyrgyzstan resulted in a shift in the timeline of the program implementation. Activities actually started in 2008, which has not allowed sufficient time to judge the impact of GAVI HSS on health outcomes. Key activities of the GAVI HSS grant have not yet reached the most problematic regions, such as the Batken oblast. It is important to note that for under-five mortality rates, there are significant differences across oblasts. Follow-up operational evaluations could highlight GAVI HSS's grant's impact on some of these key indicators.

Recommendations

The recommendations include improving and extending the mechanisms for incentives for community involvement in the immunization process and improving the information system for registration of children of migrants so that immunization of the urban migrants can be increased. It is also important to train national supervisors in methods of evaluating vaccine coverage in order to increase the quality of the immunization services and the quality of data.

It is also recommended that the coordination between development partners—UNICEF, WHO, World Bank, in particular—regarding the maintenance of cold chain equipment, particularly refrigerators be strengthened.

Health systems strengthening work, in this case the application and implementation of the GAVI HSS, should be led and coordinated by high-level policy makers.

I. Introduction

a). Description of the GAVI HSS funding

The GAVI Alliance was launched in 2000 to increase immunization coverage and reverse widening global disparities in access to vaccines. Governments in industrialized and developing countries, UNICEF, WHO, the World Bank, NGOs, foundations, vaccine manufacturers, and public health and research institutions work together as partners in the Alliance to achieve common immunization goals, in recognition that only through a strong and united effort can much higher levels of support for global immunization be generated.

HSS grants are a relatively new addition to GAVI's funding portfolio. Based on analytical work that examined system-wide barriers to expanded immunization coverage, in late 2005 the GAVI Alliance Board made new HSS support available to all GAVI-eligible countries. Currently, US $800 million is available from GAVI for HSS to help countries overcome system-wide barriers that constrain productivity and progress in providing immunization and other child and maternal health services. By December 2008, 45 of the 72 countries eligible for GAVI HSS funding had their applications approved. These approved HSS applications have an associated financial commitment of US $532 million.

This innovative and potentially catalytic use of funds for HSS makes it possible for recipient countries to address difficult health systems issues such as management and supervision, health information systems, health financing, infrastructure and transportation, health workforce capacity and incentives, and public-private partnerships and involvement of civil society. With this opportunity, however, comes the challenge of monitoring GAVI's investment and learning from past and ongoing proposal and implementation processes so as to continue to improve them.

The goal of the GAVI HSS proposal for the Kyrgyz Republic is to remove health system barriers in order to improve population health status—particularly for children from rural areas, poor families and vulnerable groups—through enhancing the effectiveness of primary care and public health services to provide high-quality preventive and curative services, and to improve and maintain immunization coverage. To achieve this goal, the GAVI HSS-planned support for the Kyrgyz Republic has five components:

1. Strengthening political commitment to immunization and financial sustainability;
2. Improving the physical infrastructure and working conditions of primary care and public health services;
3. Improving access to high-quality primary care through capacity building, improved management, and introduction of economic incentives;
4. Strengthening routine monitoring of immunization activities and coverage at the level of primary care and public health; and
5. Mobilizing and actively involving the population in prevention and health promotion.

The time-frame of the GAVI application (2007–2010) corresponds to that of the national health care reform program, Manas-Taalimi (2006–2010). The total cost for the application is US $1,154,000.

b). Objectives of the HSS tracking study overall and in the Kyrgyz Republic

- The *primary objective* is to improve the quality of project design/applications and strengthen implementation.
- The *secondary objective* is to develop responsibility and ownership over the monitoring of GAVI HSS and to promote its integration into ongoing processes at the country level.

- The *tertiary objective* is to establish a network of countries implementing HSS—beginning with the countries in the case studies—and to facilitate cross-country learning and capacity building among them.

The Tracking Study has been designed to provide real-time evidence from the country level regarding the technical, managerial, and political processes for the successful implementation of GAVI HSS grants. The end products of this work will be a set of six country case studies, a multi-country workshop and a multi-country synthesis paper.

Specific objectives of the Tracking Study in the Kyrgyz Republic are two-fold and include documenting and describing:

- the management, coordination and financial mechanisms that support HSS implementation at the national, oblast and rayon levels, and
- the status of implementation, with particular focus on the performance measures included in the application for HSS funds.

c). Tracking study methods

To obtain comprehensive information about the process of proposal development and early implementation progress, different methodological approaches (qualitative and quantitative) were used for this Study. The research team looked at retrospective and prospective data. Sources for these data were institutions and individuals receiving resources under GAVI HSS, administering and/or coordinating these resources, and providing any input into the activities of the GAVI HSS components. The following methods were applied:

- **In- Depth interviews:** (1) For the analysis of the proposal development's process, Tracking Study Interview Guidelines were adapted to the Kyrgyz context and administered by individuals who developed the proposal; (2) for the analysis of early implementation of the proposal development process, three questionnaires developed by the Team were administered to the people responsible for HSS management and implementation at the national, oblast and rayon levels. The questionnaires were semi-structured and included open- and closed-ended questions. The questionnaires were piloted before they were actually administered.
- **Document Reviews:** Documents such as national, regional and district financial and programmatic reports were reviewed. These documents provided detailed implementation-level information on financial flows and management practice as well as on technical achievements.

In total, about 30 individual and group interviews were carried out across the country, including those belonging to the following target groups:

- National level: MoH, ICC, Health Policy Council (HPC), Republican Center for Immune-prophylaxis (RCI), Department of State Sanitary-Epidemiological Surveillance (DSSES), Republican Center for Health Promotion (RCHP)
- Oblast level: Family Medicine Center (FMC), Oblast Sanitary-Epidemiological Surveillance Service (SES), Oblast Immunologist
- Rayon level: Family Group Practitioners (FGP), including the health promotion unit, Feldsher-obstetrician unit (FAP), Village Health Committee (VHC)
- International organizations: WHO, World Bank, UNICEF, ZdravPlus (USAID), KSSHP (a Swiss project)
- Three oblasts and rayons were included into this study:
- **Chui oblast, Sokuluk rayon** was included because of its closeness to Bishkek (the capital of the country). In Sokuluk rayon, the GAVI HSS subcomponent—building economic incentives to primary care staff—was piloted.

- **Issyk-Kul oblast, Jetyogyz rayon** was included because the GAVI HSS subcomponent of building economic incentives to primary care staff was also piloted in the rayon. At the same time, facilities here receive support under other components of GAVI HSS.
- **Jalalabad oblast, Aksy rayon** is in the south of the country and was included partly because there are several remote rayons in this oblast, many of which historically have lacked an infrastructure for immunization. Aksy rayon is one of the most remote areas in the south.

d). Description of the review process

Writing the country report for the Kyrgyz Republic has been the responsibility of the Health Policy Analysis Unit of the Center for Health Systems Development (CHSD) in Bishkek. The report was reviewed by members of the core Study Team. After the report was revised, it was discussed in a workshop in Bishkek on 2 July 2009. The report was then finalized by the CHSD, under the supervision of a country manager from the Team.

II. Country Context

Kyrgyz Republic is a relatively young state, formed as the result of the dissolution of the Soviet Union in 1991. Its rough terrain impacts not only population settlement patterns but also the ability to deliver services, particularly to remote rural areas. The country's population in 2006 was approximately 5.2 million, and its annual growth rate was 1.32 percent. The population is concentrated in small areas in the north and southwest in the Chu (north-central), Fergana (south-western), and Talas (north-western) valleys. About two-thirds of the population live in rural areas, and that figure has risen as the predominantly urban Russian population has decreased. Kyrgyzstan is a multi-ethnic society.

a). Health situation, priorities and programs

Kyrgyzstan is a low-income country with a GDP per capita of US $433 in 2004[1]. In the early 1990s, the level of socio-economic development in Kyrgyzstan was drastically decreased, which led to a significant decrease in the country's living standards, growth in unemployment, and an increased level of poverty among the population. However, recently the country has experienced economic growth and decreased poverty levels that create a favorable environment for health sector reforms. The following table shows some of the vital health and population data.

Table 2: Health and Population Data 2006

Population 14 years of age or younger	31%
65 years of age or older	6%
Birth rate per 1,000 population	22.8
Death rate per 1,000 population	7.1
Infant mortality	34.5
Life expectancy for women	72.7 years
Life expectancy for men	64.5 years
Fertility rate	2.7
Population sex ratio males/females	0.96

b). Child and maternal health situation

The health outcome indicators with regard to child and maternal mortality do not show significant positive results[2]. Soon after Kyrgyzstan's independence, both indicators increased, but since 2001 they are again decreasing. Poverty is an important health determinant; infant mortality rates are 1.8 times higher in the 20 percent poorest households than in the wealthiest 20 percent. A long tradition of childhood immunization with good coverage of the Expanded Program on Immunisations (EPI) vaccines has been maintained, which by WHO is regarded as one of the main reasons for decreasing mortality rates[3].

Official data of infant and child mortality show a stagnating picture while survey data show continued improvement in child health indicators (Figure 1). The main reason for this discrepancy is that in 2005 new

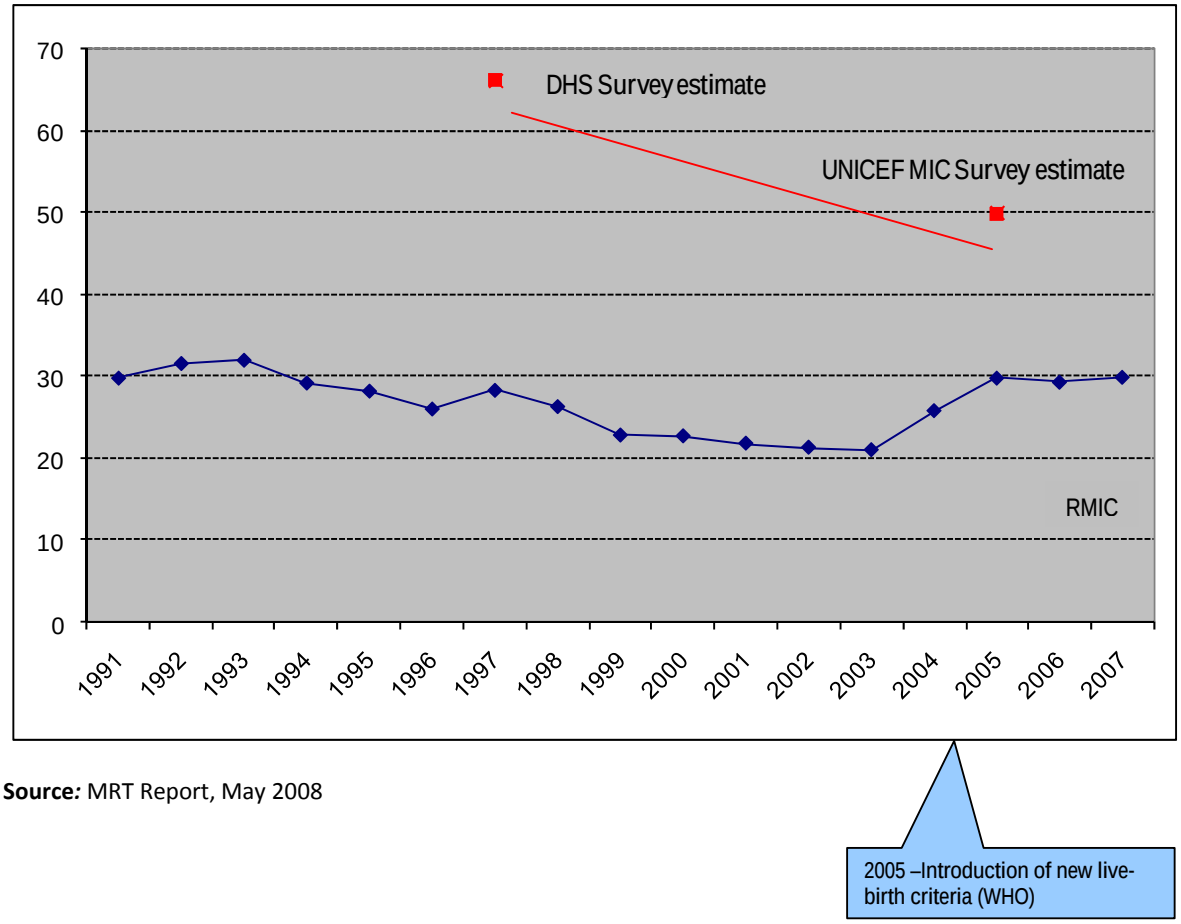
[1] Kutzin J. 2001. "A Descriptive Framework for Country-level Analysis of Health Care Financing Arrangements." Health Policy 56 (3): 171-204.

[2] Findings from the Multiple Indicator Cluster Survey, implemented in the Kyrgyz Republic, 2006, MICS, UNICEF, 2006; and "Midterm review of Manas Taalimi Programme" 2008.

3 See more details on MCH trends in "Kyrgyzstan Initial Country Assessment report 2008 for the GAVI HSS," 14/12/2008.

live-birth criteria were introduced, making it difficult to interpret the trend. The official data shows an increase in the infant mortality rate (IMR) from 25.7 per 1,000 live births in 2004 to 29.7 in 2005 and was stagnating around 30 per 1,000 live births during the 2005-07 period. The under-five mortality rate (U5MR) shows a similar picture, with an increase from 31.2 to 35.2 between 2004 and 2005 and stagnation around 35-36 per 1,000 live births during the 2005-07 period. However, recent surveys (DHS and MICS) produced IMR and U5MRs\ estimates which (a) are substantially above the official estimates, and (b) show a reduction of 20 percent in U5MR (from 66 to 50 per 1,000 live births). The last round of survey data not only shows a significant reduction in the IMR and U5MR but also demonstrates that official data and survey estimates are beginning to converge. This is most likely due to improved registration of infant deaths, which was facilitated by a change in the culture and attitude of policy makers surrounding this issue.

Figure 1. Under-five Mortality Rate, per 1,000 Live Births



Source*:* MRT Report, May 2008

A concerning aspect of infant and child deaths is that 30 percent of children under one year die on the first day of hospitalization and over 50 percent of children between 1 and 2 years die at home. These indicators suggest late hospitalization for serious medical conditions, most likely due to low awareness among parents about symptoms requiring immediate and urgent medical attention. According to official figures, maternal mortality ratios (MMRs) fluctuated between 46 and 63 per 100,000 live births for the period of 2004 to 2007 without a clear upward or downward trend (.3). Improvement in the registration coverage rates can have had an upward impact on the MMR figures as well. The main causes of death were hypertensive disorders during pregnancy (40 percent), obstetric bleedings (22 percent) and septic complications (14 percent).

Table 3. Infant, Child and Maternal Mortality Rates

	2004	2005	2006	2007
Infant mortality rate (death of infants under 1 year old per 1,000 live-births)	25.7	29.7	29.2	29.8
Mortality rate of children under 5 years old (per 1,000 live births)	31.2	35.2	34.6	36.6
Rate of maternal mortality (per 100,000 live-births)	46.4	61.0	53.0	63.2

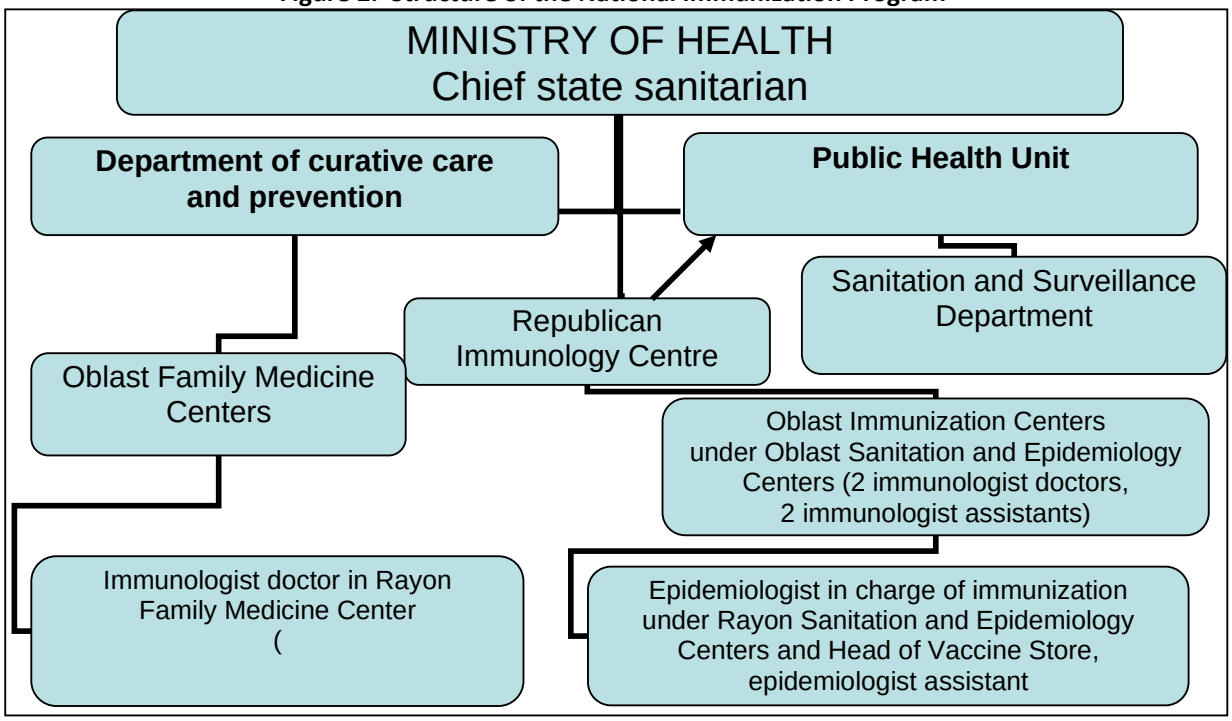
Source: RMIC

Structure of the National Immunization Program and Recent Immunization Coverage Trends

The national immunization program is integrated into the "Public health" component within Manas Taalimi. Immunization is part of the delivery of individual and population-based services in the framework of priority programs in Manas Taalimi, for the reduction of child mortality through evidence-based health care services. Public health services in Kyrgyzstan are provided by Sanitation and Epidemiologic Surveillance Service (SES) and Health Promotion Centers (HPCs). SES is responsible for health securing and HPC for health promotion. Infectious disease surveillance and sanitary inspection and control are carried out by DSSES.

The Republican Center of Immune-prophylaxis (RCI) was created by the MoH in 1994 to strengthen immunization services in the country. Its functions include shaping policies of immune-prophylaxis, performing EPI monitoring, providing and procuring vaccines, implementing methodological management of the system, and performing surveillance for vaccine-preventable diseases. The RCI has its own budget and is supervised by the Deputy Minister, Chief National Sanitary Doctor of Kyrgyzstan.

Figure 2. Structure of the National Immunization Program



Source: RCI, 2009

The major functions in immunization are assigned and integrated into PHC activities. At present, the issues of immunization at the regional and local level are the responsibility of an epidemiologist (a specialist in vaccine monitoring and cold chain and immunization monitoring), responsible for all organizational activities

within his region (oblast), including professional training for medical workers in immunoprophylaxis and surveillance of vaccine preventable diseases. At the district level (rayon), an immunologist at the Family Medicine Center provides consultations to family group practitioners (FGP) on schedules of vaccinations, reports and individual vaccination calendars for those patients who violated the vaccination schedule, and organizes various activities jointly with an epidemiologist.

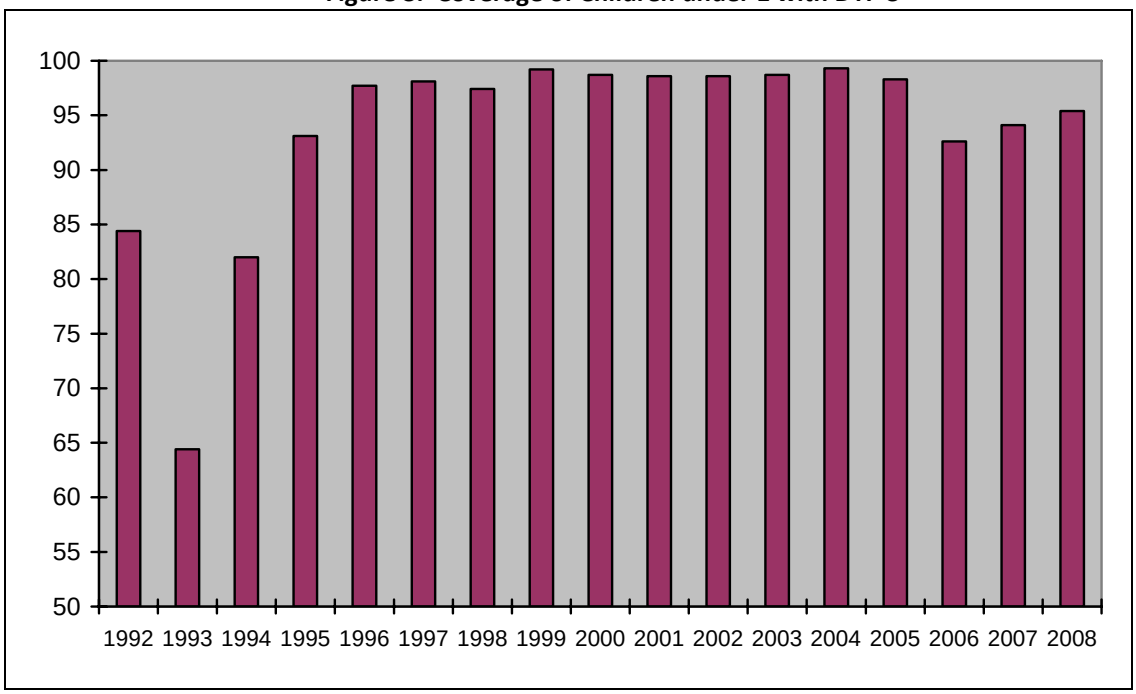
The MoH has established a forum for discussing the issues of immunization—the Republican Committee on Immunoprophylaxis (RCI)—an advisory body comprised of representatives of various departments of the MoH, academia and Republican health structures and headed by the Deputy Minister of Health. Similar Committees operate at the regional and district levels. An Intersectoral Coordinating Committee (ICC) on partner cooperation in the sphere of immunoprophylaxis has been operational under the MoH for the last 10 years.

To preserve immunization advantages as a particularly valuable component of PHC and to maintain its optimal structure in the period of health care system reforms as well as to formulate basic strategies, goals and objectives in compliance with the global goals of immunization and strategic framework for 2006-2015 recommended by WHO and UNICEF, it was necessary to develop a country Multi-Year Program (cMYP) for five years, the National Program of Immuno-prophylaxis for 2006-2010. The basic principles of cMYP are formed in accordance with the existing laws of Kyrgyzstan and other legal acts concerning the protection of its citizens' health: justice and gender equality; partnership and responsibility; guaranteed quality of vaccines and safe vaccination; reliable district (rayon) systems of immunization; ensuring sustainability of immunization by creating technical and financial potential.

Due to the centralized provision of vaccines financed through the State budget and grants from the Government of Japan and GAVI, as well as Asian Development Bank (ADB) loans, the country has reached and still maintains a high rate (more than 95 percent for all types of vaccination) of coverage of children under two years, with prophylactic vaccinations through the period of cMYP's implementation. This coverage rate has resulted in a decrease in the morbidity rate for a number of preventable infections to very few cases. This occurred in the face of vital challenges, including the retention of financial independence to ensure timely procurement of vaccines, expansion of the national immunization schedule and provision of training to PHC specialists on qualitative and timely vaccination. Maintenance of high-quality coverage with immune-prophylaxis is one of the key actions defined in Manas Taalimi.

Based on the data from the Mid-Term Review of the Manas Taalimi in May 2008, the level of immunization (percentage of children vaccinated according to the national immunization calendar) was found to remain high (95.8 percent in 2007) although this is a decline from the previously observed coverage of 99 percent. This decline is most likely due to increasing internal migration. Internal migrants, mostly in the capital, Bishkek, constitute a pocket of under-coverage in terms of vaccination. Many migrants are not aware that they can receive free primary care and vaccinations without being registered in their new place of residence. On the other hand, PHC workers in parts of Bishkek are overwhelmed by their ever-increasing workload, which, combined with the poor roads and lack of cars and resources for fuel, make outreach activities nearly impossible in these areas.

Figure 3. Coverage of Children under 1 with DTP 3



Source: RCI, 2008

Past GAVI Alliance Support, Achievements and Implementation Experience

Kyrgyzstan received a total of US $68,000 in Immunization Service Strengthening (ISS) support. The first part of ISS funds, US $34,000, was transferred to the country in November 2006 and has been used since March 2007. The MoH manages the funds through the RCI, according to the GAVI plan within the framework of the cMYP and Manas Taalimi. The plan of action, budget and reports are discussed annually during the meetings of the ISS. A key task defined for 2006-2010 is to increase the immunization coverage level, which can be achieved through a number of activities such as:

- identifying priority and remote areas,
- setting up and equipping mobile immunization teams,
- monitoring and registering migrating populations,
- improving registration and reporting systems,
- creating a 25 percent stockpile of vaccines,
- building the capacity of immunization service providers,
- improving infrastructure and cold chain equipment maintenance,
- monitoring the system for immunization coverage, and
- developing a national strategic plan on social mobilization.

Kyrgyzstan has been receiving substantial support from the international community since mid 1990s, when it first started to experience problems with controlling vaccine-preventable diseases and support for the introduction of the new vaccines since 2003. Although the Government is gradually taking over an ever-increasing share of responsibility for the Program, donors are still playing an active role in meeting needs.

In 2006, the state budget, including Mandatory Health Insurance Funds (MHIF) covered, 69.8 percent of total Program needs. This contribution provided for all the current Program needs except vaccine and injection supplies procurement. Procurement of these latter two items was co-financed by the ADB loan (21.8 percent of routine immunization costs) and GAVI (3.4 percent of routine programme costs). In 2008, the MoH applied to the GAVI Secretariat for support of the pentavalent vaccine. Thus, beginning 1 April 2009, Kyrgyzstan introduced the pentavalent vaccine.

Health Care Reforms and Health Systems Strengthening Efforts

After gaining independence, the health sector, along with other sectors, faced the problem of insufficient financial resources and inability to maintain inherited excessive infrastructure with a predominance of hospital care and excessive specialization of health services from the Soviet period. Basic principles of Soviet health care were the social nature of health care, universal access, and free health services. However, inherent in the health system's hyper-centralized management was a high level of bureaucracy, lack of flexibility, fragmentation and duplication of health care delivery, inefficient methods of financing, and the need to maintain bulky infrastructure—which did not allow provision of the declared principles of universal access and absence of payment. As with other sectors in Kyrgyzstan, it became essential to implement cardinal changes in the health system. During the period 1994-1996, the National Health Care Reform Program, Manas, was developed for 1996-2006 with the support of WHO. The first health reform (1996-2006), supported by funds from the World Bank, was intended to implement structural changes in the delivery of primary health care, rehabilitation of health facilities, changes in financing methods, and drug management in pilot regions.

The main characteristics of the Kyrgyz health model are a multi-structural nature (i.e., existence of health care providers with various types of ownership), creation of an infrastructure that corresponds to population needs in medical care and financial resources, decentralization of management, and the enhancement of administrative autonomy of health organizations. The health sector was split into providers and purchasers of health care. The recognized priority was the development of primary health, family medicine, free choice of family doctor, and ensured access to health service for the population through the State-Guaranteed Benefit Package (SGBP). New outcome-oriented methods of financing and payment to health workers (depending on quality of performed work) were introduced at the primary and secondary levels.

The analysis and evaluation of the health reforms impact on main policy goals under the Manas program demonstrate that the comprehensive structural health reforms, which have been more intensively implemented since 2000, have resulted in several improvements, such as in several health status indicators, with improved equity, transparency, accessibility and responsiveness of the health system to population needs. With the 10-year health reform (Manas), Kyrgyzstan managed to overcome systematic health care crises despite its complicated economic situation, thanks to economic support from the Government and partners from WHO, the World Bank, KfW, ADB, USAID, United Nations Development Programme (UNDP), Department for International Development (DfID), the Japanese and Swiss governments, and the Global Fund on TB, Malaria and HIV/AIDS (GFATM), as well as international NGOs. Most of the implemented changes obtained sustainability in a series of laws and further institutionalization.

In 2004 the MoH applied to WHO for technical support for further development of reform strategies to secure the results obtained and ensure sustainability of the health system. WHO and DfID supported the preparatory process of development of Manas Taalimi 2006-2010. Manas Taalimi identified some major problems remaining after the first Manas reforms up to 2005: the low level of public expenditure for health; high financial burden for households using the health service; low quality of health delivery; poor involvement of the population, local committees and NGOs; low salaries of health human resources; and the need to focus on mother and child health to reach the Millennium Development Goals (MDGs).

The main goal of Manas Taalimi is to improve the health status of the population through the creation of a responsive, efficient, comprehensive and integrated system of individual and public health care service delivery; and increased responsibility of every citizen, family, society, state power and public administration bodies for health of each person and society in general. Objectives of the reform are to

- achieve fairness and accessibility to health services;
- decrease the financial burden of health care for the population;
- increase the effectiveness of the health delivery system;
- improve the quality of the health delivery system; and
- increase responsiveness and transparency in the health system.

Two of the major areas of activities identified in the reform program are supported by the GAVI HSS: the support to Village Health Committees (VHCs), aimed at increasing population and community involvement in coping with health-related problems, and HSS support to salary incentives for health workers performing vaccination services.

Table 4. Main Health Systems Indicators - 2005/2006

Main indicators	
Per capita total expenditure on health (average exchange rates)	11.0
Government expenditure on health as % of total Government. expenditures	8.4%
External resources for health as a % of total expenditures on health	7.6%
Nursing and midwifery personnel density (per 10,000 population)	58
Physician density (per 10,000 population)	24
Hospital beds (per 10,000 population)	51

Source: World Health Organization, 2008

The implementation of Manas Taalimi is taking place under the Sector-wide Approach (SWAp) led by the MoH and its development partners. It is the first large-scale SWAp in the Former Soviet Union. Development partners provide their support to the sector strategy either through budget support (so-called joint financiers that include the World Bank, KfW, DfID, Swiss Agency for Development and Cooperation (SDC) and the Swedish International Development Cooperation Agency (SIDA) or parallel financing (WHO, USAID, GFTMH, etc.). The MoH Department of Strategic Planning and Reform Implementation coordinates the Manas Taalimi implementation process, including the planning of the twice-yearly Health Summits. The heads of MoH Departments take a leading role in ensuring that policy dialogue processes are working, developing plans and technical specifications, and incorporating implementation of Manas Taalimi activities into routine MoH work. The health policy dialogue has progressed and expanded under Manas Taalimi. The MoH has established several policy dialogue mechanisms, including the Health Policy Council (HPC) and Inter-sectoral Coordination Commission (ICC). HPC meets regularly and makes major decisions related to general health policy and the pressing issues of Manas Taalimi implementation, including approval of national and oblast plans of work, budgets and procurement plans.

To strengthen the health system in Kyrgyzstan, all efforts are incorporated in Manas Taalimi and are organized through twice yearly year health summits in spring and autumn. The health summits are preceded by one- to two- week joint reviews conducted with the MoH and development partners, the results of which are channelled into the summit itself. The spring joint review (May) focuses on evaluating implementation progress and program impact while the fall health summit (September) focuses on forward planning through preparation and approval of the costed annual plan of work and the budget. On the side of the development partners, the joint review and the summit is inclusive of both joint financiers and parallel financiers of the program (e.g., USAID, UNICEF, WHO). During the joint review, the monitoring indicator packages are revised in order to demonstrate the progress of the reforms during the health summits. The May 2008 summit performs a more substantial review in scale and scope as it is the Mid-Term Review (MTR) of the sector strategy. The MTR was a joint activity between the Government and development partners, culminating in a health summit. The main results of the MTR were presented in the previous section.

Four main donors support the immunization program in Kyrgyzstan: WHO, GAVI, UNICEF and ADB. In addition, some other donors (USAID through ZdravPlus and SDS) also supply support. WHO provides technical assistance as well as financial support to develop cMYP, analytical work and other related documents. GAVI provides funds to procure new vaccines. UNICEF provides financial support in various areas, such as the secure practice of vaccines, cold chain, and training. From 2005 to 2008, ADB provided financial support to procure vaccines. In addition, equipment for the cold chain was purchased with ADB funds. USAID (ZdravPlus) assists in improving the population's awareness of immunization issues. KSPHSS

(SDS) works with Village Health Committees in the area of immunization. Table 5 presents the sources of funding for all HSS activities relevant to Immunization in Kyrgyzstan.

Table 5. Sources of Funding for All HSS Activities Relevant to Immunization

Funding	2007	2008	2009	2010	**TOTAL FUNDS**
	412,000	500,000	582,500	1,021,000	
Domestic Sources	3,017,000	1,366,400	1,250,000	450,000	2,515,500
SWAp Joint Financiers	40,000	10,000	40,000	10,000	6,083,400
WHO	9,000	4,500	9,000	4,500	100,000
UNICEF	139,000	162,400	-	-	27,000
USAID/ZdravPlus	341,200	242,000	1,200	1,200	301,400
KSPHSS/SDC	423,684	255,088	255,462	219,511	585,600
GAVI HSS	**4,381,884**	**2,540,388**	**2,138,162**	**1,706,211**	1,153,745
TOTAL					**10,766,645**

Source: Global Alliance for Vaccines and Immunization (GAVI) Proposal for support to Health System Strengthening in the Kyrgyz Republic, 20 October 2006

III. GAVI HSS Application Process

In August 2006 Kyrgyzstan received an invitation from WHO to apply for GAVI HSS, and the process of application preparation began. Within less than half a year, in March 2007, the application was reviewed and approved. Table 6 presents the chronology of each step related to GAVI HSS in detail.

Table 6. Chronology of Activities during GAVI HSS Application Process

Activity	Date
Invitation from WHO, offering technical assistance (TA)	7 August 2006
Nomination of working group to develop application	18 August 2006
Round table discussion with ICC	7 September 2006
Second presentation and round table discussion of draft application with ICC and stake holders	10 October 2006
Submission of application to GAVI	End of October 2006
GAVI approval	1 March 2007
Setting up processes for the GAVI HSS, organization and nomination of management, opening special bank account, etc.	March – August 2007
MoH approval of methods, indicators for the salary bonus, etc.	September 2007
Start of planning for implementation	September 2007
First funds disbursement	7 September 2007
Procurement plan for the HSS	October 2007
Initiation of activities, training, method development, etc.	October 2007
Submission of 2007 APR	May 2008
Second disbursement of funds	July 2008

a). Coordination and decision-making

In Kyrgyzstan there are two bodies that execute the coordination functions within the health sector regarding immunoprophylaxis: the ICC and the HPC. Both organs were operating before the GAVI application.

Constituted in December 2000, the ICC is a national technical coordination committee for immunization issues. Since April 2008, it has been chaired by the deputy minister. The secretary position is held by the deputy head of the RCI. The committee also consists of representatives from the DSSEC; MHIF, other departments and centers within the MoH and representatives from international organizations and civil society: USAID. WHO, UNICEF, World Bank, Soros Foundation, Association for Health Promotion, Kyrgyz-Swiss-Swedish Project (KSSP), ZdravPlus (USAID), and ADB. The committee meets quarterly or whenever necessary.

Roles of the HSCC, MoH divisions, national immunization program and its ICC and other stakeholders in the process

- Major functions and responsibilities of the ICC

- Integration of Government and international structures for strong partnership through coordination of contributions and resources provided from internal and external sources.
- Assistance in development and approval of the national immunization policy, multi-year working plans (cMYPs) on immunoprophylaxis in conditions of health system reforming.
- Coordination of technical and financial support of available partners, development of key principles of collaboration of international organizations to ensure the most effective resource using fundraising for support and improvement of the immunization service.
- Monitoring and evaluation of economical effectiveness and expediency of activities undertaken for better implementation of target immunization programs.
- Discussion of issues, reflecting the status of immunoprophylaxis in the country along with development of recommendations on situation improvement.

The HPC is the highest organ of policy approval and consists of representatives of heads of departments within the MoH and is chaired by the Minister of Health. It is coordinated by the Department of Strategic Planning and Reform Implementation. The creation of strong links between the ICC and HPC allows some relevant issues from the ICC to be raised with the HPC.

The national immunization program took an active part in developing the proposal. It was involved in formulating component 1 (political commitment and financial sustainability) and in identifying the needs for component 2 (infrastructure and working conditions). It was also responsible for one of the sub-components in component 3 (improving access). The proposal was discussed two times in the ICC and finally with the HPC, which gave the final approval. The Republican Center for Health Promotion is one of the members of the ICC and brought to the table the proposal to support VHCs. With the exception of the ICC, CSOs were not involved in the application process. Researchers from the Center for Health Systems Development were involved.

Nature and level of technical assistance received during the process

WHO and Zdrav Plus (USAID) provided technical assistance to the working group responsible for the development of the application. Three representatives from WHO and one from ZdravPlus (USAID) participated in the working group, giving significant time and added international experience to the group.

Decision-making process

The decision to apply for GAVI funding was formally taken by the Minister, but the idea to apply was obvious within MoH, among donors such as WHO and UNICEF. The signal to start came from WHO/Geneva to MoH on 7 August 2006. The application process was lead by the ICC and the Deputy Minister. Following the MoH order (prikaz), the working group was established on 18 August 2006. The working group comprised multiple stakeholders, including representatives from public health in general and immunization services (SES, RCI, etc.) and from service delivery and broader health systems (MoH, MHIF, CHSD, etc.). RCI and MHIF were actively involved and led the working group, and the CHSD provided research input and technical assistance. In addition, technical input and advice was provided by WHO, UNICEF, and ZdravPlus on behalf of the wider group of development partners. Having all three parties in the working group created a balanced composition of main stakeholders. Unfortunately, the group was so large that a smaller core group of five people was identified and actually put the proposal together.

During the application process, the large working group met three times. Their discussions were lively and interesting. Since this grant is intended to strengthen the health system in a broader sense, there was no doubt within the working group that the proposal should not be focused on narrow activities (i.e., directly benefitting only immunization) but on broader health systems strengthening activities. Therefore, they decided at the very beginning that they needed to identify the main health system barriers in Kyrgyzstan and agree on a common statement of these barriers. These discussions were based on the studies done a year before by the CHSD on the evaluation of primary care services in Kyrgyzstan and the evaluation of financing reforms. As a result of the brainstorming, broader activities were included in the proposal, for

example, support to VHC[1] activities that not only aims at increasing the coverage of immunization but also at strengthening the VHCs (see more in section V.a).

The proposal was presented two times to the ICC. The first time was on 10 October 2006 to inform the ICC about the conditions of the GAVI HSS grant and the process of developing the first draft and for a discussion of the first draft. The second time was at an extended meeting on 23 October 2006 of approximately 60 participants, including international organizations, donors and United Nations organizations for a final discussion. Finally, the application was approved by the HPC and submitted to the GAVI Secretariat in early November 2006.

The process of developing the application lasted from August to October 2006. The small working group met several times a week, especially initially to select the focus of the application. The process included brain-storming sessions, round-table discussions with stakeholders and international organizations, and hard internal work within the group. According to respondents, this was a remarkable application and a very good experience. It was easy to develop the proposal because of the Manas Taalimi.

The final draft proposal was discussed at the ICC and approved by the HPC within the MoH. Afterwards, the Minister signed the proposal and submitted it to the GAVI Secretariat. In November 2006 the HSS IRC recommended that the application be approved with the following clarified:

- Is there is any active involvement or evolution of civil society engagement in the HSS arena (apart from the trade union and health association)? Their involvement in the process needs to be clarified.
- How will the budget be adjusted to match the amount allocated by the GAVI (US $6,500 less)?
- How many rayons (districts) in the country will benefit from the GAVI HSS?
- Why are the social mobilization funds from GAVI HSS supporting the rayons (urban) different from the primary target rayons (rural)?

In 2006, after these questions were clarified, the application was approved by the GAVI secretariat. Later, Kyrgyzstan was invited to Istanbul to share the experiences of the proposal development process during a workshop for countries of the Central Asian and Asian region that were planning to develop applications for GAVI.

b). Stakeholder perceptions of the proposal development/application process

Satisfaction/dissatisfaction with the planning process and the resulting HSS application

The interviewed stakeholders expressed satisfaction with the technical assistance provided by the international organizations. During the proposal preparation, WHO also provided support to the revision of the cMYP on immunization in order to have the proposal align with this program. WHO is actively involved in immunization issues in the country. Therefore, while developing the proposal, WHO provided financial support by providing three experts to the working group.

All interviewed stakeholders were satisfied with the proposal development process and the content of the application. The discussions were described as lively and democratic. None of the respondents suggested any measures for improving the proposal development.

The process was lively—with discussions and differing opinions on what to do—but aimed at reaching consensus. Several stakeholders stated that there was a very high level of competence in the working group, and meetings were characterized by good arguments and well-thought-through suggestions, such as inclusion of bonus payment to the PHC personnel.

[1] Village Health Committees are part of District (Rayon) Health Committees, which are NGOs acting on a voluntary basis and officially registered by the Ministry of Justice.

Suggestions for improving the proposal development process

Overall, the process of proposal development was multi-level and comprehensive. One or two respondents suggested involving civil society in the proposal development procedure.

c). Analysis of the GAVI HSS proposal development

A number of factors contributed to a technically sound application although the time for applying was limited. From the beginning and throughout the process, there was strong political support, with the Deputy Minister supervising the work and the approval of the application coming from the Health Policy Council. Technical assistance, already available in the country and provided by the development partners and other members of the working group, was of high quality and enabled the proposal to be developed within a three-month period. The creation of the working group and provision of the technical assistance was facilitated by the high level of cooperation already existing among the development partners in the SWAp. The active involvement of ICC in the process was another positive element, contributing to the formulation and identification of the needs in the components. Also facilitating proposal development was Manas Taalimi's policy framework, with its efforts to strengthen the health system. Studies that could be used for identifying barriers to immunization and other primary health care (PHC) services existed and were used. The development of the application was further aided by the existing processes and competencies within MoH for planning, financing and monitoring. One example was the existing monitoring system developed within the SWAp to monitor progress of the health reform program, which could be used, although in a slightly modified form, for the GAVI HSS proposal.

IV. Characteristics of the GAVI HSS Application

a). Description of country's GAVI HSS approach

Primary objectives and budget allocation

The goal of the GAVI HSS proposal is to remove health system barriers in order to improve the population's health status—particularly for children from rural areas, poor families and vulnerable groups—through enhancing the effectiveness of primary care and public health services by providing high-quality preventive and curative services and improving and maintaining immunization coverage.

The GAVI HSS Program Proposal is a mix of traditional investments with known effectiveness and policy innovations requiring learning during the implementation process itself. *Traditional investments* with known effectiveness in the HSS Program Proposal include equipment purchases for primary care providers and the public health system at the rayon (district) level, strengthening the means of transportation at the rayon level, organizing mobile immunization teams, introducing supportive supervision, improving information technology, and integrating the training of primary care providers.

The *policy innovation* in the GAVI HSS Program Proposal is the development and introduction of performance-based payment incentives for primary care providers, an enduring aspiration of the Kyrgyz MoH. The recently emerging human resource crisis in rural areas brought the need for this policy instrument into focus, and the GAVI HSS window creates an opportunity for its realization. The successful experience of the Kyrgyz MoH and MHIF with output and population-based purchasing mechanisms (all primary care providers are paid on a capitation basis, and all hospitals are paid on a per-case basis) and past investments in information technology have resulted in good data systems and availability for calculating incentives, and it has created an enabling environment for successful implementation of performance-based payment. GAVI funds are proposed to be used as a catalyst to the process, and according to the application, the Government will contribute its own funds starting from the second year of implementation—increasing the share of domestic financing for this component annually and achieving full financing after 2011. The total budget for the GAVI HSS is US $1,153,745 for the period 2007 - 2010 (Table 7).

Table 7. Budget for the HSS Support

Component	Budget (USD)
1. Strengthening political commitment to immunization and financial sustainability	41,328
2. Improving the physical infrastructure and working conditions of primary care and public health services	239,996
3. Improving access to high quality primary care through capacity building, improved management, and introduction of economic incentives	680,465
4. Strengthening routine monitoring of immunization activities and coverage at the level of primary care and public health	77,060
5. Social mobilization and active involvement of the population in prevention and health promotion.	73,200
6. Administration, accounting, reporting	41,696
TOTAL	**1,153,745**

During the process of developing the GAVI HSS application, the cMYP was also revised. so the GAVI HSS proposal and the cMYP now correspond. This is illustrated in Table 8 from the cMYP, describing the main problems that should be addressed to increase immunization coverage.

Table 8. Issues Identified in cMYP against the Components

Problems overview from the cMYP	Addressed by the GAVI HSS
Low coverage, especially in hard-to-reach regions with traditionally incomplete vaccine usage:	
Weak organizational capacity of regional managers in planning, implementation and control of immunization activities	Component 3
Lack of medical personnel in remote medical units	
High level of internal migration of population	Component 1
Lack of public awareness on privileges and advantages of vaccinoprophylactics	
Low financial incentives (mainly due to inadequate remuneration) for medical workers resulting in personnel drain into more profitable sectors	Component 3
Lack of recourses for outreach work and formation of mobile teams	Component 4

Key activities, their scope, geographic targeting, and expected results

To achieve its goal, the GAVI HSS support for the Kyrgyzstan has five components:

1. Strengthening political commitment to immunization and financial sustainability - Activities include (a) conducting analytical work relevant to strengthening immunization and primary health care and used to guide policy processes; (b) conducting advocacy activities targeting local governments, and the population; and (c) providing accurate and timely information to MoH on financing requirements for ensuring full immunization coverage for preparation of annual budgets and the Medium-Term Budget Framework (MTBF).
2. Improving the physical infrastructure and working conditions of primary care and public health services - Activities include the purchase of 27 cars for surveillance and mobile teams; the purchase of 10 pieces of refrigerating equipment; and the renovation of 16 rayon-level vaccine warehouses.
3. Improving access to high quality primary care through capacity building, improved management, and introduction of economic incentives - Activities include (a) conducting training for feldsher-midwives in “Immunization in Practice” (WHO curriculum); (b) developing mechanisms for “supportive supervision” of primary care staff for performance improvement, including immunization coverage (develop manual, train supervisors, conduct joint supervision trips with MHIF in each of 40 rayons); (c) organizing mobile teams in each of 40 rayons that will visit population points without medical services four times a year; (d) training primary health care staff on integrated surveillance of infectious diseases and providing support for its implementation; and (e) developing mechanism and indicators for performance-based pay for primary care providers.
4. Strengthening routine monitoring of immunization activities and coverage at the level of primary care and public health - Activities include (a) developing and introducing a vaccine status register and immunization calendar; (b) creating an electronic reporting system for immunization activities in primary care by revising the primary care reporting form of the Medical Information System; and (c) monitoring the timeliness of immunization activities in line with the immunization calendar.
5. Social mobilizing and actively involving the population in prevention and health promotion - Activities include (a) developing regular contact with NGOs working among urban migrants in Bishkek and Osh cities, where under-coverage is significant; and (b) conducting capacity building for

providers to work with civil society organizations to help conduct outreach and communication activities in order to generate demand for timely primary care and immunization.

The GAVI HSS Proposal included a fully-costed Plan of Work (POW) listing proposed activities, timing, estimated cost, availability of financing from already programmed sources, and the requested amount from GAVI. The POW/costing for the GAVI HSS proposal provides a comprehensive description of HSS activities targeted to improving immunization and child health (including activities proposed for GAVI funding), as well as complementary activities for which financing has already been secured from other sources (Government budget, joint financiers, or parallel financing). This approach allows highlighting synergies across activities funded from different sources and avoiding duplication. Input requirements for these activities have been estimated and costed out using the same unit prices as were used for costing the Manas Taalimi sector strategy. The full details of the costing exercise can be found in the application.

The GAVI HSS Plan of Work (POW) indicates the link of each activity to the corresponding Manas Taalimi component identification number so that relevant sections can be easily found and cross-referenced in the Manas Taalimi strategy, plan of work and costing.

Relationship of themes/activities to past assessment findings and recommendations

The proposal contains a list of approximately 10 assessments that have informed the decision on the barriers to be addressed by GAVI, including evaluations of the Manas Health Sector Reforms (1996-2005), Assessing Human Resource Issues in the Kyrgyz Health System, and Health and Access to Health Care among Urban Migrants.

The conclusions from the studies are that the following obstacles to improved immunization should be addressed:

- Access barriers remain for the timely use of primary care services due to the lack of providers in remote areas, low salaries and motivation of health care personnel, migration of health care workers to the capital and abroad, and low awareness of entitlements, especially among poor and vulnerable populations.
- The poor quality of primary health care remains a problem despite improvements, particularly at the level of feldsher-midwife points (known by the Russian acronym FAPs) due to the poor condition of facilities, lack of functioning equipment, and insufficient training/qualifications of staff.
- Although general immunization coverage is high, there are pockets of under-coverage. These are particularly relevant for follow-up vaccines such as DPT-3, for children in rural areas and from poor families, and among urban migrants. These pockets of under-coverage are directly connected with access barriers and quality issues.
- While the immunization program has been strengthened in the past, the overall public health service delivery system and surveillance capacity remain underdeveloped due to low salaries, weak coordination mechanisms with other health improvement structures, under-investment in transportation and the cold chain, and outdated monitoring mechanisms.

When analyzing the proposal, the Study Team found that the proposal addressed a number of gaps and bottlenecks to immunization, identified in the above-listed assessments. These gaps and bottlenecks have been chosen in relation to what other activities are already included in annual plans and in relation to what is supported by other donors (see Table 3).

Management and financial arrangements proposed

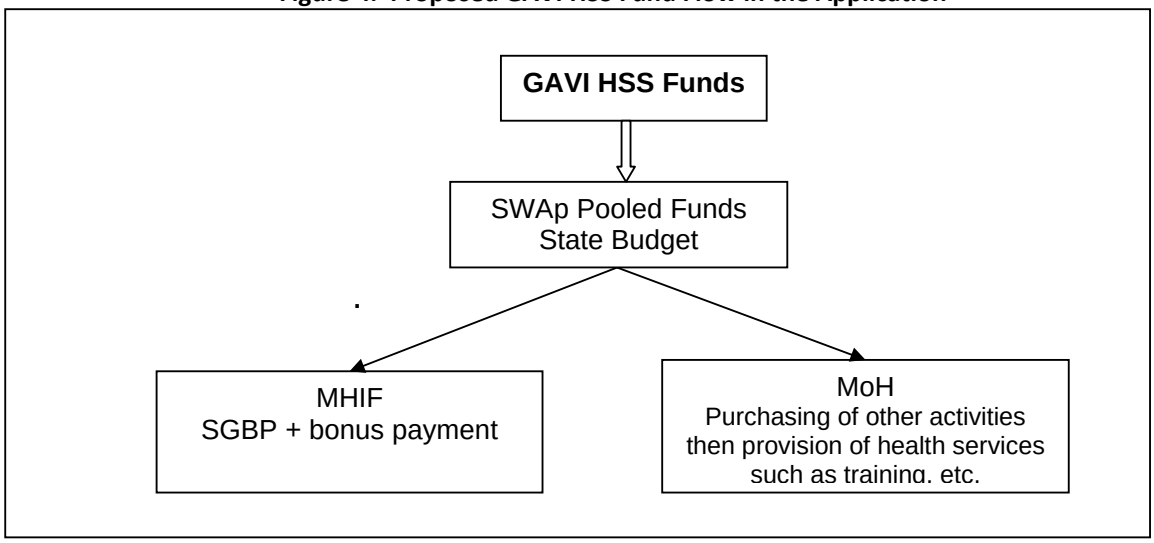
The GAVI proposal is managed by a Technical Coordinator and a Financial Coordinator, together forming a small unit organized directly under the MoH focal point for GAVI HSS (Deputy Minister).

The main and innovative feature of the GAVI HSS proposal was the proposed financial arrangements—the GAVI HSS funds flow into and mix with the state budget of Kyrgyzstan within the framework of SWAp. GAVI would thereby be the first of the Global Health Initiatives that use the SWAp format for support. (Unfortunately, this did not happen since GAVI later came to the conclusion that they could not use the

financing modality of the SWAp). Further, the funds are distributed by the programmed activities using the existing allocation and procurement mechanisms of the Kyrgyz state budget as specified in the context of the SWAp.

Within the framework of the SWAp, GAVI HSS funds are proposed to be allocated to activities through two channels: the MoH and the MHIF—in an agreed and specified manner. The GAVI HSS funds are proposed to flow in the same manner as other SWAp funds, following the same rules. Specifically, once the HSS funds are deposited in a local currency account managed by the Central Treasury, they will be sent to the Treasury accounts of the MHIF for financing "incentive payments for primary care providers" (the activities within Component 4) and the MoH for all the other activities proposed within Components 1 to 5. Once they are in the Treasury system, the funds are managed according to the Government's standard budgetary procedures. The fund flows proposed in the GAVI HSS application are shown in the following figure.

Figure 4. Proposed GAVI HSS Fund Flow in the Application



There are four main advantages of this arrangement. First, it ensures full and automatic harmonization of the annual programming of the GAVI HSS funds with the implementation of Manas Taalimi, increasing their effectiveness. Second, issues related to implementation progress and program impact can be highlighted at the bi-annual Joint Health Summits, which provide a high-level, powerful forum for policy and programmatic decisions (e.g., budget issues, counterpart funds, concerns for duplicate activities, identifying synergies with other organizations). Third, a complex system of fiduciary risk-mitigation measures are being put in place for the SWAp fund-flow mechanisms, measures which are monitored closely by the joint financiers during the spring health summit. Thus, pooling the GAVI HSS funds will ensure proper financial management of the grant funds. Fourth, this arrangement would decrease administrative costs associated with management and accountability arrangements related to the GAVI HSS Grant.

In line with forming and approving annual plans and budgets for Manas Taalimi, the following process was proposed for the GAVI HSS activities and funds:

1. The GAVI HSS working group will make a draft annual plan of the work and budget. The group will be coordinated by a Technical Program Coordinator, who will be the primary point person for all activities included in the HSS program proposal and the contact person for communication with the GAVI Secretariat. For the annual plan of work and costing, review and recommendations of the ICC will be sought.
2. The draft POW and budget will be submitted to the MoH Department of Strategic Planning and Reform Implementation in charge of compiling an overall annual plan of work and budget for Manas Taalimi in time for the September SWAp joint review.
3. Approval will be provided by the MoH HPC, the highest organ of policy approval.

4. Agreement with the development partners will be sought at the September Health Summits, whose purpose is to approve program activities and corresponding funding for the following year. GAVI representatives will be invited to take part in the bi-annual health summits and approve annual plans of work and budgets in the context of the overall Manas Taalimi plan of work.

As a result of this process, the agreed annual POW for GAVI HSS is proposed to be approved by a resolution of the MoH. The annual GAVI HSS budget will form part of the budget of Kyrgyzstan discussed and approved by the Parliament.

Quarterly financial management reports (FMRs) on the GAVI HSS Grant are proposed to be prepared by the Financial Management and Disbursement Specialist hired under the Grant. The Specialist should be located in the MoH Finance Department, where similar reporting activities are conducted in the context of the SWAp.

b). Monitoring and evaluation plan

Annual activity reports should be prepared by the MoH with the support of the Technical Coordinator and furnished to GAVI 60 days after the end of the calendar year. The progress report is then presented as part of the progress report of Manas Taalimi at the spring health summit. If the mechanism proposed is accepted by the GAVI Secretariat, these reports will be supplemented by the procedures for financial reporting put in place by joint financiers[1].

The following studies are included in the proposal and would contribute to understanding the impact of GAVI HSS support:

1. Monitoring and evaluation studies: (1) a baseline survey to monitor the indicators selected for calculation of bonus payments in the rayons targeted for early implementation using GAVI funds and in three to four control rayons selected for later implementation; (2) follow-up survey conducted after one year of implementation assessing the effectiveness of the implementation progress, looking at changes in the indicators in phase-1 rayons relative to control rayons, and providing recommendations for improving the design of the program; (3) a last survey to be conducted after the second year of implementation, taking into account longer reform history and assessing the wider impact of the program on staff retention and quality of care.
2. Economic evaluation of immunization: Although it is widely known that immunization is one of the most cost-effective health interventions, the use of international data has little effect on Kyrgyz policymakers (outside the health sector in the wider Government and in parliament). During 2007, an economic evaluation of selected immunization activities is proposed to be conducted using a combination of national and international data. The objective is to demonstrate mortality and morbidity averted concretely in Kyrgyzstan by investing in immunization and its cost implications.
3. Study of primary care use and immunization coverage among urban migrants, 2007-2009: a study to be conducted among urban migrants to better understand under-coverage and under-use of health care services. The study is built on the existing qualitative study, looking at perceptions among migrants of health problems and access to services, including the quantitative estimates of service utilization and immunization coverage.

Key Indicators, Targets and Processes

The GAVI HSS indicators are proposed as a part of the Joint Monitoring Instrument annually collected and presented by the MoH at the spring health summit. The proposed indicators below allow tracking implementation progress and program impact of the GAVI HSS support. As part of the SWAp, great efforts have been made to reduce the number of overlapping monitoring mechanisms. As a result, a Joint Monitoring Instrument was developed and approved by the MoH and development partners. The Monitoring Instrument is composed of three sections:

[1] For more details see SWAp Financial Management Operational Manual

1. "Dashboard" indicators, a selection of the 25 most important indicators (mostly outcome) for high-level policy attention.
2. A performance-impact monitoring instrument (outcome indicators) matching the goals/objectives of Manas Taalimi.
3. Implementation progress monitoring (input, process and output indicators) matching the components of Manas Taalimi (Table 9 below).

A mid-term review of the support is planned to be part of the Mid-Term Review of Manas Taalimi in 2008, and a final evaluation is planned for 2010.

Table 9. Progress and Impact Monitoring

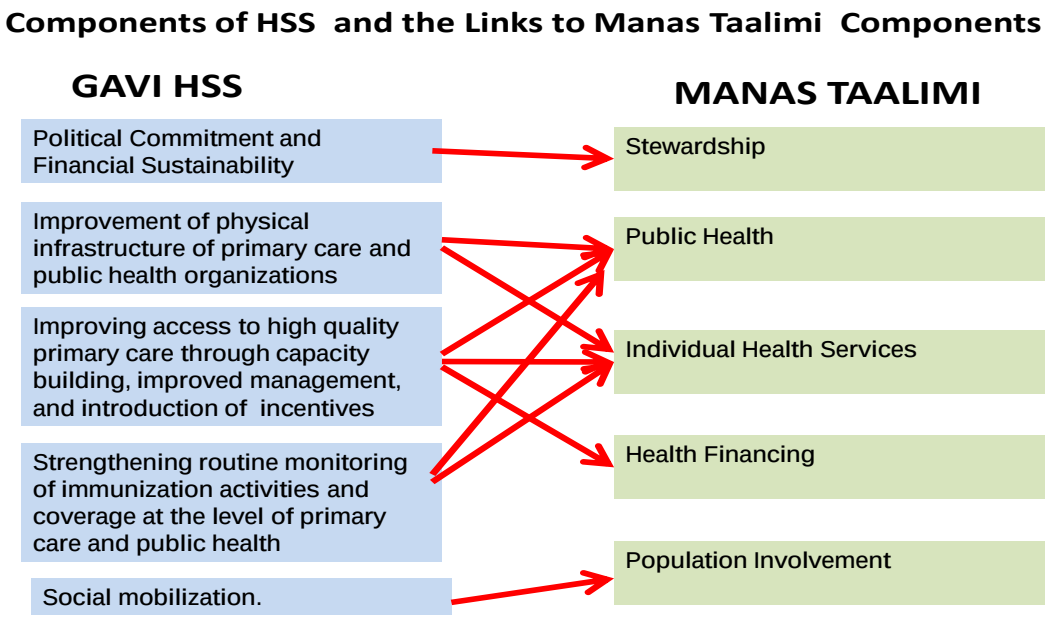
Indicator(s)		Data source(s)
HSS Inputs **(year 1 and 2)**	# of vehicles purchased (and as % of planned)	MoH
	# of planned cold chain equipment purchased; # of vehicles purchased (and as % of planned)	MoH
	# of planned rayon-level vaccine warehouses repaired; # of vehicles purchased (and as % of planned)	MoH
HSS Activities	# of planned supervisory teams established and trained (and as % of planned)	RCI
	# of trainers trained at the oblast and rayon level in immunization, IMCI, and other maternal and child health programs	MoH
	# of FAPs receiving training in "WHO Practice of Immunization" (and as % of planned)	RCI
	# of mobile teams established (and as % of planned)	RCI
	# of primary care providers receiving performance incentives (and as % of planned)	MHIF
	# of NGOs working with urban migrants on health issues and which are in regular contact with the RHPC	RHPC
Outputs **(Impact on the capacity of the system)**	% of rayons where at least 90% of facilities received integrated supportive supervision at least once during the year	RCI
	% of population points with no health facility that received four rounds of mobile services during the year	RCI

c). The Paris Declaration and other Core GAVI HSS principles

Alignment

GAVI HSS is fully integrated with the health sector reform program, Manas Taalimi. The HSS is also an integrated part of the total efforts to strengthen the health system and is fully harmonized with what other donors are supporting (see Table 5). All health system strengthening efforts are also part of Manas Taalimi and coordinated within the framework of the SWAp. The links between the GAVI HSS and Manas Taalimi is illustrated in the following figure.

Figure 5. GAVI HSS Links to Manas Taalimi



The activities of the HSS have been included in the revised cMYP for immunization.

Harmonization

There are two committees—such as ICC and HPC—created to provide guidance and policy input to the MoH[1]. The Technical Coordinator for GAVI HSS support is proposed to take part in committee meetings, provide information about progress of implementing activities, seek the support of the committees where needed, and ensure appropriate information flows.

The Sanitary-Epidemiological Surveillance Service (SES) and RCI as indicated in the POW will ensure full harmonization with the implementation arrangements of Manas Taalimi. The GAVI HSS proposal did not seek to establish a separate project management unit but rather create two posts: Technical Coordinator and Financial Manager. The GAVI HSS Technical Coordinator should work closely with all structures implementing the activities of the GAVI HSS Program and should take part in committee meetings, provide information about the progress of implementing activities, seek the support of committees where needed, and ensure appropriate information flows within the country as well as between the country and the GAVI Secretariat.

Immunization as part of maternal and child health is one of the priority programs in Manas Taalimi. Thus, the direct responsibility for the implementation of the GAVI HSS is assigned to the MoH Department of Prevention and Curative Services. In addition, other departments and agencies, such as the Public Health Department, SES, and RCI are involved in activities relevant to immunization. The Technical Coordinator for GAVI HSS support is to work closely with the Department of Prevention and Curative Services and the Department for Strategy and Planning. Implementation at the oblast and rayon levels is fully integrated into the MoH management.

To facilitate a harmonized implementation, as mentioned earlier, the GAVI HSS funds were supposed to flow into the state budget of Kyrgyzstan, and its distribution to programmed activities would use the existing allocation and procurement mechanisms of the Kyrgyz state budget as specified in the context of the SWAp. Moreover, GAVI was invited to take part in the health summits and the preceding joint reviews.

The financial reporting from the GAVI HSS was to be included in MoH's regular financial reports. The funds are internally audited together with the audit of other MoH funds. Also proposed is an operational audit of

[1] The structure and functions of ICC and HPC are described in detail later in this report.

MoH. Under the SWAp, there is an agreement for an external audit through a twinning agreement between the Kyrgyz Chamber of Accounts and a foreign public auditor. This has not worked out well because of the great need for capacity building involved. Therefore, an external independent firm will be contracted to conduct the audit.

The GAVI HSS indicators are developed and included as a part of the SWAp Joint Monitoring Instrument annually collected and presented by the MoH at the spring health summit. GAVI HSS are invited to take part in the joint review and the bi-annual health summits along with other development partners. The Technical Coordinator collects the data regarding the indicators and prepares the annual reports required by GAVI.

The annual implementation of the HSS is planned to be included in the MoH Annual Plan of Works, thus being fully integrated into the MoH planning system.

Results-oriented

In the Kyrgyz health system, all primary care providers are paid on a capitation basis (population-based purchasing mechanism), and all hospitals are paid on a per-case basis (output purchasing mechanisms). The experience gained through these mechanisms provides a basis for performance-based payment schemes. Thus, within the framework of GAVI HSS, it is proposed to introduce the performance-based payment incentives for primary care providers. The recently emerging human resource crisis in rural areas brought the need for this policy instrument into sharp focus, and the GAVI HSS window creates an opportunity for its realization.

Resources

The GAVI HSS proposal was developed to fit into the Manas Taalimi and contribute to the implementation of the health strengthening efforts of that strategy. Other donors are contributing to the strategy through budget support or separate financing of part of the Manas Taalimi. The calculated cost for all HSS activities of Manas Taalimi relevant to immunization is about US $10 million over the period 2007-2010. The contribution from GAVI HSS is about 10 percent. Major funding is coming from the SWAp joint financiers (60 percent). Other contributors are WHO, UNICEF, USAID and the Swiss Development Cooperation.

Catalytic

GAVI HSS funds are to be used as a catalyst to the process of providing incentives to health workers. The Government will contribute its own funds, starting from the second year of implementation, increasing the share of domestic financing for this component annually and achieving full financing after 2011.

Sustainability

The study team analyzed the possible sustainability of the activities proposed in the GAVI HSS application after completion of GAVI HSS funds (see Table 10).

Table 10. Approach to Sustaining Gains after Completion of GAVI HSS Funding

Component	Sustainability
1. Political commitment	Analytical work and advocacy are intended to have an immediate impact, and effects are intended to last for some time.
2. Infrastructure and procurement	Cars, refrigerators and warehouses will need maintenance and eventually replacement.
3. Capacity building	The conducting of the supervision and the cost for payment to health workers can continue only if GAVI funds are later replaced by Government funds, which is the Government's intention.
4. Reporting and monitoring	Improvements are considered as sustainable.
5. Social mobilization	Activities including sustained with promotion of popular participation and civil society engagement themselves can create demand for sustained services.

A factor that contributes to financial sustainability is the fact that the GAVI funding is part of a package of HSS support within the SWAp and that the package is also supported by the Government and other donors. GAVI HSS support and support available from other sources are taken into account and included in annual work plans and budgets. When support from GAVI ends, its funding may be substituted by funding from other sources or the budget will be reduced. The Government has expressed its ambition to continue the support to immunization incentives initiated by the GAVI HSS funds, which will also contribute to sustainability. The sustainability in the early implementation phase is further analyzed later in this report.

d). Application's strengths, weaknesses and appropriateness

The proposal is technically sound, with a logical structure that fits well into the health sector reform program and existing efforts to strengthen the health system, and into existing structures. It is well coordinated with other HSS efforts. The application builds on a number of assessments of the health system; thus, it is very relevant in relation to well-known problems and barriers. The application activities are part of the Manas Taalimi national health strategy and implemented within the SWAp framework, using Government systems and procedures without creating a special Program Implementation Unit. The activities address a number of gaps and bottlenecks to immunization identified in a number of assessments. The gaps and bottlenecks addressed have been chosen in relation to what other activities are already included in annual plans and in relation to what are supported by other donors.

GAVI HSS is targeting several components of the health system, human resources (training and incentives), infrastructure (warehouses repair) and equipment (vehicles, refrigerators, etc.) and delivery of immunization services through the primary health care level. The activities will benefit both the immunization-specific part of the health system and the wider primary health system, and is expected to increase immunization coverage, particularly by addressing under-served areas and the migrant population. Geographically, the proposal is nationwide and does not target specific regions or districts. The fact that the proposal addresses several components of the health system and aims at the whole country may result in resources being thinly spread. On the other hand, the proposal is part of a joint donor program for HSS activities and complements what the Government and other donors are doing. It will, therefore, be difficult to attribute any changes in the health outcome indicators to the implementation of the GAVI HSS proposal.

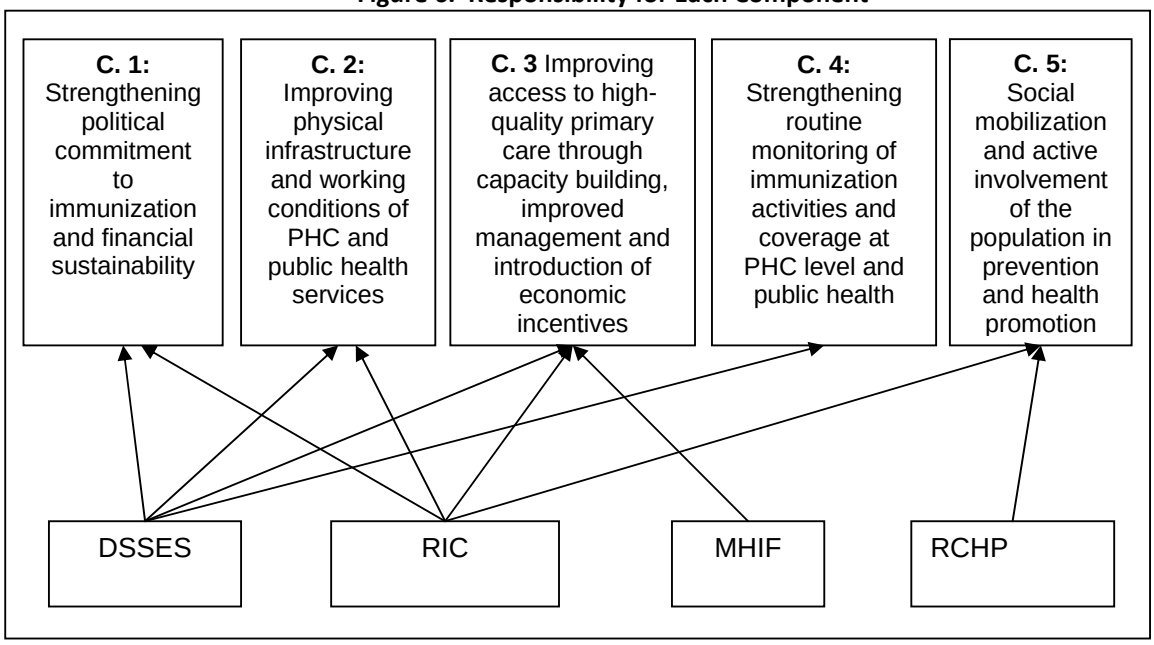
V. Implementation Experience

a). Management and coordination of the GAVI HSS

Management, coordination mechanisms and decision-making process

GAVI HSS in Kyrgyzstan is supervised by the Deputy Minister, Chief Sanitary Doctor of the Kyrgyz Republic, so he is a focal point in the country. Two bodies coordinate the GAVI HSS grant in Kyrgyzstan as was proposed in the application: ICC and HPC. The full description of these two bodies functions are described in detail later in this report. The ICC is a national technical coordination committee for immunization issues chaired by a Deputy Minister. Each component is implemented by several bodies (Figure 6). In addition, the MoH Department of Strategic Planning and Reform Implementation is responsible for coordinating all HSS activities under Manas Taalimi, including coordinating and facilitating planning, implementation and reporting processes. Two times a year, before the health summits, the monitoring data is collected to be presented to the development partners for their review of the health system progress in relation to the aims of Manas Taalimi. GAVI HSS monitoring indicators are included into the overall monitoring package of the health system.

Figure 6. Responsibility for Each Component



The application proposed two positions were established within the MoH to coordinate the implementation of GAVI HSS: Technical Coordinator and Financial Manager. The Technical Coordinator works closely with all the MoH departments, agencies and bodies involved in GAVI HSS implementation on a regular basis and provides a link for the GAVI Secretariat between the health summits as required. The APRs are prepared by the Technical Coordinator and presented to the HPC for approval before being sent to the GAVI Secretariat. The issues related to financial management are coordinated by the Financial Manager. The work of both these specialists is supervised by HPC and ICC.

Overall, the general coordination of components included into the proposal is going according to the plan. Some activities have been implemented already, and some are in the process of being implemented. The Deputy Minister, focal point for GAVI, supervises the implementation of all activities and deals with any difficulties that arise. The process of reviewing the implementation and budget for the previous year (APR) by HPC before submitting it to the GAVI Secretariat is a good example of the coordination and management

of this program. Overall management is satisfactory; however, there is still room for improvement. Closer collaboration with other international organizations that are active in this field in Kyrgyzstan is needed.

Planning and Budgeting Process

During the early stage of the GAVI HSS implementation, it was found that the procedure of planning and budgeting is different from that proposed in the application. The plan of work and budget for the upcoming period is developed by the organizations responsible for implementing the GAVI HSS components and submitted to MoH. The MoH approves the plan by Order of the MoH (Prikaz of MoH). Based on this order, all organizations responsible for implementation of components send a request application with a detailed budget for each GAVI HSS component to the MoH. The MoH reviews all the applications and then sends to the Central Treasury a payment order signed by the Deputy Minister, who coordinates the GAVI HSS activities and the chief accountant from the MoH.

Technical Assistance

During implementation of this program, technical assistance is provided by WHO, Zdrav Plus (USAID) and Kyrgyz-Swiss Health Reform Support Project (SIDA/SDC). WHO provides assistance in the monitoring and evaluation area via analytical input by conducting baseline and follow-up surveys to evaluate the impact of economic incentives given to PHC. SIDA/SDS links the VHC with GAVI HSS Technical and Financial Coordinators because this project introduced VHC into the health promotion area in 2000 in one rayon and now is in the process of rolling it out to the whole country. The USAID-funded ZdravPlus project provides assistance on issues of social mobilization and population involvement of the in prevention and health promotion within the framework of GAVI HSS. In addition, its specialists provide assistance to the VHC in drafting proposals to receive small grants.

b). Attention to Core GAVI HSS principles

Country-aligned and country-driven:

GAVI HSS is implemented by arrangements with the Manas Taalimi program and on-going HSS initiatives within the SWAp framework. The Technical Coordinator for the GAVI HSS works closely with the MoH departments responsible for maximum integration of MHC into the health system at all levels within Manas Taalimi and others stakeholders on a regular basis. The Technical Coordinator ensures a link between MoH and the GAVI secretariat.

Harmonization

The GAVI HSS program is fully harmonized with other development partners' strategies and planning processes. For example, the activities of the GAVI HSS are included in the revised comprehensive cMYP for immunization. Consequently, GAVI HSS was reviewed during joint reviews of the progress of Manas Taalimi in May 2009. The indicators to monitor the GAVI HSS program are included into the main Monitoring and Evaluation package.

Results-oriented

The non-traditional approach to strengthening the health system is funding based on results. Within the framework of GAVI HSS, such an approach is introduced. The approach, performance-based payment incentives for PHC providers, is the most innovative mechanism in the Kyrgyz health system, which aims to retain health personnel in the rural areas. This GAVI HSS instrument creates an opportunity for solving the problems with human resources in the rural areas. This approach stimulated an application for a World Bank grant aimed at providing results-based funding at all levels in the field of MCH.

Predictable and additional resources

The GAVI HSS funds fit into Manas Taalimi and contribute to that strategy's implementation efforts. Other donors are contributing to the strategy through budget support or separate financing of part of the Manas Taalimi. The calculated cost for all HSS activities of Manas Taalimi relevant to immunization is about US $10 million over the period 2007-2010. The contribution from GAVI HSS is about 10 percent of that amount. The total funding for HSS activities is reported in the application. The major funding is coming from the SWAp joint financiers (60 percent). Other contributors are WHO, UNICEF, USAID and the Swiss Development Cooperation.

Inclusive and collaborative

The Technical Coordinator for the GAVI HSS informs and involves two MoH departments (the Prevention and Curative Services Department and the Department of Strategic Planning and Reform Implementation) in the planning, implementation and evaluation stages. In addition, other stakeholders, including members of ICC, local agencies and development partners (WHO, UNICEF, World Bank, etc.) active in the immunization field in the country, are informed and involved in the planning, implementation and evaluation stages when needed and if they have expertise in that area.

Catalytic

GAVI HSS funds are used as a catalyst to the process; the Government plans to contribute its own funds, starting from the second year of implementation of the sub-component, "performance-based payment incentives."

Sustainability

Despite the fact that the sustainability of GAVI HSS activities is well described in the proposal, during the evaluation of the early GAVI HSS implementation process, distinct activities that ensure the sustainability of

GAVI HSS activities after its completion have not been identified. The exception is the component on "performance-based payment incentives." In particular, GAVI HSS funds are to be replaced by Government funds; the MHIF has developed the plan already.

c). Financial management

Financial procedures, roles and responsibilities

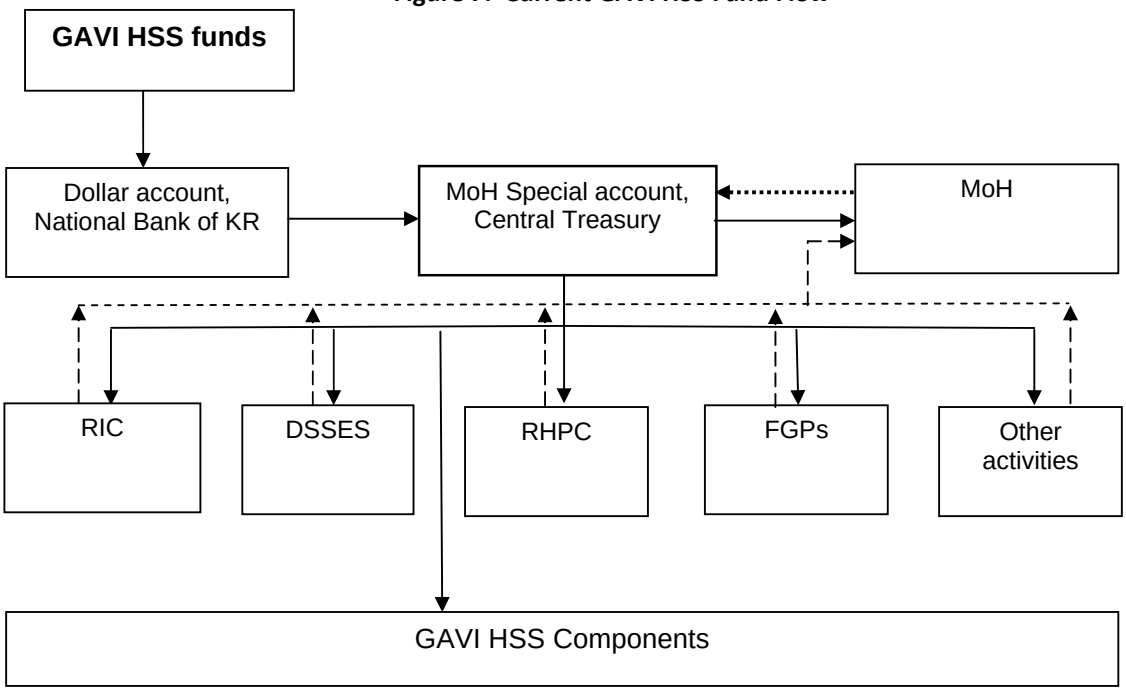
The financing system of activities within GAVI HSS consists of three levels:

- On the first level, there is an accumulation of funds in the special account of the MoH. The special account is set up in the Central Treasury system.
- The second level is represented by various health care organizations (RIC, RHPC, Medical Academy, MHIF and others) that are responsible for carrying out activities within the five components of GAVI HSS.
- The third level is represented by various organizations that are direct implementers of activities (for example, FGPs, which participate in bonus programs). In this level, not only institutions in health systems (including organizations from the second level) but also all other non-health organizations can be represented (for instance, the Kyrgyz Media Radio Company).

The funding can be carried out in two ways: (a) funds are sent first of all to an organization responsible for implementing an approved plan of actions or (b) funds are sent directly to the implementers of activities. For instance, MHIF is responsible for activities to introduce financial incentives, so it sends to the MoH reports on results of selected indicators in FGPs and information on how much additional payments are needed based on the earned bonuses of FGPs. However, the ultimate financial means receivers are those FGPs that are actually participating in the bonus payment program. The MoH sends financial means directly to those FGPs.

All financial documents related to payment (receipts, invoices, etc.) are submitted by organizations responsible for components implementation to the MoH. The figure below presents the current financial flow.

Figure 7. Current GAVI HSS Fund Flow



Flow of funds and common bottlenecks

As was noted earlier, it was expected that all financial flows related to GAVI HSS will be integrated into the SWAp mechanism used by international organizations in an effort to support the state budget under financing Manas Taalimi. However, the MoH has faced problems in allocating the investment budget. The Ministry of Finance has not fully financed expenditures regarding the implementation of the procurement plan within the Manas Taalimi program, which has led to fines because commitments were not paid by contracts, negatively affecting future procurement plans. To avoid such problems when implementing the GAVI HSS program, the decision was made to take funds from the SWAp framework. In addition, as it is the Alliance (which includes different financing organizations) and not GAVI that is the financing organization, GAVI could not sign the Memorandum that is required within the framework of SWAp.

It should be noted that, in general, the current system of funds flow is efficient enough for financing activities within GAVI HSS. Until now, there was no case in which any organization had problems using the present system of funds flow. The only problem the country has faced at the beginning of GAVI HSS is the delay of tranches. Thus, the first tranche was provided only in September 2007, the second in June 2008, and the third in March 2009. As a result of these delays, the planned activities were also delayed, leading to the incomplete use of funds for 2007-2008. The delay in tranches was due to the need to find new arrangements for transferring the GAVI HSS funds to Kyrgyzstan because the funds could not flow into the SWAp pool. Before the decision was made, a discussion with the World Bank and other joint financiers was undertaken; it was decided that GAVI HSS funds should be transferred to the special account of the MoH in the Central Treasury, which was opened specially for GAVI HSS funds. Thus, the procedure of finding the best solution and other technical issues related to opening the new account affected the timing of receiving all the tranches.

GAVI HSS allocation/spending compared to plan

The total sum of the application is US $1,155,000. Table 11 shows how this amount was distributed by year and how much was actually used.

Table 11: GAVI HSS Financing Volume (in US Dollars)

	2007	2008	2009	2010
Approved amount	$ 424,000	$ 255,000	$ 255,000	$ 220,000
Used amount	$309,070	$28,000	-	-
Remain (balance)	$ 115,290	227,500	$ 255,000	

The main reason for the incomplete use of funds is the delays in receiving the funds from GAVI. As a result, the use of the first tranche was initiated in September 2007, and the funds covered most of 2008 also. The funds from the second tranche are currently being used, but only US $28,000 has been spent.

The use of the first tranche is detailed in Annex 1. Table 12 shows the data from the MoH on the use of funds per component in the first tranche.

Table 12: Use of Funds from the First Tranche (in US Dollars)

Component	Plan	Fact	Execution in %
1. Strengthening political commitment to immunization and its financial sustainability	4,710	4,710	100%
2. Improving the physical infrastructure and working conditions of primary care and public health services	232,400	219,680	94.5%
3. Ensuring access to high-quality primary care through capacity building, improved management & introduction of economic incentives	115,220	49,370	42.8%
4. Strengthening routine monitoring of immunization activities & coverage at the level of primary care and public health	39,000	2,280	5.8%
5. Social mobilization and active involvement of the population in health promotion activities	18,300	18,300	100%
Support cost/administration	14,730	14,730	100%
TOTAL	**424,360**	**309,070**	**72.8%**

Source: GAVI HSS Kyrgyzstan, reporting system, 2008

Almost 73 percent of the first tranche was utilized. Funds allocated for components 1 and 5 were fully utilized. Those for supporting the GAVI HSS program, which envisaged hiring a Technical Coordinator and Financial Specialist, were fully utilized as well. Almost all funds allocated for component 2 were utilized (94.5 percent). In this component, funding of five activities were planned. Three out of the five were fully implemented. But the funding for purchasing refrigerators for vaccine warehouses and for developing software for monitoring refrigerators and other equipment in the cold chain were not fully used. Actual use of funds for those activities was at 17 percent and 19 percent, respectively.

Actual spending for Component 3 made up less than half of the planned funding volume (42.8 percent). Within this component, 11 activities were planned, but only 5 were implemented and only 3 used all of the funds allocated to them.

The worst situation occurred with the funding of Component 4 (4.8 percent from the planned volume). This component had funding for four activities, but actual spending was only 14.7 percent of the planned

volume. The funds that were spent went to the collection and processing of information on immunization through PHC facilities using the standard clinical informational forms.

The use of the second tranche in compliance with the five components is detailed in Annex 2 and the table below.

Table 13: Use of Funds from the Second Tranche (in US Dollars)

Activities	Plan	Fact	Execution in %
1. Strengthening political commitment to immunization and its financial sustainability	19,800	4,300	21.7%
2. Improving the physical infrastructure and working conditions of primary care and public health services	3,400	-	0%
3. Ensuring access to high-quality primary care through capacity building, improved management & introduction of economic incentives	184,600	19,400	10.5%
4. Strengthening routine monitoring of immunization activities & coverage at the level of primary care and public health	20,200	-	0%
5. Social mobilization and active involvement of the population in health promotion activities	18,300	1,500	8.2%
Support cost/administration	9,200	2,800	30.4%
TOTAL	**255,500**	**28,000**	**11.0%**

Source: GAVI HSS Kyrgyzstan, reporting system, 2008

Regarding the funds received within the second tranche of GAVI HSS, it is worthwhile to note that implementation of planned activities had begun at the end of 2008, but funds from the first tranche were still being used in 2008. By May 2009 only 11 percent of funds from the second tranche were utilized.

When we look at components, we can see that components 2 and 4 have not spent any funds. Within component 1, four activities were planned, two of which—annual analysis of impact of immunization programs of health status and public awareness campaigns about the impact of immunization programs on health status—had fully used their funds. The other two did not spend any funds.

In component 3, seven activities were planned, but actually only three of them used any funds:

- Training of FAPs, FGPs and ambulance staff on specific issues in MCH, in addition to the general training envisioned under the human resources component of Manas Taalimi program (15.3 percent from the planned volume).
- Epidemiological investigations of detected cases of infectious diseases (33.3 percent from the planned volume).
- Phase 1 of implementation of the performance-based pay in pilot regions with high MMR and U5MR (13.6 percent from the planned volume).

Actual financing of component 5 made up only 8.2 percent from the planned volume. Three activities were planned within this component. Two were fully implemented, but most of the funding (US $16,800) should have been spent on implementing the incentives for NGOs and public associations to conduct health

promotion activities among urban migrants and in remote regions, but this activity was not yet implemented.

Attention to financial sustainability

One component of the HSS grant has a plan developed to ensure financial sustainability—the incentives program (bonus payment) for primary-level health care service providers. The MHIF has developed a plan to introduce this component, with specific dates for specific oblasts. Until now, the mechanism for using GAVI funds has only been introduced in Issyk-Kul and Chui oblasts. The next stages are:

1. The bonus payment program will be introduced in the second half of 2009 in Naryn and Talas with funding from the MHIF.
2. By 2010 the mechanism will be introduced in all oblasts. Two oblasts will receive GAVI funds, and other oblasts will receive funds from the MHIF.
3. By 2011 all oblasts will receive funds from the MHIF.

d). Monitoring and evaluation practices

Indicators, Information Systems, Procedures

The Strategic Planning Department leads the preparation of indicator reports for Joint Annual Reviews (JARs). For indicators on MCH and immunization, the Department collects information from MHIF, RHIC, the MCH Unit, and the Public Health Unit. Figures from these agencies are then translated into indicators to compare against indicator targets. The Strategic Planning Department follows agreed standard guidelines for calculating the indicators. Indicators then are reported to stakeholders in JARs during the health summits.

Specifically, to track immunization performance, vertical health institutions produce and report two types of data. Immunization Units within Sanitation and Epidemiology Surveillance centers (SES) in rayons report immunization process data to higher chains of Immunization Centers. Cases of vaccine-controllable infections are reported by PHC providers to Immunization Units and SES Units on site, and the latter report to both the Republican Immunization Center (RIC) and SES Department. The SES and RIC provide summarized data to the Public Health Unit of MoH and the Republican Health Information Center.

To track MCH developments other than immunization, the MCH Unit of MoH uses reports from PHC providers and SES facilities, as well as data produced under the UNICEF Multiple Indicator Cluster Survey and the Integrated Household Survey.

In 2008 the MHIF revised its contracts with health providers, promoting results-based procurements (strategic procurements). Indicators used for the GAVI HSS-supported bonus payment mechanism are fully in line with criteria used in the revised MHIF contracts. Health facilities are contracted based on new criteria; the number of contracted facilities is growing along with the extension of the GAVI HSS bonus payment mechanism across the regions.

The Monitoring package has indicators that specifically focus on mother and child health: "Under-5 child mortality rate," "Infant mortality rate," "Maternal mortality rate," "Share of delivered women who received the entire package of antenatal services," and "Vaccination coverage in children under 1."

Although the indicators package is a part of the SWAp Operational Guidelines, some parallel donor programs in health have their own indicators, often with distinct principles and technical approaches. To avoid this situation, the country application for HSS provided for the incorporation of GAVI HSS indicators into the Kyrgyz indicators package.

In May 2009 the Manas Taalimi monitoring package revision was initiated, with changes envisioned both in the structure and contents of the package. Indicators with targets already achieved by 2009 were excluded. The main focus of the revision was output and outcome indicators. GAVI HSS indicators were also taken for review within working groups on three components: Public Health, Community involvement, and Mother and Child Health. The review within these groups was attended by the GAVI HSS Technical Coordinator and

was supposed to result in the incorporation of several GAVI HSS indicators in the revised package. The indicators package review was to be accomplished in June 2009. Guidelines for calculating the indicators will be presented in the October Review.

The incorporation of GAVI HSS indicators in the package will enforce collection of the data as an integral part of the reporting system within the national health monitoring system. Targets for these indicators will reflect those in the Action Plan for the GAVI HSS program in Kyrgyzstan, as GAVI alliance support is a key element in achieving targets in MCH and immunization.

Use of monitoring data for program management, planning or policy making

Overall, maternal and child health indicators are extensively used for planning and policy making in Kyrgyzstan. MCH, including immunization, is a priority area. In recent years, a number of initiatives were launched to specifically address improving maternal and child heath, such as Integrated Management of Childhood Diseases, flour fortification with iron, Vitamin A supplements, and Safe Motherhood, as well as GAVI-supported programs.

Using the indicators, the JARs provide overall feedback from Government and donors on reforms progress. Summary notes produced as a result of the JARs provide a cross-section image of overall progress, emphasizing immediate actions needed to overcome current bottlenecks and ensure further progress. The MoH adjusts plans and budgets based on the outcomes of the JARs, reporting performance at the following JAR.

During JAR 2009, the GAVI HSS Technical Coordinator briefed the Joint Review Commission on the progress of the HSS program in Kyrgyzstan.

Specifically, recently there were two major developments in relation to the use of data on GAVI HSS progress in the country: (i) the country bought into the performance-based payment mechanism and (ii) disturbances in the SWAp processes were addressed in JAR-2009, which should reinforce the GAVI HSS investments in training of PHC providers.

In 2008 the MoH adopted a performance-based payment mechanism in PCH-provided services, which will be enforced through MHIF contracts with PHC providers. The MHIF data on the bonus payment mechanism, which is currently implemented under the GAVI HSS program, were presented in JAR 2009. The data demonstrated significant progress towards improved PHC performance and planning processes. Extension of the mechanism is to be closely monitored through an indicator adapted during the Indicator Package Review (see previous subsection). In addition, the outcomes and impacts of the bonus payment mechanism will be analyzed through a survey by CHSD that in early 2009 established baselines of perceived quality among people served and providers in several administrative areas. These mechanisms will be sustained even after GAVI HSS is decommissioned, using Government resources and the Results-based Financing Program (RBF) of the World Bank, which is currently in the design process and expected to start in 2010.

Training activities under GAVI HSS Component 3 are built into the program of continuing education of PHC providers. Disturbances in the SWAp process in 2009 caused long delays in delivery of the trainings supported by HSS. These disturbances were addressed during JAR 2009, with the result that the Government promises to improve the SWAp operational modalities.

However, there are objectives not yet fulfilled to ensure the work is achieved. Specifically, the information used for tracking MCH and immunization developments needs to improve.

To improve the monitoring of immunization coverage in Kyrgyzstan, data reliability needs to be improved. Coverage statistics are formulated directly from data produced by health providers. FGPs and FAPs count the number of people subject to vaccination every autumn. Those figures are, in fact, the health providers' predictions for the following year or plan of immunization for the upcoming year. During the year, health providers report to RMIC on the numbers of actually immunized people. RMIC then calculates the immunization coverage using actual performance against the plans. These administrative data are at the complete disposal of providers. The result is that, with the available capacity of and approaches used by health authorities, the data quality is not properly controllable.

To address this, the country application to GAVI HSS provided for the need to improve the monitoring system. Although resources are readily available from HSS funds, the technical approaches to establishing such a system are not yet well envisioned and will probably require comprehensive technical assistances in the near future to achieve a solution. MoH officials interviewed were thinking of clustered surveys to establish sound benchmarks for facilities in certain administrative areas. There are already some elements for such a system in place. Supervision visits are called for to both improve data quality and address immediate needs in knowledge and skills on site related to immunization practices. A computerized vaccine status and cold chain tracking system should become an integral part of such a system.

e). Analysis of Implementation Experience

The analysis of the early implementation process of GAVI HSS shows the following:

- Overall management and coordination mechanisms are adequately carried out according to the GAVI HSS application. Some activities have been already implemented and some are in the process of being implemented. The process of reviewing the implementation and budget for the previous year (APR) by HPC before submitting it to the GAVI Secretariat is a good example of the coordination and management of this program. However, some parts of management still need to be improved. The GAVI HSS program has to be more exposed to the international organizations that are active in this field in Kyrgyzstan to coordinate some activities.
- To support the implementation of this program, technical assistance is provided by WHO, Zdrav Plus and SIDA/SDC, a significant contribution to program activities that shows collaboration and alignment with the overall health system in Kyrgyzstan.
- GAVI HSS is implemented under the arrangements of the Manas Taalimi program and on-going health system strengthening initiatives within SWAP framework.
- The GAVI HSS program is fully harmonized with other development partners' strategies and planning processes.
- The most innovative mechanism, performance-based funding, in the Kyrgyz health system, which aims to retain health personnel in the rural areas, has been introduced. The study to evaluate the impact of this mechanism is under progress; the first results will be available by the end of this year.
- This approach (RBF) prompted the MoH to apply for a World Bank grant that aims at providing results-based funding at all levels in the field of MCH; this should start in late 2009. The sustainability of GAVI HSS activities after its completion is not clearly identified, with the exception of the sub-component, "performance-based payment incentives," under which the GAVI HSS funds are planned to be replaced by MHIF funds.
- The procedure of planning and budgeting differ somewhat from that proposed in the application. All financial flows related to GAVI HSS should be integrated into the SWAp mechanism; however, because the MoH faced problems with allocating funds from the investment budget, the GAVI HSS funds have been taken out of the SWAp to avoid negative consequences in implementing GAVI HSS.
- Approximately 73 percent of planned funds were used from the first tranche due to the delay of receiving funds from the GAVI HSS Secretariat, and 11 percent of the second tranche were received not too long ago.
- The indicators of GAVI HSS performance in Kyrgyzstan are reviewed by ICC and HPC. In addition, the GAVI HSS is monitored two times a year during joint reviews of the Manas Taalimi program before the health summits.

The analysis of early implementation of each component is presented in the following section.

VI. Country Performance against Plans and Targets

The progress of planned activities was partly influenced by factors that did not directly depend on on-site managers and involved partners. One such factor is that the delayed start of actual delivery resulted in shifts of the program timeframes and negative changes in actual procurements. Implementation of the Action Plan actually started in 2008 because of the delay in funds transfer from the GAVI Secretariat to the Kyrgyz MoH. The delayed start of the program resulted in changes in some of the planned procurements. Another factor was the introduction of the Penthavalent vaccine, which slowed down the development of some GAVI HSS-funded activities. The introduction of the Pentavalent vaccine in Kyrgyzstan has been in process for nearly two years and is expected to have valuable implications for both vaccination management and performance as it substitutes several vaccines with complicated management with a vaccine newly applied in the country. However, the transition—being a quite severe action—affected the workloads of officials and linear staff, who are, at the same time, involved in several GAVI HSS program activities.

a). GAVI HSS-funded activities as compared to plan

The table below and the following explanations provide an update on the progress of activities. More detailed activity-level tracking can be found in Annex 3.

Table 14. Tracking of Progress

Five components of HSS support	Activities and action points	Progress
1. Strengthening political commitment to immunization and ensuring financial sustainability	Conduct analytical work with relevance for strengthening immunization and primary health care and channel to policy process in the health sector, wider Government, and parliament	In progress
	Conduct advocacy activities targeting wider Government, local governments, and the population	In progress
	Provide accurate and timely information to MoH on financing requirements for ensuring full immunization coverage for preparation of annual budgets and the Medium-Term Budget Framework.	Not done
2. Improving physical infrastructure and working conditions of primary care and public health services	Purchase 27 cars for surveillance and mobile teams	Done
	Purchase 10 refrigerating equipment	Done
	Renovate 16 rayon-level vaccine warehouses	Done
3. Improving access to high-quality primary care through capacity building, improved management and introduction of economic incentives	Conduct training for feldsher-midwives in “Immunization in Practice” (WHO curriculum)	In progress
	Develop mechanism for “supportive supervision” of primary care staff for performance improvement, including immunization coverage; develop manual, train supervisors, conduct joint supervision trips with MHIF in each of 40 rayons	In progress
	Organize mobile teams in each of 40 rayons, which will visit population points without medical services 4 times a year	In progress

Five components of HSS support	Activities and action points	Progress
	Train primary health care staff on integrated surveillance of infectious diseases and provide support for its implementation	In progress
	Develop mechanism and indicators for performance-based pay for primary care providers, implement it in a phased approach and conduct evaluation of its effectiveness to improve quality and staff retention after Year 1 & Year 2. Contribute Government funds to increase the number of recipient providers after Year 1 and move to full self-financing after 2010	In progress
4. Strengthening routine monitoring of immunization activities and coverage at the level of primary care and public health	Develop and introduce a vaccine status register and immunization calendar	In progress
	Create electronic reporting for immunization activities in primary care by revising the primary care reporting form of the Medical Information System	Not done
	Monitor the timeliness of immunization activities in line with immunization calendar	Not done
5. Social mobilization and active involvement of the population in health promotion and prevention	Develop regular contact with NGOs working among urban migrants in Bishkek and Osh cities, where under-coverage is significant	Not done
	Conduct capacity building for providers to work with civil society organizations to help conduct outreach and communication activities in order to generate demand for timely primary care and immunization	In progress

Component 1 - "Strengthening political commitment to immunization and its financial sustainability

To analyze the GAVI HSS outcomes and impacts, the country application provided several studies to be carried out during the program implementation. Some are studies that are supposed to demonstrate how GAVI HSS interventions work. Evaluation of the GAVI HSS-supported economic incentives-building to PHC providers is one of them. The first phase of the study has been completed, with baselines documented on perceived quality of care among service users and providers in intervention and control areas. Another study is the economic evaluation of immunization programs in Kyrgyzstan. Currently, this study is not being implemented, as its research questions and design are yet not clear.

Advocacy activities consisted of a mass media campaign and the European Immunization Week. In 2008 there was a mass media contest carried out to promote information on immunization. The need of immunization for health and national calendars were topics for the contestants. These types of campaigns should be continued, using a range of media that can be exploited to reach people's attention. Currently, RCHP has completed development of technical guidelines and information materials to train civil society organizations on issues of public health. This resource would enrich public campaigns for building awareness on immunization.

Since 2007, GAVI HSS and WHO have together carried out the European Immunization Week once a year, which is targeted to the most problematic groups in terms of vaccination coverage (including internal migrants and immigrants). During 2008, this was in part financed by the HSS. During these weeks, people are vaccinated and provided with vitamins and awareness-building materials. At the end of the week, a round table is organized, which is actively supported by the local administration. These activities contributed to closing knowledge gaps and inappropriate immunization practices.

Each year, RIC estimates vaccine needs and the cost of immunization activities. The estimates are submitted to MoH, which should then allocate resources for procuring the needed amounts of vaccines. In recent years, the Government has not fully meet its obligation by contributing its share of resources used for procuring adequate amounts of vaccines. Another challenge is the decision on funds allocation, which is made in the spring, hindering the RIC from promptly and efficiently procuring vaccines.

Component 2 - "Improving the physical infrastructure and working conditions of primary care and public health services"

The application budgeted the procurement of 26 vehicles, but only 18 were purchased. Due to the delay in starting the HSS program, the Procurement Unit of MoH procured as many items as the amount that the budgeted allowed, which turned out to be only 18 vehicles. There was no formal decision to reduce the number of vehicles or to reallocate funds within from other parts of the budget. Changes in market prices were the main reason for this reduced number. The SES Department distributed the vehicles, two for each oblast and two for Bishkek and Osh. The recipients were Oblast SES Centers. The vehicles are used not only for immunization purposes, but for other needs as well. In the near future, they will be used for supervisory visits and mobile teams. It has to be noted that 18 vehicles are not enough; most facility health managers agreed that, ideally, it would be more efficient to have a vehicle per each rayon.

The application proposed the purchase of 10 specialized vaccine refrigerators. Instead, 30 ordinary refrigerators were procured for vaccine-storage in health facilities. The 30 refrigerators were distributed among Oblast Immunization Centers, FGPs and FAPs. Distribution was mainly driven by the availability of the refrigerators and the locales of the recipient health facilities; that is, remotely located facilities received priority. RIC was responsible for distribution. It needs to be mentioned that in 2008 the country had received specialized vaccine refrigerators from the Japanese Government, with UNICEF ensuring the logistics of the refrigerators. The amount of equipment seems to already meet requirements, as the RIC reports that the cold chain equipment needs of oblast warehouses was fully met by 2009.

The Central Vaccine Store went through capital repair, and 35 warehouses in rayons have been repaired. The repairs, however, do not address providing extra space for refrigerators, as they did not involve restructuring but more minor types of repairs such as painting.

Component 3 - "Improving access to high-quality primary care through capacity building, improved management and introduction of economic incentives"

In 2008 the first round of trainings was carried out. Trainers went to oblast health facilities to train health professionals. The second round is planned for 2009, but is currently delayed due to problems with the SWAp mechanism exploited for GAVI HSS-supported trainings on immunization.

Generally, the progress in capacity building through the training of PHC providers is impressive, with only minor management modifications required to improve it. Fifteen feldsher trainers have been trained against 26 planned, and 170 immunologists, fieldshers and nurses trained on "Immunization in practice" against 420 planned.

Respondents had two major concerns that should be accounted for in planning activities: (1) the training "Specifics of Immunization" was too short to deliver the whole pack of essential material and (2) the trainers who deliver "Specifics of Immunization" feel they need more incentives to deliver such a comprehensive training.

Both concerns seem relevant, as the curriculum is really too large to be covered in a day. The curriculum covers vaccination timeframes, managing doses, clinical decision making in complex cases, etc. Managers of the Kyrgyz State Medical Institute of Post-Graduate Training and Continuous Education (KSMIRCE) said the trainers do need fees to better deliver this training. Management of this training will require more funds assigned in future country applications.

GAVI HSS support enabled initiation of a new approach to supervising providers' performance, which substitutes numerous check-ups of providers by inspectors from various authorities (RIC, MHIF, MoH's Curative Department, SES). Although the supervisory visits to PHC facilities primarily focus on supervising

immunization activities, these visits are expected to significantly reduce the extra time the providers spend with inspectors.

Supervisory visits will be conducted by staff of MHIF, MoH and SES. Introduction of supervisory visits is in progress. Methodological guidelines have been developed and approved by MoH. The methodology is being piloted in health facilities in the Chui oblast, with RIC leading the process. After the pilot is finalized, training activities are expected to start during 2009.

Arrangements of mobile groups are not progressing. To ensure immunization and MCH service coverage in villages with no FAPs, mobile groups will be organized. They will be composed of an immunologist, family doctor and other health professionals. The mobile groups will use vehicles available in the health facilities operating in rayon or oblast centers, including vehicles supplied under GAVI HSS. Mobile groups are to make four rounds of visits per year. Currently, the MoH is making estimates of country requirements for mobile groups and making organization arrangements.

For the implementation of the bonus payment system, a number of indicators were selected during 2008 for the calculation of the bonuses and base-line values. After developing guidelines in September 2008, the incentive system was piloted in the Jety Oguz and Sokuluk rayons, beginning in October 2008. FMCs in these rayons will receive bonus payments from the GAVI HSS project until the end of 2010. In September 2008, these rayons provided instructions for FMCs.

The performance-based payment mechanism is showing improvement both in service delivery and planning, the rayons found improvements in indicators used for payments and improved practices in health within PHC facilities.

Availability of GAVI HSS resources induced a revision of epidemiologic surveillance standards. The trainings are expected to inform the audience of the basic and revised principles of epidemiologic surveillance in Kyrgyzstan. Epidemiologic surveillance, case investigations, role distribution, etc., will be demonstrated in those trainings. Preparation for the training is underway although the training has not yet started.

Component 4 - "Strengthening routine monitoring of immunization activities and coverage at the level of primary care and public health"

GAVI HSS enabled the development of the information system for vaccine status registration and tracking cold chains, currently in the finalization stage. The task was contracted to a private company. Development of Terms of Reference took nearly a year, for conceptualization of the future system's elements with a view of translating them into the software products was quite a new experience for the actors in the immunization process. Eventually, all elements of the future system were integrated into a single contract. The contractor was expected to develop a single information system, instead of three individual software products.

The maintenance of Health Information Systems is institutionalized, with IT staff capable of working on a wide range of tasks, including information systems developed for improved immunization management.

In May 2009, the Indicators Package for the Manas Taalimi Health Reform Program was revised. Indicators related to immunization, which were used under GAVI HSS, were also revised during the review mission. An important indicator to track the introduction of performance-based payment, which is currently funded by GAVI HSS, was included in the Package.

Monitoring of timeliness and quality of immunization within the National Vaccination Calendar is still a challenge in Kyrgyzstan. Computerized individual vaccine status calendars and tools for tracking vaccine stocks, along with supervision visits, are called for to improve monitoring processes. However, how to improve the quality of immunization data produced by PHC providers through routine processes requires more comprehensive technical assistance.

Component 5 - "Social mobilization and active involvement of people in health promotion and disease prevention"

All activities under Component 5 are progressing well, with beneficial lessons learned from challenges at the initial stages of the Small Grants program to support the initiatives of community organizations to act on immunization and MCH.

With donor assistance, the Republican Center for Health Promotion, a leading agency in community involvement, is extending VHCs to regions that have not been covered so far.

Technical guidelines and information materials to train civil society organizations on issues of public health have been prepared, as the Action Plan provided. They are designed and printed by the Republican Center for Health Promotion, which specializes in designing health promotion actions, and the RCI. The booklets, which illustrate the National Vaccination Calendar in a user-friendly way, are printed in the Kyrgyz and Russian languages, covering the majority of the population.

To create incentives for civil society organizations, GAVI HSS established a Small Grants Program. Initially, the Program was designed so that applicants submitted project proposals related to immunization and MCH. The Review Committee—consisting of staff from the Republican Center for Health Promotion (RCHP), GAVI HSS, Swiss Project to Support Kyrgyz Health Reform, Mandatory Health Insurance Fund, and MoH—was established for selecting project proposals to support it. GAVI HSS then directly transfers Small Grants Program funds to recipients.

The first round was announced through the media. Mostly, VHCs applied to the Program, although the Program is open for other civil society organizations as well. Main challenges in the Small Grants Program implementation were (1) in the initial stages, the proposal selection process had to deal with difficulties in articulating and formulating the project proposals to show their clear relation to MCH and immunization topics; and (2) resources available to run the program in a way to build robust incentives for civil society organizations appear to be too small.

To build relevant knowledge and skills, trainers from the Swiss Project to Support Kyrgyz Health Reform and USAID's ZdravPLUS Project were involved in informing VHCs on the Small Grants Program mission and training them in project management, financial arrangements under the Program and several other areas. These trainers deliver training to health professionals and community organizations on communications skills. The training was designed before GAVI HSS started and is still ongoing.

b). HSS inputs and outputs compared to targets

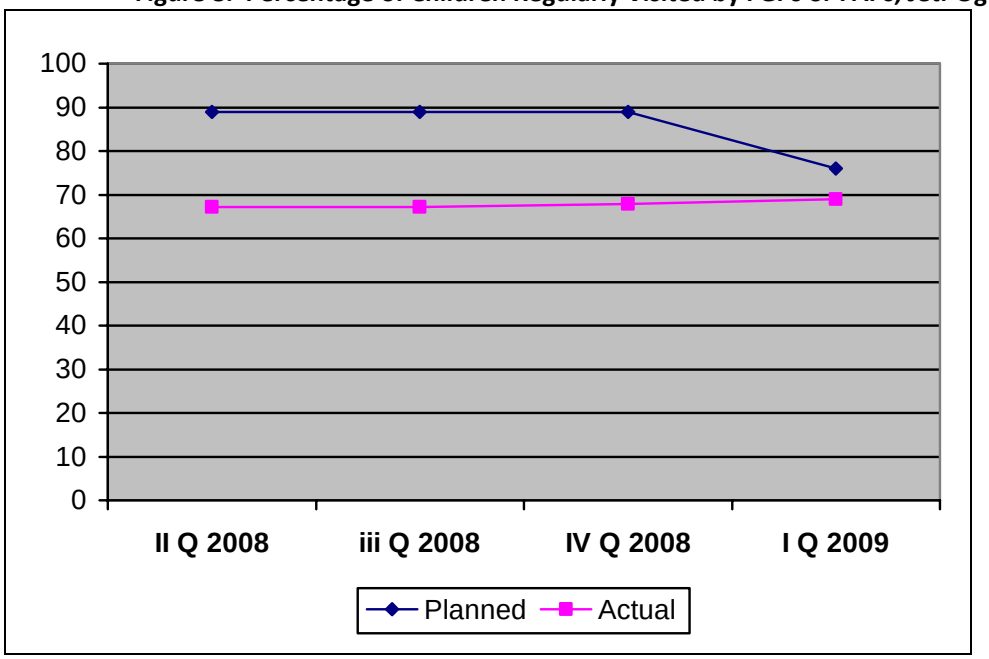
Annex 4 presents the description of inputs and outputs compared to targets. GAVI HSS impact on immunization and child mortality rates was to be judged based on data for 2009-2010.

Progress toward outcomes

The delayed start of GAVI HSS in Kyrgyzstan resulted in a shifted program implementation timeline. Activities actually started in 2008, which did not provide sufficient time to judge the impact of the GAVI HSS on health outcomes. Changes in under-five and infant mortality rates cannot be directly attributed to GAVI HSS.

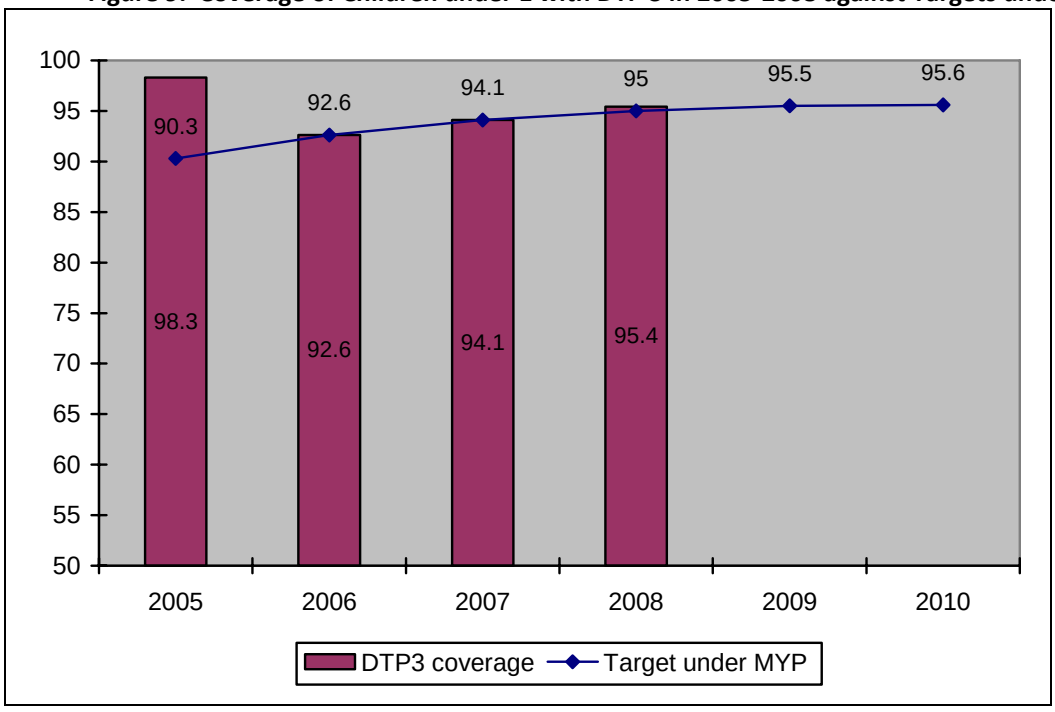
The progress in the performance-based payment mechanism funded by GAVI HSS promises improvements in the near future. As Figure 9 below illustrates, actual performance (on children regularly visited by FGPs or FAPs) does not yet meet targets; however, it is believed that health facilities are better able to plan with targets that are becoming more realistic. Managers are now trying to set targets closer to what doctors can actually deliver, giving the doctors an opportunity to earn extra money.

Figure 8. Percentage of Children Regularly Visited by FGPs or FAPs, Jeti-Oguz Rayon



Coverage with DTP3, which was one of the GAVI HSS indicators, is increasing. Reported data by RIC illustrates that overall DTP 3 coverage is progressing in line with targets set under the Multi-year Plan of Immunization (MYPI) in Kyrgyzstan and the GAVI HSS program in Kyrgyzstan (Figure 10).

Figure 9. Coverage of Children under 1 with DTP 3 in 2005-2008 against Targets under MYPI



Source: RIC, 2008

At this stage, it is clearly not possible to attribute changes in immunization coverage to the GAVI HSS support. Upcoming rounds of the Integrated Household Survey and MICS could potentially demonstrate important improvements in coverage rates, especially among disadvantaged and remote populations. However, to date, there have been no discussions concerning the relevant questions that would be needed in those surveys or the survey design considerations needed to substantiate any associations between improved routine immunization coverage and the GAVI HSS program.

VII. Conclusions

a). GAVI HSS proposal development and application process

The process was clearly a Kyrgyz-led process. A working group was established that included the main stakeholders to identify the barriers to health system development in Kyrgyzstan. The group was able to develop the proposal and, in particular, to identify components that should be included in it. Further, a number of factors contributed to a technically sound application although the time for writing it was limited. From the beginning and throughout the process, there was strong political support, with the Deputy Minister supervising the work and the Health Policy Council approving it.

The active involvement of ICC in the process was another positive element, in that ICC contributed to formulating and identifying the needs in the components. The strong policy framework provided by the Manas Taalimi and existing efforts to strengthen the health system also facilitated proposal development. Studies that could be used for identifying barriers to immunization and other PHC services already existed and were utilized. The development of the application was further facilitated by the existing monitoring system developed within the SWAp to monitor the progress of the health reform program, which could be used, although in a slightly modified form, for the GAVI HSS proposal.

b). Strengths/weaknesses of the HSS application

The proposal addresses a number of gaps and bottlenecks to immunization that had been identified in a number of assessments. It is aligned to the health sector reform program and existing efforts to strengthen the health system. The gaps and bottlenecks addressed have been chosen in relation to what other activities are already included in annual plans and in relation to which are supported by other donors.

Several components of the health system are addressed—human resources (training and incentives), infrastructure (warehouses repair), equipment (vehicles, refrigerators, etc.), and delivery of immunization services through the primary health care level. Activities will benefit both the immunization-specific part of the health system and the wider primary health system, and are expected to increase immunization coverage, particularly by addressing under-served areas and the migrant population.

Maintenance of the vehicles, equipment and renovated infrastructure is not included in the proposal and could potentially be a weakness.

c). HSS implementation experience/absorptive capacity

The procedure of planning and budgeting differ somewhat from that proposed in the application, in that all financial flows related with the GAVI HSS should be integrated into the SWAp mechanism; however, because the MoH faced problems with allocating funds from the investment budget, the GAVI HSS funds have been taken out of the SWAp to avoid negative consequences in implementing GAVI HSS.

GAVI HSS is implemented under the arrangements of the Manas Taalimi program and on-going health systems strengthening initiatives within the SWAp framework. The GAVI HSS program is fully harmonized with other development partners' strategies and planning processes; indicators of GAVI HSS performance in Kyrgyzstan are reviewed by ICC and HPC; and the program is monitored two times a year during joint reviews of the Manas Taalimi program before the health summits.

d). Application of Paris Declaration and other core GAVI principles

GAVI HSS is implemented through the Manas Taalimi program and on-going health systems strengthening initiatives within the SWAp framework. Planning and implementation is fully aligned with the Government processes.

The most innovative mechanism in the Kyrgyz health system, performance-based funding, aims to retain health personnel in the rural areas. The study to evaluate the impact of this mechanism is in progress, and the first results of it will be available by the end of this year. This approach (RBF) impelled the MoH to apply for a World Bank grant, which aims at providing results-based funding at all levels in the field of MCH. The sustainability of GAVI HSS activities after its completion is not clearly identified, with the exception of the sub-component "performance-based payment incentives," through which GAVI HSS funds are to be replaced by MHIF funds.

The Government plans to contribute its own funds starting from the second year of implementation of the sub-component, "performance-based payment incentives." Still, during the evaluation of the early GAVI HSS implementation process, with the exception of one sub-component, there are no distinctive activities to ensure sustainability.

e). Progress toward expected outputs and outcomes

Progress was partly influenced by factors that did not directly depend on on-site managers and partners. One such factor was the delayed start that resulted in changes to the program timeframes and negative changes in actual procurements. Implementation of the Action Plan actually started in 2008, resulting in changes in some of the planned procurements. Another factor was the introduction of the Pentavalent vaccine, which slowed down the development of some of the GAVI HSS-funded activities because it affected the workloads of officials and linear staff.

Still, the conclusion of the tracking study is that all components are progressing well and no delays that will jeopardize the expected results of the program have been noted.

Activities actually started in 2008, which does not provide sufficient time to judge the impact of GAVI HSS on health outcomes.

VIII. Recommendations

a). To country policy and program decision-makers

- Improve the mechanisms for developing proposals for incentive building for community involvement in the immunization process (Component 4). The idea in the proposal is great but realization is weak.
- Improve the information system to enable better registration of children who have had vaccinations in order to solve the problem of the migration of mothers and children either in or outside the country.

b). To stakeholders in-country

- Strengthen the analytical work of the immunization program.
- Train national supervisors in the methods of evaluation of coverage with vaccination.
- Strengthen the coordination between development partners, UNICEF, WHO, and World Bank, in particular, with regard to the maintenance of refrigerators.

c). To the GAVI Alliance

- Develop the reporting system within the GAVI Alliance.
- Improve the timing of disbursements.

d). To other countries planning to apply for or to implement GAVI HSS

- The proposal was prepared by a multi-stakeholder working group representing the state bodies and development partners.
- Ensure that GAVI HSS is driven and coordinated by higher-level health policy persons.
- Include in the proposal an innovative mechanism to strengthen the immunization system via salary bonuses to PHC staff or something similar, and develop methods for evaluating the indicators, in particular in the area of immunization.

IX. Annexes

Annex 1. Use of funds from the First Tranche within the GAVIH HSS Application (in US Dollars)

Activities	Plan	Fact	Execution in %
1. Strengthening political commitment to immunization and its financial sustainability			
A1. Annual analysis of impact of immunization programs on health status	$100	$100	100%
A2. Public awareness campaigns about the impact of immunization programs on health status	$4,110	$4,110	100%
A7. Dissemination of results of analytical work conducted in the framework of the GAVI HSS activities and within other immunization and public health programs	$500	$500	100%
2. Improving the physical infrastructure and working conditions of primary care and public health services			
A2. Purchase of vehicles for vaccine transportation and supervisory visits	$189,000	$189,000	100%
A3. Purchase of refrigerators for vaccine warehouses	$28,000	$28,000	100%
A4. Development and adoption of software for monitoring refrigerators and other equipment in the cold chain	$13,300	$ 2,280	17.1%
A5. Maintenance of cold chain equipment	$2,100	$400	19.0%
3. Ensuring access to high-quality primary care through capacity building, improved management & introduction of economic incentives			
A1. Training of FAPs, FGPs and ambulance staff on specific issues in MCH, and immunoprophylaxis, in addition to general training envisioned under the HR component of Manas taalimi	$11,750	$11,750	100%
A2. Training for FAP personnel - Immunization in practice (WHO curriculum)	$29,820	$27,820	93.3%
B1 Development of manual on supervisory visits and comprehensive monitoring (immunologist, FMC specialist) to improve the quality of immunoprophylaxis	$3,300	$3,300	100%

Activities	Plan	Fact	Execution in %
B2. Training of supervisors (immunologist, FMC specialist) and experts of MHIF to conduct comprehensive supervisory visits	$6,700		-
B3. Joint comprehensive supervisory visits (immunologist, FMC specialist) to monitor quality of activities on immunoprophylaxis and programs on MCH	$13,460		-
B4. Support to the work of mobile immunization teams in remote villages	$29,400		-
C3. Training PHC staff on integrated surveillance of infectious diseases	$6,000		-
B1. Development of manual on supervisory visits and comprehensive monitoring (immunologist, FMC specialist) to improve the quality of immunoprophylaxis	$3,300	$3,300	100%
B2. Training of supervisors (immunologist, FMC specialist) and experts of MHIF TD to conduct comprehensive supervisory visits	$6,700		-
B3. Joint comprehensive supervisory visits (immunologist, FMC specialist) to monitor quality of activities on immunoprophylaxis and programs on MCH	$13,460		-
B4. Support to the work of mobile immunization teams in remote villages	$29,400		-
C3. Training PHC staff on integrated surveillance of infectious diseases	$6,000		-
C4. Epidemiological investigations of detected cases of infectious diseases	$6,000	$6,000	100%
D1. Establishment of a technical working group to develop (i) the exact financial and institutional mechanisms for performance-based payments and (ii) a system of indicators that will serve as the basis for calculating performance payments	$2,540	$500	19.7%

Activities	Plan	Fact	Execution in %
D2. Presentation and discussion of the developed mechanisms for performance-based pay to primary care providers at a multi-stakeholder round table discussion	$6,250		-
D3. Phase 1 of implementation of the performance-based pay in pilot regions with high MMR and U5MR			
4. Strengthening routine monitoring of immunization activities & coverage at the level of primary care and public health			
A1. Development of the vaccine status register with individual immunization calendar	$6,700		-
A2. Development and installation of software for registering immunization status of individuals and providing information about vaccine sensitive diseases	$, 000		100%
A4. Automazation of collection and processing of information on immunization through PHC facilities using the standard clinical informational forms	$14,500	$2,280	15.7%
A6. Monitoring of timeliness and quality of immunoprophylaxis within the framework of the National Vaccination Calendar	$10,800		-
5. Social mobilization and active involvement of the population in health promotion activities			
A2. Development of technical guidelines and informational material to train civil society organizations on issues related to public health, particularly among urban migrants and in remote areas	$1,000	$1,000	100%
A3 Creation of incentives for NGOs and public associations to conduct health promotion activities among urban migrants and in remote regions	$16,800	$16,800	100%
B2. Implementation of activities under the framework of European initiative "Immunization Week"	$500	$500	100%
Support costs			

Activities	Plan	Fact	Execution in %
Hiring of a technical coordinator and an FM and disbursement specialist	$14,370	$14,370	100%
Management			
M&E support			
Technical support			
TOTAL	**$424,000**	**$308,710**	**72.8%**

Source: GAVI HSS Kyrgyzstan, reporting system, 2008

Annex 2. Use of Funds from the Second Tranche within the GAVI HSS Application (in US Dollars)

Activities	Plan	Fact	Execution in %
1. Strengthening political commitment to immunization and its financial sustainability			
A1.Annual analysis of impact of immunization programs on health status	$100	$100	100%
A2. Public awareness campaigns about the impact of immunization programs on health status	$4,200	$4,200	100%
A5. Survey on economic efficiency of immunization programs	$15,000		-
A7. Dissemination of results of analytical work conducted in the framework of the GAVI HSS activities and within other immunization and public health programs	$500		-
2. Improving the physical infrastructure and working conditions of primary care and public health services			
A4. Development and adoption of software for monitoring refrigerators and other equipment in the cold chain	$1,300		-
A5. Maintenance of cold chain equipment	$2,100		-
3. Ensuring access to high-quality primary care through capacity building, improved management & introduction of economic incentives			
A1. Training of FAPs, FGPs and ambulance staff on specific issues in MCH, immunoprophylaxis, in addition to general training envisioned under the HR component of Manas Taalimi	$11,800	$1,800	-
B3. Joint comprehensive supervisory visits (immunologist, FMC specialist) to monitor quality of activities on immunoprophylaxis and programs on MCH	$13,500		-
B4. Support to the work of mobile immunization teams in remote villages	$29,500		-
C3. Training PHC staff on integrated surveillance of infectious diseases	$6,000		-
C4. Epidemiological investigations of detected cases of infectious diseases	$6,000	$2,000	33.3%

Activities	Plan	Fact	Execution in %
D3. Phase 1 of implementation of the performance-based pay in pilot regions with high MMR and U5MR	$114,600	$15,600	13.6%
D4. Analysis of the effectiveness of performance payment in Phase 1 regions	$3,200		-
4. Strengthening routine monitoring of immunization activities & coverage at the level of primary care and public health			
A2. Development and installation of software for registering immunization status of individuals and providing information about vaccine-sensitive diseases	$11,200		-
A6. Monitoring of timeliness and quality of immunoprophylaxis within the framework of the National Vaccination Calendar	$9,000		-
5. Social mobilization and active involvement of the population in health promotion activities			
A2. Development of technical guidelines and informational material to train civil society organizations on issues related to public health, particularly among urban migrants and in remote areas	$1,000	$1,000	100%
A3. Creation of incentives for NGOs and public associations to conduct health promotion activities among urban migrants and in remote regions	$16,800		-
B2. Implementation of activities under the framework of European initiative "Immunization Week"	$500	$500	100%
Support costs			
Hiring of a technical coordinator and an FM and disbursement specialist	$9,200	$2,800	30.4%
Management			
M&E support			
Technical support			
TOTAL COSTS	**$255,500**	**$28,000**	11.0%

Source: GAVI HSS Kyrgyzstan, reporting system, 2008

Annex 3. Detailed Tracking of Performance against Plans and Targets

Component 1 - "Strengthening political commitment to immunization and its financial sustainability" is implemented as follows:

- Annual analysis of impact of immunization programs on health status
- Public awareness campaigns about the impact of immunization programs on health status
- Implementation of activities under the framework of the WHO Immunization Week Initiative
- Broadening of ICC membership to involve all stakeholders
- Survey on economic efficiency of immunization programs
- Analysis of socio-economic inequalities in access to PHC and immunization services based on household survey data
- Dissemination of results of analytical work conducted in the framework of the GAVI HSS activities and within other immunization and public health programs
- Annual needs assessment and costing of immunization activities, and submission to MoH in the context of the annual budget formation process
- Allocation of resources for immunization in the annual consolidated state health sector budget and MTBF

Country demonstrates strong political commitment to invest in immunization; however, budgeting for vaccine procurements needs further improvements. Overall, activities under Component 1 are well in progress, involving both GAVI HSS and other source-funded activities.

Annually, the RIC produces figures on immunization coverage and cases of vaccine-controllable infections. However, there is no specific analysis of the impact of immunization programs on health status in Kyrgyzstan, as the Action Plan provided. The study on economic efficiency of immunization programs is currently under design.

RIC annually makes estimates of vaccine needs and costing of immunization activities. The estimates are submitted to MoH, which should allocate resources to procure the needed amounts of vaccines. In recent years, the Government has not fully meet its obligations. i.e., its share of resources used for procuring adequate amounts of vaccines. Moreover, the decision regarding funds allocation is made in the spring, which does not enable the RIC to promptly and efficiently procure vaccines.

To analyze the GAVI HSS outcomes and impacts, the country application provided several studies to be carried out during program implementation. Part are studies that are supposed to demonstrate how GAVI HSS interventions work. Evaluation of the GAVI HSS-supported economic incentives building to PHC providers is one of them. The first phase of the study is completed, with baselines documented on perceived quality of care among service users and providers in intervention and control areas. Another study is on the economic evaluation of immunization programs in Kyrgyzstan. Currently, the study is not progressing at all, as its research questions and design are not yet clear.

Another focus of analysis provided in the country application was exploring the overall effects of the GAVI HSS interventions. The Kyrgyz Integrated Household Survey has been regularly carried out since 2001. It utilizes a representative sample of households, which is relatively stable over time. Households report resources they have and make, as well as how they use those resources. Use of health services is among the questions, as there is a "Health" module incorporated in the survey instruments. The country application for GAVI HSS provided for incorporating immunization questions in the survey instruments; however, this is not yet specifically discussed by GAVI HSS and the survey coordinators. There is a similar situation with MICS, the national survey focused on maternal, infant and children's health. The survey's first round was in 2006.

In 2008 there was a mass media contest carried out to promote information on immunization. The need of immunizations for health and a national calendar were topics for contestants. These sort of campaigns should be continued, kept open to a range of media that can be exploited to reach people's attention. Currently, RCHP has completed development of technical guidelines and information materials to train civil society organizations on issues of public health. This resource would enrich public campaigns for building awareness on immunization.

GAVI HSS, together with WHO, carried out the European Immunization Weeks once a year since 2007. The oblast Sanitation and Epidemiology Surveillance (SES) Centers, together with Immunization Units, involve PHC facilities, local administrations and VHC in this initiative. They mostly target the most problematic groups in terms of vaccination coverage, that is, internal migrants and immigrants, children over two years of age, and adults subject to vaccination and revaccination. During these "Weeks," the people are vaccinated, and provided with vitamins and awareness-building materials. At the end of the week, a round table is organized, which is actively supported by the local administration. These activities contribute to closing knowledge gaps and poor or inappropriate practices of people in regard to immunization.

ICC in 2008 expanded toward the involvement of actors who are engaged in working with communities: the Republican Health Promotion Center and VHC members. However, how the representatives of civil society like VHC members articulate their messages and to which extent they have input in decisions made in regard to the GAVI HSS program is not known. Roles of various stakeholders in decision making will probably require follow-up qualitative studies.

Component 2 - "Improving the physical infrastructure and working conditions of primary care and public health services" includes six activities:

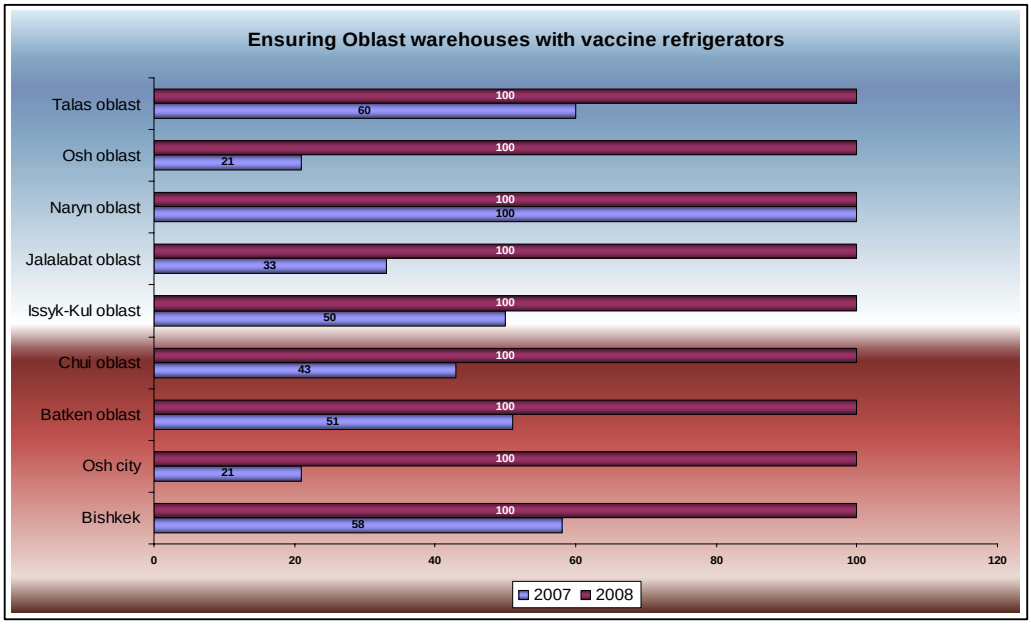
- Repairs of FAPs and provision of medical equipment to FAPs and FGPs
- Purchase of vehicles for vaccine transportation and supervisory visits
- Purchase of refrigerators for vaccine warehouses
- Development and adoption of software for monitoring refrigerators and other equipment in the cold chain
- Maintenance of cold chain equipment
- Installation of equipment in SES laboratories at the rayon level

GAVI HSS well invested in infrastructure for immunization and addressing its management and maintenance. Country inputs into Component 2 are still on the way to fulfilling planned outputs.

The application budgeted for the procurement of 26 vehicles but only 18 were purchased. Due to the delay in starting the HSS program, the Procurement Unit of MoH procured as many items as the amount was budgeted, that is, only 18 vehicles. There was no formal decision to reduce the number of vehicles or to reallocate funds within from other parts of the budget. Changes in market prices were the main reason for the reduced number of vehicles procured. The SES Department distributed the vehicles. Two vehicles per each oblast and two for Bishkek and Osh. Oblast SES Centers were the recipients. The vehicles are used not only for immunization purposes, but for other needs as well. In the near future they will be exploited for supervisory visits and mobile teams as well. It has to be noted that 18 vehicles are not enough; ideally it would be more efficient to have a vehicle per each rayon, most interviewed facility health managers said.

The application proposed the purchase of 10 specialized vaccine refrigerators. Instead, 30 refrigerators "NORD DX 245-010" were procured for vaccine-storage in health facilities due to the procurement procedures of the MoH. This is not a specialized refrigerator, but an ordinary one typically used for household needs. The 30 refrigerators were distributed among Oblast Immunization Centers, FGPs and FAPs. Distribution was mainly driven by availability of refrigerators in and localization of the recipient health facilities, i.e. remotely located facilities received priority. RIC was responsible for distribution. It has to be mentioned that in 2008, the country had received specialized vaccine refrigerators from the Japanese Government. Inputs in equipment seem to already meet requirements, as the RIC reports that the needs of oblast warehouses for cold chain equipment was fully met by 2009.

Table 15. Ensuring Oblast Warehouses with Vaccine Refrigerators



Source: RIC, 2008

In 2008 the maintenance of cold chains was reinforced with GAVI HSS contracting a group of technicians to visit health facilities to identify needed spare parts to repair refrigerators; their list is then provided to the MoH for procuring the parts. The parts are purchased by UNICEF through MoH. It would be more efficient if these two activities (identifying spare parts and repairing) were done simultaneously. These activities need to be coordinated between GAVI HSS and UNICEF.

Cold chain management will be enhanced with the introduction of a software product that is expected to enable on-line tracking of vaccine stocks in warehouses and, when needed, to redistribute vaccines and accessories across warehouses and health facilities. The software development is incorporated in the contract with a private software company to develop an information system that operates several software systems (see details in "Component 4").

The Central Vaccine Store went through capital repair and 35 warehouses in rayons have been repaired. The repairs, however, do not address providing extra space for refrigerators, as they are just basic, cosmetic ones.

Country inputs in infrastructure are moving ahead, although slowly. Installation of equipment in SES laboratories at the rayon level is moving slowly, as a network of laboratories within SES and clinical services are under a restructuring and optimization process. The Concept of Laboratory Service Development is not well enforced due to the lack of accurate vision and consensus among policymakers and a lack of funds[1]. Repairs of FAPs and the provision of medical equipment to FAPs and FGPs were reported as progressing well during JAR 2009.

Component 3 - "Improving access to high-quality primary care through capacity building, improved management and introduction of economic incentives" is expected to be achieved through four activities:

- training health professionals on immunization and MCH topics,
- introducing supervisory visits to oversee and support health workers in the field,
- supporting epidemiologists in investigating vaccine-preventable infection cases, and
- introducing a performance-based payment mechanism for PHC.

[1] Joint Annual Review , 2009

Generally, capacity building of PHC providers through training is progressing well, with minor management modifications required to improve it. Fifteen feldsher trainers have been trained against 26 planned, 170 immunologists, fields hers and nurses trained on "Immunization in practice" against 420 planned.

At the May 2009 Health Summit in Bishkek, continuous training of PHC staff was considered a weak point of reform in that it had fewer resources than needed. Financial and human resources capacity were the most in need of refueling.

In the context of the poor continuous education of PHC staff, training of PHC in the specifics of immunization and MCH under GAVI HSS is considered quite relevant for improving immunization coverage and quality in Kyrgyzstan. The Action Plan provided several subcomponents for training FGPs, FAPs, epidemiologists, immunologists, and ambulance drivers.

One of the contracts, for training FGPs, FAPs and the ambulance service, was awarded to the Kyrgyz State Medical Institute for Retraining and Continuous Education (KSMIRCE), a leading institution in Kyrgyzstan in post-graduate and continuous education of health workers. For organizational specifics inside the KSMIRCE, in 2008 training was provided by the Department of Feldsher Trainings. A team of trainers available in the Department had previous experience in delivering training on many other health topics. In addition, using them as trainers for that specific initiative invests in the capacity of the institution. RIC carried out trainings for trainers in the Department. Curriculums were developed covering both basic procedures of vaccination and specifics of planning and calculating doses. To avoid extra costs, the immunization training is delivered along with training on other health topics provided by the same trainers under the SWAp process. Staff indicated the contents of the training, "Specifics of Immunization," was easy to follow and comprehensive, capturing many skills essential for the audience.

In 2008 the first round of trainings was carried out at oblast health facilities, where health professionals wee trained. A second round is planned for 2009, but currently delayed due to disturbances in the SWAp mechanism used for GAVI HSS-supported training on immunization.

There were two major concerns indicated by respondents that should be accounted for in planning activities: (i) the ***training "Specifics of Immunization" was too short*** to deliver the whole pack of essential material, (ii) ***trainers who deliver trainings "Specifics of Immunization" feel they need more incentives*** to deliver such a comprehensive training. Both concerns seem relevant, as the curriculum is really large to be covered within a day. Curriculums cover vaccination time frames, managing doses, clinical decision making in complex cases, etc. Interviewed managers of the KSMIRCE said the trainers do need fees to better deliver these trainings. **Management of these trainings seems to require more funds assigned in future country applications.**

RIC is also delivering training to FAPs called "Immunization in Practice," with a curriculums developed by WHO. The process is arranged as a cascade, in which trainers from RIC staff who had been trained first and subsequently train staff of the oblast health facilities.

Availability of GAVI HSS resources induced revision of epidemiologic surveillance standards. The MoH Resolution, which came into force in November 2008, comprehensively provides revised standards and the need for training in integrated epidemiology surveillance for epidemiologists, immunologists and PHC facilities. The training is expected to inform the audience on the basic and revised principles of epidemiologic surveillance in Kyrgyzstan. Epidemiologic surveillance, case investigations, role distribution, etc., will be demonstrated in this training.

GAVI HSS support enabled initiation of a new approach to supervising providers' performance. In addition, this approach can substitute for the numerous check-ups of providers by inspectors from various authorities (RIC, MHIF, MoH's Curative Department, SES). Although the supervisory visits to PHC facilities primarily focus on supervising immunization activities, these visits are expected to significantly reduce the extra time providers spend with inspectors. Another feature is that the supervisory visits will approach monitoring as a means of continuous quality improvement aiming to uncover problems jointly with providers and find locally sound solutions. If well implemented, the supervisory visits should provide further insights to improving performance and monitoring the performance of PHC providers.

Supervisory visits will be conducted by the staff of MHIF, MoH and SES. Introduction of these visits is in progress. Methodological guidelines have been developed and approved by MoH. The methodology is being piloted in health facilities in the Chui oblast, with RIC leading the process. After finalization of the pilot, training activities are expected to start during 2009.

Arrangements of mobile groups are not progressing. To ensure immunization and MCH service coverage in villages with no FAPs, mobile groups composed of immunologists, family doctors and other health professionals will be organized. The mobile groups will use vehicles available in health facilities operating in rayon or oblast centers, including vehicles supplied under GAVI HSS. Mobile groups are planned to make four rounds of visits during the GAVI HSS program. Currently, the MoH is making estimates of country requirements in mobile groups and making organization arrangements. "*Organization arrangements will be more clear upon supervisory visits program start working*", interviewed managers stated.

The performance-based payment mechanism is demonstrating improvements both in service delivery and planning within PHC facilities. During JAR-2009, the GAVI HSS bonus payment mechanism in piloted rayons found improvements in indicators used for payments and in practices of health facilities in setting targets.

"With this mechanism, we assured providers that MoH will not anymore administratively punish them for poor performance, but will encourage better planning and ownership of work results", stated an interviewed MHIF official**.**

PHC providers are currently funded based on the number of enrolled population considering different socio-economic and geographic characteristics. These factor determine the fixed or guaranteed budget for PHC providers. Implementation of economic incentives at FGP level implies additional financing equal to around 10 percent of the fixed budget on a quarterly basis. This mechanism does not anticipate equal payment for all PHC providers since decisions on additional financing will be made in accordance with specific work criteria based on monitoring performance indicators, reflecting the quality of health care delivered to citizens by FGPs. The selection of indicators reflected:

- Quality of preventive immunization;
- Quality of health care delivery to children under five years of age; and
- Quality of health care delivery in the case of some diseases managed at the PHC level.

The following indicators have been selected:

1. Proportion of infants under one who received duly preventive vaccines according to the National Immunization Calendar.
2. Percentage of children under five who are regularly observed by FGP doctors (FAP Feldsher).
3. A change in the number of visits of FGP doctors by children under five years old as compared to the same period in the previous year.
4. Proportion of women registered for the reason of pregnancy on term under 12 years.
5. Proportion of pregnant women who received potassium iodide medicines.
6. Percentage of women hospitalized for delivery with an Hb level below 100 h/l.
7. Proportion of patients with bronchial asthma who received drugs on SBP.
8. Rate of hospitalizations of patients with bronchial asthma.
9. Proportion of registered patients with HTN out of the adult population enrolled to FGP.
10. Rate of hospitalizations of patients with chronic obstructive lung diseases.

Previous values for these indicators have been estimated by FGP. Planned or targeted values are identified by each FGP and used, in turn, as the basis for the FMC targets. Evaluation bonuses are calculated in accordance with those targets for the selected indicators.

In order to conduct pilot experiments on introducing economic incentives in the framework of the GAVI Project, financial resources are envisaged and should be managed by the Ministry of Health of the Kyrgyz Republic. Quarterly, the MHI Fund submits one copy of reports from health organizations, showing the size of earned resources to the Ministry of Health. The Ministry of Health credits specified funds to the FMC's operating account on MHIF resources. This incentive system will be extended to the remaining oblasts using MHIF regular resources.

FMC channels the received funds for material incentives of FGP and FAP health personnel on the basis of health service quality indicators and bonuses calculated by each FGP. Based on the reports on using GAVI funds by health organizations, the MHI Fund compiles summary report and submits it to the Ministry of Health.

In October 2008, the incentive system was piloted in the Jety Oguz and Sokuluk rayons. FMCs in these rayons will be financed in the framework of the GAVI HSS Project up to 2010. In September 2008, these rayons provided instructions for FMCs.

Next phase became introduction of the economic encouragement mechanism in Issyk-Kul and Chui oblasts. Following the results of the 1st quarter of 2009, the amount of incentive financing in Chui oblast (by 3 pilot providers) was 126,000 Soms and in Issyk-Kul oblast (by 20 providers) – 558,300 Soms.

The subsequent phases of the economic incentive mechanism are as follows:

1. Introduction of economic incentives in the second half of 2009 in Naryn and Talas oblasts, using MHI funds;
2. In 2010, implementation of the mechanisms in all oblasts; financing in two oblasts will be ensured using GAVI HSS funds and in the rest of the oblasts using MHI funds;
3. In 2011, assurance of the financing of the framework of economic incentives using MHI funds.

Component 4 - "Strengthening routine monitoring of immunization activities and coverage at the level of primary care and public health" is implemented through four activities:

- Development of the vaccine status register with individual immunization calendar
- Revision of the Indicator Package for Manas Taalimi, to include the agreed GAVI HSS Indicators
- Maintenance of the Health Information System
- Monitoring of timeliness and quality of immunization within the National Vaccination Calendar

GAVI HSS enabled development of the information system for vaccine status registration and tracking cold chains, which is currently in finalization stage. To improve immunization information flows, the GAVI HSS Action Plan provided three directions of computerized system for monitoring immunization processes: (i) create an individual vaccination calendar for children under 5, (ii) create a tool for tracking cold chains, and (iii) develop mechanisms to record and fund health services delivered to not enrolled populations (e.g. urban migrants), including immunization services which will be integrated with registries of children.

It was decided that the task would be contracted to a private company. Development of the Terms of Reference took nearly a year, for conceptualization of the future system's elements with a view of translating them into the software products was quite a new experience for the actors of the immunization process. Eventually, all elements of the future system were integrated into a single contract. The contractor was expected to develop a single information system, instead of three individual software products.

"*Reality of provision of immunization services and supply of vaccines from central chains require a platform that would enable ongoing tracking of 2 elements: vaccination and vaccine stocks. The information system should link those two*", an interviewed contractor company's representative said. The information system is expected to address two bottleneck areas in immunization: vaccine logistics within the country is going to improve and vaccination status of individuals will be tracked.

Vaccine stocks within facilities are directly linked to vaccination provision. Health coordinators, having information on the vaccine stocks, can better arrange logistics of vaccines and accessories. At times of stock-outs, they can promptly redistribute vaccines among administrative areas or among individual facilities. The possibility of track individuals' vaccination status is crucial when dealing with migrants. The PHC facilities will have records for every individual enrolled.

The introduction of the information system induced some changes in reporting formats, which now reflect newly introduced Pentavalent vaccine time frames. Technically, the system will be used as a network operated through a terminal that is separate from the currently exploited systems within recipient health facilities. The electronic reporting will exist within the health sector only, in parallel to "hard paper"

reporting, which is required by the National Statistics Committee. Data sets on vaccine stocks and vaccination processes will be linked to each other, but users will operate them in separate system cells.

Maintenance of Health Information Systems is institutionalized, with IT staff capable to work on a wide range of tasks, including information systems developed for improved immunization management. For maintaining any developed health information system under GAVI HSS, the MoH can exploit IT staff of MoH and CHSD. The staff is paid from SWAp. The IT Unit in CHSD was established at the very beginning of the SWAp process, considering the value of maintaining health information systems along health reforms

In JAR in May 2009, the Indicators Package for Manas Taalimi was revised. Indicators related to immunization, which were used under GAVI HSS, were also revised during the review mission. An important indicator was included in the Package to track the introduction of performance-based payment, which is currently funded by GAVI HSS (see details in Monitoring and evaluation practices").

Monitoring of timeliness and quality of immunization within the National Vaccination Calendar is still a challenge in Kyrgyzstan. Computerized individual vaccine status calendar and tool for tracking vaccine stocks, along with supervision visits, are needed to improve monitoring processes. However, how to improve the quality of immunization data produce by PHC providers through routine processes requires comprehensive technical assistance. Currently, the RIC is considering an idea to run cluster cross-section surveys to (i) validate data provided by FGPs and FAPs receiving benchmark data and (ii) improve data-gathering practices (see details in "Monitoring and evaluation practices").

Component 5- "Social mobilization and active involvement of people in health promotion and disease prevention" focuses on four activities:

- Implementation of the Jumgal Model of community involvement in health promotion activities through establishing village health committees
- Development of technical guidelines and informational material to train civil society organizations on public health issues, particularly among urban migrants and in remote areas
- Creation of incentives for NGOs and public associations to conduct health promotion activities among urban migrants and in remote regions
- Training for health workers on communication methods

All activities under the Component 5 are progressing well, with good lessons learned from challenges at initial stages of Small Grants program to support initiatives of community organizations to act on immunization and MCH.

In Kyrgyzstan, community involvement in health promotion is one of the components under the Manas Taalimi program. So far, there have been a number of initiatives to promote health within local communities, mostly focusing on rural health. VHCs are currently a running element of the health promotion initiatives. They are composed of community leaders recruited to act for community health. Communities identify health priorities, with VHCs leading the process of both problem identification and actions to tackle them.

VHCs have been involved in a number of health promotion initiatives, including campaigns on anemia, parasitic diseases, and arterial hypertension. The number of communities with active VHCs is increasing. With donor assistance, the Republican Center for Health Promotion, which is a leading agency in community involvement, is extending VHCs to regions that have not been covered so far.

Technical guidelines and information materials to train civil society organizations on issues of public health have been prepared as the Action Plan provided. They are designed and printed by the Republican Center for Health Promotion, which specializes in designing health promotion actions, and RIC. The booklets illustrate the National Vaccination Calendar in a user-friendly way. They are printed in the Kyrgyz and Russian languages, covering the majority of population.

To create incentives for civil society organizations, the GAVI HSS established a Small Grants Program. Initially, the Program was designed in a way that applicants submit project proposals related to immunization and MCH. The Review Committee was established for selecting project proposals for support. It consisted of staff of the Republican Center for Health Promotion (RCHP), GAVI HSS, Swiss Project to

Support Kyrgyz Health Reform, Mandatory Health Insurance Fund, and the MoH. GAVI HSS directly transfers funds to recipients.

The first round was announced in the media. Mostly, VHCs applied to the Program, although the Program is open for other civil society organizations as well. For convenience, VHCs organized in Rayon Health Committees (RHCs) that would be registered entities, with corporate responsibilities, bank accounts, etc. VHCs elect their staff to represent them within RHCs. Small Grants Program provided grants to proposals from RHCs.

The main challenges in the Small Grants Program implementation were as follows: (1) at initial stages, the proposal selection process had to deal with difficulties in articulating and formulating the project proposals with clear relation to MCH and immunization topics; and (2) resources available to run the Program in a way to build robust incentives for civil society organizations appear to be short.

Indeed, when redistributing among VHCs, the funds to support projects appeared to be very small in amount for individual VHCs. For some VHCs, funds to cover their projects were around 600 Som, which is equivalent to US $15. These amounts are small to run a serious project, even locally.

For VHCs making project proposals with activities corresponding to immunization and MCH was a challenge. Initially, there were VHCs that could not provide proposals that would clearly address immunization and MCH actions.

To build relevant knowledge and skills, trainers from the Swiss Project to Support Kyrgyz Health Reform and USAID ZdravPLUS Project were involved in informing VHCs on the Small Grants Program mission and training them in project management, financial arrangements under the Program and several others.

In parallel, these trainers deliver training for health professionals and community organizations on communications skills. The training had been designed before GAVI HSS started and is still ongoing.

ANNEX 4. The results of activities achieved by 2009

	Indicator(s)	Target[1]	Date of target	2008	2009
HSS Inputs (year 1 and 2)	# of vehicles purchased (and as % of planned)	27	2008	18 (67 %)	Completed
	# of planned cold chain equipment purchased (and as % of planned)	10	2008	30 (300 %)	Completed
	# of planned rayon level vaccine warehouses repaired (and as % of planned)	16	2008	16 (100 %)	Completed.
HSS Activities	# of planned supervisory teams established and trained (and as % of planned)	40	2010	Not in progress	First supervisory teams will be established during 2009
	# of trainers trained at the oblast and rayon level in immunization, IMCI, and other maternal and child health programs	26	2010	15	KSMICE is not going to train anymore feldsher trainers, as 15 trained trainers represent a sufficient number to fulfill training targets[2]
	# of FAPs receiving training in "WHO Practice of Immunization" (and as % of planned)	210	2010	170	In progress
	# of mobile teams established (and as % of planned)	40	2010	Not in progress	Organizational arrangements are in preparation
	# of primary care providers receiving performance incentive (and as % of planned)	85	2010	8	
	# of NGO's working with urban migrants on health issues and which are in regular contact with the RCHP	20	2010	14	
Outputs (Impact on the capacity of the system)	% of rayons where at least 90% of facilities received integrated supportive supervision at least once during the year	100	2010	Not in progress	Methodology was piloted in early 2009
	% of population points with no health facility that received 4 rounds of mobile services during the year	100	2010	Not in progress	Will be considerable after mobile teams established
	% of measles and rubella cases that received lab confirmation	90	2010	100	NA

[1] Targets here refer to the Country Application to GAVI HSS, 2006
[2] Sources: interviewed managers of KSMICE

	% of rural FGP's with more than 2000 enrolled population (NB: Manas Taalimi dashboard indicator for staff retention)	33	2010	79,6	
	% of government health spending allocated to primary health care	-	2010	n/a	NA
Impact on immunization (year 3 and 4)	BCG	98,0	2010	98,8	NA
	DPT1	96,0	2010	99,0	NA
	DPT3	95,6	2010	95,3	NA
	MMR1	98,0	2010	99,1	NA
Impact on child mortality (year 4)	Under 5 child mortality	0,8 annual decrease	For every program year	4,1 decrease as compared to 2007	NA