Joint Appraisal Report — 2018

Country	**Kyrgyzstan**
Full JA or JA update	Full Joint Appraisal
Date and location of Joint Appraisal meeting	May 28-30, 2018, Bishkek
Participants / affiliation	Gavi Secretariat WHO country and regional office UNICEF country and regional office UNICEF supply division World Bank country office Ministry of Health Ministry of Finance One23 consultant Dalberg consultant JSI consultant
Reporting period	1 January – 31 December 2017
Fiscal period	1 January – 31 December 2017
Comprehensive Multi Year Plan (cMYP) duration	2017- 2021
Gavi transition / co-financing group	Preparatory transition phase

1. RENEWAL AND EXTENSION REQUESTS

Renewal requests were submitted on the country portal

Vaccine (NVS) renewal request	Yes☑ No☐ N/A ☐
HSS renewal request	Yes☑ No☐ N/A ☐
CCEOP renewal request	Yes☐ No☑ N/A ☐

Observations on vaccine requests

Target Population	155 063		
Birth cohort	157 500		
Vaccine	**Pentavalent DTP-HBV-HIB**	**Pneumococcal PCV13**	**Inactivated polio**
Population in the target age cohort	155 063	155 063	155 063
Target population to be vaccinated (first dose)	151 081	151 081	153 600
Target population to be vaccinated (last dose)	147 453	147 453	
Implied coverage rate	95	95	99
Last available WUENIC coverage rate	92	88.6	N/A
Last available administrative coverage rate	92	88	N/A
Wastage rate	5	5	1
Buffer	25	25	25
Stock reported (31Dec2017)	300 980	424 650	0

Indicative interest to introduce new vaccines or request Health System Strengthening support from Gavi in the future[1]

Indicative interest to introduce new vaccines or request HSS support from Gavi	Program	Expected application year	Expected introduction year
	HPV	2020	2021

[1] Providing this information does not constitute any obligation for either the country or Gavi, it merely serves for information purposes.

2. RECENT CHANGES IN COUNTRY CONTEXT AND POTENTIAL RISKS FOR NEXT YEAR

Since the last full Joint Appraisal (September 2016), the following changes occurred in the country's **regulatory framework:**

1. Amendments have been made to the Law of KR "On Immunoprophylaxis of Infectious Diseases" dated 5 July 2017 No. 119. It has been supplemented with the following article: "This law establishes the legal framework for state policy in the field of immunization of vaccine-preventable infectious diseases, carried out to protect the health and ensure the sanitary and epidemiological well-being of the population of the Kyrgyz Republic";
   - Article 3. Scope of this Law. "This Law applies to citizens and legal entities of the KR, as well as to foreign citizens and persons without citizenship who permanently reside in the territory of the KR";
   - Article 5. The Article to be supplemented with Part 6 as follows. "Parents or legal representatives of an under-age child are liable for the refusal of preventive vaccination, which entailed the development of a child's disease";
   - Article 11. "Preventive vaccinations for epidemiological indications are provided to citizens in case of a threat of occurrence and spread of infectious diseases";
   - Article 12. Part 4 to be reworded as follows. "The term, procedure, registration and requirements for preventive vaccinations, as well as the form of medical documents and preventive vaccinations certificate shall be determined by the Government of the Kyrgyz Republic".
2. A mid-term review (MTR) of the implementation of Den Sooluk Program has been performed; as for the priority areas and components of Den Sooluk Program, intermediate adjustments have been made to health targets, and activities for the period up to 2018 inclusive have been prioritized. In May 2017, by the Decree of the Government of the Kyrgyz Republic No. 267 dated 11 May 2017, Den Sooluk Program has been extended until the end of 2018. A resolution of the GKR has approved the Action Plan for Health System Improvement for 2016-2018 (No. 300 dated 30 June 2016). The Ministry of Health has drafted a strategic document titled "Sustainable Development Goals (SDG)", which includes immunization indicators - (percentage of children under 1 year of age who have received three doses of DTP3, OPV3).
3. The implementation of the Immunoprophylaxis Program in 2013-2017 has been completed. The results, achievements, problems, and information have been summed up, and information has been submitted to the GKR. The draft of a new fifth NIP, which will be based on the European Vaccine Action Plan 2015-2020, will reflect strategic directions of the Health-2020 policy and be focused primarily on meeting the population's needs for equitable and stable access to quality immunization services, is currently at the preparatory stage. In order to track the national, regional and global targets for immunization and vaccine-preventable disease control, the new Program will be a logical continuation of the current NIP policy, synchronized with EVAP and integrated with the National Health Reform Program Den-Sooluk.

Political and socio-economic trends – the national sustainable development strategy of the Kyrgyz Republic for the period 2013-2017 has been completed. In October 2017, the President of the country has been elected – Jeenbekov Sooronbai Sharipovich, the new Cabinet of Ministers was appointed in April 2018 and has begun its work. The new Minister of Health Cholponbaev K. S. has been appointed. Political changes in the country can affect the health strategy, including immunization. The Government of Kyrgyzstan has developed a program for the development of the country for 2018-2040 titled "Taza koom - zhany door" ("40 steps - a new era"). The "40 steps" strategy will succeed the National Sustainable Development Strategy 2013-2017.

According to the project of the Swiss Agency for Development and Cooperation, in the pilot districts of the Issyk-Kul region optimization of health organizations is being carried out (reductions in the staff of immunologists and vaccination nurses, combining vaccination rooms with procedural/manipulation rooms), which may limit access to immunization services and become a risk for the Program on the whole.

Macroeconomic - according to the World Bank statistics, the level of the country's national gross income (GNI) has decreased from $1,250 in 2014 to $1,100 in 2016. National regulatory acts, in particular, those for import and clearance of vaccines and cold chain equipment, should also be aligned with the Eurasian Economic Union (EEU) technical regulations.

Joining the EEU has stimulated modernization and improvement of the quality of manufactured goods. The country's economy is vulnerable to external shocks because of its dependence on one Kumtor gold mine, which accounts for approximately 10% of GDP, as well as remittances of workers, which is equivalent to approximately 30% of GDP in 2011-16.

Migration - The processes of internal migration in Kyrgyzstan are directed towards the City of Bishkek and border areas of the Chuya region. The country's membership in the integration association has had a positive impact on the situation of labor migrants, providing them with favorable conditions of stay and activities in terms of a simplified procedure for employment, improving their social conditions. Notably, the number of our compatriots working legally in the EEU countries has increased from 30% to 60%.

Based on the current trends in the country (socio-economic, political, macroeconomic, demographic processes), the following forecast for the development of the situation in the Immunization Program can be made:

1. With a further reduction in the preventive vaccination coverage, especially among children of the primary vaccine complex and in general in the revaccinating complex of children, adolescents and adults, within the preventive vaccination schedule, there is a high risk of the renewal of the VPD pathogens circulation, when imported from other countries (e.g., the country's epidemiological situation with measles from January to June 2018, which is associated with the import and genetically confirming the imported nature of the outbreak).

2. Refusals due to doubts as to the quality of vaccines may lead to a decrease in the demand for immunization; health workers conduct ineffective counseling for parents, in particular because of their doubts and inability to provide parents with sufficient information about the benefits of immunization.

3. Insufficient staffing capacity and low motivation of health personnel lead to a decrease in preventive vaccinations coverage.

Corrective measures:
For the above risk groups 1 and 2, under the Gavi HSS-2 grant, objective 1 is to increase knowledge, trust and demand for MCH services among the population. This goal aims at increasing preventive vaccinations coverage and will address the problem of vaccination refusals due to insufficient knowledge, incorrect perceptions, and negative attitudes against vaccination. (UNICEF).

4. The ongoing reform of the health system within the framework of National Program Den-Sooluk (according to the project of the Swiss Agency for Development and Cooperation, in the pilot districts of the Issyk-Kul region optimization of health organizations is being carried out) may limit access to immunization services and become a risk for the Program on the whole, should the project be extended for the entire Republic.

Corrective measures:
- for the risk group 4, the issue has been submitted for consideration by the MoH KR collegium; a relevant decision has been made.

5. The financial deficit of the Program budget, especially for non-vaccine costs (customs clearance, certification procedures, storage, transportation, maintenance and repair of cold chain equipment, and other program components), as well as for additional immunization measures in the event of a VPD outbreak.

Corrective measures:
- for the risk group 5, TCA for 2018 provided for high-level advocacy on financial sustainability of the NIP (WB).

6. National procedures for budgeting and funds utilization under the KR Budget Code do not allow for timely utilization of funds allocated by partners (Gavi, WHO, UNICEF, etc.) to implement NIP components. Problems are caused by subordinate regulatory funding bases for the implementation of projects. As a result, the RCI accounts did not function, which led to a 5-month delay in the implementation of the project.

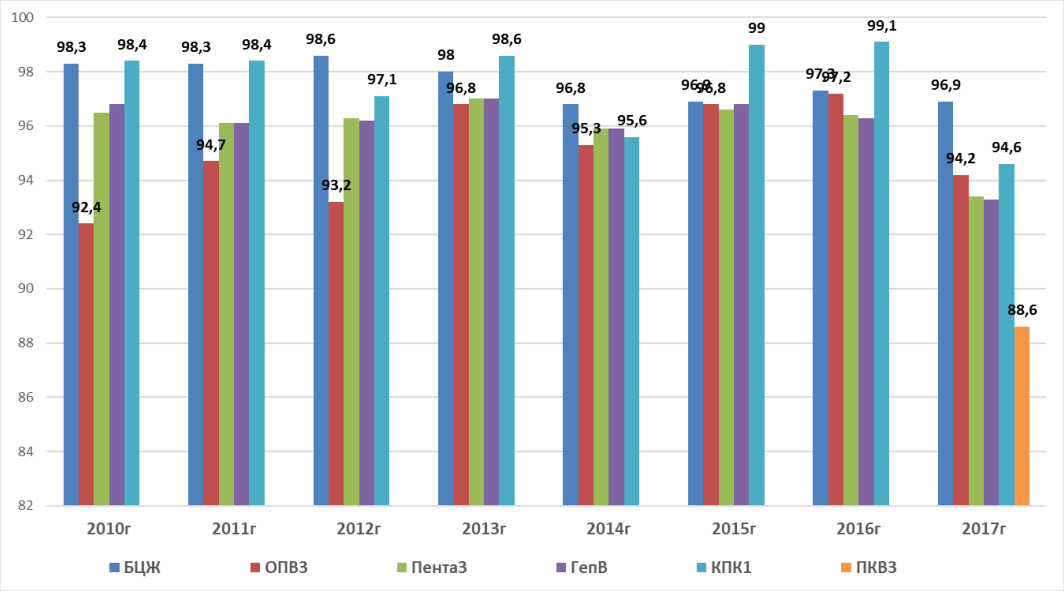
Corrective measures:
- for the risk group 6 – at the meeting convened to discuss the country report of 30 May 2018, a representative of the KR MoF scheduled a meeting on 18 June 2018, which was held at the above specified date to discuss at the level of Ministries (Finance and Health) the issue of other rules for the approval and utilization of the Gavi funds.

3. PERFORMANCE OF THE IMMUNIZATION PROGRAM

3.1 COVERAGE AND EQUITY OF IMMUNIZATION

Regarding the results of the Immunoprophylaxis Program's implementation, in the period from 2010 to 2016, the preventive vaccinations coverage in the Kyrgyz Republic as per the National Schedule (NS) was maintained at a level of at least 95%, according to the objectives of the Immunoprophylaxis Program and WHO recommended indicators.

Table 1. Primary vaccine complex coverage in the KR for 2010-2017.



БЦЖ	BCG
ОПВ3	OPV3
Пента3	Penta3
ГепВ	HepB
КПК1	MMR1
ПКВ3	PCV3

However, in 2017, according to forms of 5,6 (state statistical data), submitted by all health organizations of the republic, preventive vaccinations coverage of the primary vaccine complex has decreased by 4.1%, as compared with 2016.

Table 2. Penta3 and MMR-1 coverage dynamics at the national level (2000-2017)

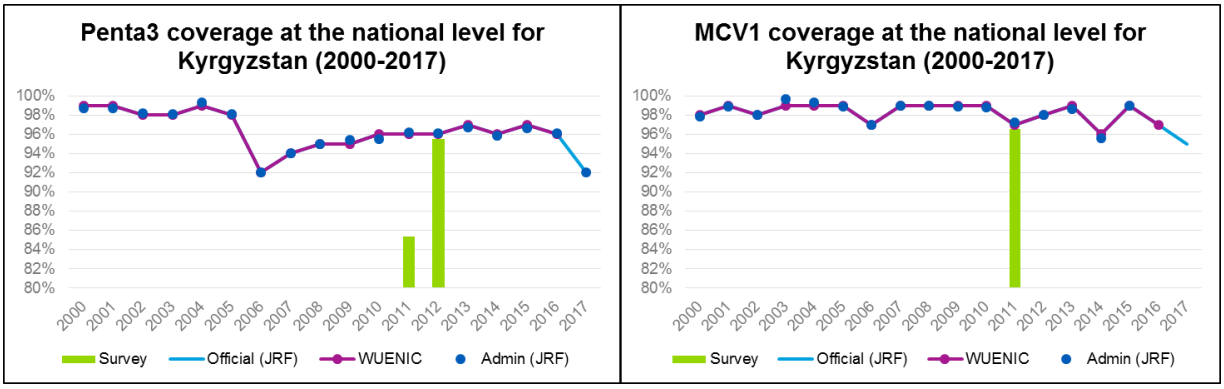
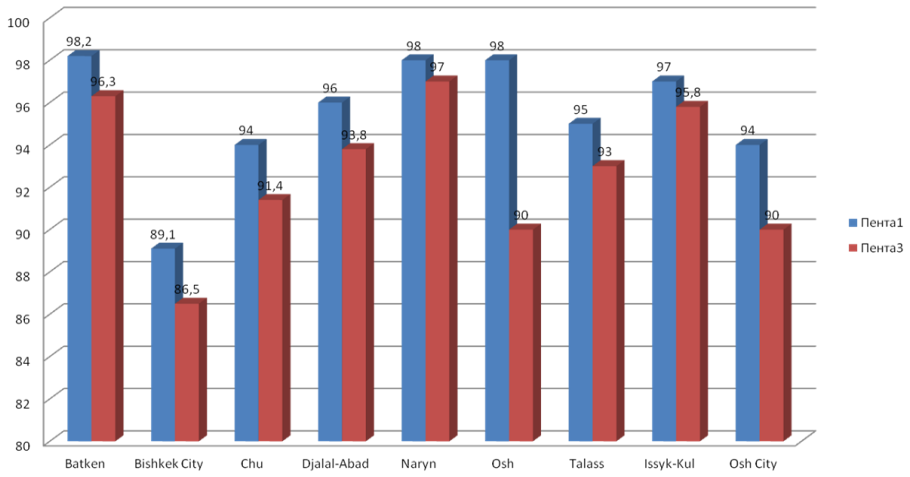
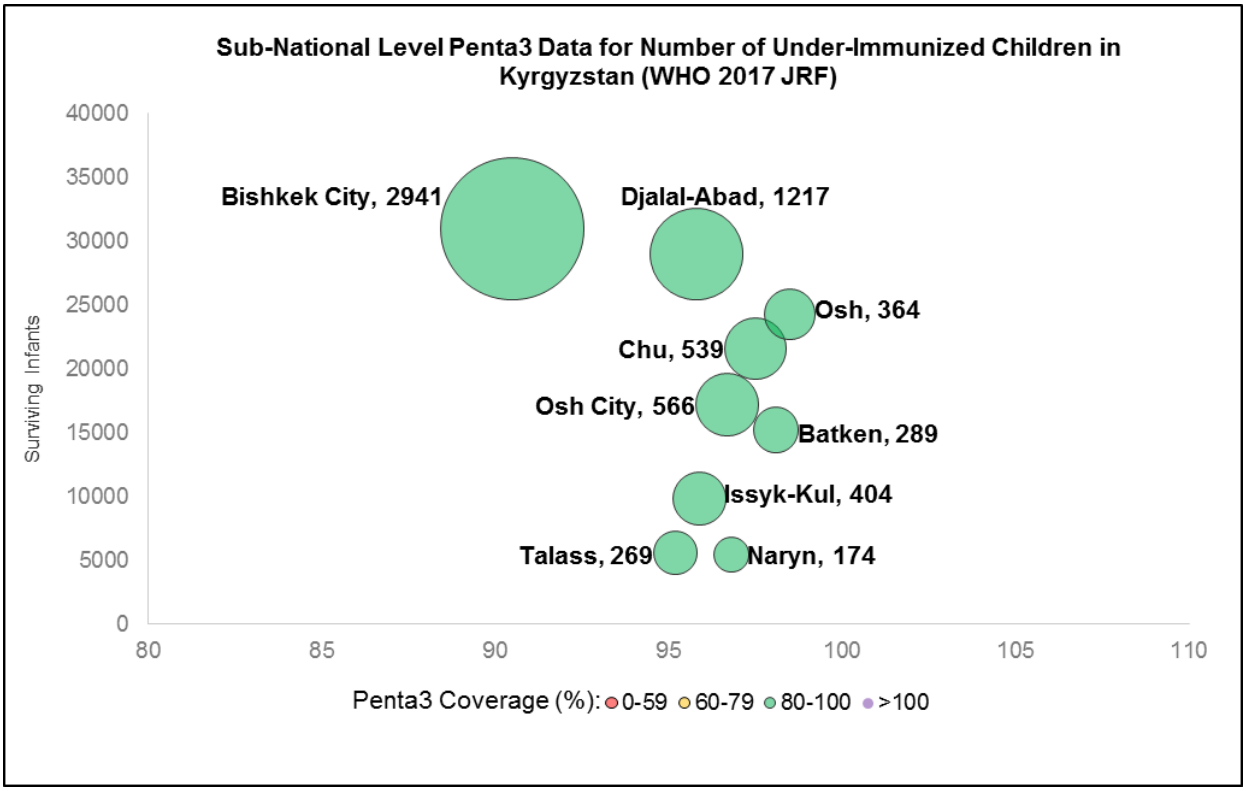


Table 3. Sub-national preventive vaccination coverage (2017)



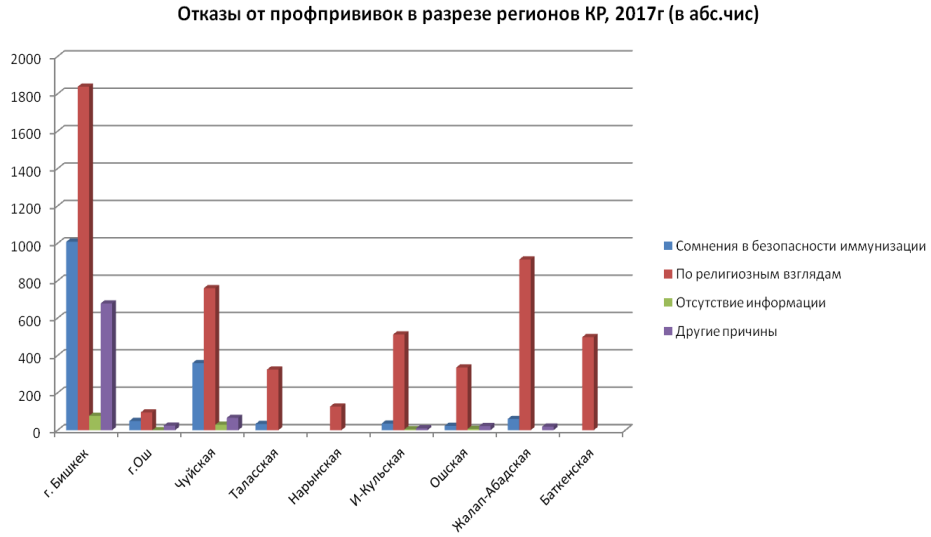
Пента1	Penta1
Пента3	Penta3

Table 4. Sub-national Penta3 coverage rate



The reason for the coverage decrease is intensive internal and external migration of the population in all regions of the country, as well as the trend of refusals from preventive vaccinations. Also, in rural areas, one of the reasons for the coverage decrease is lack of qualified health staff.

Table 5. Geographical distribution of refusals from preventive vaccinations (according to medical statistics)



Отказы от профпрививок в разрезе регионов КР, 2017 г. (в абс. чис)	Refusals from preventive vaccinations by regions of the KR, 2017 (in absolute numbers)
Сомнения в безопасности иммунизации	Doubts in immunization safety
По религиозным взглядам	Due to religious beliefs
Отсутствие информации	Lack of information
Другие причины	Other reasons
г. Бишкек	City of Bishkek
г. Ош	City of Osh
Чуйская	Chuya
Таласская	Talass
Нарынская	Naryn
И-Кульская	I-Kul
Ошская	Osh
Жалап-Абадская	Jalal-Abad

The analysis showed that in comparison with 2016, the number of refusals from preventive vaccinations increased 1.7 times and amounted to 7,905 cases compared to 4,611 cases in 2016. Over 68% of refusals are due to religious considerations (non-halal vaccines). Refusals based on doubts as to the safety of immunization due to negative information on the Internet increased and amounted to 19.8% compared to 15% in 2016. Over 10% of refusals are due to other reasons.

Compared to the same period in 2016, the number of refusals increased 1.8 times in the city of Bishkek, from 3 to 4.5 times in Naryn, Talass and Chuya regions, from 1.3 to 2 times in Batken, Jalal-Abad, and I-Kul regions. Decrease in the number of refusals in the city of Osh and Osh region.

The result of a direct impact of the above reasons is the decrease in preventive vaccinations coverage of children under 1 year of age in the reporting year 2017: Penta3 - 92% versus 96.1%, as compared with the same period in 2016. Penta3 coverage compared to the previous year has decreased and reached 88% in Bishkek versus 90.5%, a similar situation is observed in several districts of the Chuya region and in other regions.

The results of MICS 2014 and the scale of the registered measles outbreak in Bishkek and Chuya region during 2014-2015 outbreak confirm that there are problems with the registration and immunization of children in new residential developments in Bishkek and Chuya region districts, inhabited by a large number of internal migrants.

The problem of internal migrants creates a challenge for the program. First, it is related to the provision of immunization services. Although there is a legislative framework for the protection of the right to global health care coverage, including migrants, in reality there are administrative barriers in the form of refusal or redirection to private health care facilities for medical aid. Due to deficiencies in the computer-information form registration program (it does not take into consideration the work load per physician providing services to people that have applied without documents and a registered address). Secondly, lack of knowledge among the migrating population of their rights to medical services. Thirdly, low-level awareness of the population of the benefits and importance of immunization (Source: KAP, pp. 20-24).

The key challenge for the program is the growing anti-vaccination tendency, which requires significant efforts to increase awareness of the specialists and the general public on immunization issues (Source: KAP, pp. 67-68). A qualitative

study confirmed the main conclusion of the quantitative survey and highlighted several reasons for the refusal from immunization among different groups of respondents, which are presented in the following paragraphs:

1. Fear of immunization side effects: the overwhelming majority of respondents expressed their fears about short-term and long-term side effects, and although some of them did not personally experience side effects, this topic is widely discussed, which causes a negative impression that does not reflect the actual situation.
2. The study found no direct contradiction between religion and immunization, and it is believed to be because the majority of respondents did not want to openly link their refusal from vaccination with religion.
    a. Despite the fact that the main reason for the refusal from immunization is fears associated with adverse reactions, it is impossible to exclude the increase in the number of reasons for refusal due to religious beliefs because religious people are encouraged to refuse from vaccination based on religious/pseudo-religious tenets.
    b. There is an opinion that some religious tenets can be interpreted as an indirect prohibition against immunization, which is used by its opponents to increase the number of refusals from immunization. Moreover, the survey's participants professing Islam did not name any religious leader in Kyrgyzstan, who acted as a supporter of immunization. While religious leaders, who act as opponents of immunization, are quite popular among refusing parents.
3. Distrust of vaccine quality: the population is disoriented by a variety of negative information on the quality of vaccines used in Kyrgyzstan, mostly based on rumors.
    a. Negative information on the quality of vaccines (composition, manufacturers), which is distributed in various media and for which the Ministry of Health did not provide an equivalent response.
    b. Lack of laboratory services in the country to test the quality of vaccines.
    c. Doubts about the transportation of vaccines and the cold chain process.
    d. Insufficient information about vaccine manufacturers and belief that vaccines imported into the country are of lower quality, like vaccines for third world countries.
    e. Vaccines are imported from such countries as India and Pakistan characterized by high mortality and unsanitary conditions.
4. Incompetence of some health workers:
    a. A number of cases have been noted when health workers could not properly consult parents planning to refuse from immunization, which left the parents confused and as a result, they refused from vaccination.
    b. Some medical workers do not examine children before immunization, which leads to the fact that parents start to consider immunization to be harmful to children.
5. Intimidation and coercion to immunization have the opposite effect and cause outrage.
6. Vaccines composition: There is an opinion that vaccines contain toxic substances and also forbidden substances, and therefore they should not be used.
7. Lack of responsibility of the state and health workers: neither the state nor health workers are responsible for negative consequences of immunization; that leads parents to believe that they expose their children to risk in case of immunization.

Solutions to problems:
Within the framework of the Gavi UNICEF TCA, studies have been completed on the qualitative and quantitative perception of immunization. Based on the study results, the Communication Strategy Plan for routine immunization has been prepared, with special emphasis on target audiences. An information package on immunization for physicians and the public has been developed, which can also be used in training and as handouts. It is planned to conduct further training for primary health care workers using the training materials developed.

Decrease in coverage is noted in many countries of the region. Therefore, there is an important opportunity for countries to share experience through WHO.

With WHO support, leading clinicians and immunization program specialists have been trained on vaccine safety issues and contraindications to immunization. New national guidelines for surveillance and assessment of the causal relationship of adverse events following immunization and for safe immunization practices have been developed. Further training of mid-level managers and health workers implementing immunization is an important task for improving the quality and safety of immunization services.

3.2 Key drivers of sustainable coverage and equity

In order to achieve the national, regional and global targets as related to vaccine-preventable diseases control, Kyrgyzstan strives to ensure equitable and stable access to quality immunization services, regardless of social status and gender differences. In order to provide equal and fair access to immunization, in addition to routine activities, it uses strategies of mobile and outreach teams rendering immunization services for internal migrants, populations in remote areas and socially inaccessible (religious and other beliefs) groups. It widely uses the European Immunization Week (EIW) platform.

Reasons for inequality in vaccinations:

- Incomplete registration of children and adults, especially in new residential developments in the City of Bishkek and in certain districts of the Chuy region, that are inhabited by internal migrants (Source: KAP report) "...The "internal labor migrants" category includes mothers who live without permanent registration and moved to their place of residence in search of work or housing. The majority of the mothers in this category live in the City of Bishkek. Only 62 percent of them stated that their children under the age of five are registered with a FDG (family doctors' group) (RHP (rural health post)) at their place of residence. The share of fully vaccinated children under the age of five living in the families of labor migrants was 82 percent";
- Refusal from immunization, mainly due to religious beliefs, doubts as to the safety of immunization (Source: Form 5 of state statistical reporting);
- Problems of access to health care in remote villages due to lack of health staff;
- Low level of the public awareness (especially among internal migrants) of the need to vaccinate their children;

Equal access

- The results of MICS-2014 show that the Penta3 coverage is lower in cities (92.2%) than in rural areas (96.8%). According to the regional breakdown, City of Bishkek and the Chuy region (about 90-91%) have lower coverage compared to other regions, which all are above 95%.
- According to MICS, there is no gender-based inequality in the provision of immunization services (the difference is 1.4%); the Penta3 coverage among girls was 94.7%, among boys - 96.1%.
- There are no significant differences in the education level of mothers whose children have received Penta3 (the difference is 1.3%).
- The quintile of the index of welfare demonstrates significant differences (difference of 5.6%) in the Penta3 coverage among the wealthiest (90.9%) and middle class (94.6%) populations, while among the poorest it is (96.5%). Possibly, the wealthiest and middle class population segments have more access to information through the Internet, where there is a lot of negative information on the safety of vaccines

Table 6. Equality, MICS results (2014)

Stratification factor	Detailed stratification factor	Penta3	MMR1
	National coverage	**95.5**	**96.7**
Gender	Male	96.1	97.6
	Female	94.7	95.9
Welfare	WQ1	96.5	94.5
	WQ5	90.9	99.4
Place of residence	City	92.2	95.6
	Village	96.8	97.2
Education	Non-educated caregiver	N/A	N/A
	Educated caregiver	95.9	97.8

Territorial access equity

Per cent of districts with Penta3 coverage ≥ 90%: 38/40

- Alamedin district (Penta3 - 85.6%, high population migration)
- Tyup district (Penta3 - 87.2%, low staffing)

Per cent of districts with MCV1 coverage ≥ 95%: 35/40

- Alamedin district (MCV1 -90.5%, high population migration);
- Tyup district (MCV1 - 88.6%, low staffing);
- Suzak district (MCV1 - 90.5%, refusals due to religious beliefs);
- Toguz-Torouzsky (MCV1 - 92.4%, by geographical remoteness);

- Chatkal district (MCV1 - 91.5%, by geographical remoteness);

Risk groups

The main problem is internal migrants (according to KAP - only 62 percent of "internal labor migrants" stated that their children under the age of five are registered with a FDG (family doctors' group) (RHP (rural health post)) at their place of residence);

- Religious groups (**according to KAP** - 46% of mothers and caregivers, 50% of fathers, 46% of grandparents and health workers believe that many refuse to receive vaccination on religious grounds. About half of religious leaders are of the opinion that vaccine-preventable diseases can be prevented by adhering to a healthy lifestyle. Less than a half of religious leaders surveyed consider "fears and concerns associated with adverse effects following immunization" the main cause of refusals. And only 18% noted that the reasons can be associated with religious beliefs. Only 5% of religious leaders believe that their religious principles are contrary to immunization.
- Religious leaders are least likely to inform parents who refuse to vaccinate their children. This is of particular concern, since religious leaders are considered an important source of information and authority for caregivers.

Generation of demand/demand for vaccines:

Despite high levels of immunization coverage in the country, the number of refusals, the level of doubts and negative attitude towards immunization increases. Part of this is due to the fact that health workers conduct ineffective counseling for parents, as well as because of their inability to provide parents with sufficient information about the benefits of immunization. In addition, immunization coverage is subsequently questioned by increasing anti-vaccination trends on the initiative of various groups.

According to a study of knowledge, attitudes and practices (2017) (Source: KAP) - "...The "internal labor migrants" category includes mothers who live without permanent registration and moved to their place of residence in search of work or housing. The majority of the mothers in this category live in the City of Bishkek. Only 62 percent of them stated that their children under the age of five are registered with a FDG (family doctors' group) (RHP (rural health post)) at their place of residence. The share of fully vaccinated children under the age of five living in the families of labor migrants was 82 percent". The main reason for the child to be not vaccinated/undervaccinated is a medical exemption after a visit to the doctor and fears associated with unwanted reactions following immunization. Only 8.5 percent of mothers refused to vaccinate children, including refusals for religious reasons. Most of those who have encountered problems are dissatisfied with the long waiting time in queue.

Health workers in their practice face unvaccinated or undervaccinated children. Most parents, in their opinion, refuse to vaccinate their children due to their religious beliefs. There are cases when parents are exposed to the influence of radical religious figures who are against immunization (Source: KAP, p. 49).

Therefore, the Ministry of Health together with UNICEF and partners conducts ongoing project activities to increase knowledge, confidence and demand for immunization among population in general and among hard-to-reach groups in particular. In the process of application of Gavi HSS-2 tools, the Communication Strategy for Immunization has been developed. The Strategy comprises a plan for a comprehensive social campaign for routine immunization reaching information recipients, including internal migrants. Prior to the development of the strategy, the Ministry of Health and UNICEF conducted quantitative and qualitative surveys nationwide to assess knowledge, attitudes and practices of information recipients, and to get a better understanding of the causes of refusals from immunization and behaviors related to immunization, and to gather conclusions on approaches and actions in order to generate demand for immunization services.

To improve access to immunization services for urban migrants, a quantitative study of the coverage of urban migrants is being prepared under Gavi HSS-2 (WHO, goal 2). The goal is to study the coverage of this category of population. The methodology has been prepared, the study is scheduled to be carried out 18 from July to 10 September 2018.

To improve the access of the poor urban population, JSI carried out diagnostic activities to identify challenges faced by the urban poor from April to June 2018 within the framework of technical assistance (TA). The task is to identify the most vulnerable groups of the poor urban population. Results: improvement of access to immunization services by strengthening the interest of partners (governmental, non-governmental, international organizations) responsible for policy, planning, coordinating, financing and monitoring of the urban population immunization services' provision, involving social service providers and experts in working with urban residents (new residential developments).

3.3 Data

As is mentioned in Section 3.1., there are problems associated with the provision of immunization data, and the current administrative data has been called into question by a massive outbreak of measles. In addition, the measles monitoring data for supplementary immunization activities (SIA) indicated that coverage in some regions is about 70%. Also, there are contradictions and questions concerning the accuracy of the data on the risk group size when calculating the infectious disease morbidity rate from various sources (medical data of the census, CEH MoH KR, NSC, and the Civil Records Registration Office).

The following are the main problems identified by the data quality assessment conducted in December 2015:

1. Lack of methodology for calculating target groups for immunization, because the data of the National Statistical Committee differ from the data obtained during the medical registration of the population served by health facilities.

2. Inconsistency in the use of data sources in relation to the risk group size when calculating the infectious disease morbidity rate (medical registration by health facilities, the data of the Republican Center for Medical Information and national statistics data).

3. Registration of immunization among migratory population has not been standardized at health facilities.

4. Limited use of monitoring of data on the effectiveness of low-level staff to provide support from management and channel resources to unvaccinated children.

With regard to improving data quality, based on recommendations of the data quality study under HSS 2, this issue has been included in the action plan, revised edition 2017, in the field of immunization software and its installation at health facilities in 2018. With the use of Gavi ISS funds, immunization reporting forms have been disseminated and trainings of the health workers in the field of PHC and public health have been conducted (September, October 2017)

In order to develop a methodology for calculating the risk group size when calculating the infectious disease morbidity rate, the Working Group consisting of leading specialists from the Ministry of Health, the Republican Medical Information Center (RMIC), the National Statistics Committee, and relevant institutions will be established.

The current system for collecting and analyzing immunization data in the Kyrgyz Republic is integrated with the Unified State Health Information System. At the state level, the Republican Center for e-Health under the Ministry of Health (CEH MoH KR) is the responsible institution. At the district and region levels, the management of immunization data is carried out by Centers for Disease Prevention and Centers for State Surveillance (CDP & CSS). The National Statistical Committee has approved state statistical reporting forms: form No. 5 “Report on immunization activities” (on a monthly basis) and form No. 6 “Report on children, adolescents and adults vaccinated against infectious diseases” (on an annual basis). These reports should be provided by all health facilities within the prescribed deadline to submit the reports to the district CDP and CSS. Then, the data should be aggregated on a monthly basis at each level of the health care system, and the data collected should be submitted to the RCI. The annual data for regions should be submitted to the CED MoH KR and the National Statistical Committee in accordance with the established deadline (in March 2018 for the next reporting period). As of the moment, reporting documentation in the Kyrgyz Republic is submitted in paper form.

Within the framework of HSS-2 for Goal 5, improvement in the collection of timely and reliable immunization data and management decision-making has been scheduled. A high level WHO technical mission was organized in August 2018 to look into various options. The technical report with recommendations is expected in early October 2018 which will help define the related budget line.

In 2017, together with the Ministry of Health of the Kyrgyz Republic, with the support of a partnership platform in the field of Targeted Support to Partners, key recommendations of the data quality assessment mission (2015) on improving data quality have been fulfilled.

3.4 Immunization Financing

The Government of the Kyrgyz Republic (GKR) demonstrates a strong, long-standing commitment to immunization. GKR pays for all traditional vaccines and meets the Gavi co-financing requirements for new vaccines. In recent years, the GKR has not fully financed operational costs of the RCI, but this is largely due to the fact that Gavi subsidized such costs through the Immunization Services Support project (ISS). This project was completed in late 2017, and as a result in 2018 the budget deficit amounts to 2.4 million som. It is expected that the GKR will be ready to provide the funds required to cover this deficit.

Adequate reporting *on immunization financing and timely availability of reliable financing information to improve decision making.*
The RCI, like any other organization of the MoH KR, provides regular financial reports as per the standard forms defined by the MoH KR. After that, the MoH KR integrates all reports in the financial statements of the MoH KR and reports to the Ministry of Finance. The World Bank, within the framework of the technical assistance in 2018, will support the work on financial management and reporting. First, it will be determined which financial reports the RCI should produce to meet requirements of Gavi and other donors. Next, it will be determined how the RCI can create such reports based on the existing financial reports. Finally, the RCI accounting software will be optimized to receive all the required reports automatically.

At an early stage, it was agreed that Gavi funding would be consolidated with the procurement plan of the National Program Den Sooluk, and it was expected that the World Bank would supervise the procurement of goods and services financed by Gavi. This issue was clarified by the Bank to the MoH. In accordance with paragraph 41 of the agreement signed between the Government of the Kyrgyz Republic, the Swiss Agency for Development and Cooperation (SDC), KfW and the International Development Association (IDA) in 2014, the World Bank, in consultation with the MoH of the Kyrgyz Republic, does not object to financing contracts with pooled funds on behalf of development partners

participating in the Health and Social Protection Project (SWAp-2). This role does not apply to contracts financed by unallocated funds, as is the case with Gavi projects.

Technical assistance

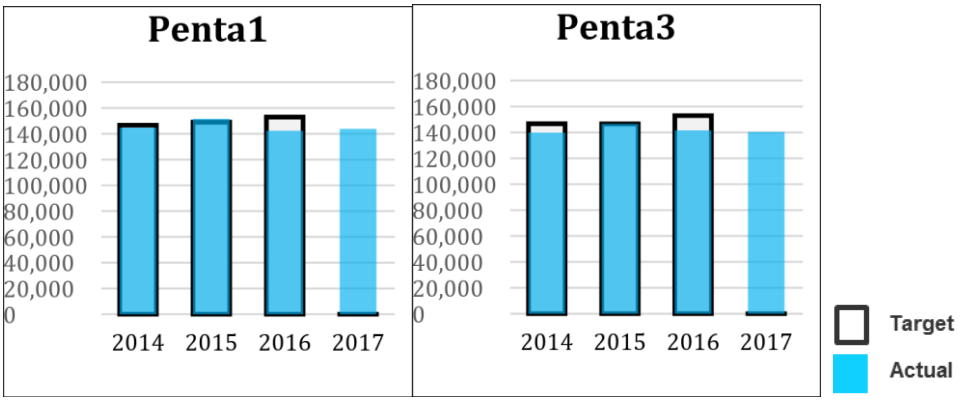
Technical assistance in 2017 has been carried out by the World Bank for immunization financing assessment (IFA) and co-financing of health system assessment (HSA). Immunization financing assessment was completed in early 2018. This assessment has been presented to Gavi in April 2018 and the RCI during the Gavi JA in May 2018, and again at a high-level forum in June 2018. A broader health system assessment has several components, including financial space analysis and analysis of deficiencies in the provision of services. The assessment stage takes considerable amount of time. While the components are still being finalized, the overall assessment of the health system will be completed by the end of 2018. Apart from that, there was no change in the technical assistance work plan in 2017.

4 INDICATORS OF THE EFFECTIVENESS OF GAVI SUPPORT

4.1. New vaccines support (NVS) – pentavalent DTP-HBV-HIB, pneumococcal, and inactivated polio vaccines.

Pentavalent DTP-HBV-HIB vaccine has been introduced into the national preventive vaccinations schedule in 2009 to immunize children under 1 year of age (at 2-3.5-5 months of age); the vaccine procurement is financed on the basis of co-financing of GKR and Gavi (10% and 90%, respectively), and a grant has been provided to support the introduction of the pentavalent vaccine. From 2009 to 2017 inclusive, GKR has fulfilled its obligations as related to the co-financing of this vaccine.

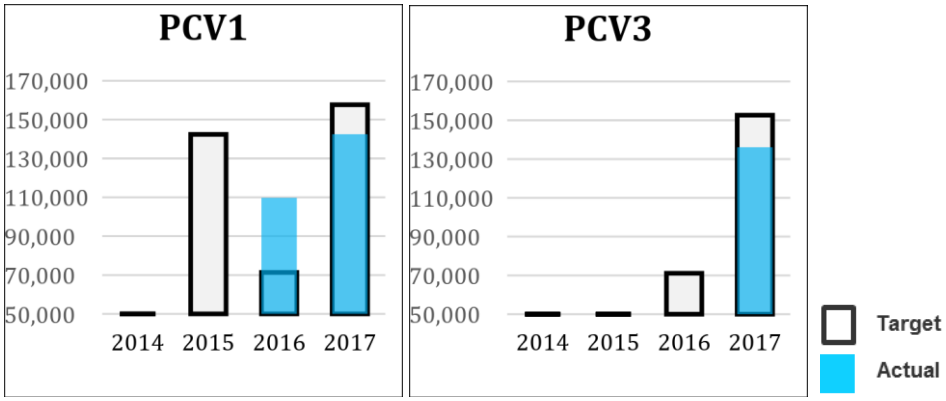
Table 1. Provided by Gavi - Penta3 coverage at the national level (2014-2017)



In the grant performance framework – within the period from 2010-2016, the target indicator of Penta3 coverage was maintained at a level of not less than 95%, but in 2017 the target was not achieved and amounted to 92% due to barriers (refusals from preventive vaccination due to doubts as to the quality of vaccines, religious beliefs, as well as unreasonable medical contraindications). The percentage of incomplete immunization between Penta1 and Penta3 was 2.4% and reached the targets set (3%). In the system adverse effects following immunization surveillance, no serious AEFI as related to the pentavalent vaccine were registered.

Pneumococcal and inactivated polio vaccines, under national health reform programs of the Kyrgyz Republic (Den Sooluk and Immunoprophylaxis), in accordance with the recommendations of Scientific and Technical Expert Group on Immunoprophylaxis (STEGI) and the decision of the Interagency Coordination Committee on Immunization (ICC), the Ministry of Health approved the introduction of the pneumococcal vaccine (PCV) in the immunization schedule. The application for the PCV introduction support was submitted by the country and approved by the Gavi Secretariat in 2014. As a result of the challenging epidemiological situation with measles in 2014-2015, the introduction of the vaccine was postponed until 2016.

Table 2. Provided by Gavi - PCV-2 and PCV3 coverage at the national level (2016-2017)



In accordance with the PCV introduction plan and the final phase of the Global Polio Eradication Strategic Plan, changes were introduced in the preventive vaccination schedule in 2016 – the pneumococcal vaccine and the inactivated polio vaccine were included. Gavi provided financial support for the introduction of two new vaccines in the form of grants for the introduction of conjugate vaccine for pneumococcal infections prevention and inactivated polio vaccine (IPV) for a total of USD 244,500.

Procurement of pneumococcal vaccine is carried out on the principle of shared financing by GKR and Gavi. IPV procurement in 2017 was carried out solely with Gavi funds.

The introduction of the pneumococcal vaccine began at health facilities throughout the republic in March 2016, with the support of the PCV introduction grant and part of the IPV funds. In the reporting year, the funds were not used. In 2018, the funds were used for the IPV implementation (USD 18,866), the balance of funds as of May 14, 2018 was according to the IPV grant – USD 66,037, according to the PCV grant – USD 22,980. Refer to Section 4.4 for detailed financial information.

Within grant performance framework - based on 2016-2017 results, immunization coverage among children with 2 doses of conjugate vaccine for prevention of pneumococcal infections in the country in 2016 was 41.3% and achieved the targets set for 2016 (40%).

Consequently, the coverage with the 3rd dose of PCV in 2017 was 88.6% and achieved the targets set for the second year of introduction (75%). The introduction of conjugate vaccine for the prevention of pneumococcal infections improved the NIP through advocacy, communication and social mobilization activities, and trainings for health workers increased the awareness of immunization among the population and the general level of knowledge of health workers (EPI Review, 2016).

In 2017, the country requested an extension of the period of support for the pentavalent DPT-HBV-HIB, pneumococcal vaccines for 2018-2021, in accordance with the new comprehensive multi-year plan for immunization (CMYP). The Gavi Secretariat approved the application for support renewal (Gavi decision letter dated 13 December 2017).

As part of the global polio eradication initiative, the Kyrgyz Republic switched from the trivalent oral polio vaccine (tOPV) to the bivalent vaccine (bOPV) in April 2016. With the support of the Gavi grant for the introduction of inactivated polio vaccine (IPV) and procurement of this vaccine in the amount of 80,600 doses in May 2018, immunization of children at 3.5 months with IPV was initiated throughout the country. IPV immunization is positively accepted by parents and the general public, according to the feedback from conversations with parents and social media.

Rotavirus vaccine - according to the KR national health reform programs “Den Sooluk” and “Immunoprophylaxis”, as well as the recommendations of the Scientific and Technical Expert Group on Immunoprophylaxis (STEGI), the rotavirus vaccine was scheduled to be introduced into the national preventive vaccination schedule between 2013 and 2017, but the RV introduction was delayed and the introduction of the rotavirus vaccine (RV) is scheduled for 2019. The Gavi Secretariat approved the country’s application for support as related to the rotavirus vaccine introduction in 2019-2021 on terms of co-financing (Gavi decision letter dated 9 April 2018) and receiving a grant for RV introduction in the amount of USD 116,257.

4.2 Performance of Gavi HSS support (if country is receiving Gavi HSS support)

Health system strengthening (HSS-2) for 2016-2020 was approved by the Gavi Secretariat in January 2015 (Gavi decision letter on HSS financial support in the KR dated 29 January 2015. Program grant number: 1418-KGZ-10a-Y). The total grant amount for the Kyrgyz Republic for five years is USD 4,596,655:

	2016	2017	2018	2019	2020	Total amount
Program budget, US dollars	1,085,684	873,311	879,269	879,657	878,734	4,596,655

The project is aimed at the five key Goals, for which the MoH KR, WHO and UNICEF are responsible:
Goal 1 – Expansion of knowledge, trust and demand for MCHPP services among the population. This goal will solve the problem of the increasing rate of refusals from immunization due to insufficient knowledge, incorrect perceptions and negative attitudes against vaccination (UNICEF).
Goal 2 – Strengthening primary health care (PHC) facilities to ensure better access to basic MCH services and immunization for city migrants and hard-to-reach regions. This task solves the problem with lower access to PHC services and immunization services (WHO).
Goal 3 – Strengthening human resources capacity of PHC to provide quality child immunization services. This task is designed to improve the quality of immunization services using updated guidelines and training (WHO).
Goal 4 – Increase of the cold chain capacities. This task addresses cold chain deficiencies (MoH KR).
Goal 5 – Upgrade the data collection system to ensure the relevance and accuracy of the information on immunization services. (WHO)

The achievement of targets is delayed due to the fact that the GPF was finalized only recently and also due to a significant delay in the start-up of activities.

Activities completed for Goal 1 of Gavi HSS-2 project (UNICEF)
Goal 1 of the Gavi HSS-2 project is implemented in accordance with the work plan agreed upon with the Secretariat. In early 2018, UNICEF received a no-cost extension of the first tranche until 31 December 2018, according to the agreement reached at the beginning of the project, given the fact that the activities implemented were initially scheduled for a period of two years.

UNICEF data on the use of funds, as well as activities to be implemented in 2018.

Total program budget for 2017-2018: USD 282,775.93 (net of programme support costs)

	Funds used 2017-2018	Projected for August-December 2018
International and local consultants to provide technical support to local researchers and develop the Communication Strategy on Immunisation (including transportation costs)	65,674.68	
Discussion of the draft strategy and the KAP results	6,689.66	
Participation in Gavi regional meeting	2,839.70	
KAP	8,864.29	
Interpersonal communication training for trainers	20,367.84	
Interpersonal communication training for 1000 health workers		100,000
Improvement of the interpersonal communication module and its introduction into postgraduate training of health workers, including a meeting-consultation for trainers in the medium-term stage of training of health workers		15,000
Training of journalists and activities to improve the quality of materials on immunization in mass media		20,000
Social mobilization training for NGOs		15,000
ICC support		8,800
National consultant to work with religious leaders		1,000

Other (translation, design/layout, printout of working materials, etc.)	8,387.72	10,152
Total	**$112,823.89**	**$169,952**

Activities completed for Goals 2,3,5 of Gavi HSS-2 project (WHO)

2017

Goals 2,3,5 of the Gavi HSS-2 project are implemented in accordance with the work plan agreed upon with the Gavi Secretariat. For the purposes of Regional Coordination, by the time of signing of the grant between WHO and Gavi in August and funds allocation in September 2017, procedures for hiring a national project coordinator in the WHO country office have been completed. Two WHO European Regional Office missions were conducted in August and September 2017 to discuss action plans; indicators for the implementation of activities and interim results of project components were developed and approved. Additional discussions were held in Budva, Montenegro, in October 2017 to develop a concept and operational plan for the first year of the project's implementation, taking into account the changed situation in the country. In January 2018, WHO European Regional Office convened a meeting for all HSS project country coordinators to strengthen their capacity for technical aspects of implementing of the WHO goals of the HSS grant, consult with the WHO specialists to develop a detailed plan for 2018. In addition, personnel were familiarized with the WHO rules and procedures, since none of them had previously had experience in this area.

According to the activities planned under Goal 2 "Strengthening primary health care (PHC) facilities to ensure better access to basic MCH services and immunization for city migrants and hard-to-reach regions", all preparatory activities for the implementation of activity 2.1 "Carrying out coverage survey among internal migrants in Bishkek and Osh" were completed.

2.1. Carrying out coverage survey among internal migrants in Bishkek and Osh

- Selection of an international consultant and the development of ToR.
- Design and methodology of the survey were developed in accordance with the revised WHO methodology, with direct participation of the WHO European Regional Office technical program; 4 types of questionnaires for the survey;
- Taking into account the distribution of internal migrants in Osh, an additional visit was made by the consultant to adapt the methodology in Osh;
- Design, methodology, questionnaires and other materials for piloting are translated into Russian;
- Creation of the MoH coordination group for the coverage survey (representatives of Bishkek and Osh);
- Training of the coordination group members on methodology and review of the questionnaires developed; All questionnaires were revised and changes were made;
- Piloting of methodology and questionnaires by the coordination group members in selected households in Bishkek using a mobile application;
- A workshop for discussing the results of piloting and making changes to study instruments.
- Mapping of 43 new settlements in Bishkek, where the survey will be conducted;
- Obtaining an address list and a map of territories inhabited predominantly by internal migrants from Osh health care facilities;

According to activities planned under Goal 3 "Strengthening human resources capacity of PHC to provide quality child immunization services", the following activities were completed:

3.1 Revision of the standard definition of AEFI case and reporting protocols

- The AEFI manual was developed with the WHO consultant's assistance;
- It is now to be approved by the MoH and then distributed among health care organizations of the republic.

According to activities planned under Goal 5 "Immunization data quality", the following activities were completed:

5.1. An immunization data quality improvement plan

- The mission of the WHO consultant to Kyrgyzstan (Center for e-Health, MoH, RCI, SRS, Infocom, CISI pilot in the City of Kant);
- The technical report was prepared and translated into Russian. The report assesses the feasibility of implementing the electronic registration of immunization, reviews the CISI program and contains technical specification for computer equipment for the immunization service

Out of the total amount of the agreement, USD 567,913 (inclusive of USD 37,153 program support costs) USD 95,272 was spent as of 31 December 2017:

Expenditure Category	Expenditure Type	Encumbrance	Expenditure	Utilization
Staff Costs	501-Staff Costs: LT	0	55,063	55,063
Staff Costs Total		**0**	**55,063**	**55,063**
Activities	513-Contractual Serv, General	0	22,420	22,420
	518-Travel	0	11,556	11,556
Activities Total		**0**	**33,976**	**33,976**
Financial Transactions	530-PSC	0	6,233	6,233
Financial Transactions Total		**0**	**6,233**	**6,233**
Grand Total		**0**	**95,272**	**95,272**

2018

Continuation of activities in the following areas:

2.1. Carrying out coverage survey among internal migrants in Bishkek and Osh

- The contract is prepared for an international consultant to develop sample criteria, training of local interviewers;
- Terms of reference and competitive requirements for local research companies are prepared, and a tender is announced. By the deadline of 22 May, 3 local research companies submitted their applications.
- Contract with an international consultant to analyze future collected data and review the preliminary report of the research company.
- From 9-14 July, training on methodology to be conducted by an international consultant, training for the local agency, and the study will be launched

2.4. Development of methodology and separate plans for the use of mobile teams to increase access of the population in hard-to-reach areas and in the areas of new residential developments inhabited by internal migrants in Bishkek and Osh.

- According to the WHO procedures, the public health authority is selected for the subsequent contract and conducting immunization sessions with Who technical assistance;
- The budget for conducting immunization sessions by mobile teams has been prepared;
- The MoH is preparing the composition of the working group for reviewing the outdated Order on mobile teams and for conducting immunization sessions by mobile teams

3.0 Training for middle level managers

- An international tender was held at the regional level and a service provider was identified, which would make it easier for WHO country offices to contract with the selected institution to conduct the training of national trainers (ToT) and control the trainings by qualified national trainers.

3.8 Support as related to operating costs for integrated supervising visits concerning basic MCH services with a focus on immunization

- A contract with a local IMCI consultant who will support the MoH KR in the development of an integrated guide for integrated supervising visits concerning basic MCH services with a focus on immunization.

3.9 Training of the SSES Department district managers on vaccine supply and distribution management, including safe transportation (the module is supported by WHO only for the national level)

- The development of a protocol of epidemiological supervising visits in cooperation with the Department of Prevention of Diseases and State Sanitary and Epidemiological Supervision (DPD & SSES) and support as related to the operating costs for supervising visits to comply with the immunization safety requirements, the AEFI standards, and the EVM standards.
- A contract for DPD & SSES Working Group has been signed

5.1.1 Overview of the immunization data collection and registration system and reporting forms

- Two international consultants performed a mission in the city of Bishkek, Chuya and Issyk-Kul regions.
- A draft report is currently under consideration by the technical program
- Preliminary conclusions and recommendations were discussed with the MoH KR, together with all the partners involved in improving data collection
- With the participation of WHO European Regional Office, the possibility of joint efforts of WHO, Department of SSES, RCI, and Center for e-Health (CEH) towards “Electronic system for tracking of cases of certain non-infectious and infectious diseases” (CSID) was discussed during the final discussion of the results of the MoH KR mission and AIS utilization

Main problems:

In general, the majority of HSS-2 activities under goals 2, 3 and 5 were formulated by international consultants for the implementation by the country and national health care facilities a long time ago. For WHO, starting a project in a new

modality of its implementation at this scale of funding required the development of new skills at the level of the WHO country office.

In the country:

- in the second half of 2017, all the RCI staff were engaged in the implementation of a significant amount of the Gavi ISS (the deadline expired in December 2017)
- In January 2017, Law "Budget Code" was enacted with the transfer of bank accounts of all state budgetary institutions in the health sector to accounts of the Central Treasury under the Ministry of Finance. In addition, according to this law, the RCI and all state institutions have access to special accounts where funds received from donors and international organizations are accumulated until the month of May inclusive.
- In this regard, as a result of joint measures, the RCI was able to obtain permission to use part of the Gavi funds in April 2018
- A new dedicated RCI account was not introduced into the WHO electronic financial system, which is a barrier to formalizing the contract between WHO and RCI.

By WHO:

- introduction of new procedures to attract local individual experts and relevant state institutions, with a tender required;
- Direct appointment of a contract partner by the Ministry of Health contradicts the WHO financial rules and regulations, which require a tender, when the total cost for a period of two years is more than USD 25,000.
- Insufficient administrative support at the WHO CO level until January 2018
- The WHO HSS project coordinator is also responsible for the implementation of immunization program activities

At the same time, it should be noted that WHO has tools to monitor the use of funds online both in respect of its activities and of strict payment rules that must be observed upon the completion of work and submission of all results and satisfactory conclusion of the contract.

Solutions:
- for 2018, the WHO HSS action plan has been drawn up in coordination with the existing annual RCI plan to eliminate overlapping and limit the workload of RCI staff;
- regular coordination meetings are held with all partners;
- since January 2018, 50% administrative support has been provided at the WHO office;
- the WHO consultant is available since March 2018 for assistance in the immunization program;
- trainings to increase staff capacity both in technical and administrative matters at the regional and country levels;

As of 29 May 2018, the balance amounts to USD 363,814. It is assumed that before the expiration of this agreement, by the end of the year all the funds available will be used in accordance with the following plans.

Plans until the end of 2018:

A national round table on the results of the Gavi HSS-2 implementation (MoH, WHO and UNICEF) - 2.5 days (December)

2.1. Carrying out coverage survey among internal migrants in Bishkek and Osh
June - November 2018

- Conclusion of a contract with a local research company for the study of vaccine coverage among internal migrants in the cities of Bishkek and Osh;
- Assistance of an international consultant in training a team of interviewers and supervisors on methodology;
- Field work, collection and preliminary analysis of data
- Monitoring, supervisory visits in Bishkek and Osh to test the quality of the vaccine coverage study among internal migrants;
- Assistance of an international consultant to analyze the data collected;
- A national workshop on the validation of the results of the study of coverage among internal migrants in Bishkek and Osh (November);

2.1.3. Immunization program adaptation: social science studies on internal migrants in three districts of Bishkek:
The following plan has been agreed upon:

- August 2018: preliminary situation analysis based on coverage and observation data, conclusions on the formation of surveys and similar studies; MoH and WHO / CO staff participate in the WHO Summer School on behavioral matters
- 10-14 September 2018: planning of meetings with the immunization program and a workshop for stakeholders. Finally, determining the scope and purpose of the study (Katrine Habersaat and WHO consultant mission)
- September-October 2018: Request for a quote to identify a local research agency (1 month process)
- October 2018: (terms to be specified) preparation of the immunization program and the research agency as related to interview methods and qualitative research methods (WHO consultant mission)
- October-December 2018: research with a local immunization team and a research agency with the WHO consultant's support
- For 2019: 1st Quarter of 2019: Completion of studies and reports; a workshop for stakeholders, development of activities, planning of next steps (WHO consultants' mission); 2nd-4th Quarter of 2019: interventions to

increase coverage based on the study results - significant investments may be required, depending on the outcome

3.0 Training for middle level managers

- Conducting ToT for at least 25 trainers and conducting the first trainings of health workers by trained national trainers; Training by an international training center (September);
- Preparation and printing of modules for middle level managers in Russian (November);
- Preparation of a health worker's immunization pocket guide;

3.5 Training of 18 trainers for physicians on immunization practice with a focus on new vaccines and AEFI

- Conducting ToT on AEFI cause-effect relations and the first trainings of health workers by trained national trainers (October)
- Training of the National Committee on AEFI cause-effect relations assessment by an international trainer (November).

3.8 Support as related to operating costs for integrated supervising visits concerning basic MCH services with a focus on immunization

- Development of a tool for MCH supporting supervising visits with a focus on children immunization (July);
- Translation of the tool into Kyrgyz (August);
- Development of training materials on IMCI (revised) with a focus on children immunization and printing the materials (August-September);
- Conducting supervising visits according to the approved MoH plan (September-November).

5.1. Data quality improvement plan

- WHO mission to assess possibilities and choice of the format for electronic reporting on immunization (13-17 August 2018)
- Development of the electronic immunization reporting form, piloting;
- Procurement of computer equipment for immunization service and implementation of the electronic reporting form;
- Contract with a local IT consultant

Activities completed for Goal 4 of Gavi HSS-2 project (MoH KR)

For the implementation of the HSS-2 program, Gavi transferred a total of USD 1,085,684, of which the first tranche amounted to USD 271,421, which on 11 November 2015 was converted into the national currency in the amount of KGS 19,243,748.90, the 2nd tranche on 10 February 2016, amounted to USD 814,263, which was also converted into the national currency in the amount of KGS 58,138,378.20.

In accordance with the Gavi Secretariat decision dated 18.11.2016 on reprogramming the Gavi Health System Strengthening Program for 2016-2020, and also in connection with the development of a new Gavi Project Proposal for the Cold Chain Equipment Optimization Platform for 2017-2020, the Order of the MoH KR dated 2.08.2017 No. 692 amended the Gavi HSS-2 Project Action Plan for 2016-2020 for **Component 4 Strengthening Cold Chain Physical Capacity (MoH KR).**

Budget. In accordance with the revised Activities Plan, procurement and administrative costs totaling USD 438,816 were planned for 2017, including USD 237,073 via the UNICEF Supply Division.

	Account name		**2017 total amount, USD**
	Total received funds		
4.1	Procurement of 8 cold rooms for national, district and regional vaccine warehouses for the purpose of compliance with temperature conditions and storage conditions for vaccine products: 1 pc. x 40m^3 (including 3-phase voltage regulators) for the national warehouse; 3 pcs. x 30 m^3 for vaccine warehouses in Osh, Jalal-Abad regions and the City of Bishkek; 4 pcs. x 10m^3 for vaccine warehouses of Issyk-Atin, Kara-Suya, Uzgen, Aksyi regions	MoH, through Supply division UNISEF	190,507
4.2	Diesel generator units (1 pc. - 50 kW, 8 pcs. - 15 kW).	MoH, RCI	110,426
4.3	Refrigerated trucks (8 pcs.) to ensure the distribution and supply of vaccines to the national and regional, district centers (2 pcs. x 20m^3, 6 pcs. x 12m^3)	MoH, RCI	0
4.4	Pickup/minivan cars (1 pc.) for the national level to provide cold chain monitoring and maintenance	MoH, RCI	0
4.5	Repair of the national, district vaccine warehouses	MoH, RCI	50,000
4.6	Procurement of spare parts for specialized cold equipment	MoH, throuhg Supply division UNISEF	15,000

4.7	Maintenance of specialized cold chain equipment	MoH	5,000
4.8	Training for immunologists, heads of vaccine warehouses and vaccination nurses associated with temperature indicators, according to the Effective Vaccine Management (EVM) plan.	MoH	10,000
4.9	Replication of accounting and reporting forms, a register on vaccine and supplies stocks management in accordance with the EVM plan. Instructions for cold equipment maintenance.	MoH	0
4.10	Cold boxes (2 types) for vaccine products' transportation - 800 pcs. x 2.6 Lt, 216 pcs. x 7lt.	MoH, throuhg Supply division UNISEF	31,566
4.11	Freeze-tags (2000 pcs.) for vaccine products' transportation	MoH, throuhg Supply division UNISEF	0
6.1.a.	Technical Coordinator	MoH	15,557
6.1.b.	Financial Manager	MoH	2,900
6.2	Office equipment	MoH	5,900
6.3	Utilities	MoH	1,960
	Total		***438,816***

The balance of funds under Goal 4 Strengthening Cold Chain Physical Capacity as of 01.01.2017 was USD 1,075,084 (KGS 76,649,271)

Actual execution of the budget and the Procurement Plan in 2017 amounted to **USD 216,621**, including:

- under item 4.1, 4 cold rooms - 10 m3, 3 cold rooms - 30 m3 and 1 cold room - 40 m3 (including three-phase voltage regulators) for storage of vaccine products for a total amount of USD 168,706 were purchased;
- under item 4.10, containers for the transportation of vaccines for a total amount of USD 35,501 were purchased.
- under item 6.1a operating costs amounted to USD 11,414.

The balance of funds as of 01.01.2018 was USD 858,462. The rate of funds utilization for 2017 was 49.3% of the planned amount (purchases and wages). The equipment received was distributed among the regional and district CDP and SSES. As of 01.01.2018, the balance of Gavi HSS fixed assets amounted to **KGS 8,845,499**. The following cold rooms are procured (1 pc. - 30m3 and 1 pc. - 40m3). In connection with the expectation of repair of the RCI and CSSES storage facilities in Bishkek, the equipment has not yet been distributed. Repair of vaccine warehouses is scheduled for 2018.

The main reasons for not using funds and not implementing the Action Plan was the administrative barrier. In accordance with the Framework Agreement on Cooperation between MoH KR and Gavi, in the section on the requirements for financial resources management, it is stipulated that the Ministry of Health of the KR must comply with and adhere to the requirements of the World Bank (WB) procedure when using the HSS-2 grant funds.

However, the WB informed the Gavi Secretariat that the WB procedures can not be applied to programs funded by Gavi HSS-2, although initially it was a requirement for health sector procurement, including services, except for cold chain equipment provided by UNICEF.

The audit of the use of the Gavi funds for 2016 was carried out by the Audit Chamber of the Kyrgyz Republic and is reflected in the general audit report of the Ministry of Health. Currently, the Audit Chamber of the Kyrgyz Republic is expected to audit the Gavi HSS funds for 2017 as part of the audit of the Ministry of Health.

2018

In order to implement the Gavi HSS-2 project, the action plan and the procurement plan for 2018 was reviewed and approved at the ICC meeting on 5 April 2018, for a total of USD 480,596.

Of these, **through the UNICEF Supply Division:**

1. Refrigerated trucks (RCI and Osh CDP and SSES for the transportation of vaccines from the national warehouse and for the distribution of vaccines at the district level) - 2 pcs;
2. Pickup/minivan car (to support monitoring and control of equipment deployment) - 2 pcs.
3. Generators with the capacity of 50 kW (for equipping the national warehouse) - 1 pc.;
4. Generators with the capacity of 15 kW (for regional vaccine warehouses) - 8 pcs.;
5. 3-phase voltage regulator 10kW - 7 pcs.;
6. 3-phase voltage regulator 20kW - 1 pc.;
7. Spare parts for specialized cold equipment for all types of the equipment supplied under CCEOP - 78 sets.

Carrying out activities through the **procurement department of the MoH KR**:

8. Repair of district vaccine warehouses,
9. CCE maintenance,
10. Training for immunologists, heads of vaccine warehouses and vaccination nurses associated with temperature indicators,
11. Printing of reporting forms,
12. Utilities and consumables,

According to the application of the Ministry of Health of the KR dated 28 February 2018, for the procurement of generators and voltage regulators-8 pcs., 78 pcs. spare parts for cold chain equipment, freeze-tags 2000 pcs., UNICEF Supply Department issued an invoice in the amount of USD 47,022.07 dated 5 April 2018, No. 10019510, and in the amount of USD 102,392.30 dated 1 May 2018. The total amount is USD 149,414.37. **The transfer of funds is approved by the Treasury and the payment is currently being processed**.

There are three priorities which need to be addressed in 2019 through HSS funding:

a. Taking into consideration that procurement of computerized remote temperature monitoring systems for the national store and sub-national stores could not be funded through CCEOP project, USD 25,000 shall be allocated through the HSS savings for procurement of nine 8-channel systems for regional stores and and one 24-channel system for the national vaccine store. This is a high priority in order to ensure safe vaccine storage at critical levels in the cold chain.
b. The following priority is procuring additional cold chain equipment to address storage capacity gap at the Jalal-Abad regional vaccine store: procurement of one cold room 30 m3 shall be considered should the procurement costs remain under USD 23,000, including all expenses. Otherwise, alternative solutions shall be explored.
c. Furthermore, procurement of remote temperature monitoring systems for the procured refrigerated vehicles (8 systems x) shall be considered as well to establish an adequate and integrated monitoring of storage and distribution risks and to safeguard vaccines. The total budget is about USD 16,000 (USD 2,000/unit) and funding shall be planned along with procurement of refrigerated trucks.

Objective 1	
Objective of the HSS grant (as per the HSS proposals or PSR)	Raising awareness, trust and demand for MCH services, in particular for immunization services, among the population
Priority geographies / population groups or constraints to C&E addressed by the objective	1. Mothers as the key caregivers for children, with a focus on those who have doubts about immunization 2. Fathers, grandmothers and grandfathers as people that influence the mother's decision regarding immunization 3. Religious leaders and mass media workers who have great social influence 4. Health workers who are in direct contact with mothers and have greater opportunities to influence their decision regarding immunization
% activities conducted or budget utilization	31%
Major activities implemented and review of implementation progress, including key successes and outcomes, activities not implemented or delayed, financial absorption	By the time of the Joint Appraisal, the knowledge, attitudes and practices (KAP) study was completed. It was partially supported by Gavi HSS-2 in terms of providing international consultancy expertise. The results of the study were presented to all country stakeholders at a press conference in April 2018. The report was prepared in an electronic format. Based on the results of study, the Communication Strategy on Immunisation was developed, which was approved by the ICC and agreed with the State Committee on Matters of Religion. The strategy was further approved by the MoH. The key implementers of the Strategy are being defined, and partnership agreements are being prepared. A draft interpersonal communication module for health workers, including training cases and information kits, was also prepared. Currently, two five-day trainings for trainers and three-day cascade trainings for 1,000 health workers are being prepared.
Major activities planned for upcoming period (describe significant changes or budget reallocations and associated **needs for technical assistance**)11	National campaign Social mobilization in the City of Bishkek, Chuya and Talass regions Increase the capacity of health workers in interpersonal communication – 1000 people Involvement of religious leaders Involvement of mass media Increase of the RCI institutional capacity as related to communication for development Monitoring and assessment
Objective 2	
Objective of the HSS grant (as per the HSS proposals or PSR)	Strengthening primary health care facilities to ensure better access to basic MCH services and immunization for city migrants and hard-to-reach regions.
Priority geographies / population groups or constraints to C&E addressed by the objective	Internal migrants in Bishkek and Osh, who may have problems with access to immunization services for children.
% activities conducted or budget utilization	55%

Major activities implemented and review of implementation progress, including key successes and outcomes, activities not implemented or delayed, financial absorption	Design of methodology for vaccine coverage study for Bishkek and Osh have been developed and questionnaires piloted in Bishkek. A local research company was contracted and an international consultant has started training interviewers. A review of the outdated Order on mobile teams for conducting immunization sessions is being currently conducted.
Major activities planned for upcoming period (describe significant changes or budget reallocations and associated **needs for technical assistance**)11	Conducting interviewers' training and conducting the immunization coverage survey of internal migrants' children (24-35 months) in the City of Bishkek and the City of Osh; Analysis of the data collected; Validation of the results obtained at the Round Table; Preparing the report. Conducting immunization sessions by mobile teams. Immunization program adaptation: social science studies on internal migrants in three districts of Bishkek.
Objective 3	
Objective of the HSS grant (as per the HSS proposals or PSR)	Strengthening human resources capacity of PHC to provide quality immunization services.
Priority geographies / population groups or constraints to C&E addressed by the objective	The population of hard-to-reach areas of the country and internal migrants. Health workers
% activities conducted or budget utilization	
Major activities implemented and review of implementation progress, including key successes and outcomes, activities not implemented or delayed, financial absorption	A training of national trainers will be conducted in the second part of September 2018 to strengthen human resources capacity at PHC level. Support will be provided to the MoH in the development of a guide for integrated supervisory visits on monitoring basic MCH services with a focus on immunization. A working group at the MoH was established to develop a protocol of epidemiological supervisory visits jointly with the Department of Prevention of Diseases and State Sanitary and Epidemiological Surveillance.
Major activities planned for upcoming period (describe significant changes or budget reallocations and associated **needs for technical assistance**)[2]	The national training is scheduled for 15-30 September for training trainers and health workers within the course of immunization for middle level managers. Support as related to operating costs for integrated supervising visits concerning basic MCH services with a focus on immunization.
Objective 4	
Objective of the HSS grant (as per the HSS proposals or PSR)	Supporting and strengthening health system in order to ensure a decrease in the infant mortality rate through overcoming systemic barriers, development of access to basic services in the field of maternal and child health, including maintenance of at least 95% preventive vaccination coverage.
Priority geographies / population groups or constraints to C&E addressed by the objective	National RCI warehouse and regional warehouses
% activities conducted or budget utilization	Actual execution of the budget and the Procurement Plan in 2017 amounted to **USD 216,621,** the percentage of funds execution in 2017 amounted to 49.3% of the planned amount (procurement and salaries).

[2]Note. When specifying Technical Assistance (TA) needs, do not include elements of resource requirements. They are considered in the context of planning targeted country assistance (TCA). Information for TCA planning is based on the needs specified in JA. In this case, the following TA requirements should be stated (within the limits known to date): the type of TA required (staff, consultants, briefing, etc.), the organization that provides TA (the lead partner or member of the extended partner network), the required number and duration, the regime (at other events; sub-national; coaching; etc.), and any timeframes/deadlines. When ranking TA for the next year on priorities, JA teams are reminded to both look back (TA which was not completed/successful in the past) and forward (planned vaccine introductions, campaigns, major upcoming HSS activities, etc.). The list of TA options is given in the reference manual.

Major activities implemented and review of implementation progress, including key successes and outcomes, activities not implemented or delayed, financial absorption	Under item 4.1, eight cold rooms for storage of vaccine products (4 cold rooms - 10 m3, 3 cold rooms - 30 m3 and 1 cold room – 40 m3 including three-phase voltage regulators for storage of vaccine products for a total amount of USD 168,706) were procured and delivered to the intended sites. The storage sites of RCI and CSSES in Bishkek will undergo repairs scheduled for 2018 before cold room installation. Under item 4.10, containers for transportation of vaccines for a total amount of USD 35,501 were procured. During 2017 the main reasons for not utilizing funds and not implementing the Action Plan was the administrative barriers: the issue of applying procurement procedures for the Gavi project was not resolved. Annual delay in approving project cost estimates. The decree of the Government of the KR on approval of special funds' balances is issued only by the end of May, June.
Major activities planned for upcoming period (describe significant changes or budget reallocations and associated **needs for technical assistance**)	For successful completion of the project, the budget should be increased by USD 130,000 (for procurement of a refrigerated truck). A budget of USD 25,000 shall be allocated through the HSS savings for procurement of nine 8-channel systems for regional stores and one 24-channel system for the national vaccine store. This is a high priority. Up to USD 23,000 shall be allocated to procure additional cold chain equipment to address storage capacity gap at the Jalal-Abad regional vaccine store: procurement of one cold room 30 m3 is preferred should the costs fit in the above budget. Otherwise, alternative solutions shall be explored. Furthermore, a budget of USD 16,000 shall be planned along with procurement of refrigerated trucks to procurement of remote temperature monitoring systems for the procured refrigerated vehicles (8 systems x USD 2,000).
Objective 5	
Objective of the HSS grant (as per the HSS proposals or PSR)	Immunization data quality.
Priority geographies / population groups or constraints to C&E addressed by the objective	The system of collection and reporting on immunization at health facilities, immunization services at the regional and national levels.
% activities conducted or budget utilization	
Major activities implemented and review of implementation progress, including key successes and outcomes, activities not implemented or delayed, financial absorption	A priority for this objective is the development of an online electronic system for collection and reporting of immunization data and services at the health facility, regional and national levels. December 2017: The consultant's mission to assess the feasibility of implementing the electronic registration of vaccination, assess the CISI program and technical specification for computer equipment for the immunization service; May 2018: Two international consultants performed a mission to assess the quality of immunization reporting data in the City of Bishkek, Chuya and Issyk-Kul regions. The findings of the mission will be taken into account in the development of SOP for supervising, conducting of epidemiological studies.
Major activities planned for upcoming period (describe significant changes or budget reallocations and associated **needs for technical assistance**)	• Development of SOP for supervising; • According to the results of the WHO mission in August 2018, an electronic immunization reporting form will be developed and piloted; • Procurement of computer equipment for immunization service and implementation of the electronic reporting form; • Contract with a local IT consultant for support of the RCI and the NIP in electronic tools' introduction. • Training of district immunologists on the reporting form application

4.3 Performance of Gavi CCEOP support (if country is receiving Gavi CCEOP support)

In 2016, the country accepted Gavi proposal for support for the optimization of the cold chain equipment (CCEOP) and prepared a project application for the total amount of USD 1,658,246, 50% of which will be covered by the country from the HSS-2 grant funds. The application is based on needs assessment, rehabilitation plan and cold chain maintenance during the cold chain inventory in 2016. An application was approved at the ICC meeting on immunization (12.01.2017) and coordinated with the MF of the KR. The full package of application documents was submitted to the Gavi Secretariat for review (18.01.2017). The project application was reviewed by the Gavi Independent Review Committee and approved (05.03.2018).
Thanks to CCEOP, the republic will have the opportunity to provide the PHC level with refrigeration equipment, temperature monitoring devices and transportation facilities that have been pre-qualified by WHO and meet the international ISO standards.

The state of CCEOP implementation - as of 28 May 2018, CCEOP:

The UNICEF Supply Division has placed a tender for the supply of CCE on 16 May 2018, with the closing date of 22 June 2018, in official sources.

Completed stages of CCEOP:

Stage	Activities	Schedule	Comments
1	Final preparation of the application for CCEOP support	January 2017	With WHO support
2	Approval by Gavi independent committee	April 2017	With some comments for corrections
3	Gavi decision-letter on the approval of CCEOP application	March 2018	Received on 5 March 2018
4	Creation of a working group on logistics for developing the CCEOP operational plan (which included the UNICEF members invited)	February 2018	Created by the decree of the MoH KR No. 92 dated 12.02.18
5	Developing the Operational Deployment Plan	March 2018	Technical assistance from UNICEF
6	Presentation of the operational plan to ICC members with UNICEF support	5 April 2018	Approved by ICC
7	Official submission of the operational plan and the official request letter for the cost estimate	2 May 2018	From the RCI and MoH KR to UNICEF Country Office and Supply Division
8	Discussion and approval of the terms of reference for the supplier	10 May 2018	RCI, UNICEF Country Office and Supply Division
9	Holding a tender for CCE procurement	16 May 2018	UNICEF Supply Division

Contribution of CCEOP to overall immunization performance. CCEOP grant will allow Kyrgyzstan to improve immunization performance by:

- ensuring safe storage of vaccines;
- increasing access to immunization and increasing coverage;
- increasing the volume of vaccine storage (for new vaccines introduction);
- addressing the issue of power failures for health facilities, since specialized CCE maintains the temperature for up to 53 hours;
- continuous temperature monitoring.

Future needs for technical assistance in implementing CCEOP support

At this stage of preparation for CCEOP implementation, when drafting the Operational Deployment Plan,

the country faced the following problems:

1. Limitations of CCEM (Cold Chain Equipment Manager) to work on unlicensed Microsoft Access Russian language environment. During the preparation of the CCEOP application, an inventory of cold chain equipment was carried out in 2016, and when creating the operational deployment plan the working group worked on the basis of this inventory. The CCEM worked incorrectly, much of the data was hidden, which made the work more complicated and created the need to export data to Microsoft Excel. The compatibility issue has been addressed through subsequent WHO assistance. Nevertheless, the RCI must be provided with 2 computers with a licensed version of Microsoft, as well as training for at least 2 RCI employees to work in Microsoft Access.

Forthcoming difficulties in CCEOP deployment:

1. For further monitoring and accounting of the CCE supplied under CCEOP, it is necessary to develop a mechanism that allows HCFs to provide reliable data. At the time of the development of the operational plan, information was requested in some districts on the current state of the facility and CCE in order to verify readiness for CCEOP.
2. Maintenance of the existing equipment and newly supplied equipment under CCEOP.

Past experience revealed difficulties in contracting companies for CCE repair and maintenance, although there are private companies providing cold chain equipment maintenance services in Kyrgyzstan.

Possible solution:

Under CCEOP, the CCE supplier will cooperate with the local representative for assembly and installation of the equipment and training of health facilities' personnel on preventive maintenance and handling of the refrigerator, and the CCE warranty service. It is proposed to use the capacity of the supplier's local representative for further work:

- for the existing CCE repair;
- for subsequent repair and maintenance of the CCE supplied under CCEOP after the end of the warranty service period (2 years).

It is also necessary to work out a mechanism for further work with the supplier's local representative and support of motivation to continue working with RCI/MoH.

4.4 Financial management performance

Gavi grants for new vaccines (pneumococcal and inactivated polio) introduction

The approved consolidated report in US dollars (KGS 68.8 = USD 1 in accordance with the current exchange rate of the KR National Bank as of 31 December 2017)

Grant	Opening balance 1 January 2017, USD	Income 2017, USD	Expenditures 2017, USD	Closing balance, 31 December 2017, USD
ISS	233,300	0	222,001	11,299
PCV introduction Gavi grant	22,980	0	0	22,980
IPV introduction Gavi grant	84,903	0	0	84,903
Total amount	341,183	0	222,001	119,182

The approved consolidated report in US dollars (KGS 68.7 = USD 1 in accordance with the current exchange rate of the KR National Bank as of 14 May 2018)

Grant	Opening balance 1 January 2018, USD	Income 2018, USD	Expenditures 2018, USD	Closing balance, 14 May 2018, USD
ISS	11,299	16	0	11,315
PCV introduction Gavi grant	22,980	33	0	23,013
IPV introduction Gavi grant	84,903	0	18,866	66,037
Total amount	119,182	49	18,866	100,366

In 2017, Gavi grants for PCV and IPV introduction were not used, the main activities were carried out at the expense of the ISS funds.

Gavi grant for immunization service support (ISS)
Gavi information letter to the MoH KR; Grant of Kyrgyzstan immunization system support (ISS) and health systems strengthening (HSS). Grant closure manual. (dated 4 March 2017).

According to this letter, the ISS funding ends on 31 December 2017, where it is indicated that Kyrgyzstan can use the funds before this date, part of the funds must be used to audit HSS-1 ISS 2011-2016, HSS-2.

The Republican Center for Immunoprophylaxis developed a financial plan that was discussed by the WHO country partners and UNICEF on the Gavi request and recommendations, in order to avoid duplication of activities. (After discussion of the plan by the Gavi Secretariat in Copenhagen, July 2017). Assessment recommendations of the Joint National and International Review of the National Immunization Program in Kyrgyzstan (25 July – 3 August 2016) are one of the important areas in the activities scheduled. At the RCI, a plan of response measures was developed. Order of the Republican Center for Immunoprophylaxis No. dated 16.06.2017 on financing the Gavi ISS NIP was issued.

Information letters are sent to the Deputy Minister of the MoH KR; (No. 87 dated 13 June 2017, on the support of activities scheduled for the utilization of ISS funds, No. 88 dated 13 June 2017, on the procurement of vehicles for RCI).

The financial plan of measures was developed and approved by the MoH KR, a decree of the MoH KR No. on the implementation of activities and targeted utilization of funds was issued.

Letter to the Gavi Secretariat (dated 4 August 2017) on the utilization and closure of the ISS funds. Where the official closure of funding and the efficiency of funds utilization are also noted;

- Holding the Round table to discuss the results, review the evaluation of the national immunization program with regional, district immunization services (two proposed round tables: North and South)

-Procurement of a transport vehicle for the immunization program

-Procurement of laptops for monitoring and data collection from regions

-Support and training in polio and measles surveillance.

Repair of the central refrigerating room

Audit costs for ISS, HSS1 and HSS2 (Gavi requirement).

One of the important components included in the financial plan for ISS utilization;
1. Strengthening communication and social mobilization to overcome barriers with public distrust towards immunization.

-creation and support of the official RCI website on immunization.

Involvement of a communication and advocacy specialist

- printing colored posters for health workers:

(Preventive vaccination schedule, vaccine introduction algorithms)

2. Improving the quality of immunization data

Conducting supervising visits and monitoring on the quality of data in HO, as well as on SIP, EVM, AEFI.

Based on Decree of the MoH KR No. 776 dated 29 August 2017, “On Preparation and Conducting Supervising Visits on Data Quality and Immunization Safety in HCFs”, with Gavi funds, in 2 stages (September-October 2017), according to the standard questionnaire, an inventory of cold chain equipment was carried out, as well as the assessment of vaccination posts' rooms, assessment of vaccination posts' work and completeness of the vaccination documentation in accordance with Order of the MoH KR No. 36 dated 31 January 2011, “On Introduction of Guidelines for Accounting and Reporting Documentation and Monitoring of Vaccination”. Monitoring visits covered 1490 (over 80%) of the health care facilities conducting immunization. The results of these visits indicate that health workers in over 90% of HCFs know the rules for proper storage and handling of vaccines, 91.8% of HCFs have manuals for standard operating procedures of the effective vaccine management, 92% have standard registers for recording and movement of vaccines and of expendables, but only 87.4% of HCFs keep timely records of vaccines' movement, high losses of OPV, MMR – in over 23.7% of HCFs.

- Conducting regional trainings for completing revised forms 5 and 6 of statistical reporting (decree of the MoH KR No. 815 dated 12.09.2017) on 19-22 September 2017.

Printing reporting forms for inventory management of SOP, EVM (state procurement).

Increase mobility of regional immunologists when validating immunization data. Procurement of computer equipment (laptops) + Internet support, mobile communication (state procurement).

3. Strengthening the surveillance system for vaccine-preventable diseases.

- Development of educational modules of the “Surveillance for vaccine-preventable diseases” course.

(Decree No. 996 dated 8.11.17, the MoH KR December 2017)

4. Strengthening epidemiologic surveillance of measles and rubella

- Holding a workshop for specialists of HO of the southern region of the republic (decree of the MoH KR No. 1050 dated 22.11.17, December 2017)

5. Strengthening epidemiologic surveillance of diphtheria.

Carrying out trainings for specialists of HO of the republic for increasing epidemiological alertness. (Decree of the MoH KR No. 1034 dated 16.11.17, November, December 2017).

6. Strengthening planning in immunization management, policies and strategies

- Develop a new National Program “Immunoprophylaxis” (decree of the MoH KR No. 1051 dated 22.11.17, December 2017)

-Translating and printing documents of cMYP, DQA (in Russian).

- Increase mobility and efficiency of specialists at the national level.

- Procurement of vehicles, computer equipment, improvement of the RCI material and technical base, major repairs of the national vaccine, dry warehouse, reconstruction of the RCI building to include the meeting room.

Utilization of Gavi HSS-2 funds

Actual execution of the budget and the Procurement Plan in 2017 amounted to **USD 216,621**, including:

- item 4.1. 4 cold rooms - 10 m^3, 3 cold rooms - 30 m^3 and 1 cold room - 40 m^3 (including three-phase voltage regulators) for storage of vaccine products for a total amount of USD 168,706 were purchased;

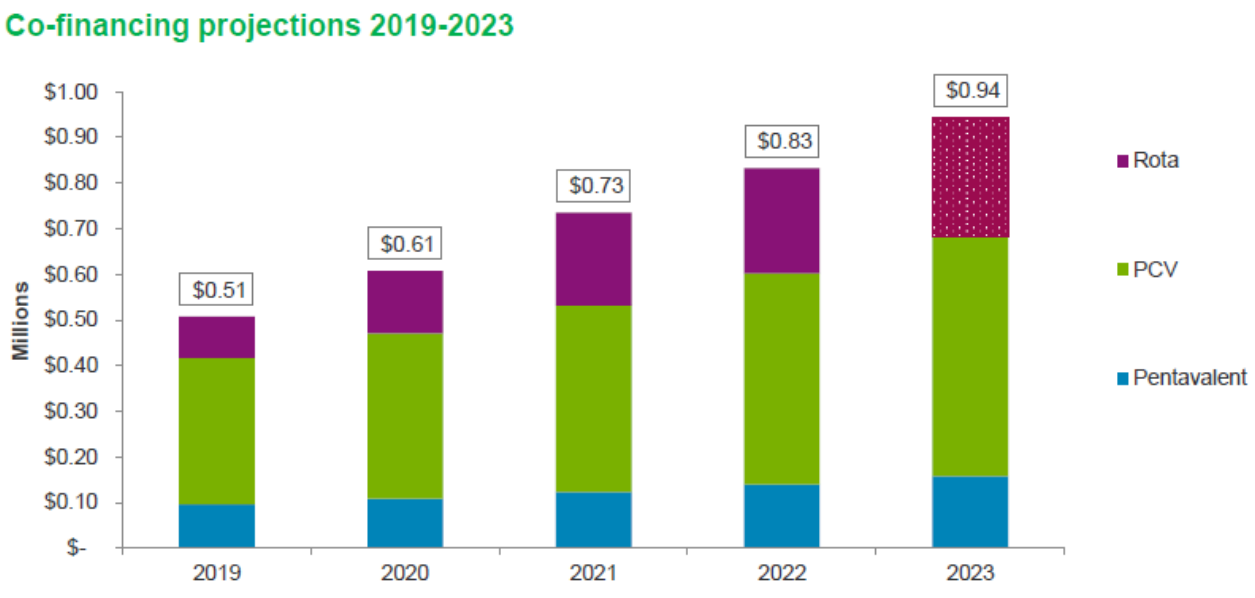
- item 4.10, containers for transportation of vaccines for a total amount of USD 35,501 were purchased.

- item 6.1a operating costs amounted to USD 11,414.

The balance of funds as of 1 January 2018, was USD 25,000. The rate of funds utilization for 2017 was 49.3% of the planned amount (purchases and wages). The equipment received was distributed among regional and district CDP and SSES.

As of 01.01.2018, the balance of Gavi HSS fixed assets amounted to **8,845,499 som**. The following cold rooms are procured (1 pc. - 30m^3 and 1 pc. - 40m^3). In connection with the expectation of repair of the RCI and CSSES storage facilities in Bishkek, the equipment has not yet been distributed. Repair of vaccine warehouses is scheduled for 2018.

4.5 Transition planning (if applicable, e.g. country is in accelerated transition phase)



	2019	2020	2021	2022	2023
Pentavalent	$ 96,459	$ 109,003	$ 123,327	$ 139,657	$ 158,190
PCV	$ 320,727	$ 361,326	$ 408,743	$ 462,801	$ 524,251
Rota	$ 90,137	$ 137,520	$ 202,860	$ 229,643	$ 260,179
Total	**$ 507,322**	**$ 607,850**	**$ 734,930**	**$ 832,101**	**$ 942,620**

- Projections are based on Gavi's operational forecast version 15.

4.6 Technical Assistance (TA)

Technical assistance from WHO (PEF TCA) in 2017:

WHO provided technical assistance to MoH in making informed decision on introduction of rotavirus vaccine and advocated to Ministry of Finance for allocation of necessary funds:

- Technical support was provided to NITAG in making evidence based recommendations on introduction of rotavirus vaccine and communicate recommendations to Interagency Coordination Committee
- Technical support was provided in preparing rationale for introduction of rotavirus vaccine for the Ministry of Health and Ministry of Finance
- Advocacy meetings were conducted with the MoH and MoF officials to ensure allocation of additional funds
- Technical support was provided to National Immunization Porgramme in developing proposal to GAVI for the support with introduction of rotavirus vaccine, including online application, Introduction Plan, Timelines, and Budget

Technical support was provided to MoH in educating leading clinics on vaccine safety and contraindications to reduce missed opportunities to vaccinate children due to false contraindications. Leading clinicians and immunization program specialists participated in the WHO regional training were held in Tashkent, Uzbekistan. The trainees received a package of training materials and a manual that will help them to conduct further trainings for front line medical workers.

Technical support was provided in building capacity of NITAG in making evidence-based recommendations:

- Technical support in conducting evaluation of NITAG using a standardized WHO tool. The findings and recommendations on the NITAG improvement were presented and discussed with the NITAG, NIP, and the MoH
- The representatives of NITAG participated WHO regional training on development of evidence-based recommendations on immunization.
- NITAG Chair participated in the meeting of the European Advisory Group of Experts on Immunization.

Technical assistance was provided for the development of a plan for the installation and distribution of cold chain equipment under CCEOP. Assistance was provided in the revision of the CCEOP indicators.

Technical assistance was provided in updating the national AEFI Manual. The Manual is currently under consideration by the Ministry of Health for its endorsement.

In addition, WHO provided TA to developing the national guideline on safe immunization practice.

Technical assistance was provided in the development of the Immunization Crisis Communication Plan. The Plan is developed and is currently under consideration by the Ministry of Health for its endorsement.

The development of the Vaccination Card for keeping at home was completed. This card has been approved by the Order of the Ministry of Health. The contract was signed to print a sufficient number of Vaccination Cards for a total number children born in one year.

Technical assistance from UNICEF (PEF TCA) in 2017:

Launched in 2017 and completed at the time of the Joint Appraisal, the study of knowledge, attitudes and practices, which was by most part by supported by TCA funds. The results of the study were presented to the public at a press conference in April 2018. The report was prepared in an electronic format. Based on the study, a communication strategy on immunisation was prepared, which was approved by the ICC and agreed with the State Committee on Matters of Religion.

Technical assistance from WB (PEF TCA) in 2017

Technical assistance in 2017 was carried out by the World Bank for immunization funding assessment (IFA) and co-financing of health system assessment (HSA). Immunization funding assessment was completed in early 2018. This assessment has been presented to Gavi in April 2018 and the RCI during the Gavi JA in May 2018, and again at a high-level forum in June 2018. A broader health system assessment has several components, including financial space analysis and analysis of deficiencies in the provision of services. The assessment stage takes considerable amount of time. While the components are still being finalized, the overall assessment of the health system will be completed by the end of 2018. Apart from that, there was no change in the technical assistance work plan in 2017.

Technical Assistance from Dalberg

In 2017, a contract was signed between Gavi and the Dalberg company. In February 2018, the first visit to Bishkek took place, and in March 2018 the managing partner of Dalberg moved and began working in Bishkek.

At the time of the meeting, according to the joint appraisal, the following work was carried out:

- The evaluation plan was discussed with the RCI, the Dalberg team and sent to the Gavi SCM.
- Presentation of the evaluation study results was completed.
- The evaluation study results were presented to the RCI team. After the discussion, the final presentation was corrected, updated and translated into Russian. The evaluation study final results were presented to the SCM.

The specific areas were analyzed, and some of the identified weaknesses are presented below:

Program Management

- Insufficient strategy planning capacity at RCI level
- Fragmented surveillance
- Limited involvement of local health authorities in support provision of the immunization program

Monitoring and Evaluation

- The immunization data collection is paper–based, manually recorded, fragmented and quite laborious
- Lack of monitoring and evaluation specialist within RCI
- The same data is frequently registered in several registries
- Data sharing is difficult and not entirely accurate for some layers of the population (migrants, unregistered urban population)

Financial Management

- Lack of capacity to use existing tools such as cMYP for overall management of the program
- Inconsistent financial reporting and lack of quality financial data for decision making and management
- No inclusion of specific cost associated with vaccine purchasing in the RCI budget for 2018

Communication

- Vaccine resistance and refusals due to deficient communication of information on immunization
- Advocating against immunization occurs periodically
- Lack of communication specialist within RCI

Vaccines supply chain management

- Shortage of reserve/buffer stocks were noticed for some vaccines, at least at the central level
- Weak management of the entire supply chain was identified
- Significant gap was registered since the departure of the former RCI director who was the only one who had the comprehensive knowledge of the entire supply chain processes

- In order to address the identified weaknesses and to achieve the sustainable results Dalberg will use a multidimensional approach.

Leadership and management capacity development of the RCI team

- To develop and support the implementation of the new RCI organizational structure that includes temporary consultancy positions
- To develop and implement the new JoD's
- To establish and create RCI team member Professional Development Plan
- To provide customized coaching support for each RCI team member
- Coach the RCI team in financial management practices, including budgeting processes

Development of strategic planning and monitoring capabilities of the RCI team

- To define RCI's institutional vision/objectives
- To develop operational planning skills and monitoring capabilities of the RCI team
- To support the development of the annual operational plan for accomplishing the priorities and mandate defined in the NIP

Support the strengthening of performance management processes and practices of the RCI program

- To support the development of individual annual RCI workplans
- To ensure M&E of workplans across all levels
- To support the strengthening of RCI self-assessment capacity

Improve external communication and coordination

- To ensure the effective day-to-day coordination with MoH leaders, departments and sub-national levels
- To reinforce the functionality of the ICC by providing customized support/coaching to its members

One23 Consulting company

Consulting company One23 consulting, in accordance with the contract signed with the Gavi Secretariat, provides technical assistance to the Inter-agency Coordination Committee (hereinafter referred to as ICC) of the Kyrgyz Republic. The project, which was launched in September 2017, ends on 31 August 2018, and consists of three phases. Phase 1 (September 2017 - February 2018). In Phase I, an assessment was made of the ICC state (using the Gavi questionnaire to assess the work of the Country Coordinating Forums in countries), and the key issues to be addressed to strengthen the ICC work were outlined. Based on the assessment results, a technical assistance work plan was prepared and approved by the Gavi Secretariat. On 13 December 2017, during the Gavi mission, a workshop was held for the ICC members aimed at increasing the understanding among the ICC members and stakeholders of the relationship between compliance with Gavi's requirements to the ICC and its effectiveness in carrying out its core functions. The ICC members highly appreciated the quality of the materials presented at the workshop: the topic and content were estimated at 4.75 points (with a 5-point scale), in general (logistics, results and their compliance with expectations) at 4.58 points. The following topics were especially appreciated: "How the topics presented are important for your work in ICC" (4.91) and "Materials were well presented, and I received full answers for my questions" (4.92). Phase 2 (March-June 2018) In April 2018, the study of the level of knowledge and understanding by the ICC members of functions and responsibilities was carried out in accordance with the applicable order of the MoH and Gavi guidelines. This study helped to identify "weak spots" and to prepare 6 modules for subsequent training/coaching. Final Phase 3 (June – August 2018) provides for continued training and coaching of the CC members, preparation and implementation of the ICC self-assessment, analysis of changes in the ICC activities, carrying out final assessment of the ICC activities and report preparation.

Technical assistance from JSI research & training institute, Inc.

The main objective of technical assistance (TA) is to carry out diagnostic measures to identify challenges faced by poor urban populations as related to access to immunization services by strengthening the interest of partners (governmental, non-governmental, international organizations) responsible for policy, planning, coordinating, financing and monitoring of the urban population immunization services' provision, involving social service providers and experts in working with urban residents (new residential developments). Period of JSI TA provision is from January 2018 until July 2018, (6 months). During the TA implementation the following was accomplished:

- A working document was developed - diagnostic methodology to improve access to immunization services among the poor urban population;
- The diagnostic methodology tools developed were tested by data collection;

The results of the analysis of diagnostic methodology quantitative and qualitative data will form the basis for the development of recommendations that will further contribute to the development of a national strategy for urban immunization improvement within the framework of comprehensive measures to improve immunization in the country (UNICEF, WHO).

5 UPDATE OF FINDINGS FROM PREVIOUS JOINT APPRAISAL

Prioritized actions from previous Joint Appraisal	Current status
1. A review of the Expanded Immunization Program to identify strengths and weaknesses of the immunization program and develop improvement plans	In July 2016, a joint national-international review of the National Immunization Program (NIP) was conducted. The review recommendations were included in the

	Action Plan of the Republican Center for Immunoprophylaxis for 2017 and 2018. The HSS-2 grant contributed to the improvement in some key areas, such as data quality improvement, study and development of strategies for immunization coverage improvement among vulnerable population groups. In 2018, WHO is conducting a study of immunization coverage among migrants in Bishkek and Osh (Gavi HSS-2, Goal 2).
2. Raising public awareness of immunization and improving health workers' competence	Support was provided by partners to raise awareness of the Supplementary Immunization Activities (SIA) against measles. Need to continue work in this area. Support was provided under HSS-2 and ISS in 2017, Conduct a quantitative and qualitative study on the awareness of parents, health workers, and refusals since November 2017 (UNICEF). In May 2018, a Manual for Communication Strategy on Matters of Routine Immunization 2018/2020 was developed by the RCHI and sent for approval to the ICC A set of awareness-raising activities was conducted during the European Immunization Week. Health improvement offices of health facilities and the Republican Centre for Health Improvement trained specialists and carried out activities to raise awareness and social mobilization.
3. Data quality analysis (DQA) and improvement of registers of newborns and other data sources for immunization programs	Data quality assessment was carried out in December 2015 as part of the WHO TCA. The assessment report was received in April 2017. The assessment recommendations were included in the Action Plan of the Republican Center for Immunoprophylaxis. Part of the activities will be funded under HSS-2.
4. The development of the Comprehensive Multi-Year Plan (cMYP) and capacity building for the utilization of the cMYP and the National Immunization Plan to improve decision making, planning and management.	The final version of the Comprehensive Multi-Year Plan for 2017-2021 for the implementation of the National Immunization Program was approved on 5.09.17 at the ICC meeting, taking into account the changes introduced
5. NITAG strengthening	Technical support in conducting evaluation of NITAG using a standardized WHO tool. The findings and recommendations on the NITAG improvement were presented and discussed with the NITAG, NIP, and the MoH. The representatives of NITAG participated WHO regional training on development of evidence-based recommendations on immunization. NITAG Chair participated in the meeting of the European Advisory Group of Experts on Immunization.

6 ACTION PLAN: SUMMARY OF FINDINGS, ACTIONS AND NEEDS OF RESOURCES OR SUPPORT IDENTIFIED AND AGREED DURING THE JOINT APPRAISAL

Overview of Key Activities Scheduled for 2019:

Key finding / Action 1	**New vaccines introduction**
Current response	
Agreed country actions	Support to NITAG in the development of recommendations for the HPV vaccine introduction Support in decision making on the HPV vaccine introduction Support in preparation of a proposal on the HPV vaccine introduction to Gavi Support in preparation for the HPV vaccine introduction: – Conduct of a formative study; – Develop a communication strategy and a communication plan for the HPV vaccine introduction; – Establishment of a system for adolescents' immunization;

	– Health workers' training.
Expected outputs and results	MoH made informed decision on introduction of HPV vaccine; Proposal to GAVI for the support with introduction of HPV vaccine is developed; communication strategy and plan are developed; health care workers are trained.
Relevant schedule	2019-2020
Required resources and support	Technical support; financial support
Key finding / Action 2	**Enhancing EPI's capacity to procure and supply vaccines for 2019-2020**
Current response	
Agreed country actions	Capacity building of partners on procurement and forecasting of vaccines for 2019-2020: - Trainings; - Round tables; page 33 - Workshops.
Expected outputs and results	Partners get knowledge on the processes of procurement
Relevant schedule	2019-2020
Required resources and support	Technical support
Key finding / Action 3	**Increase of vaccination coverage**
Current response	Carrying out coverage survey among children of internal migrants
Agreed country actions	Development and implementation of interventions to increase immunization coverage based on research results, including using motivational tools (financial) -TA to strengthen the country capacity to manage AEFI surveillance data
Expected outputs and results	Increase of immunization coverage among children not covered by immunization; Improving access to immunization services for internal migrants and in hard-to-reach areas.
Relevant schedule	2020
Required resources and support	Technical support
Key finding / Action 4	**NITAG support**
Current response	
Agreed country actions	- Ensuring participation in the Global NITAG Network; - Participation of NITAG in WHO meetings and trainings; - Participation of NITAG in meetings of the European Advisory Group of Experts on Immunization; - Revision of the Regulation on NITAG, development of SOP regulating NITAG's operation.
Expected outputs and results	NITAG increases capacity to make evidence-based recommendations on immunization policy and practice
Relevant schedule	2019-2020
Required resources and support	Technical support; financial support
Key finding / Action 5	**Improvement of cold chain management**
Current response	
Agreed country actions	- Support for the development of a distribution plan for cold chain equipment obtained with Gavi support; - Study of the temperature mode in the cold chain system at the national and sub-national levels; - Development of an online vaccine stock management system; - Support to implementing computerized remote temperature monitoring systems at national and sub-national stores.
Expected outputs and results	
Relevant schedule	2019-2020

Required resources and support	Technical support
Key finding / Action 6	**Ensuring financial sustainability of the immunization program**
Current response	
Agreed country actions	Support of country activities for resource mobilization - Organization or participation in conferences on health system reforms; - Organization of conferences to share experiences with other countries to raise public awareness and demonstrate that immunization is a very effective tool for the prevention of many diseases.
Expected outputs and results	MoH improves capacity to mobilize resources for immunization
Relevant schedule	2019-2020
Required resources and support	Technical support; financial support
Key finding/ Action 7	**Strengthening the country's communication capacity to improve demand for immunization**
Current response	The Communication Strategy on Immunisation has been adopted and implementation started. In includes six areas: - National communication campaign; - Social mobilization; - Capacity building and strengthening for healthcare professionals; - Partnering with religious leaders; - Mass media engagement; - Strengthening communication capacity of RCI.
Agreed country actions	Health workers capacity building: - include updated topics, immunization modules in curricula for pre and post graduate education; - conduct specialized training of professors and consequent cascade trainings; - distribute updated materials. In 2019: Technical support in developing a C4D Strategy for three most likely disease outbreak scenarios; and developing and testing related pre-final materials. In 2020: Knowledge, Attitude and Practice Research to track dynamics in knowledge, attitudes and practices of mothers of children under 5 years old in relation to routine immunisation over the period of 2017-2020 and to measure results of the Communication Strategy on Immunisation (2018-2020).
Expected outputs and results	C4D Strategy for Disease Outbreak and related pre-final materials are available Knowledge, Attitude and Practice Research Report
Relevant schedule	2019-2020
Required resources and support	C4D Strategy for Disease Outbreak: $ 50,000 Knowledge, Attitude and Practice Research: $ 40,000
Key finding/ Action 8	**Rotavirus vaccine post-introduction evaluation**
Current response	
Agreed country actions	Conduct rotavirus vaccine post-introduction evaluation
Expected outputs and results	Possible errors timey identified and corrected; lessons learned are developed
Relevant schedule	2019
Required resources and support	Technical support, financial support

7 JOINT APPRAISAL PROCESS, ENDORSEMENT BY THE NATIONAL COORDINATION FORUM (ICC, HSCC OR EQUIVALENT) AND ADDITIONAL COMMENTS

The final version of this report was reviewed and approved by ICC members at the end of September 2018.

8 ANNEX Compliance with Gavi reporting requirements

	Yes	No	Not applicable
Grant Performance Framework (GPF) * Reporting against all due indicators	X		
Financial reports*			
Periodic financial reporting	X		
Annual financial report	X		
Annual financial audit report	X		
End of year stock level report (which is normally provided by 15 May as part of the vaccine renewal request) *****	X		
Campaign reports*			
Supplementary immunization activity technical report			X
Campaign coverage survey report			X
Immunization financing and expenditure information			X
Data quality and survey reporting			
Annual data quality desk review		X	
Data quality improvement plan (DQIP)	X		
Progress report on data quality improvement plan implementation	X		
In-depth data assessment (conducted in the last five years)	X (DQA 2015)		
Nationally representative coverage study (conducted in the last five years)	X (MICS 2014)		
Annual progress update on the Effective Vaccine Management (EVM) improvement plan	X		
CCEOP: updated CCE inventory	X		
Post introduction evaluation (PIE)			X
Measles and rubella situation analysis and five-year plan (CMYP)	X		
Operational plan for the immunization program 2018	X		
HSS end of grant evaluation report			X
HPV specific reports			X
Reporting by partners on TCA and PEF functions	X		