REPORT

A study in the area of HIV in the Kyrgyz Republic

THE KYRGYZ REPUBLIC 2015

Ministry of Health
of the Kyrgyz Republic

USAID
FROM THE AMERICAN PEOPLE

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" A study in the area of HIV in the Kyrgyz Republic" corresponds evaluation of the State programme on Stabilization of HIV epidemic in the Kyrgyz Republic for 2012-2016 as well as includes Continuum of HIV care on access to diagnoses, treatment and support for PWID/PLHIV. Moreover the report contains recommendations for design concept and new strategy for period up to 2030.

The evaluation is conducted by Consulting Group Curatio Ltd under financial support of UNAIDS and USAID by team of international and national experts. The team worked under leadership of D-r David Gzirishvili. The report may be interested for politicians, staff of the Ministry of Health, AIDS Centres, civil society, representatives of international organizations, for other organizations and persons active in HIV closely related problems.

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ABBREVIATIONS

ART	Antiretroviral therapy
CD	Condom distribution
CS	Clinical staging (of HIV disease)
CTX	Co-trimoxazole
DHS	Demographic and Health Survey (МДИКР= Медико-демографическое исследование Кыргызской Республики)
EIA	Enzyme immunoassay
ELISA	Enzyme-linked immunosorbent assay
GARPR	Global AIDS Response Progress Reporting
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
GSEP	State Service for the Execution of Punishments under the Government of the Kyrgyz Republic
HBC	Hepatitis C virus
HBV	Hepatitis B virus
HIS	Health information system
HIV	Human immunodeficiency virus
HTC	HIV testing and counselling
IE	Information and education
IBBS	Integrated bio- and behavioral survey(s)
IFA	=ELISA or EIA[1] (ИФА in Russian, "иммунно-ферментный анализ")
KP	Key populations
KR	Kyrgyz Republic
KGS	Kyrgyz Som
MIS	Management information system
MSM	Men having sex with men
NoD	No data (available)
NSC	National Statistics Committee of the Kyrgyz Republic
NSP	Needle and syringe program
OST	Opioid substitution therapy
PITC	Provider-initiated testing and counselling
PIU	Project implementation unit
PMTCT	Prevention of mother-to-child transmission of HIV
PWID	Persons who inject drugs
RAC	Republican AIDS Center
RCN	Republican Center of Narcology
RH	Referred for HIV testing
RP	Reached by prevention
RS	Referred for STI testing
SE	Size estimate
STI	Sexually transmitted infection
SWs	Sex workers
TB	Tuberculosis
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNODC	United Nations Office on Drugs and Crime
UMIS	Unified management information system (in HIV area)
VL	Viral load
VS	Virus suppression

1 It is not "indirect fluorescent antibody" but direct translation of the acronym from Russian

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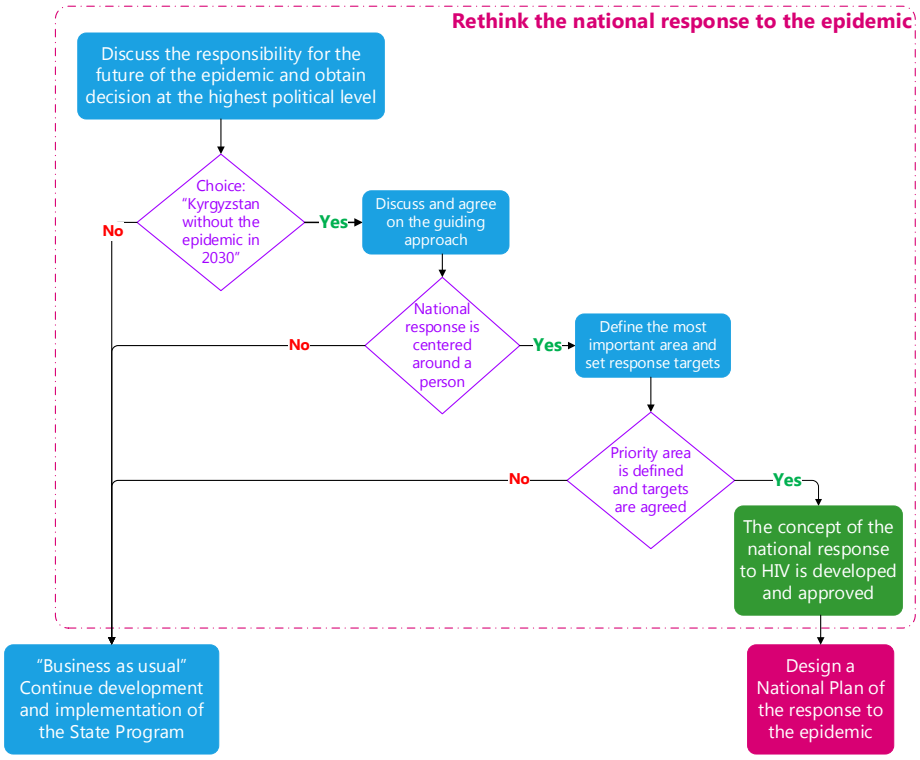
Recommendations

Rethink the national response to the epidemic by following the consecutive steps:

a) Define a clear vision of the epidemic in Kyrgyzstan by 2030 by making a choice between the two scenarios: committing explicitly to "Kyrgyzstan without the epidemic by 2030" at the highest political level, or continuing the business as usual, and by default subscribing to "Kyrgyzstan with the generalized epidemic by 2030".



b) If the choice is made in favor of "Kyrgyzstan without the epidemic by 2030" scenario, then define the two guiding principles of the national response (with criteria to assess the adherence to these principles):

- Building the response around the human being to be served, instead of around the interests or the mandates of implementers or donors;
- Building the response along the continuum of prevention, care, and treatment of the key populations;

c) If the abovementioned principles are defined and agreed upon by the key stakeholders, discuss and built consensus on the most important areas for stopping the epidemic, which should be fully funded before the resources are allocated to the rest, less important interventions.

d) Compile all of the above mentioned decisions into a "Conceptual framework of the national response to the epidemic" (conventional title), and endorse it at the highest political level in order for it to serve as a long term policy instrument which will planning and actions of the government, NGOs, service providers, and the partners.

Design a 3 to 5-year strategic plan (conventionally called The State Program) through the following consecutive steps:

e) Define a chain of results: from the highest level result (either impact such as HIV related mortality, or outcomes such as behavioral changes or viral suppression) down to outputs and inputs (see Figure 36 below):

- The highest level result should be clearly linked to (aligned with) the milestone of the conceptual framework;

- Set targets at each stage of the chain using at least 10 global indicators as recommended by the World Health Organization (see Figure 61 on page 93).

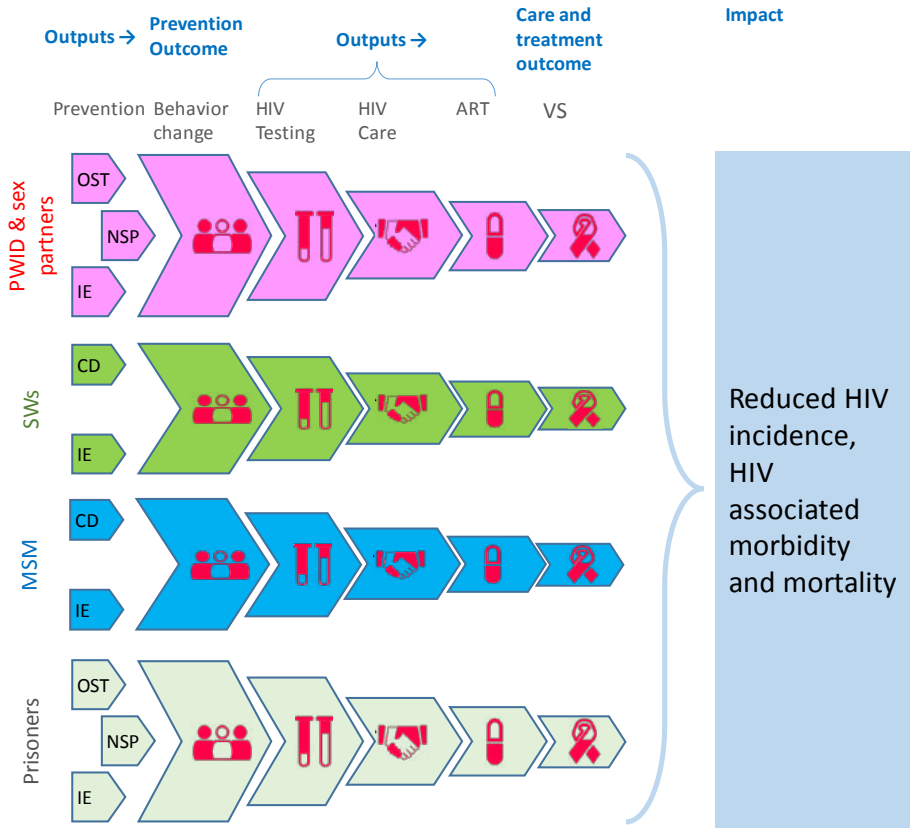
f) Select the most appropriate technical solutions based on the rich experience accumulated in the country and abroad in order to reach output and outcome targets in the HIV chain of results;

g) Estimate the resource requirements (financial, human, technological) for each solution / approaches. If financial resources are insufficient or capacity constraints are identified, develop at least two scenarios:

- Scenario with a funding gap and/or a capacity constraint: the original targets and the funding gap;
- Scenario without a funding gap and/or a capacity constraint: targets (for less important outputs and outcomes) balanced with the financing projections (the availability of resources).

h) Assign one responsible actor to each output and outcome in the HIV chain of results based on consultations and thorough assessment of the balance between the responsibility assigned, and the competence (or authority to assume control over the implementation and deliverables).

Figure: Illustrative HIV result chain for planning



Conceptualize the M&E framework as the major tool for strategic governance and oversight, and improve the M&E practices by concentrating efforts on the following directions:

i) Define a minimum set of output and outcome indicators to measure the progress, along with the progress reporting format;2

j) Define clearly responsibilities for the data flows, [3] data validation/quality audit, and calculation of the achievements by selected indicators and reporting followed by development of enforcement mechanisms (administrative and/or

2 Irrespective of external reporting commitments, such as GAPRP

3 Ideally, responsibilities should be separated between implementers (in charge of data generation) and entities measuring performance and generating M&E reports

financial) and the resource requirement projections (necessary the M&E system to function);

k) Start streamlining the existing data collection, storage, and sharing practices advancing to a unified information management system in HIV through the following steps:

- Define clearly user requirements for the analysis and reporting at strategic (as described in point a) above) and operational/ programmatic level;
- Make a full inventory of variables that are necessary to meet the user requirements (i.e. to calculate indicators);
- Define data flows necessary to collect data for each variable and business processing related to data entry, validation, storage, transmission, and processing;
- Make a full inventory of the existing data arrays (stored in different electronic databases), assess the data quality and the feasibility of its transfer to the consolidated information system;
- Based on the results of the above mentioned efforts, design a comprehensive plan for the development and operation of the unified information management system in HIV area that includes terms of reference for software developers, mechanism for ensuring confidentiality of sensitive information, and the requirements in hardware and modern communication technologies.

1 Introduction

1.1 Background

The State Program for the stabilization of the HIV epidemic in the Kyrgyz Republic for 2012-2016 aimed at implementation of the objectives of UN Political Declaration on HIV/AIDS, 2011.

The goal of the State Program is stabilization and further reduction of the transmission of HIV in the Kyrgyz Republic by 2016.

The State program includes 5 strategic areas and 17 objectives. The work- plan, the budget and the M&E plan are integral components of the State Program.

Implementation of the State program is based on a multisectoral approach, and given the complex nature of the problems, it involves the participation of all stakeholders including Government, international, educational, religious and non-governmental organizations, as well as at-risk populations and PLHIV.

The Government of the Kyrgyz Republic carries out overall management and coordination of activities in the field of HIV-infection. In accordance with the State program, the key ministries, government bodies, and organizations involved in the implementation of the State program are:

- The Ministry of Health of the Kyrgyz Republic;
- The Ministry of Finance of the Kyrgyz Republic;
- The Ministry of Justice of Kyrgyz Republic;
- The Ministry of Defense of the Kyrgyz Republic;
- The Ministry of Internal Affairs of the Kyrgyz Republic;
- The Ministry of Education and Science of the Kyrgyz Republic;
- The Ministry of Youth, Employment and Migration of the Kyrgyz Republic;
- The Ministry of Culture and Tourism of the Kyrgyz Republic;
- The Ministry of Social Development of the Kyrgyz Republic;
- The National Statistical Committee of the Kyrgyz Republic;
- The State Penitentiary System of the Kyrgyz Republic;
- The State Drug Control Agency.

According to the M&E section of the State Program, a mid-term review was envisaged along with other routine monitoring and evaluation exercises.

Upon the request of the Ministry of Health of the Kyrgyz Republic, with financial support of USAID, UNAIDS commissioned a study in HIV area in the Kyrgyz republic setting the following objectives:

- To evaluate the progress in the implementation of the State Programme;
- To see the gaps and losses in continuum of HIV service provision for PWID for further refocusing of the state programme (if necessary), and
- To develop an action plan for implementation of the state programme for 2016.

1.2 Report structure

The current report presents the results of the study in HIV area in Kyrgyz Republic.

Section 2 “Study Methodology” describes a conceptual framework, and data collection approaches and methods for each exercise: the mid-term review and the assessment of the HIV continuum of care for PWID.

Findings of each exercise are presented in relevant sub-sections of 3 “The study results”:

- 3.1 “Mid-term evaluation of progress in the implementation of the State Program on HIV/AIDS“:
  - Performance for each of the 17 objectives is described in sub-section 3.1.1 “Description of the achievements”: it includes the measurement

of achievements, followed by the interpretation of the results of the performance measurement, and summary of progress in the implementation of the State Program per given objective;

- The findings are summarized in next sub-section 3.1.2 "Summary of the progress".

- 3.2 Continuum of HIV care for PWID

  - Sub-section 3.2.1 "Flow of PWID along the HIV continuum of care" reviews the data for 2013 and 2014 using a cohort-based HIV cascade method, and compares the flow of PWID along the cascade by years, geographical areas, and sectors (civil and the penitentiary);

  - In sub-section 3.2.2 "System's view" the same data is presented from a point of view of the system (of the national response) – showing leakages of the PWID along the cascade;

  - Sub-section 3.2.3 "PWID's view" describes the same picture as can be viewed by a human being, such as the likelihood of reaching any point along the cascade of care and time needed to get through the critical stages (from the first testing to starting ART).

The study team presented its own views and understanding of the underlying causes of the issues identified in the previous section in section 4 "Discussion and analysis".

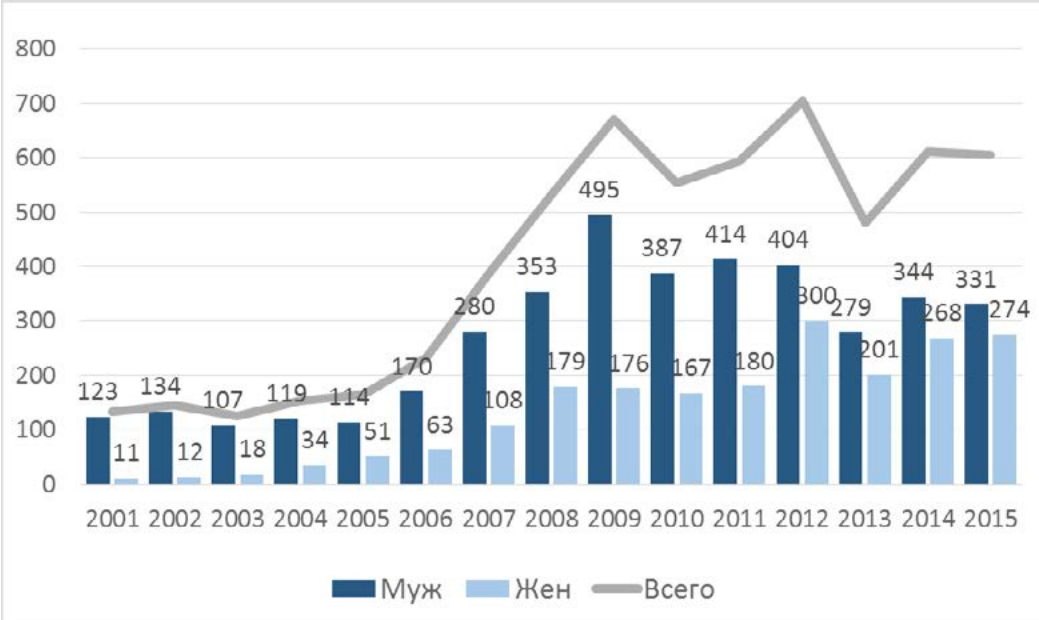
The study team synthesized the findings under the major issues, and shared solutions in section 5 "Conclusions and recommendations".

Annexes contain technical details presented as tables and charts, as well as the list of background documents reviewed or cited in the report.

1.3 Brief information on the epidemiological situation in HIV/AIDS in the Kyrgyz Republic

The Kyrgyz Republic is still at the stage of growing HIV epidemic. Thus, over the period from 2010 the number of officially registered cases of HIV infection in the country has more than doubled (from 2718 cases on 01.01.2010 to 6402 cases in 31.12.2015). The actual number of HIV infection cases according to SPECTRUM is 9453. The number of women since 2010 has increased 3 times (from 656 in 2010 till 2049 in 2015. cumulative). If in 2010 women accounted for 29.8% among the newly registered PLHIV, in 2015, they already reached 45.3% (Fig. 1). This is due to the location of the country on one of the three main drug trafficking routes that defines the high level of drug abuse, related dangerous forms of drug use and sexual transmission of HIV to women from their partners PWID.

Figure i: Dynamics of HIV infection registration by sex in the Kyrgyz Republic during 2001-2015.



Despite the decline in injecting HIV transmission from 59.6% in 2010 to 51.4% in 2015, this way of transmission still determines the nature of the epidemic in the country. However, in recent years there has been an increase in the number of cases of sexual transmission of HIV. Among registered in 2015 PLHIV, drug users accounted for only 26.9%, whereas sexual way of transmission reached 65.0% (2010 sexual way amounted to 32.6% (Fig. 2, 3)).

Figure ii: HIV ways of transmission in the Kyrgyz Republic during 1987-2015 (cumulative)

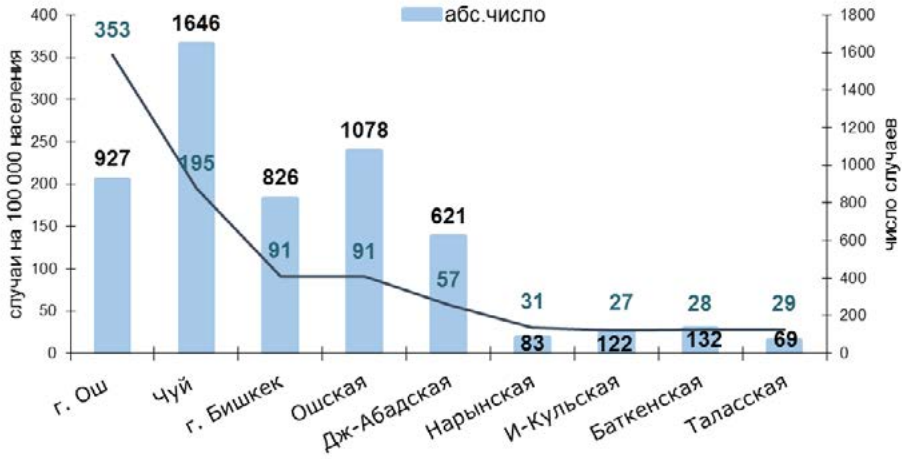
Figure iii: Dynamics of HIV transmission in the Kyrgyz Republic during 2003-20014

The Kyrgyz Republic remains a country with a low HIV prevalence. According to the Republican AIDS Centre as of December 31, 2015 6402 cases of HIV infection were registered. It includes 694 PLHIV with AIDS manifestation (cumulatively). 1343 PLHIV died, including 416 died of AIDS and 487 of tuberculosis. Incidence of HIV infection in the Kyrgyz Republic made 10.2 in per 100 000 of population in 2015, mortality from AIDS increased from 0.006 per 1000 population in 2010, up to 0.009 in 2014.

HIV infection is registered in all regions of the country. In absolute numbers the largest number of HIV infections registered in Chui Oblast, but in terms per 100 000 population prevails Osh, where HIV prevalence makes 353 per 100 000 of population, whereas in Chui Oblast - 195 per 100 000 of population. In four oblasts Naryn, Issyk-Kul, Talas and Batken there is low level as the prevalence as well as the absolute number of cases of HIV infection (from 27 to 100 000 of population in Issyk-Kul to 31in Naryn oblast) (Fig. 4). However, according to the data of 2014, there is an increase of HIV infection in all regions of the country except in Bishkek that has the highest growth rates in regions with low prevalence of HIV. Thus, the annual registration of new cases of HIV infection in these areas increased 3-5 folds. So, in Naryn oblast in 2010, there were 6 cases of HIV infection, and in 2015 - 20 PLHIV; in Talas oblast-5 and 14; Issyk-Kul-8 and 31; in Batken 5 and 25 respectively. Sentinel surveillance data also show a rising trend of HIV infections among key populations in regions with low prevalence of HIV.

HIV epidemic is at the concentrated stage, the prevalence among pregnant women remains low (0.04% in 2015). However, according to the Sentinel surveillance in three of the four key populations groups, HIV prevalence exceeds 5% (PWID-12.4%; 7.6% among prisoners; among MSM-6.3%).

Figure iv: HIV-infection by cities and provinces of the Kyrgyz Republic for the period of 1996-2014.



As of December 31, 2015, new HIV infections appear in the category of working and reproductive age of 20-39 years - 84.8%. Percentage of HIV-positive children under 15 years made 9.1% cumulatively (554), 3484 of them through parenteral way of transmission, vertical -183, sexual way -2, unspecified-21. According to the routine epidemiological surveillance in 2011 there were tested 65 263 children due to clinical and epidemiologic conditions and 57 children with HIV have been identified. In 2012 there were tested 110 203 children and 157 were HIV positive. In 2015, 31 children aged before 15 years were registered living with HIV, constituting 5.1% of newly diagnosed PLHIV. Vertical transmission of HIV tends to decline from 3.5 percent in 2010, to 2.4 percent in 2015.

Key population groups with high risk to HIV infection

People who inject drugs (PWID) determine the tempo, nature and stage of the epidemics in the country. Despite the decline in the absolute and relative number of PWID in the structure of registration of new cases of HIV infection, PWID accounted for 51.4% from the number registered PLHIV. The increase in HIV cases among women is probably linked to the sexual transmission of HIV to women sexual partners of PWID-PLHIV. The study of sentinel surveillance in 2013 revealed prevalence among PWID 12.4%, which was 2.2% lower than in 2010 (14.6%).

Prisoners. According to the State penitentiary system the number of the imprisoned population, including in penal settlements in 2014 amounted to 10 273 people, 8 045 in custodial institutions.

HIV prevalence rate among prisoners, according to sentinel surveillance, declined almost in half (from 13.7 in 2010 to 7.6%). Prevalence of HIV depends on the length of their stay in prison. A positive development is the lack of identified cases of HIV infection according to the results of sentinel surveillance among women, and in penal settlements and colonies for persons serving sentences for the first time.

MSM и TG (transgender people). According to population estimates (2013) the number of MSM in Kyrgyzstan is 22000 people but the number of high-risk behavior, and having the risk of HIV infection might not reach even half that number. It should be noted that the assessment of the population MSM was carried out only in two major cities (Bishkek and Osh) and amounted to 3 800 people (1.5%) from sexually active male population aged 15 - 49 years.

Sex workers. According to the population estimates (2013) in Kyrgyzstan there are 6 890 - 7 316 sex workers, most of them work in large cities (Bishkek and Osh). According to sentinel surveillance, in 2013 2% of SW were infected with HIV (3.5% in 2010-2011) in the whole country. However, there is a high prevalence of antibodies to syphilis among SW (23.9%), the highest in the city of Bishkek, where every other SW with experience over 4 years had antibodies to syphilis. Prevalence of antibodies to syphilis directly depended on seniority in the sex business (the more experience, the higher the prevalence of antibodies to syphilis).

4 Out of 348 children with parenteral transmission 214 have been identified during routine screening of 175 466 children aged 3-14, and children treated in hospitals of Osh, Jalal-Abad oblasts of the Kyrgyz Republic.

2 Study Methodology

2.1 Mid-Term review of the State Program

2.1.1 Conceptual framework and key approaches

The study team developed a matrix for assessment of the progress in the implementation of five strategies of the State Program against the targets set for 17 objectives based on the following documents:

- Statements of the objectives and the expected results in the main document of the State Program
- Monitoring and Evaluation Plan (M&E Plan) of the State Program

The study team found that the stated expected results do not always correspond to the objectives. For instance, Objective 1.1 was defined as "Stabilization of HIV spread among PWID, including women who inject drugs" which implies HIV prevalence among PWID, while the expected result "≥60% of the estimated size of PWID receive quality preventive, curative and care services by 2016" refers to the coverage with all set of services, but does not even refer to harm reduction related behavior change. The same was true for other key population-related objectives and expected results.

Therefore, the team faced a dilemma due to the disconnect (a logical gap) between most of the objectives and the expected results under strategies 1 to 3 (prevention of HIV spread among the key populations and care and treatment of PLHIV). For example, how to assess the progress of implementation if an objective was achieved but the corresponding expected result was not (or vice versa)? Or, does the achievement of coverage targets (of expected results) outweigh falling short of the HIV prevalence targets? Moreover, can the objective be considered as accomplished if HIV spread is contained but the coverage with services is far below the targets? Lastly, is a 3-year program implementation period (2012-2014) sufficient to translate assumed (implicitly) behavior changes into observed disease spread trends?

The team opted for a two-step approach:

1. Measuring the achievement of disconnected objectives and the expected results separately based on the M&E Plan;

2. Assessing the progress in the implementation of the strategies through a careful analysis of the achievements including some theoretical triangulation techniques (UNAIDS 2010).

The study team selected a set of indicators from the M&E Plan for each objective and the expected result (keeping the original numbering of indicators for easy reference) as shown in Figure 66 on page 98:

- Whenever an indicator is objective-specific, the objective and indicator(s) are shaded in the same color;
- Each indicator taken from the M&P Plan has 3 identifications: the order number as defined in the M&E Plan (e.g. #2.2.1), the reference code to the GFATM set of indicators (The Global Fund to Fight AIDS, Tuberculosis and Malaria 2011), and the reference code to the UNAIDS register of indicators;
- Some indicators proposed by the study team have no reference number to the M&E Plan as the team considered them more appropriate to measure the results.

The team reviewed a set of secondary data (official reports, published or unpublished technical reports) to validate some of the findings of the qualitative data. The team used this together with the qualitative data collected through interviews and consultations with the key informants in order to interpret the findings of the assessment matrix.

2.1.2 Data collection

The team used documents/official publications in order to collect quantitative data as defined in the M&E Plan for each indicator.

The data for measuring the achievements of the major objectives and the expected results in 2014 under strategies 1 and 2 was missing. Thus, the team used IBBS 2013 as the major data source. Findings of IBBS 2013 describe the epidemiologic and behavioral situation in 2013 and can be hardly attributed to the State Program implementation in the first year – 2012. Therefore, the team was unable to collect and use the data for the measurement of achievements related to HIV spread and prevention among the key populations (objectives 1.1 and 2.1 – 2.4).

The team discussed and validated the preliminary findings of the quantitative analysis with the key informants, including the representatives of the RAC and the partners. The team collected additional qualitative information through consultations with the key informants in order to interpret the findings, and to incorporate them during the final analysis.

2.2 HIV continuum of care for PWID

2.2.1 Conceptual framework for the assessment of the HIV continuum of care

In order to assess the HIV continuum of care for PWID in KR, the team developed a conceptual framework consisting of two dimensions of processes as shown below:

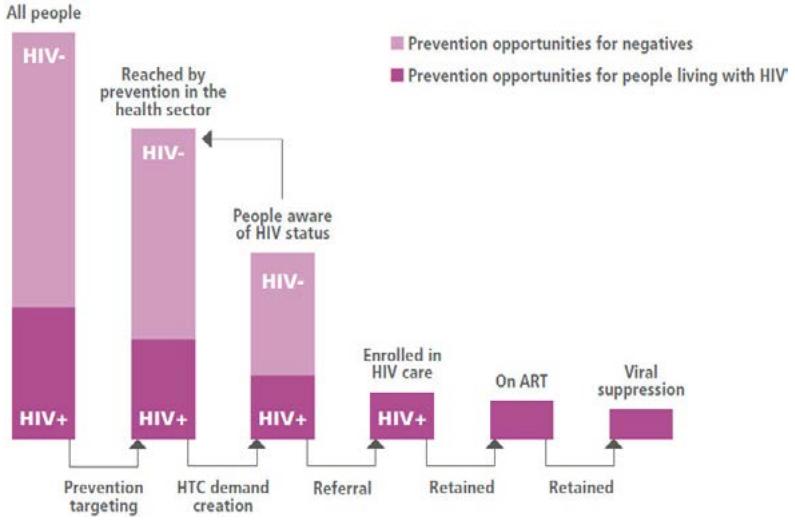
Figure 1: Description of a two-dimensional conceptual framework

		Data collection	Analysis
Process dimensions	**Steps**	Cascade of prevention, diagnosis, care and treatment	**"System perspective" breakpoints with PWID leakages**
			"Human perspective" – probability of reaching a destination along the cascade
	Chronology	Milestones on the timeline	**"Human perspective"** – time required to make the "journey"

Cascade of prevention, diagnosis, care, and treatment model

The study team used a framework proposed by WHO (World Health Organization 2013) that differs from common continuum of care models (used by the CDC in US (CDC 2014) or models used in some countries in Europe (European Centre for Disease Prevention and Control 2015)) as it a) includes prevention prior to testing and linking to care, and b) separates the pool of target population by HIV status at 3 initial stages (till HIV confirmation stage).

Figure 2: Cascade of HIV prevention, diagnosis, care and treatment



Source: (World Health Organization 2014, 10)

Further, the team customized the framework to fit the country context by adding several stages (by splitting 3rd stage "People aware of HIV Status" and 5th "On Art" into sub-stages). The customized model consisting of 9 stages better reflects critical flows and leakages of PWID along the continuum.

Figure 3: Description of the stages of the customized cascade

Cascade stages	Definition	Sources of data
(A) All PWID	The estimated size of PWID in KR, the same as "All People" in the WHO framework (1st stage)	(Общественный фонд «Центр анализа политики здравоохранения» 2014)
(B) Reached by prevention	The number of PWID reached by prevention programs as reported by service providers the same as "Reached by prevention in the health sector" in the WHO framework (2nd stage)	IBBS 2013 (Чокморова, et al. 2013)
(C) Tested for HIV	The number of PWID who received the first HIV test (ELISA1 or rapid test) in a given year	RAC
(C3) Aware of HIV test results	The number of PWID aware of HIV testing results (negative or suspected positive) before reaching the confirmation stage	IBBS 2013 (Чокморова, et al. 2013)
(D) HIV confirmed	The number of PWID with HIV infection confirmed in a given year – HIV infected PWID cohort The same as "People aware of HIV status" in the WHO framework (3rd stage)	RAC
(E) Enrolled in care	The number of PWID registered with AIDS Centers (in clinical registration journal) from "HIV confirmed" cohort	Dataset from RAC electronic database
(F) Started ART	The number of PWID who started ART from "HIV confirmed" cohort	Dataset from RAC electronic database
(G) On ART ≥12	The number of PWID who stays on ART 12 month or longer from "HIV confirmed" cohort	Dataset from RAC electronic database
(H) Viral suppression	The number of PWID on ART at least 12 months whose viral load was below the threshold (1000 per ml) after 12 months from starting ART	Dataset from RAC electronic database

Timeline and milestones

The study team identified the following milestones:

Figure 4: Description of the timeline

Milestones	Definition	Sources of data
Prevention	A starting point of the journey – the date of the first record of a prevention service provided to PWID	GFATM supported project / UNDP database
HIV Rapid Test	The date of receiving HIV testing using rapid tests	GFATM supported project / UNDP database
ELISA 1	The date of receiving the first HIV test (recorded retrospectively only for those PWID who registered for care and surveillance form was filled in)	Paper based records of RAC
ELISA 2	The date of receiving the second HIV test (recorded retrospectively only for those PWID who registered for care and surveillance form was filled in)	Paper based records of RAC
IB	The date of the confirmation test (with Western blot or immunoblot)	RAC electronic database
ART	The date of starting ART (the first time)	RAC electronic database

The major limitation of this model is a gap between HIV rapid test and ELISA1:

- The dates of starting the prevention and receiving the HIV rapid test were recorded in the database of GFATM-supported project;
- The dates of the first ELISA test are recorded in the database of RAC;
- These two databases are completely disconnected: it is impossible to trace a person who injected drugs and received prevention services and rapid HIV testing from the first database into the second database, as well as to calculate the time lag between the rapid test and ELISA1. Theunique identifier used by prevention service providers (including community-based testing) is not carried forward to facility-based testing (with ELISA or Immunoblot) where full personal information is recorded.

Therefore, the timeline misses a critical stage (from HIV rapid testing to ELISA1), and underestimates the duration of the journey from prevention to HIV confirmation.

2.2.2 Data collection and modeling

Data collection

The team developed a data entry and modeling tool (MS Excel based) to streamline data entry, quality check, and processing.

The team collected statistical data from official reports for stages "(B) Reached by Prevention" and "(C) Tested for HIV", cross checked with other sources, and validated with the representatives of RAC.

RAC provided a dataset for each cohort of people whose HIV status was confirmed in 2013 and 2014:

- The datasets contained variable "transmission routes" that allowed to separate PWID sub-cohort from the rest ("Parenteral transmission due to injecting drugs"). However, the team could not identify other key populations (as long as attribution to key population by risky behavior was not specified in the RAC database).
- The dataset did not contain data on the dates of ELISA1 and ELISA2, even though they had been recorded in the epidemiologic surveillance ("investigation") paper based forms for each individual registered for care. The team extracted ELISA1 and ELISA2 dates from individual forms, and entered them into the dataset.
- The team run several logical tests and found many inconsistencies in the dates entered. The team cleaned up the dates for PWID through a

series of iterations, but could not do the same for other HIV infected sub-cohorts due to time limitations. Therefore, the team did not use the data for other HIV positive people (e.g. for a comparison with PWID).

The dataset did not contain a single variable to define the number of PHLIV staying on ART at least 12 months. Therefore, the team had to generate such variable using strict or soft ("loose") criteria:

- Strict criteria implied that PHLIV was considered on ART at least 12 months if all these conditions were met: a) the last or current ART course started after the date of confirmation, b) the date of death was either empty or was 12 months after the start of ART, c) did not withdraw from ART during 12 months after starting (variable "the date of stopping ART" being empty or 12 months after the start), and d) the date of last visit to healthcare provider was 12 months after starting the last course of ART (assuming that all previous scheduled visits have been made, although not verifiable in the database).
- Soft criteria implied the same rules except for the last condition.

The team used the following conditions to calculate the number of PWID whose viral load was undetectable: a) a threshold was set at 1,000 copies per ml, b) the viral load (VL) test was conducted after 12 months of starting ART, and c) PWID retained on ART at least 12 months (as described above).

The team recognized the data limitation for 2014 PWID cohort – the database for 2014 covered the period from January 1 2014 to October 31 2015. Therefore, PWID whose HIV infection was confirmed in November or December 2014, or who started ART after October 2014 could not be counted as "staying on ART at least 12 months". Therefore, the flow of 2014 PWID cohort at the last two stages of the cascade ("On ART > months" and "Viral suppression") does not reflect the reality.

The team was unable to receive a dataset from the GFATM-supported project database to extract the first prevention service and the first HIV rapid test dates for all PWID tested in 2013 and 2014. The reason was purely technical: a user cannot populate and export raw data (this functionality was missing in the software), and a direct access to the database (bypassing software interfaces) was restricted (due to property/intellectual rights). The team used an alternative approach of randomly selecting 30 individual records of service beneficiaries in each geographic area (Bishkek, Chuy and Osh), and manually recording the dates displayed on the screen in MS Excel worksheet. Therefore, the measurement of the time lag between the first prevention service and HIV rapid test is rather indicative, and cannot be generalized.

Finally, the team collected qualitative information through a) semi-structured face-to-face interviews with HIV infected PWID in Osh and Bishkek regarding their journey through the cascade of services, and b) focus-group discussion and semi-structured interviews with key informants (service providers, healthcare officials, representatives of international organizations, and researchers).

Modeling

The team processed the RAC database and produced summary tables for civil sector, prisons and the entire country grouping results in each table by years, the category of PHLIV (PWID and others), and geographic location as presented in the following figures:

- Figure 62: The HIV continuum of care statistics – Civil Sector (on page 94)
- Figure 63: The HIV continuum of care statistics – Prisons (on page 95)
- Figure 64: The HIV continuum of care statistics – all sectors (on page 96)

The team used a cohort-based approach to calculate the flow of PWID from stage D "HIV confirmed", which means that the numbers in the following stages are only for those PWID whose HIV infection had been confirmed in a given year (irrespective of the date of enrollment in care or starting ART).

The team compiled continuum of care matrixes by linking dynamically the data from the above-mentioned summary tables, and the secondary data sources to relevant stages of the cascade (see Figure 41: Modeling of PWID flow along the cascade of services in 2013 (on page 82) and Figure 42: Modeling of PWID flow along the cascade of services in 2014 (on page 83). The team introduced four modeling parameters:

1. Use IBBS 2013 results to estimate the coverage with prevention services vs. administratively reported data (as shown in sub-table "B Covered by preventive programs") – "Y"/" N"; default value "Y"

2. Use strict or loose ("soft") criteria to define the number of PWID on ART at least 12 months (as shown in sub-table "G On ART after 12 months") – "Y"/" N"; default value "Y"

3. Use only ELISA1 vs. ELISA1 and HIV rapid tests (RT) to estimate the number of PWID linked to HIV diagnosis (as shown in sub-table "C Tested for HIV (1st IFA or RT") – "Y"/" N"; default value "Y"

4. Set the ELISA1 and ELISA2 specificity – the percentage of ELISA1 and ELISA2 positive results confirmed with the Western Blot test to estimate backward more accurately the number of PWID who reached the confirmation stage (irrespective of the confirmation test results); default value "98%"

The team produced another summary table for estimating the time lag between HIV testing stages (ELISA1 – ELISA2, ELISA2 – IB), diagnosis, and ART (see Figure 40 "Timeline (in calendar days) by different stages from the first HIV test to starting ART" on page 81) and supplemented with the results of computation of the data on prevention and the rapid test dates for three regions (Bishkek, Chuy and Osh).

3 The study results

3.1 Mid-term evaluation of progress in the implementation of the State Program on HIV/AIDS

3.1.1 Description of the achievements

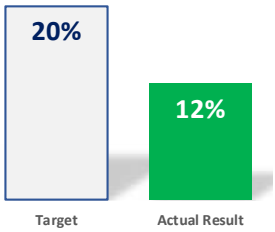
Strategy 1. Decrease the vulnerability of people who inject drugs to HIV

Objective 1.1 Stabilization of HIV spread among people who inject drugs, including women who inject drugs

Expected Result ≥60% of the estimated size of people who inject drugs receive quality preventive, curative and care services by 2016

Measurement result

The country met the target for the objective in 2013: the percentage of people who inject drugs who are HIV-infected (indicator 1.1.1, HIV-I5 | #855) was 12.4% in 2013 against the target of <20%, and is below the baseline 14% (2010) by 1.6 percentage points.



The following indicators were used to assess the progress in the delivery of the expected result:

	Target	Result
1.1.2. Percentage of people who inject drugs reached with HIV prevention programs (HIV-C-P2 | #845, HIV-P5 | #760)	60%	28.2% ↓
1.1.3. Percentage of people who inject drugs that received an HIV test in the last 12 months and who know the results (HIV-C-P7 | #854)	60%	43% ↓
1.1.4. Percentage of people who inject drugs tested and counseled for HIV (in last 12 months) and who received results (HIV-P7 | #537)	50%	33.3% ↓
3.1.1 Percentage of *people who inject drugs* receiving ART (from the estimated number of people who inject drugs eligible for treatment) (HIV-T1 | #649)	35%	19.3% ↓
3.1.2. Percentage of *people who inject drugs* with HIV known to be on treatment 12 months after initiation of antiretroviral therapy (HIV-I3 | #G3)	85%	77.8% ↓
3.1.3. Percentage of people living with HIV reached with palliative care and support out of the number in need (of medical service)		No Data

Discussion of the achievement

Technical soundness of the M&E Plan

The definition of the expected result is not consistent with the objective from a standpoint of the hierarchy of results – the expected result reflects coverage with services while the objective implies a result at the impact level. Even if the expected result is delivered, it is unlikely that it will influence the accomplishment of the objective within the lifespan of the State Program.

The definition of expected results refers to "quality". However, no single indicator in the M&E Plan measured the quality aspect of either prevention, care, or treatment. Therefore, the results reflect only quantitative aspects of the achievement, and quality can be assessed only indirectly such as by behavior change (related to high-risk practices), uptake of HTC, OST or ART.

As defined, the strategy and the expected result implied a full range of services from prevention to treatment. However, four key interventions under the strategy in the Plan of Action for the implementation of "the State Programme for the Stabilization of the HIV epidemic in the Kyrgyz Republic for 2012-2016" (hereinafter referred to as "Plan of Action") are mainly focused on prevention (harm reduction), psycho-social rehabilitation, improvement of interaction between different sectors and of advocacy for financing OST, diagnosis and treatment of VHC and TB, but is are not focused on ART and adherence. Only action 1.1.2.1 ensures the access of PWID to diagnosis and treatment of HIV, viral hepatitis, IST, and concomitant diseases through the establishment of user-friendly services in specialized and PHC clinics. 400 PWID served by 7 multidisciplinary teams was defined as an output of this activity. Similarly to the activities, no indicator was selected under this strategy to measure care and treatment outcomes for specifically PWID. Therefore, the team "borrowed" three indicators (3.1.1, 3.1.2 and 3.1.3) from the strategy #3 on ART and care and measured PWID specific results. Data on the coverage with palliative care and support of PWID was not available.

Interpretation of the achievements

The achievement of keeping HIV prevalence below 20% among PWID (12.4% prevalence) cannot be attributed to the implementation of the current State Program. It can be used as a baseline as the current program became effective in December 2012. The real epidemic situation among PWID will be visible next year after conducting next IBBS. However, the attributing the progress made in the year of 2016 to the State Program is difficult unless it demonstrates substantial breakthrough in risky behavior change as a successful outcome of the prevention program implemented under the 2012-2016 State Program.

The recent IBBS among sexual partners of PWID in KR (Дерябина and Дооронбекова 2015) revealed that only 21% had been always using condoms with PWID partner, 42% had never been tested for HIV, 5% respondents (n=857, CI 3.6-6.7) were HIV infected, and 15.8% (CI 13.2 – 18.1) were VHC infected. HIV prevalence was the highest in Jalal-Abad (7.6%), and VHC - in Bishkek (43.6%).

According to the M&E Plan, progress in the implementation of prevention programs (for all KPs) should be measured based on IBBS results. Nevertheless, the team reviewed administrative coverage reports as well as other sources to fill the data gap, and run consultations with the key informants to validate alternative approaches:

- According to the electronic database for tracking the prevention services provided to KPs[5] of the UNDP PIU (the Principal Recipient of the GFATM HIV grant in KR), 50.4% of PWID were reached with a minimum package of prevention services in 2014:
  - A total of 11,254 PWID in the civil sector (including 1,452 women) and 1,344 PWID in prisons (including 20 women) were reached.
  - 1,673 PWID received OST services at least once, which differs from the numbers reported by RAC, 1246 and RCN – 1,277 for 2014.
- The coverage with prevention has scaled up in 2015. In total, 14,356 PWID were covered by harm reduction programs as of July 1st 2015:
  - 12,780 PWID were reached with needle and syringe programs (NSP) including 1,375 PWID in prisons (51.1%);
  - 1,576 PWID were enrolled in OST (6.3%).
- According to the study for PWID size estimation (study sample of 904 PWID in 8 sites), 53% of respondents were benefiting from the NSP, and 36% were reached with a full package of preventive services.

5 The system uses a unique identification code (UIC) to register service beneficiaries that minimizes double-counting

There is no single indicator in the M&E Plan capturing any aspect of either scale or the effectiveness of OST services. According to administrative reports of the Republican Center of Narcology (RCN):

- 1,246 PWID has been registered at OST sites as of January 1st, 2015 (including 103 women) that constituted 5.1 of the estimated size of PWID;
- 54% of enrolled PWID stayed in OST programs at least for 6 months.

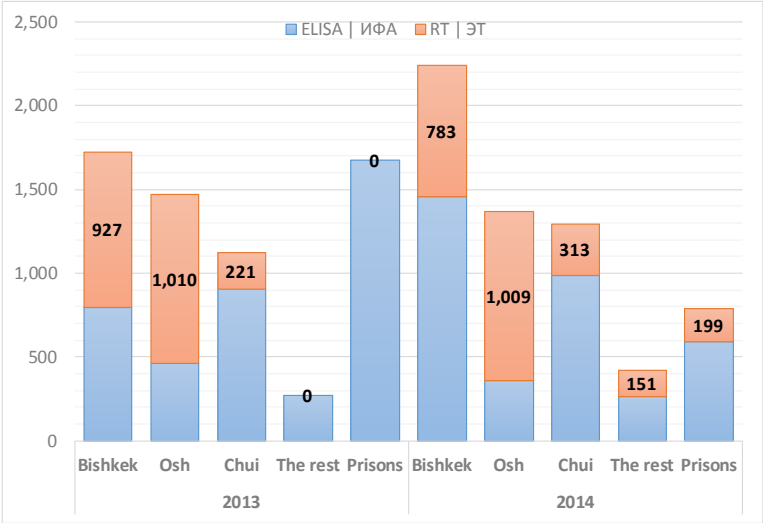
The number of OST sites increased from 20 to 29: 20 in the civil sector and 9 in prisons. The enrollment increased from 1,013 in 2011 to 1,673 in 2014 (or 1,277 as reported by RCN). All OST sites are financed by partners: CDC supported two OST sites, and the GF grant covered the remaining 27 sites.

PWID coverage with OST is discussed in details in relation to the HIV continuum of care later in corresponding section of the report (see Figure 32 on page 66 and Figure 33 on page 66). The key informants reported the following causes of the low enrollment or retention in OST:

- Prejudice among PWID against OST nourished by myths in mass media (some respondents even presumed that illicit drug business was behind it trying to retake the market);
- Raids of the law enforcement agencies in the vicinity of OST centers;
- High workload of OST staff, and the lack of user-friendly services.

NGOs started rapid HIV testing of PWID in 2013, which substantially increased the number of PWID tested for HIV as shown in Figure 5 below.

Figure 5: PWID tested for HIV by types of testing, geographic area/sector and years



According to the testing algorithm effective in 2014, confirmed by the key informants, rapid HIV testing does not replace ELISA testing. If rapid test is positive, PWID should undergo the testing with ELISA1 and ELISA2 before applying for HIV confirmation with Western Blot (as shown in Figure 67: HIV testing pathways (in 2013-2014) (on page 104). As reported by one of the key informants, new standard operational procedure which was recently circulated to AIDS centers does not alter the testing algorithm; it just allows taking blood sample once for all three tests. Rapid tests accounted for 34% of the first HIV test PWID received in 2013 and for 40% received in 2014. It is noteworthy that rapid tests were used in prisons in 2014. The study team could not explain the observed variation in testing patterns (rapid tests vs. ELISA) across regions.

As shown in Figure 41 on page 82 and Figure 42 on page 83, 140 PWID tested positive out of 2,158 PWID tested with rapid tests in 2013, so did 130 out of 2,455 in 2014. HIV detection rate with HIV rapid testing was 6.5% and 4.6% respectively. It is noteworthy, that only 40 PWID (out of 104

tested positive) reached RAC for HIV confirmation in 2014: in 2 cases HIV was not confirmed, and out of confirmed 38 cases only 12 were new with 26 being detected in the past. Out of a total 170 HIV confirmed cases among PWID in 2014, 40 (24%) were first detected with rapid HIV testing.

The study team analyzed registration codes of 168 PWID with HIV confirmed in 2013. Only 78 PWID were registered as a group that injected drugs (codes 101.2, 102 and 112.1). The majority of PWID were registered as patients without risky behavior having different health conditions that triggered a referral to HIV testing. Drug injection practices, as a route of transmission, had been detected retrospectively during the epidemiologic surveillance. These finding leads to two assumptions:

- The contribution of prevention to the entry of PWID into care and treatment is even more modest than expected. Referrals from medical facilities (provider induced testing) was the major source of the pool of PWID with HIV infection confirmed in 2013.
- Healthcare providers play more important role in suspecting HIV infection than preventive service providers. This is encouraging from a health care system perspective, and reflects the benefits of the investment in healthcare professionals. However, the achievement in general healthcare facility-based detection and referral cannot outweigh the failure of the prevention services targeting PWID through outreach or specialized facilities.

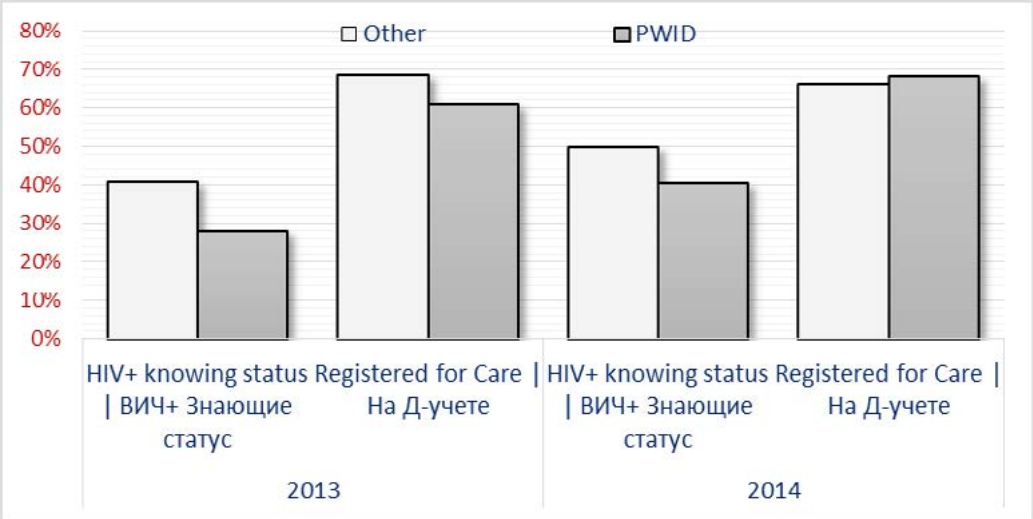
According to the RAC database, out of a total of 170 PWID with HIV infection confirmed in 2014 only 19 PWID reported that were tested for HIV in last 12 months and knew their results, which constitutes 11.2%, up from 4.2% in 2013. This is below IBBS 2013 finding of 43%, which measured the awareness of HIV testing results among PWID regardless of HIV infection status.

Administrative coverage figures are not instrumental for assessing the achievement against: "1.1.4. Percentage of people who inject drugs tested and counselled for HIV (in last 12 months) and who received results (HIV-P7 | #537)" as it is hard to detect what is considered as "counselled for HIV" and how it differs just from being informed about HIV test results.

The results for ART related two indicators: enrollment and retention in ART were measured based on RAC reported figure. The coverage of PWID with ART (19.3%) was below the target set for all PLHIV (30%) which itself is very low. The percentage of PWID who were on ART by the end of 2014 for at least 12 months was 77.8% - less than for all PLHIV on art (84.5%), and below the targets. Nevertheless, this result can be considered as success taking into consideration the difficulties related to opioid dependency compared to other PHLIV. However, the success in retention of PWID on ART becomes questionable after assessing the cascade of care and treatment services (described in section 3.2 "Continuum of HIV care for PWID" below): the study team can assume that the most compliant PWID enrolled in ART after substantial leakages before confirmation and registration for care.

The study team also looked at equity aspect of ART coverage of PWID (as recommended by WHO, (World Health Organization 2015)) as shown in Figure 6 on page 26: out of a total of 77 PWID registered for care, 47 initiated ART in 2011, or 61% compared to 69% of other registered PLHIV. However, in 2014 slightly higher share of the registered for care PWID enrolled in ART 68% (69 out of 101) than other PLHIV (66%). The difference in ART enrollment rates between PWID and other PLHIV is higher if the number of HIV confirmed cases is used as a denominator due to higher leakage of PWID between confirmation and registration for care stages.

Figure 6: Enrollment in ART (the number of PLHIV on ART as % of either "knowing HIV+ status" or "registered for care") by categories and years



Summary – Strategy 1/Objective 1.1

- ✓ The study team cannot assess the achievement of objective 1.1 as required by the M&E Plan due to the lack of information (the latest IBBS is dated 2013), the logical inconsistencies between the objectives and the expected results, and the noted M&E Plan deficiencies (such as the absence of quality-related indicators, as well as the irrelevance of some of the existing ones)
- ✓ Most likely, the objective will be achieved in terms of the HIV spread among PWID (<20%), but no evidence was found to expect a decline in HIV prevalence among PWID in 2016 from 12.4% in 2013.
- ✓ The review of actual results against expected ones (based on administrative reporting and other sources) indicates the underperformance in reaching PWID with quality preventive services, and the inability of the prevention programs to link PWID to care and treatment.
- ✓ The review team did not find an inequity in enrolling PWID in ART compared to other groups of PLHIV even though the retention in ART was much lower.
- ✓ Overall, the implementation of the Strategy 1 is unsatisfactory when measured against expected results despite a lot of efforts on behalf of designated actors.

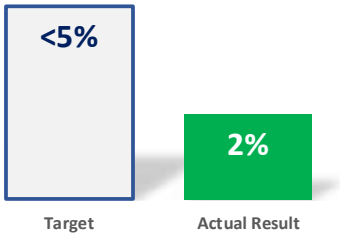
Strategy 2. Prevention of sexual transmission of HIV

Objective 2.1 Limit HIV spread among sex workers and their clients

Expected Result At least 60% of sex workers are covered with a basic package of services by 2016

Measurement result

The country met the target for the objective in 2013: the percentage of sex workers who are HIV-infected (indicator 2.2.1, HIV-I5 | #855) was 2.2% in 2013 against the target of <5%, which was below the baseline 3.5% (2010) by 1.3 percentage points.



The following indicator was used to assess the progress in the delivery of the expected result (based on IBBS 2013 findings) (Чокморова, et al. 2013):

	Target	Result
2.2.4. Percentage of sex workers reached with HIV prevention programs (HIV-P5 | #760)	60%	24.8% ↓
2.2.2. Percentage of SWS that received an HIV test in the last 12 months and who know the results (HIV-C-P7 | #854)	55%	56% ↑
2.2.3. Percentage of SWs tested and counseled for HIV (in last 12 months) and who received results (HIV-P7 | #537)	55%	39% ↓
2.2.5 Percentage of female and male sex workers reporting the use of a condom with their most recent client (HIV-O4 | #842)	90%	90.6%↑
2.2.6 Percentage of SWs who both correctly identify ways of preventing sexual transmission of HIV and who reject major misconceptions about HIV transmission (modified HIV-C-P1 | #658)	40%	21%↓

Discussion of the achievement

Technical soundness of the M&E Plan

Similar to the pair of objective and expected result for PWID (under Strategy 1), the definition of the expected result is inconsistent with the objective from a standpoint of the hierarchy of results – the expected result reflects coverage with services while the objective implies a result at the impact level. Even if the expected result is delivered, it is unlikely that it will influence the accomplishment of the objective within the lifespan of the State Program.

However, in distinction from the objective 1.1, the M&E Plan suggests that the indicators measure immediate results of prevention: namely, knowledge of HIV transmission risks and behavior change (condom use with a client). Technically, these 2 indicators can be used for interpreting the achievements, but not for assessing the achievement of either the objective (prevalence) or the expected result (coverage) directly.

According to the M&E plan manual ((Министерство Здравоохранения Кыргызской Республики 2012), the coverage indicator 2.2.4 implies the following basic elements of prevention services for SWs: prevention of STI and HIV, awareness of HIV, and HIV testing.

For unknown reason, year 2014 target (90%) for the indicator "2.2.5 Percentage of female and male sex workers reporting the use of a condom with their most recent client (HIV-O4 | #842)" in the M&E Plan was set below the baseline 91% (2010) and the target for previous reporting year which was 95% in 2012.

Interpretation of the achievements

The achievement of keeping HIV prevalence below 5% among SWs (2% prevalence) cannot be attributed to the implementation of the current State Program. An in the case of PWID for objective 1.1, it can be used as a baseline as the current program became effective in December 2012. The real epidemic situation among SWs will be visible next year after conducting the next IBBS.

According to IBBS 2013, the coverage of SWs by preventive services was measured for 3 types of packages: a simple package included 2 services – the distribution of information-education materials, and condoms, the second ("3-service") package included a referral for HIV testing in addition, and the most advance package included the knowledge of the location of HIV testing ("4-service package"). The composition of 4-service package was closest to the indicator definition in the M&E manual of the State Program. Therefore, the study team used the IBBS measurement of the coverage for the most advanced package in order to assess performance by the indicator 2.2.4. The coverage with lighter,

2-service prevention package was 65% on average being the highest in Batken (93%) and Issyk-Kul (90%), while the lowest was 12% in Talas. If the 4-service package is considered to be a standard of prevention service, then a gap between the coverage with 4-service and the coverage with 2-service packages can indirectly point to the quality of prevention programs. According to the IBBS 2013 results, the gaps was very high in Chuy – 73 percentage points (13% for 4-service package and 86% for 2-service package), in Issyk-Kul – 62 percentage points (28% and 90% respectively), in Bishkek - 44 percentage points (1% and 45% respectively) and in Osh – 38 percentage points (39% and 87% respectively). It can be assumed that the most successful coverage with prevention programs both in terms of scale and content was in Batken (87% and 93% respectively) and Naryn (53% and 66% respectively), while the implementation of the State Program with regards to the prevention among SWs was mostly focused on the scale in Osh, Issyk-Ku and Chuy (the coverage light 2-service package was above 60%), as well as in Bishkek and Jalal-Abad, but failed to reach 60% target.

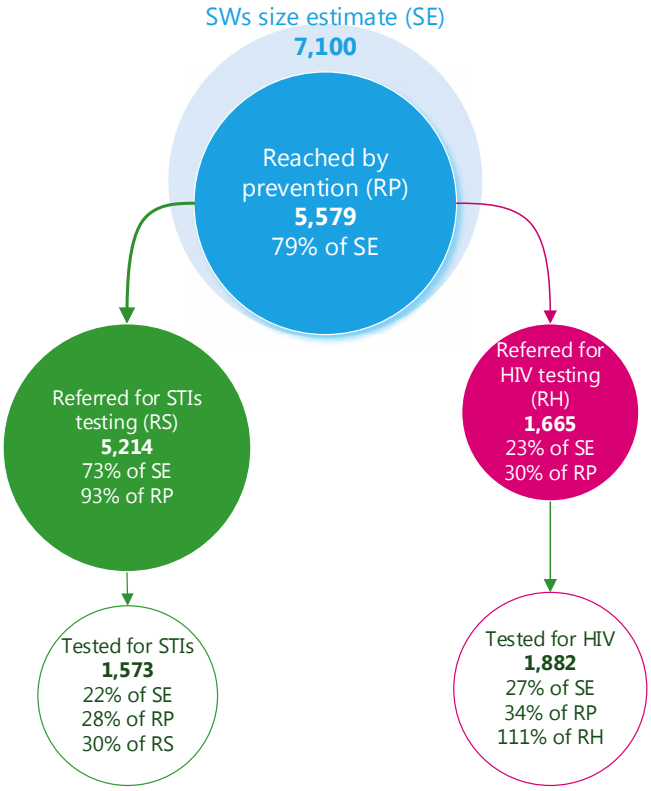
According to the administratively reported coverage figures, 5,579 SWs received "consultations" in 2014 (GFATM, UNDP 2015). The report for the previous year did not specify the total number of SWs reached with prevention (GFATM, UNDP 2014), only showing the number reach with "a minimum package of service to prevent HIV" in the 2nd half of 2013 – 3,020 (less compared to 3,653 for the same period in 2014) 6. If we assume that "consultations" referred to in the report is equivalent of "a minimum and need-based extended packages of services"7, then the administratively reported coverage of SWs with prevention was 79% in 2014 (of the size estimate of 7,100 (M-Vector 2013), much above the target of 55% in 2013 (or >60% in 2016):

- As reported by the UNDP, 5,214 SWs were referred for STI testing, which constitutes 93% of SWs reached by prevention (RP or 73% of the SWs size estimate (SE) as shown in Figure 7:

6 The reported numbers of SWs reached in the 1st and the 2nd half of the year cannot be summed unless some of the beneficiaries were reached in both periods. For instance, 3,663 SWs were reached in H1 2014, 3,653 in H2 2014, but the total number reached in 2014 was 5,579, not 7,316 (=3,363 + 3,653).

7 The study team noted that the beneficiaries of "consultations" and "the minimum package of services" were counted separately for MSM in the same report, table 11 (GFATM, UNDP 2015).

Figure 7: Coverage of SWs with prevention and the flow of SWs in 2014



- 1,573 SWs were tested for STI, which is 30% of 5,214 SWs referred for STI testing (RS), 28% of SWs reached by prevention (RP), or 30% of the size estimate (SE).
- 1,665 SWs were referred for HIV testing to AIDS Centers, that is 30% of 5,579 of SWS reached by prevention (RP), or 23% of the size estimate (SE).
- 1,882 SWs were tested for HIV in 2014, more than those referred for HIV testing (RH) to AIDS centers. The study team did not find an explanation for this phenomena in the report. Nevertheless, it accounted for 34% of the SWs reached by prevention, and for 27% of the size estimate.

The administrative coverage of HIV testing of SWs (22%), as reported by prevention service providers (GFATM, UNDP 2015), was lower compared to IBBS 2013 findings for both indicators of HIV testing – 56% (tested and knew results) and 39% (tested and were counselled for HIV). This is the opposite of the observation on PWID coverage where prevention was higher to the administrative reported than measured by IBBS 2013.

Routine statistics of the RAC does now allow for tracing testing of SWs with ELISA. The coding used originally (code 105 "Persons with random sexual relationships") included sex workers and their clients. Registered with this code, 1,112 persons were tested for HIV in 2013, and 1,242 in 2014. HIV was confirmed in 6 and 3 cases (HIV detection rate 5.4% and 2.4% respectively).

8 NGOs provided rapid HIV testing to 1,453 SWs in 2013 and to 1,355 SWs in 2014. Only 9 out of a total of 16 SWs with positive rapid HIV test results reached AIDS center, while HIV infections was confirmed in 8 cases. If all SWs had reached AIDS centers for the confirmation, the estimated HIV prevalence in the cohort of SWs tested with rapid HIV saliva-based testing would have been 1.0% (as shown in Figure 8 on page 29). This is quite close to 2.2% HIV prevalence among SWs as detected by IBBS 2013.

Figure 8: HIV Rapid test stasticis by KPs in 2014 KPs (as reported by RAC)

	Number of persons tested	Positive result	Share of positive results	Reached AIDS centers	**HIV confirmed**	New HIV cases	HIV confirmed in the past	**HIV detection rate**	**Estimated HIV prevalence**
PWID	2,256	104	4.6%	40	**38**	12	26	**1.7%**	12.0%
MSM	852	27	3.2%	12	**11**	9	2	**1.3%**	7.1%
SWs	1,355	16	1.2%	9	**8**	8	0	**0.6%**	2.1%
Total	**4,463**	**147**	**3.3%**	**61**	**57**	**29**	**28**	**1.3%**	**7.9%**

The study team could not understand a relationship between 1,882 SWs tested at AIDS Centers (see Figure 7 on page 28) and 1,355 SWs who received rapid HIV testing as reported by UNDP (see Figure 8 on page 29). Assuming that they represent different cohorts, the total number of SWs tested for HIV in 2014 amounts to 3,237 that is 46% of SW size estimate – still below the target of 55% for HIV testing.

High level of using condoms with last client (90.6%) as reported by SWs in IBBS 2013 should be interpreted carefully: although marginal, is shows a decline from the baseline 91%, and is below the 95% target for 2012. Taking into consideration extremely low level of awareness of HIV transmission (21%) and, most importantly, the high prevalence of syphilis (23.6%) among the SWs (discussed later under objective 2.3), this number seems to be more reflective of the knowledge of the "correct answer" as opposed to the knowledge of safe sex practices.

As noted by the key informants, the environment was not conducive toward scaling up prevention programs for the SWs. Sex work is decriminalized in Kyrgyzstan, but there have been a series of attempts to tighten the regulation, and to amend the Administrative Code of the Kyrgyz Republic. Access to SWs for reaching by prevention remained restricted. The city police established a unit for control of the violation of social morality [8]and for human trafficking, having the right to register SWs (including taking photos and fingerprints). The study team noted that none of the 3 interventions under the objective 2.1 implied addressing this issue.

8 In Russian: «по борьбе с нарушениями общественной нравственности»

Summary – objective 2.1

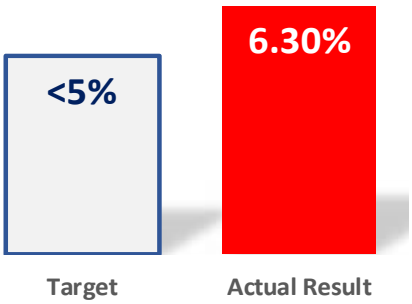
- ✓ The study team cannot assess the achievement of objective 1.1 as required by the M&E Plan due to the lack of information (the latest IBBS is dated 2013), the logical inconsistencies between the objective and the expected results, and the noted M&E Plan deficiencies (such as irrelevance of some and the absence of quality related indicators)
- ✓ Most likely, the objective will be achieved in terms of the HIV spread among SWs (<5%), but no evidence was found to expect a decline in HIV prevalence among SWs in 2016 from 2.2% in 2013.
- ✓ The review of actual results against the expected ones (based on administrative reporting and other sources) indicates underperformance in reaching SWs with quality preventive services, and inability of the prevention programs to link SWs to HIV testing.
- ✓ Overall, the implementation of the objective 2.1 is unsatisfactory when measured against the expected results despite of a lot of efforts of the designated actors.

Objective 2.2 Decrease the vulnerability of men who have sex with men (MSM) to HIV

Expected Result More than 30% of the estimated size of MSM are covered with a basic package of services by 2016

Measurement result

The country failed to meet the target for the objective in 2013: the percentage of MSM who are HIV-infected (indicator 2.3.1, HIV-I4 | #850) was 6.3% in 2013 against the target of <5%, which was far above the baseline 1.1% (2010) by 5.2 percentage points (i.e. almost a six-fold increase).
The following indicator was used to assess the progress in delivery of the expected result (based on IBBS 2013 findings) (Чокморова, et al. 2013):



	Target	Result
2.3.4. Percentage of men who have sex with men reached with HIV prevention programs (HIV-P5 | #760)	30 % (2014)	47.9% ↑
2.3.2. Percentage of MSM that received an HIV test in the last 12 months and who know the results (HIV-C-P7 | #854)	60%	40% ↓
2.3.3 Percentage of MSM tested and counseled for HIV (in last 12 months) and who received results (HIV-P7 | #537)	60%	17.9% ↓

2.3.5. Percentage of men reporting the use of a condom the last time they had anal sex with a male partner (HIV-O5 | #664)	60%	83% ↑
2.3.6. Percentage of MSM who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission (modified HIV-C-P1 | #658)	80%	56.8% ↓

Discussion of the achievement

Technical soundness of the M&E Plan

A logical gap between the definitions of the objective and the expected result for MSM is not as wide as for PWID and SWs (objectives 1.1 and 2.1). Even though the expected result reflects coverage with services, the objective refers to vulnerability (not to HIV prevalence). The concept of "vulnerability" was not still clear: does "vulnerability" refers to "insecurity" of those MSM not covered by prevention? Or does it imply "vulnerability" caused by risky behavior? The definition of the expected result interprets "vulnerability" as the level of coverage with preventive programs. However, inclusion of behavior and knowledge indicators in the M&E Plan demonstrates that the concept is more than just a service coverage.

The study team noted a serious inconsistency in the targets between the expected result and the corresponding indicator 2.3.4 in the M&E Plan: the State Program calls for covering more than 30% of MSM with prevention (so any coverage number above 30 could be a success), while twice higher threshold was set in the M&E Plan at 60%[9].

The study team noted that the targets for the indicator 2.3.5 (condom use with the last male partner) were set below the baseline of 70.5% in 2010 to 50, 60% and >60% for 2012, 2014, and 2016 respectively.

9 As experts reported, 60% of MSM coverage was included into M&E Plan mistakenly.

Interpretation of the achievements

The failure to keep HIV prevalence below 5% among MSM (6.3% prevalence) cannot not be attributed to the implementation of the current State Program. As in the case of PWID and SWs for objective 1.1 and 2.1, the result can be used as a baseline as the current program became effective in December 2012. The real epidemic situation among MSM will be visible next year after conducting the next IBBS. However, the observed sharp increase of the epidemic, particularly in Bishkek (from 1.1% to 13.3%), is alarming.

Progress towards the accomplishment of the objective – decreasing vulnerability – is more appropriate to be assessed with behavior and knowledge indicators. According to the IBBS 2013, safe sex practice was reported by 83% interviewed MSM, which is above the 2014 target of 60% and the baseline of 70.5%. However, this behavior is hard to associate with an adequate level of understanding of HIV risks – only 56.8% of MSM demonstrated the proper knowledge of HIV transmission. Most importantly, the high level of using condoms with male partner does not match the upward trend in the spread of HIV and syphilis (7.9%, up from 5.7% in 2010). The logical inconsistencies between knowledge, behavioral, and serological results were well noted in the IBBS 2013 report, questioning the reliability of some of the measurements.

If 30% target is used for the coverage indicator (as defined in the expected result) instead of 60%, the result was delivered. However, 48% coverage level is inadequate to respond to the observed upward trend of the epidemic among MSM, and cannot be considered to be a success.

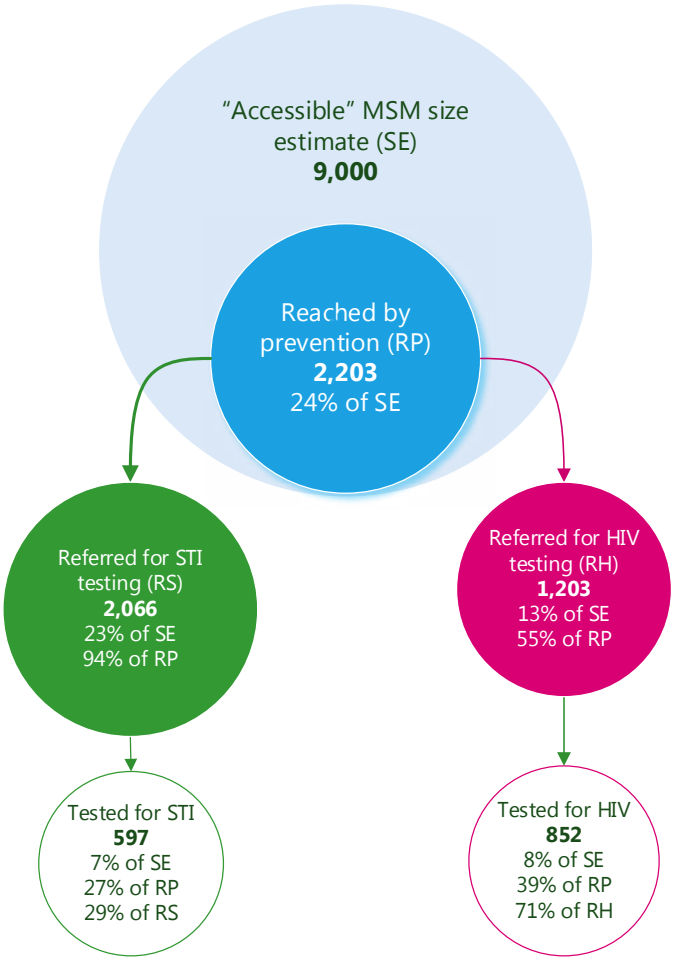
According to the administrative reports, 2,203 MSM were reached with a comprehensive package of preventive services in 2014 (including the distribution of condoms and lubricants, and testing for STI and HIV testing). UNDP claimed that "82% of the interviewed MSM reported the use of a condom with their most recent partner in 2014, showing

11.5% improvement in comparison with 2010 data" (GFATM, UNDP 2015, 45). No source of this data was indicated, and the study team assumes that the authors used IBBS 2013 findings (comparing to IBBS 2010) which cannot be attributed to the success of prevention in 2014. Furthermore, the UNDP, in the capacity of the PR of the GFATM project supporting prevention interventions for KPs including MSM (i.e. the implementation of the corresponding strategies of the State Program), reported that the target agreed with the GF for the coverage of MSM was exceeded by 1,400 persons, or 157%.

The study team cannot argue regarding the performance against the GF agreed target for the prevention service coverage However, 2,203 MSM which was reached through prevention in 2014 translates into 10% coverage of the total estimated number of 22,000 of MSM (M-Vector 2013) or 24.5% if calculated only for so called 9,000 "accessible" or "available" MSM[10] as shown in Figure 9:

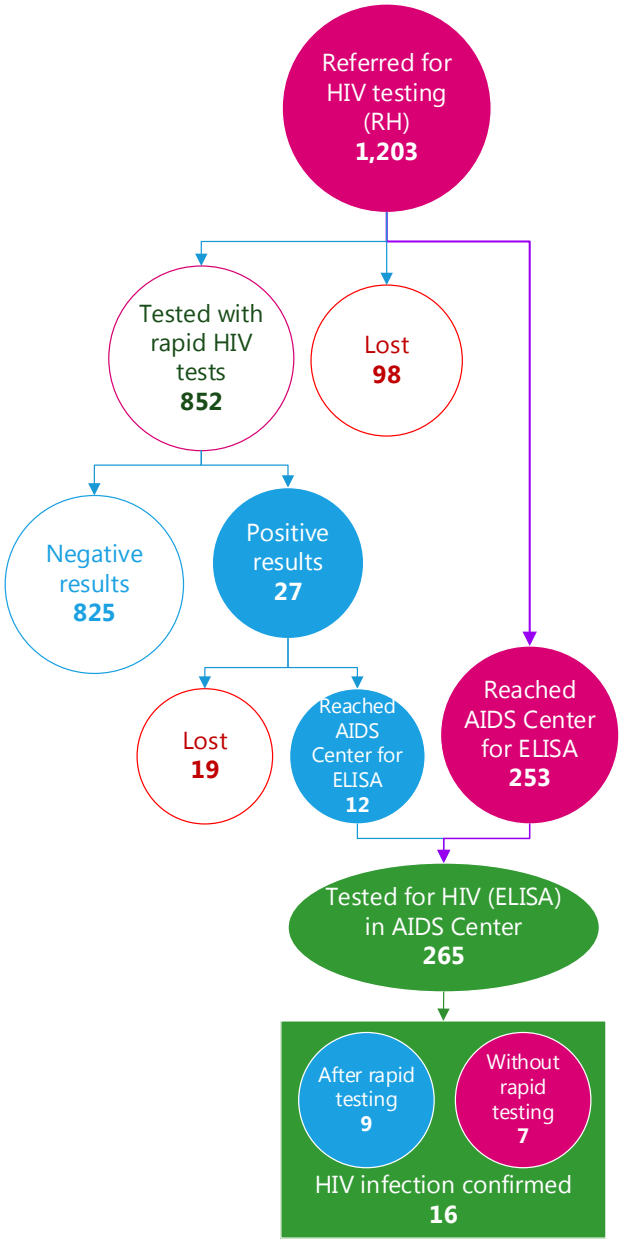
10 Although the study report refers to so called "visible" 6,960 MSM in Bishkek and 4,730 MSM in Osh (or 11,690 it total) (M-Vector 2013, 77)

Figure 9: Coverage of MSM with prevention and the flow of MSM in 2014



- As reported by the UNDP, 2,066 MSM were referred for STI testing, which constitutes 94% of MSM reached by prevention (RP), or 23% of the "accessible" MSM size estimate (SE);
- 597 MSM were tested for STI, that is 29% of 2,066 MSM referred for STI testing (RS), 27% of MSM reached by prevention (RP), or 7% of the size estimate (SE);
- 1,203 MSM were referred for HIV testing, that is 55% of 2,203 MSM reached by prevention (RP), or 13% of the size estimate (SE);

Figure 10: Flow of MSM referred for HIV testing in 2014



- 852 MSM were tested for HIV in 2014 (by AIDS Centers and NGOs), that is 71% of 1,203 referred for HIV testing, 39% of MSM reached by prevention, and 8% of the size estimate of accessible MSM. Presumably, this number includes both HIV rapid testing and ELISA as long AIDS Centers and NGOs were mentioned.

According to RAC statistics, 852 MSM were tested with rapid HIV tests in 2014 (see Figure 8 on page 29) – the number corresponds to the number of MSM tested for HIV as reported by the UNDP (see Figure 9 on page 32), which implies that all referred MSM were tested with rapid tests (even if they were referred to AIDS center as stated in the UNDP report).

According to the RAC routine statistics:

- In 2013: 77 persons registered with the code 103 "Homo- and bi-sexual" were tested (with ELISA), and HIV infection was confirmed in 12 cases or among 15.6% MSM tested in AIDS Center. As reported by the UNDP ((GFATM, UNDP 2014), two NGOs tested 343 MSM HIV with rapid tests. Presumably, some MSM with positive results of rapid HIV testing (the number was not specified in the report) reached the AIDS center, and were among 77 tested with ELISA.
- In 2014: 265 persons registered with the code 103 were tested (with ELISA), and HIV infection was confirmed in 16 cases or among 6.4% of MSM tested in AIDS Center. The same year, out of 27 MSM receiving positive results of rapid HIV testing, 12 reached the AIDS center, and 9 new cases of HIV were confirmed. It means that out of 16 HIV confirmed cases in 2014, 7 MSM bypassed the pool of 852 MSM tested with rapid HIV tests (but could be among 1,203 MSM referred by NGOs for HIV testing) as shown in Figure 10 above.

Until the upcoming IBBS, there is no evidence of MSM changing behavior other than seeking testing for STI and HIV, which were at the level of 7% and 8% respectively in 2014 as shown in Figure 9 and Figure 10 above. The coverage with prevention could have been worse in the past, and has increased after the intensification of efforts with the GF financial support. However, the level reached (24% of the modest size estimate) seems neither adequate, nor even close to the State Program target. Therefore, the study team considers that the reported statement of the UNDP "the resultant significant change of MSM behavior is due to UNDP intensified efforts in HIV prevention, treatment, care and support" (UNAIDS 2014, 46) cannot be substantiated, and is misleading in relation to prevention and behavior change of MSM.

According to RAC routine statistics, MSM were diagnosed at the early stages of HIV disease – out of 12 MSM with HIV infection confirmed in 2013, no clinical signs of the disease were found in 5 cases, while 5 patients were diagnosed with HIV disease at clinical stage I, and 2 at clinical stage

III. The same pattern was observed in 2014, when out of 17 newly detected HIV cases, 8 patients had no clinical signs, 7 patients were diagnosed with HIV disease on clinical stage I, and 2 patients were found to have HIV disease on state III. Such pattern can be partially explained by the fact that 4 out of 12 MSM with HIV infection confirmed in 2013 had been tested in 2008-2012 years, and 8 MSM out of the 2014 cohort were tested in 2012-2013.

According to various key informants, the MSM community has been experiencing sever stigma and discrimination even from the family members and relatives. Together with self-stigmatization, all these factors make it difficult to reach them with prevention programs, which creates demand side barriers to the access to HIV care and services (being afraid of the disclosure of their behavior and HIV status).

Summary

- ✓ Similar to PWID and SWS, the achievement of the objective in terms of HIV spread among MSM could not be assessed due to the lack of bio- and behavioral-surveillance information.
- ✓ Most likely the objective will not be achieved by 2015, and the HIV prevalence will remain above 5% taking into account the scale of coverage with preventive programs.
- ✓ Expected results related to coverage with HIV testing (even the results based on administrative reporting) were below acceptable levels and program targets
- ✓ If next IBBS proves that the level of safe sex practice remains high among MSM and exceeds 2013 achievements, attributing the result to the implementation of the prevention programs will be difficult, unless supported by the performance against indicators (such as awareness of HIV transmission, syphilis prevalence, etc.).
- ✓ Overall, the implementation of the objective 2.2 is unsatisfactory when measured against the expected results or objective-specific target despite of the efforts of the designated actors.

Objective 2.3 Ensure access to STI prevention and treatment to the groups at high risk

Expected Result Syphilis spread among the high risk groups decreased by 50% by 2016

Measurement result

In 2013, the country failed to meet the targets for access (and the utilization) of the key populations to STI prevention and treatment services (set for 2014):

	Target	Result
2.4.6 Percentage of sex workers with STI symptoms who received treatment	80%	28% ↓
2.4.7. Percentage of people who inject drugs with STI symptoms who received treatment	50%	27% ↓
2.4.8. Percentage of men who have sex with men with STI symptoms who received treatment	70%	66.7% ↓

As to halving syphilis spread among the key populations, according to IBBS 2013, syphilis prevalence was above the 5% threshold in all groups:

	Target	Result
2.4.1. Syphilis prevalence among people who inject drugs	<5%	8.4%↓
2.4.2. Syphilis prevalence among sex workers	<5%	23.6%↓
2.4.3. Syphilis prevalence among men who have sex with men	<5%	7.9%↓

Discussion of the achievement

Technical soundness of the M&E Plan

The stated objective and the expected result are consistent in terms of logical hierarchy – if the coverage through prevention and access to STI treatment is effective, the decline in syphilis spread in the target population could be an expected result. However, the objective 2.3 does not envisage any STI preventive intervention: they can be found under the objective 2.1 for SWs and the objective 2.2 for MSM, but were overlooked for PWID. Therefore, in terms of strategic design, it is unclear how syphilis could be controlled among PWID other than by diagnosis and treatment.

Interpretation of the achievements

Syphilis prevalence increased in all KPs from 6.6% (2010) to 8.4% (2013) in PWID, from 10.4% (2010) to 23.6% (2013) in SWs, and 5.7% (2010) to 7.9% in MSM.

Side factors as demand of services or behavior pattern cannot explain this upward trend of syphilis epidemic. As noted under the objectives 2.1. and 2.2, SWs and MSM reported high level of safe sex practices that are in consistent with such high syphilis prevalence, especially among SWs (23.6% prevalence when 90,6% SWs reported the use of condom last time with the client). Most likely, the respondents' answers on safe sex practices did not reflect the reality, and should be interpreted cautiously. 5% HIV prevalence among PWID sexual partners (not injecting drugs) in 2014 (Дерябина and Дооронбекова 2015) is one of the striking examples.

As to supply side, less than one third of PWID and SWs availed themselves for STI treatment, which ultimately contributes to its high prevalence and further transmission, paired with unsafe sexual practices (according to IBBS 2013, 81% of PWID use condoms with last commercial sexual partner, 65% with occasional partner, and only 40% with regular sexual partner).

It is noteworthy that the number of cases of syphilis has been increasing over the last 5 years from 878 in 2010 to 1,082 cases in 2014 according to the official routine statistics:

Figure 11: The total number of syphilis cases detected by gender and years

	2010	2011	2012	2013	2014
Number of cases – male	501	520	409	497	439
Number of cases - female	397	417	377	560	643
Total number of cases	**898**	**937**	**786**	**1,057**	**1,082**
Number of cases per 100,000 population	16.5	17.0	14.0	18.5	18.5

Considering a cyclic character of epidemics, it could be assumed that a new wave of syphilis spread emerges following the previous one in 90th.

Summary – objective 2.3

- ✓ The real progress in the implementation of the State Program under the objective 2.3 cannot be assessed as IBBS is the only source of information for all indicators in the M&E Plan under the Objecive 2.3.
- ✓ Upcoming IBBS is unlikely to detect substantial improvement in either syphilis prevalence among the KPs or in the access to STI treatment among PWID and SWs
- ✓ In overall, the implementation of objective 2.3 is unsatisfactory when measured against the expected results (syphilis prevalence) or objective specific targets (access to STI treatment) using the latest IBBS data available

Objective 2.4 Reducing the vulnerability of young people to HIV and STI

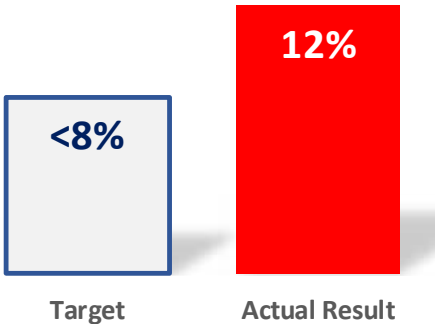
Expected Result Ensure access to HIV prevention programs of at least 60% of young men and women aged 15 to 24 years by 2016

Measurement result

According to routine statistics, HIV infection was confirmed in 0.03% of the pregnant women and in 0.007% of young women and men aged 15-24, against <1% target of the state program.

People aged 15-24 years constituted 12.1% of all HIV infection cases confirmed in 2014, against <8% target (for 2016), above the 9.5% baseline (2010).

The following indicator was used to assess the progress of delivery of the expected result (based Demographic Health Survey 2012 findings) (NSC, MOH and IFC International 2013):



	Target	Result
2.1.3. Percentage of young women and men aged 15–24 years who both correctly identify ways of preventing the sexual transmission of HIV and who reject the major misconceptions about HIV transmission (HIV-C-P1 | #658)	60%	23.4% ↓
2.1.5 Percentage of women and men aged 15–49 years who have had more than one sexual partner in the past 12 months reporting the use of a condom during their last sexual intercourse (HIV-O3 | #843)	90%	71.4% ↓

Discussion of the achievement

Technical soundness of the M&E Plan

An expected result of "reducing the vulnerability of young people to HIV and STI" should be a decline in HIV and STI spread in this specific age group, as opposed to the coverage with prevention as defined in the State Program. Therefore, the objective and the expected result, as defined in the State Program, are not logically consistent.

Out of 6 indicators proposed in the M&E Plan to measure the performance under this objective, indicator "2.1.6. Percentage of people aged 15-24 years among new cases of HIV infection" is most relevant to measure the outcome. The definition of another objective-specific indicator "2.1.1. Percentage of young women and men aged 15–24 years who are HIV infected (HIV-I2 | #844)" is ambivalent (refers to both young women and men), although the M&E Manual specifies that only the pregnant aged 15-24 years should be assessed through sentinel surveillance. Most importantly, this indicator does not seem relevant to the concentrated profile of the epidemic in the country, but can supplement the measurement by indicator 2.1.6 which better captures the inflow of young people in the cohort of PLHIV.

The M&E Plan does not include indicators to measure STI prevalence among young people despite the fact that the objective definition refers to STI as well.

Interpretation of the achievements

Findings of the DHS 2012 used by the study team for measuring the achievement of the expected result were even more outdated than IBBS 2013 findings used for other indicators. Therefore, the State Program achievements in this regard (knowledge of HIV transmission and safe sex practices among young people) can be measured after conducting next DHS or an equivalent sociological study.

The achievement against indicator 2.1.6 implies that the share of young people in new cases of HIV infection remained high in 2014 (1.5 times higher than planned). Such a result indicates that the implementation of 8 major interventions under the objective 2.4 were insufficient (even if each intervention was fully implemented) for preventing young people from risky behavior and from becoming vulnerable to HIV and STI.

According to administrative reports, the Ministry of Education and Science conducted 49 trainings on prevention of HIV infection and drug abuse for school teachers in 2014 (under the program "Healthy life style"). 10 guidelines on promoting healthy life style, and on prevention of HIV infection and drug abuse were prepared and published in 2014. HIV prevention topics were included in the curriculum of 55% schools and all professional (technical) colleges (Межведомственная рабочая группа МЗ КР 2015).

Summary

- ✓ The expected results of the objective 2.4 cannot be assessed due to the lack of information: the only source of information, DHS, is dated year 2012.
- ✓ The share of young people in new cases of HIV infection in 2014 remained 1.5 higher than planned, and the implementation of the state program is considered unsatisfactory for meeting the objective-specific target.

Strategy 3. Ensure access of PLHIV to treatment, care and support

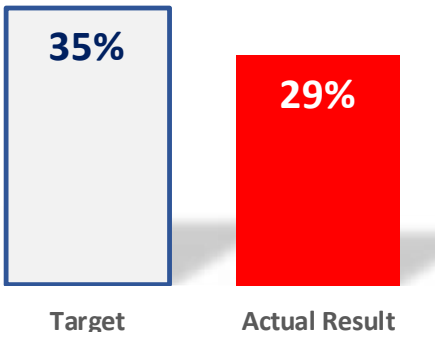
Objective 3.1 Ensure access to highly active antiretroviral therapy (HAART)

Expected Result By 2016, achieve the coverage with HAART of 80% in need, and retain 85% of them in the antiretroviral treatment more than 12 months

Measurement result

According to routine statistics, 29% of the eligible adults and children received antiretroviral therapy by the end of 2014 (indicator 3.1.1, HIV-T1 | #649), against 35% target set for 2014 (in the M&E Plan).

The study team measured the expected result for this objective using the following indicators from the M&E Plan:



	Target	Result
3.1.2. Percentage of adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy (HIV-I6 | #860)	85%	84.8% ↑
4.1.2. Percentage of people living with HIV who received CD4 testing in reporting year	90%	50.3%↓

Discussion of the achievement

Technical soundness of the M&E Plan

The study team found that for the first time a) the definitions of the objective and the expected result were logically consistent, and b) relevant indicators were suggested in the M&E Plan.

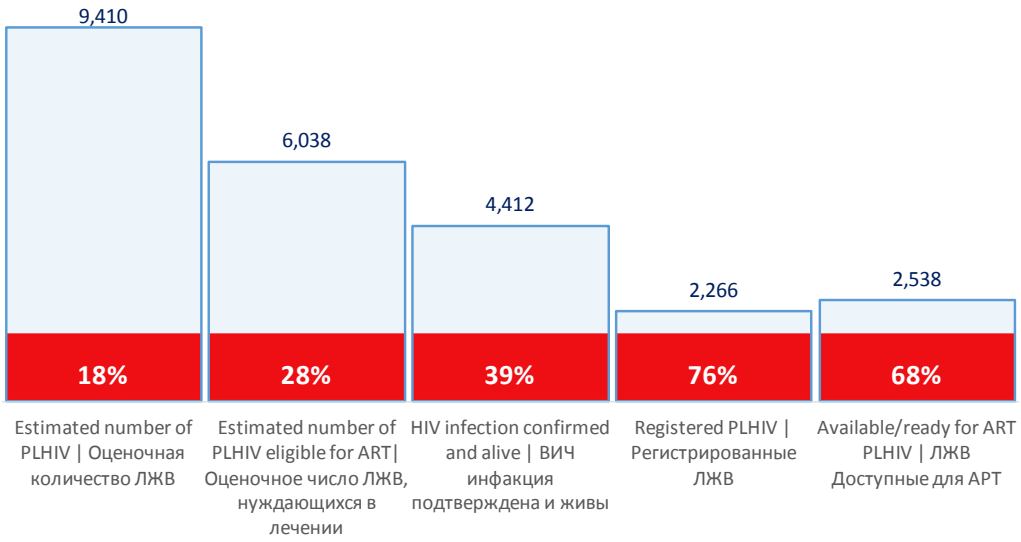
There was no indicator under this objective referring to the quality or adherence to ART. Therefore, the team used one of the indicators in M&E plan (4.1.2) to assess the achievement of the expected result. The study team acknowledged that testing for viral load was not available in 2011, and thus, a CD4 count related indicator was suggested for measuring adherence to or quality of ART.

The only technical inconsistency found it ART coverage targets between the expected result of 80% by 2016 according to the State Programme and the 35% in the M&E Plan (40% for 2016 and 35% for 2014).

Interpretation of the achievements

Figure 12 below shows four versions of ART coverage for 1,718 PLHIV on ART by the end of 2014 (based on routine statistics). The coverage was below the 80% target (as defined in the expected result) even for the registered, or for those who are ready for ART PLHIV (76% and 68% respectively).

Figure 12: Coverage with ART (in red) of 1,718 PLHIV on ART by PLHIV cohorts, as of 31.12.2014



The study team noted that the reported number of PLHIV was higher than the number of the registered PLHIV, but could not find an explanation for the figures.

The State Program could not reach the target despite a 55% year-to-year increase in the enrollment in ART in 2013, and the 60% increase in 2014 that resulted in 3.4 fold expansion of the PLHIV on ART during the period of beginning of 2012 (510) to the end of 2014 (1,718) as shown Figure 13 below:

Figure 13: Dynamics of patients on ART by years (all ages)

	2012	2013	2014	2015
On ART at the beginning of the reporting year	**510**	691	1,074	1,718
Started ART in the reporting year	**253**	**491**	**891**	**455**
Stopped ART in the reporting year	**72**	**108**	**313**	**185**
On ART by the end of the reporting year	**691**	**1,074**	**1,718**	**1,982**
Annual increment in %		*55%*	*60%*	*15%*

Although the number of PLHIV that started ART almost doubled in 2014 compared to the previous year, while the number of PLHIV that left the treatment tripled for the same period.

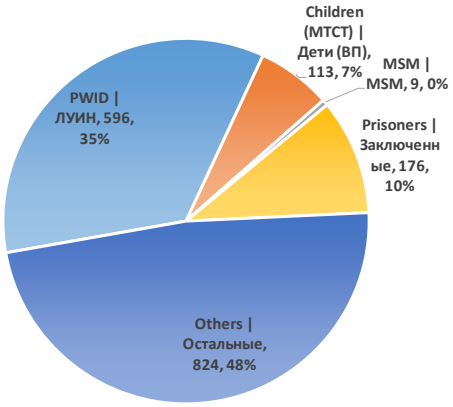
The trend in the enrollment of children in ART was upward, but not as steep as in case of adults (see Figure 14 below), resulting in the gradual decrease of the share of children in PLHIV on ART from 32% in 2012 to 22% in 2014 (and to 19% as of October 2015).

Figure 14: Dynamics of patients on ART by years (only children)[11]

	2012	2013	2014	2015
On ART at the beginning of the reporting year	171	233	284	375
Started ART in the reporting year	70	70	99	66
Stopped ART in the reporting year	19	8	24	16
On ART by the end of the reporting year	**222**	**295**	**375**	**383**
Annual increment in %		*33%*	*27%*	*2%*

PWID constituted one third of PLHIV on ART by the end of 2014 as shown in Figure 15 below. 176 PLHIV where on ART in prisons, or 10% of all PLHIV on ART and resulted in 36.1% the coverage of PLHIV in prisons with ART (488).

Figure 14.1: Description of PLHIV on ART by categories (2014)



The distribution of 1,718 PLHIV on ART in 2014 by gender, age groups, and geographical areas are presented Figure 60 on page 92.

11 According to NAC data (some data is incorrect). The evaluation team keeps the data as presented by NAC.

The adherence to ART was 82.6% in 2013 and 84.8% in 2014, according to the officially reported figures under the Global AIDS Response Progress Reporting (GARPR) framework (Межведомственная рабочая группа М3 КР 2015). As indicated in the implementation assessment matrix (see Figure 66 on page 98), 84.8% adherence for 2014 was calculated as 432 (on ART at least 12 months) divided by 512 (presumably the initial size of the cohort of PLHIV who started ART). However, the cohort size of 512 does not match any figure in the ART statistics table provided by RAC (see Figure 13 on page 38). If retention on ART in 2014 was measured for 2013 cohort of PLHIV that started ART (in 2013), the denominator should be 491, and the achievement would be 432 / 491 = 88% (not 84.8%). If, on the other hand, 432 PLHIV on ART at least 12 months belong to 2014 cohort, then the adherence would be 432 / 891 = 42%.

According to the electronic database of RAC, out of 479 PLHIV whose HIV infection was confirmed in 2013, 202 started ART (any time from 01.01.2013), while 121 remained on ART for at least 12 months,

which constitutes 59% out of those 202 PLHIV on ART. As to 2014 cohort of PLHIV, retention on ART was 39% (out of the 321 PHLIV who started ART any time after January 1st 2014, 125 PLHIV were on ART as of 31 October 2015). These calculation cannot be compared with the previous one because it uses different cohort (cohort of people with HIV infection confirmed either in a given year, as opposed to the cohort of PLHIV who started treatment in a given year). However, at least it shows that the retention of PLHIV on ART with recently detected HIV infection was far below the target of 85%.

Finally, the study team discussed an algorithm with the RAC specialists, which is used for calculating the number of PLHIV on ART for more than 12 months in the electronic database. RAC uses loose criteria to filter records of PHLIV who started ART, who did not stop (empty column for the date of stopping ART) or stopped after 12 months from the start of ART, and are alive (empty column for the date of death) or have died after 12 months of uninterrupted treatment. However, most often, the calculation is done manually using different sources of routine data recording and reporting.

The study team used registration form #4 as a primary source for measuring the result for indicator 4.1.2: 612 persons were registered for care with HIV infection confirmed in 2014, and 308 were tested for CD4 count (50.3% = 308 / 612), which is more than 44.8% (215 / 480) in 2013 –but still below the target.

According to the official report GARPR for 2014 ((Межведомственная рабочая группа М3 КР 2015), 327 persons with newly detected HIV infection were tested for CD4 count- the figure that differs from 308, recorded in registration forms #4.

The study team analyzed the RAC electronic database, and found completely different numbers. Out of 614 persons with HIV infection confirmed in 2014, 434 registered for care, and 400 received CD4 test. If the numbers are accurate, the coverage was 92% of those new cases of HIV infection who registered for care (and became available for CD4 count), or 65% out of all new cases of HIV confirmed as shown in Figure 15 below:

Figure 15: Coverage with testing for CD4 by years (electronic database of RAC)

	HIV confirmed	Registered for care	CD4 count		
			Persons tested	as % of registered	as % of HIV confirmed
2013	479	262	**245**	94%	51%
2014	614	434	**400**	92%	65%

The study decided to use calculations based on registration forms #4. In any case, the result remained far below 90% target, and the choice of data source could not affect the assessment of the performance against this indicator.

It is noteworthy, that out of 1,718 on ART in 2018, 1,111 PLHIV received testing for viral load (coverage with testing – 65%), while virus was suppressed in 269 cases (or 24% of those tested), and the viral load was below 1,000 copies per ml in 720 cases (or 65% of those tested).

Summary

- ✓ None of the targets under the objective 3.1 were achieved in 2014 except for one, namely, retention of PLHIV on ART more than 12 months.
- ✓ The team was able to measure the results for this objective based on routine statistics. However, the team faced difficulties in identification of appropriate figures that differ across official reports and sources. This does not affect the assessment of the results against all targets as long as the results were far below the target, except for retention on ART (indicator 4.1.2). The study team used the highest reported result which met the target, but has serious concerns about its validity.
- ✓ Overall, the implementation of the State Program was unsatisfactory if measured by reported results against the targets, despite the fact that retention on ART was at the target level. The team considers that high retention on ART has impact on the epidemic when a) coverage with ART is reasonable (not 29% as was in 2014) and b) there is a strong evidence suggesting that staying on ART is accompanied by adherence to the treatment (measured by CD4 count) and, most importantly, by results in viral suppression (not in a low as 24% in 2014).

Objective 3.2 Provide PLHIV a universal access to diagnosis and prevention of opportunistic infections, including tuberculosis and viral hepatitis C

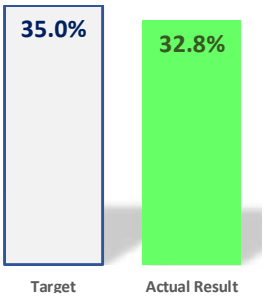
Expected Result Decrease TB related mortality among PLHIV by 20%-50% by 2016

Measurement result

The percentage of people who died of tuberculosis out of all who died in the reporting period due to HIV/AIDS-related causes was 32.8% (72 / 219), below the target of 35%.

Tuberculosis-related morbidity among people living with HIV was 284 (72 x 1000 / 2538) in 2014.

The study team used the following indicators to measure progress in the accomplishment of the objective:



	Target	Result
3.2.2. Percentage of adults and children enrolled in HIV care who had TB status assessed in the reporting period all adults and children enrolled in HIV care and seen for care in the reporting period (~TB/HIV-1 | #768)	60%	84.6% ↑
3.2.3.Percentage of estimated HIV-positive incident TB cases that received treatment for both TB and HIV (C-TB/HIV | #651)	60%	72.8% ↑[12]
3.2.4 Percentage of adults and children enrolled in HIV care and eligible for co-trimoxazole prophylaxis (according to national guidelines) currently receiving Cotrimoxazole prophylaxis (HIV-CS1 | #764)	60%	100% ↑

12 For 2013; now result was stated for 2014 in GAPRP 2014.

Discussion of the achievement

Technical soundness of the M&E Plan

The objective and the expected results are consistent logically: the definition of the two assumes that a universal access to diagnosis and prevention of TB, as well proper treatment, reduces TB related mortality among PLHIV.

The study team noted the following deficiencies of the M&E Plan:

- 'The M&E plan misses a key impact level indicator to measure the TB related mortality among PLHIV. Therefore, the study used the indicator "The number of PLHIV who died from TB per 1,000 PLHIV" in order to assess the expected 20%-50% decrease in TB-related mortality.
- There is no indicator related to diagnosis of VHC, even though it is mentioned in the definition of the objective 3.2.

Targets for indicator 3.2.4 were set far below the baseline of 88% with a gradual increase from 40% in 2012 to 80% in 2016.

Interpretation of the achievements

According to routine statistics, all targets set for objective-related indicators were met. Although the share of new HIV infection cases checked for TB increased dramatically from 22% in 2010 to 85% in 2013, there is still a room for improvement. Nevertheless, the TB detection varied between 3.4-5.9% as shown in Figure 16 below. It has to be noted that the highest detection (5.9%) was recorded in 2010 when only 22% of new HIV cases were checked for TB.

Figure 16: Description of TB and HIV co-infection by years

Years	TB cases	HIV cases	HIV/ TB	PLHIV among TB patients	TB patients among PLHIV[13]	Number of PLHIV died	Number of TB related death	TB related death among all cases of death of PLHIV
2009	6,358	687	**88**	1.4%	3.4%	**47**	25	53.2%
2010	6,595	570	**183**	2.8%	5.9%	**46**	31	67.4%
2011	6,666	599	**153**	2.3%	4.1%	**58**	41	70.7%
2012	5,930	724	**151**	2.5%	3.4%	**89**	69	77.5%
2013	7,209	480	**203**	2.8%	4.1%	**96**	70	72.9%
2014	6,390	648	**222**	3.5%	3.9%	**117**	75	64.1%
Total		3708	**1249**		21.7%	**1096**	407	37.1%

13 The data is calculated for cumulative number of PLHIV, as TB cases are registered as among new detected PLHIV, as those who are at the care connected with HIV.

New clinical protocol for "The treatment of TB and HIV co-infection among adults and adolescents" endorsed in the reporting period requests all PLHIV to be screened for TB. 91.2% of PLHIV registered for care were questioned about TB at the last visit in 2013. According to RAC presentation in November, out of 6,390 TB cases detected in 2014 (0r 97%), 6,198 TB patients were tested for HIV, and HIV prevalence was 3.58% (more than in SWs in 2013).

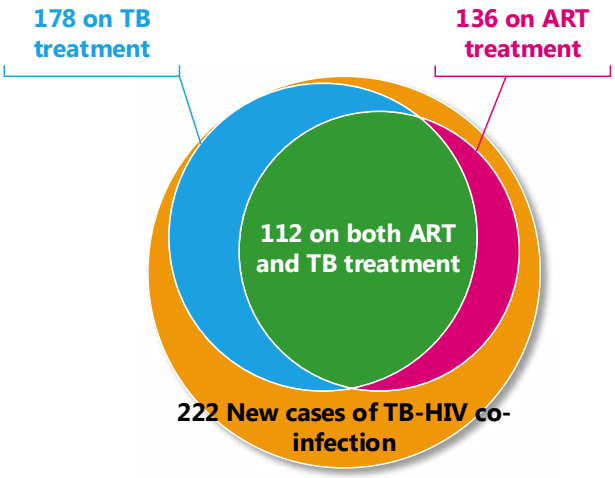
According to GARPR 2014, ART coverage of people with TB and HIV co-infection increased to 62% in 2014: out of 679 PLHIV with a diagnosed TB, 421 were on ART ((Межведомственная рабочая группа МЗ КР 2015).

UNDP GF report also refers to the same number of 421 patients with TB-HIV co-infection on ART in 2014 (up from 19 in 2009). Interestingly, UNPD GF report for 2014 claimed that:

- the treatment coverage of TB patients with TB-HIV co-infection was 92%, or 1,149 patients out of the cumulative number of 1,248[14] registered cases of TB-HIV coinfection.
- 110 PLHIV received both TB and ARV treatment in 2014 (compared to 112 stated in GARPR 2014)

14 UNDP GF counted 221 new cases of TB-HIV co-infection in 2014, therefore the cumulative number is 1,248 instead of 1,249 as counted by the RAC (222 new TB-HIV co-infection cases in 2014)

Figure 17: Coverage of patients with TB-HIV co-infection detected in 2014 with both ARV and TB treatment



The study team could not define which report (GARPR 2014 or UNDP GF 2014) was the primary source of these calculations (despite minor discrepancies in the numbers). Nevertheless, the team could not find any explanation of using cumulative numbers of people with TB-HIV co-infection to arrive to 92% coverage with both TB and ARV treatment. From a technical point of view, cumulating new TB cases (or TB-HIV co-infection cases) makes no sense as most of the patients with TB detected 3 or 4 years ago had been treated successfully a long time ago (hopefully), and cannot be counted for measuring "cumulative coverage" in 2014.[15]

If 222 new cases of TB-HIV co-infection were diagnosed in 2014, and 112 received both TB and ARV treatment, the coverage had to amount to 50.5% instead of 62% or 92% claimed in GARPR 2014 or UNDP GF reports, or to 72.8% used to measure the result.

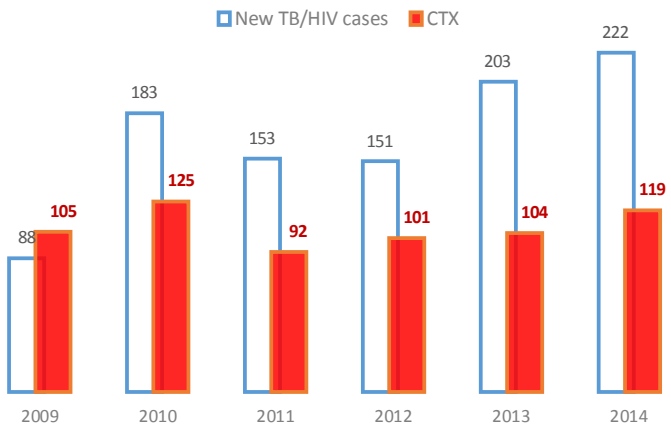
The observed use of so called cumulative numbers of TB-HIV co-infection or combined treatment can indicate the lack of technical qualification (which is very unlikely), or the deliberate data manipulation to show "success".

According to the same routine statistics of RAC, the coverage with both TB and ARV treatment was 78% in 2012 (118 / 151), but declined to 54.2% in 2013 (110 / 203).

15 The study team noted that "cumulation" approach is popular – it was used with regards to pregnant women with HIV-infection to estimate "cumulative coverage" with PMTCT, another nonsense from a technical point of view.

Although the country reported that almost all new cases of TB and HIV were covered with co-trimoxazole (indicator 3.2.4) (and the same was stated in UNDP GF report for 2014 (GFATM, UNDP 2015), the recent statistical report of the RAC shows a different picture:

Figure 18: The number of new TB and HIV co-infection case and the number of patients with TB-HIV co-infection receiving co-trimoxazole (CTX)



If that is true, the coverage declined from 68% in 2010 to 54% in 2014 (ignoring the strange phenomena in 2009, when the number of patients who received CTX exceeded the total number of patients.

Despite the abovementioned achievements in access to diagnosis and treatment of TB and HIV co-infection, TB related death among PLHIV remains high. Formally, the target for the indicator in the M&E plan was achieved, but the study team considers this indicator as inappropriate.

The TB related mortality per 1,000 "accessible" for ART PLHIV was 284 in 2014 (72 TB related death of PLHIV in 2014 / 2,583 PHLIV available for ART in 2014 x 1,000). When TB related mortality rate was calculated per 1000 of the cumulative number of HIV cases, it increased from 9.76 in 2010 to 70.62 in 2014.

Summary – Objective 3.2

- ✓ Targets set for objective-specific indicators were met, although the reported result for indicator 3.2.3 still has to be verified. The targets set for the diagnosis and treatment were low, and there is a room for the improvement toward a universal access to the diagnosis and prevention of co-infections.
- ✓ Formally, the expected result-related target was met, but the study team believes that neither the indicator nor the stated target were relevant to reflecting the expected 20%-50% decline in TB related mortality. TB related mortality indicator used by the team shows that the TB related mortality has increased, and remains high.
- ✓ Overall, the implementation of the State Program was satisfactory in terms of meeting the stated targets. However, the study team doubts that it would be sufficient to have an impact on TB and HIV co-infection and TB-related mortality among PLHIV.

Objective 3.3 Provide HIV-positive pregnant women with a complex of services for the prevention of mother-to-child transmission (PMTCT)

Expected Result Vertical transmission of HIV does not exceed 3% of children born to HIV-positive women by 2016.

Measurement result

Two children with HIV infection were born to 59 HIV-infected women in 2013, which accounts to 3.4% that was below 4% target set for 2014 (but still above the target for 2016).

The study team used the following indicators to measure progress in the accomplishment of the objective:

	Target	Result
3.3.1. Percentage of pregnant women who were tested for HIV and who know their results (#467)	80%	94.6% ↑
3.3.2. Percentage of HIV-positive pregnant women who received antiretroviral tratment to reduce the risk of mother-to-child transmission (HIV-P13 | #856 #528)	50%	96.1% ↑
3.3.3. Percentage of infants born to HIV-infected women who are provided with antiretrovirals to reduce the risk of HIV transmission during breastfeeding (№882)	50%	96.5% ↑

Discussion of the achievement

Technical soundness of the M&E Plan

The objective and the expected results are consistent and logically connected: the connection assumes that a complex of PMTCT services ensures keeping vertical transmission equal to or below 3%.

The team found that the indicators suggested in the M&P plan were instrumental to assessing the performance both in relation to the objective and to the expected result.

It is unclear why the targets for the indicators 3.3.2 and 3.3.3 in the M&E Plan were set so low.

Interpretation of the achievements

The coverage of pregnant women with HIV testing was 94.5% according to the statistics from Republic Medical Information Center (RMIC), where data from 3 sources, namely, pregnancy medical card, PMTCT ledger, and laboratory register, are compiled. According to the source, out of the 189,422 pregnant women tested for HIV in 2014, 179,131 pregnant women were tested for HIV and knew the results. The study team noted that the number of pregnant women who tested for HIV reported in GARPR 2014 differed, and amounted to 195,845 (189,422 were tested with ELISA, and 6,423 with rapid tests). Another report of RAC stated that out of 226,208 pregnant women registered in 2014, 189,845 were tested, yielding the coverage of 86.5% (compared to 93.2% in 2012, and to 92.7% in 2013).

According to the official report ((Межведомственная рабочая групппа МЗ КР 2015), the percentage of children with HIV infection born to HIV-infected women varied between 3.6% in 2011 to 3.5% in 2014 (up from 2.9% in 2013). It has to be stressed that the result for 2014 reflects the situation of 2012 – while 89 HIV-infected women delivered in 2012, only 59 children were tested for HIV (the status of remaining 30 children is unknown), out of which 2 were with HIV infection. Therefore, the result reported in 2014 should be interpreted carefully – if the remaining 30 children had been tested for HIV, the result would have been different. Nevertheless, inability to test 30 children born to HIV-infected women raises a lot of questions.

PCR method was introduced for early detection of HIV in children born to HIV-infected women. However, only 48% of children born to HIV-infected women were tested at the age of 8 weeks. The low coverage with early HIV diagnosis can be explained by the refusal to test the newborn by some parents, as well as by inadequate efforts of medical service providers, and insufficient supervision by RAC.

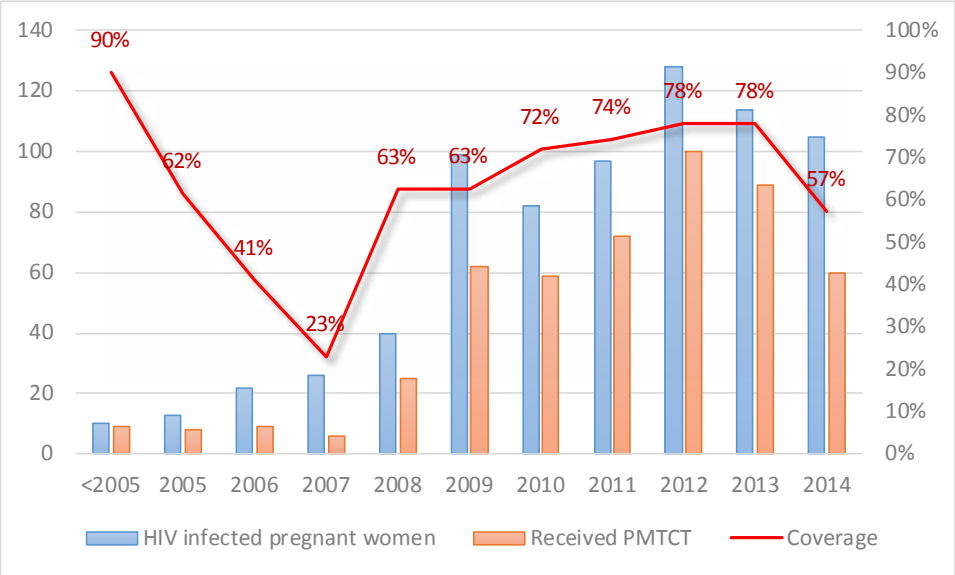
One child was born with HIV infection to 86 HIV-infected mothers receiving PMTCT services in 2013 (vertical transmission – 1.2%).

According to the GARPR 2014, in 2014 114 children were born to HIV-infected women, out of which only 110 received PMTCT services (or 96.5%). This slightly differs from the numbers that the study team used to calculate the result for indicator 3.3.2: out of 117 HIV-infected pregnant women, 114 were reached with PMTCT. The same report stated that HIV infection was confirmed in 134 pregnant women in 2014 (79 new and 55 previously detected cases), and presumably, only 114 out 134 HIV-infected women continued pregnancy.

According to RAC database, 110 HIV-infected women delivered in 2013 – there was one case of stillbirth. Out of 109 live births, 6 infants died before reaching the age of 18 months. Out of 103 surviving infants (born to HIV-infected women), only 65 children (63.1%) were tested, and HIV infection was detected in 3 children meaning that vertical transmission amounted to 4.62%. The number is much higher than the measured result, and the target for 2014.

Finally, the team used RAC reported statistics for calculating PMTCT coverage. However, one of the statistical reports circulated by RAC shows a different coverage trend in the coverage with PMTCT services (see Figure 19 on page 46).

Figure 19: The number of HIV infected pregnant women and the number of them reached by PMTCT by years (RAC statistics)



Summary – objective 3.3

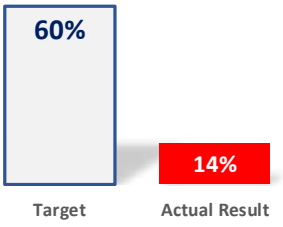
- ✓ Formally, all targets related to the access to PMTCT or vertical transmission were met.
- ✓ The study team is concerned that there were discrepancies in the official reports even for such a simple indicator as the coverage of pregnant women with HIV testing. It is unclear how vertical transmission is calculated and reported, or whether the same methodology had been applied consistently.
- ✓ Regardless of the ambiguity with the methodology for the measurement of vertical transmission, the noted high leakages of surviving infants born to HIV-infected women from the point of HIV testing to before reaching the age of 18 months, combined with a low level of early diagnosis of HIV with PCR, raises concerns about the effectiveness and efficiency of the implementation of the State Program.
- ✓ Overall, the implementation of the State Program is satisfactory in terms of meeting stated targets both for the objective and expected result. However, the measured results might be different if the abovementioned methodological issues are clarified, and inconsistencies in reported statistics are sorted out.

Objective 3.4 Provide access of HIV-positive men, women, children and their family members to care and social support

Expected Result More than 90% of HIV-positive women and children are covered with care and social support programs by 2016.

Measurement result

Out of 1,039 PLHIV in need of medical services, 142 were covered with palliative care and support, or 13.6% against the target of 60%.



The study team measured the achievement of the expected result using the following indicators:

	Target	Result
3.1.4. Percentage of people living with HIV (adults and children) entitled for social support (pension and social allowances) and receiving in the reporting period (HIV-CS3 | #765)	60%	91.6% ↑ 67% ↑

Discussion of the achievement

Technical soundness of the M&E Plan

The definitions of the objective 3.2 and the expected result are consistent. However, the expected result is formulated as an indicator of the objective rather than an outcome which supposed to be one level up in a logical hierarchy if the objective is accomplished (for instance, improved self-perceived wellbeing (monetary or non-monetary) or quality of live, reduced deprivation, improved adherence to care and treatment, and etc.).

Interpretation of the achievements

The coverage with cash social benefits was substantially higher than with palliative care. 432 adults (out of the entitled 475) and 119 children (out of the entitled 176) received cash benefits. Presumably, social cash benefits contributed to the adherence to ART and care. However, the study team could not find the evidence to substantiate the assumption.

At the same time, only 142 PLHIV received palliative care out of 1,039 in need of medical services. The coverage (13.6%) in 2014 was below the baseline of 15% in 2010. Two hospices in Bishkek and Osh for serving PLHIV in terminal stage of the disease were closed due to ineffectiveness:

- The hospices were established at narcological clinics in Bishkek and Osh, and provided palliative care to 27 PLHIV in 2010;
- As reported by RAC to the Government in 2015, there was no demand for the services in these two hospices considering that the Institute of Narcology started the provision of the services in accordance with the strategy on palliative care;
- The study team did not find a quantified description of the utilization of palliative care in the Institute of Narcology, or any attempt of understanding the low utilization of palliative care in the two original hospices (27 patients for two facilities in 2010 could be considered as suboptimal load, but the study team cannot assess whether or not it was far below the projected capacity of these 2 facilities).

Summary

- ✓ The achievement for the objective (coverage with palliative care of PLHIV in need) was far below the target, while the coverage with cash benefits was above the targets.
- ✓ The implementation of the State Program was only partially satisfactory due to the failure to provide access to adequate care to PLHIV in terminal stage of the illness.

Objective 3.5 Develop potential of PLHIV community in ensuring universal access to services

Expected Result 60% of newly identified HIV-positive have access to care and support provided by PHLIV community

Measurement result

Representatives of the PLHIV community reached 1,710 PLHIV with the support (out of the total of 2,266 PLHIV linked to care), which constitutes 75.5%, far above the target.

Discussion of the achievement

Technical soundness of the M&E Plan

The expected result reflects the ability of the PLHIV community to support it members after capacity building; therefore, the objective and the expected result are logically linked and consistent.

The only indicator in the M&E Plan, namely, 3.4.1, suggested to measure the result "Percentage of people living with HIV who receive at least one service (treatment adherence, peer counselling) provided by CSO/NGO representing people living with HIV community". The indicator and the the expected result's definition are inconsistent as the latter refers to the coverage of newly identified HIV-infected people and not all of the PLHIV linked to care.

Interpretation of the achievements

The coverage of PLHIV with at least one service (treatment adherence, peer consulting) provided by the PLHIV community increased dramatically from 17.1% in 2010 to 75.5%2014, reaching 1,710 PLHIV out of 2,266 PLHIV linked to care (including 297 PLHIV in prisons).

The relationship between 1,710 PLHIV reached by the support and 1,1718 on ART was unclear. The team cannot assess to what extent the support services contributed to the enrollment in or adherence to the treatment. Considering the fact that the services provided by the PLHIV communities included counselling for adherence to ART, paired with the incentives (for 85% adherence to ART), it definitely played a positive role even if it cannot be quantified. At the same time, there is still a room for improving the care and support as only a half of PLHIV (2,266 out of 4,412 PLHIV being alive) has been linked to care.

A wide range of challenges still exist related to the capacity of the community to contribute to the policy making, as well as to get sustainable financial support from domestic sources, identified by WHO in 2011. Despite the existence of encouraging experience of fruitful cooperation of the PLHIV communities with state and non-governmental actors in areas with high concentration of PLHIV (Bishkek and Osh), the level of integration of NGOs representing the communities into the program implementation is not effective as noted by numerous key informants.

Summary – objective 3.5

- ✓ The implementation of the State Program under this objective was satisfactory. However, the team admits that the potential of PLHIV community and related NGOs has not been fully exploited.

Objective 3.6 Promote ("form") tolerance toward PHLIV and high risk groups

Expected Result Decrease HIV- related stigma and discrimination in the society, so that above 60% of socially important cycles demonstrate tolerance to PLHIV

Measurement result

Only 2.9% of the respondents expressed accepting attitudes toward people living with HIV in 2012 (indicator 3.4.2), against 60% target for 2013.

Discussion of the achievement

Technical soundness of the M&E Plan

The objective was formulated as an action, not as a statement of a result. However, the expected result and the suggested indicator are clear in terms of what was planned to achieve.

Interpretation of the achievements

The only study that measured the level of tolerance in general population toward people living with HIV was DHS 2012. Therefore, the study team cannot assess the progress made by the State Program in this regard.

The study team noted that GARPR 2014 refers to 57.2% (2013) as a response on the question in DHS 2012: "Would you buy fresh vegetables from a seller knowing that the person is HIV infected?" (presumably, meaning the percentage that answered "Yes").

Although the national legislation does not allow stigmatization and discrimination in relation to HIV infection (subject to administrative and criminal punishment), and almost all programs and interventions include the issues to address stigma and discrimination, tolerance toward PLHIV is quite low (as expressed by the numerous key informants).

Summary

- ✓ The study team cannot assess the implementation of the State Program due to the lack of information.
- ✓ The study team believes that the level of tolerance toward PLHIV will be higher than in 2010, but is unlikely to reach the 60% target.

Strategy 4. Strengthening and ensuring sustainability of the healthcare system in the response to HIV epidemic

Objective 4.1 Integration of HIV related quality services into healthcare at all levels

Expected Result 60% of PLHIV will receive quality medical services at the primary healthcare level

Measurement result

Percentage of health facilities providing counseling and testing was as high as 98.4% - 191 out of 194 health facilities, far above the target (indicator 4.1.1).

Discussion of the achievement

Technical soundness of the M&E Plan

The objective and the expected results are consistent and logically linked. However, the study team found 2 indicators proposed in the M&E Plan for measuring the expected results which are completely irrelevant:

- Indicator 4.1.1 "Percentage of health facility providing counseling and testing" (equivalent to "Number of service outlets providing counseling and testing according to national or international standards (#429)") is able to show integration of HIV related service (such as testing and counselling). However, unless "counselling" is clearly defined as a service, the availability of testing for HIV is insufficient to count the number of health care facilities;
- Indicator 4.1.2 (share of CD4 testing among new HIV infection cases) implies neither integration of HIV related services into healthcare (because the indicator considers CD4 testing at regional AIDS centers), nor the coverage with "quality services at primary healthcare level."

Interpretation of the achievements

In general, PLHIV can receive HIV related services in primary healthcare facilities (such as Family Medicine Centers or Groups of Family Physicians), including testing for HIV and counselling. However, only 76 medical organizations provide ART (up from 66 in 2011) including 43

serving HIV-infected children as stated in GAPRP 2014 (Межведомственная рабочая групппа М3 КР 2015).

According to the National Statistics Committee, the number of hospitals in 2014 was 182, while the number of clinics was 172, including 65 Family Medicine Centers (FMC), and 18 independent Groups of Family Physicians (GFP) (NSC KR 2015). Therefore, the total number of healthcare facilities providing primary and secondary care equaled to 354 in 2014.

According to the data entry form for GAPRP 2014, 233 healthcare facilities provided HIV testing and counselling services (191 public institutions, 20 NGOs, and 22 private healthcare providers). If the information is accurate, the result for the indicator 4.1.1 should be 233 / 354 = 65.2%in case of all organizations being counted, or should equal 54% (191/354) if only public healthcare providers are considered; In any case, both results are above the target of 50%.

As the study team assumed under the objective 1.1 (analyzing the codes used by the AIDS centers for facility registration), the majority of PWID with HIV-infection who were confirmed and registered for care were referred to the AIDS centers from general healthcare facilities.

The study team noted that all of the interviewed PWID a well as some of the key informants believe that services are more user friendly in specialized clinics such as AIDS centers, compared to general healthcare facilities were PLHI- especially PWID- are exposed to stigma (coming mostly from nurses and auxiliary medical staff) and are often discriminated. The PWID interviewed in Osh preferred to receive all services in AIDS Centers rather than in general healthcare facilities. They also feel more secure in AIDS Center, because PHC facility they are assigned to is located in the community, and confidentiality is not guaranteed.

15 multidisciplinary teams were established in the reporting period comprising healthcare professionals, and the representatives of PWID and PLHIV. These teams contribute to better adherence to ART, support, and care by peers.

Summary

- ✓ The implementation of the State Program under this objective was satisfactory if measured by the result against objective-specific indicator target.
- ✓ At the same time, the study team could not assess the achievement of the expected result due to the lack of a relevant indicator in the M&E, or the absence of information.

Objective 4.2 Prevent nosocomial transmission of HIV

Expected Result Nosocomial transmission of HIV is eliminated by 2016

Measurement result

Out of 37 children with confirmed HIV infection in 2014, in 14 cases HIV infection was transmitted in medical facilities, against zero target of the State Program.

Discussion of the achievement

Technical soundness of the M&E Plan

The proposed indicator (4.2.1) is inappropriate for measuring either the objective, or the expected result in the reporting period. As defined in the M&E Manual, the indicator is calculated as a number of HIV infection cases with intra-hospital transmission in the reporting period. Therefore, the indicator does not capture HIV transmission within medical facilities in the reporting period. Thus, even if HIV transmission in medical facilities has not occurred since 2012, in 2016 new HIV cases can be detected with HIV transmission which in fact happened before 2012, and the proposed indicator will count such cases as new cases of HIV nosocomial transmission.

Interpretation of the achievements

According to RAC, all cases of intra-hospital HIV infection among children are linked to HIV outbreak among children in Osh in 2007. All 14 HIV-infected children diagnosed in 2014 with intra-hospital HIV transmission were born between 1998 and 2006.

However, out of 37 new cases of HIV infection among children in 2014, in 9 cases the transmission route still has been undefined. 3 children out of the 9 were born in 2010, 2013, and 2014 (to HIV infection free women). Therefore their HIV-infection cannot be linked to 2007 outbreak in Osh, or to vertical transmission. Thus, instead of admitting that intra-hospital transmission (even sporadic) still happens, these 3 children remain with undefined route of transmission.

Summary – objective 4.1

- ✓ The target for this objective was not met, although the indicator is not appropriate for assessing the achievement. The detection of 14 new cases of HIV infection among children with instar-hospital infection in 2014 does not imply that the transmission occurred in 2014. The RAC associates these new cases detected with the 2007 outbreak in Osh (although cannot be proved).
- ✓ If not for the 9 children with HIV infection confirmed in 2014 (and 3 in 2013) with undefined transmission route (out of which 3 were born after 2007), the implementation of the State Strategy would have been considered satisfactory (="no nosocomial transmission of HIV since 2007"). Even though the study team cannot prove that in all of the 9 cases the children were infected in medical facilities, their undefined transmission route status raises serious concerns about the achievement of the objective.

Objective 4.3 Development of healthcare workforce capacity

Expected Result 80% of healthcare professionals engaged in HIV-related service provision and infection control at all levels of healthcare system are trained and receive specific certificate by 2016

Measurement result

15.5% of healthcare professionals were trained, and received specific certificate against the 60% target.

Discussion of the achievement

Technical soundness of the M&E Plan

The indicator proposed in the M&E Plan is inadequate because it cannot measure the achievement. It captures only 1-year period, while the medical doctors are trained under certified programs once in every five years. Thus, the 60% coverage of medical doctors with certified training in any given year is unachievable.

Interpretation of the achievements

1,576 specialists were trained in HIV-related issues with the support of international donors in additional to professional training certification course which all healthcare professionals are oblied to attend every 5 years. Additionally, all certified program in Kyrgyzstan include 8-hour training module on HIV infection.

Summary – objective 4.3

- ✓ Although the target was not met (due to irrelevancy of the indicator), the implementation of the State Program was satisfactory under this objective.

Strategy 5. Improvement of strategic coordination and management and public policy administration

Objective 5.1 Improvement of strategic coordination and public policy administration

Expected Result Three Ones principles are operationalized and sustainable: one state program, one national coordination system and one national monitoring and evaluation system by 2016

Measurement result

The HIV Policy Index was 0.8, the same as the target (but lower than 0.9 in 2012).

Discussion of the achievement

Interpretation of the achievements

The State Program under the review, which was approved by the Government of Kyrgyz Republic (order 867, 29 December 2012, is the only policy instrument for the implementation of the national response). Ministries, other state agencies, and the local governments developed plans of action for implementation of the State Program.

The legislation has been improving in the reporting period:

- The Government of KR approved Anti-Drug program (order #54, 27.01.2014) that includes harm reduction programs;
- The Ministry of Health issued "Recommendations on organizing a universal access of PWID to HIV prevention, treatment and care in the Kyrgyz Republic" (order #532, 22.09.14)", "Standards for the implementation of harm reduction programs and services for PWID" (order #482, 22.08.14), which established a more conducive environment for PWID coverage with services;
- The Ministry of Health changed the rules for registration of the key populations with primary healthcare provider.

The only coordination body – "Country Coordination Mechanism" continued functioning in the reporting period. It comprised 23 members (and the same number of alternates). The CCM meetings were mostly focused on the oversight of GF supported grants. However, as reported by respondents, efforts have been made to improve the structure and functionality of the CCM for better coordination of programs in the areas of HIV and tuberculosis.

Despite the high political activity and support for HIV programs, the country faced several challenges due to some initiatives at the Parliament and Government levels against the key populations. Thanks to strong advocacy efforts of different stakeholders, the recent bill on introducing administrative punishment for sex work was withdrawn. The Parliament began review of the bill on responsibility for promoting positive attitude towards non-traditional sexual orientation ("anti-gay bill"). If passed, the bill can make reaching MSM, which face the fastest growing HIV epidemic, even more difficult.

Many stakeholders interviewed during the review are not satisfied with the CCM performance due to several reasons including a focus on GF-supported project rather than a full range of interventions/ programs, and the lack of legal power (for decision-making or execution), which implies that it remains a consultative body.

Summary

- ✓ The country coordination mechanism is in place, but did not meet the expectations of a wide range of stakeholders, including the key populations.
- ✓ The legislation remains to be conducive to the national response on the epidemic, but recent legislative initiatives are alarming.
- ✓ The implementation of the State Program was satisfactory under this objective as measured by the HIV Policy Index. However, the study team subscribes to the concerns of a wide range of stakeholders on the effectiveness of coordination, administration, and M&E.

Objective 5.2 Ensure sustainable financing of the State Program

Expected Result Share of the government's contribution in the financing of the Sate program is at least 20% by 2016.

Measurement result

The share of "domestic AIDS spending" was 40.8% above the target of 15% for 2014, and even for the target for 2016.

Discussion of the achievement

The government general health expenditure was 277.6 million US$ in 2012 and 284.6 million US$ in 2013 (according to the WHO GHED). It constituted 60% of the total health expenditure, and 12-13% of the general government expenditure. External sources of healthcare financing amounted to 56 million US$ in 2012, and to 42 million US$ in 2013 (or 12% and 8.7% of total health expenditures respectively),

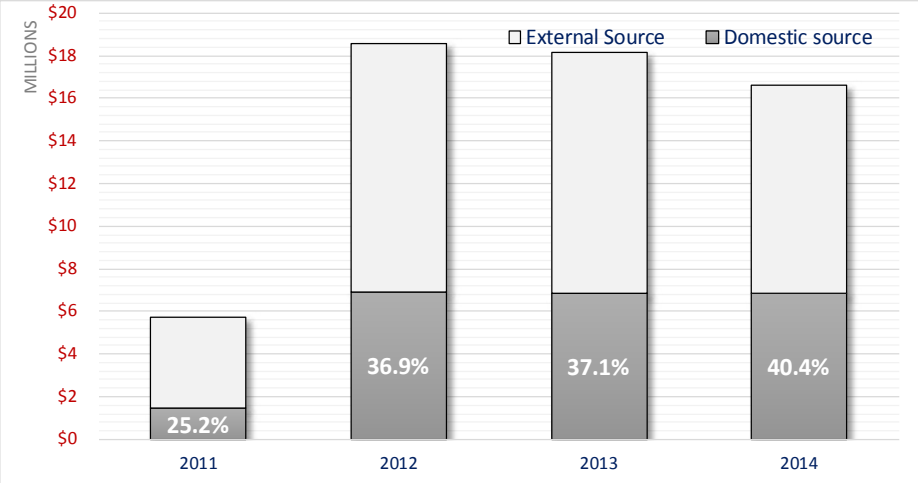
According to the State Program, the funding gap was 16% of the total resource requirements, and the financing from the state budget accounted for 16% of the total financing, and to 13% of the total resource requirements as shown in Figure 20 below:

Figure 20: Summary of the State Program resource requirements and financing (in US$)

	2012	2013	2014	2015	2016	Total
Total resourse requirements	**20,362,585**	**20,058,988**	**18,129,282**	**19,004,442**	**18,986,918**	**96,542,215**
Financing by sources						
State budget	2,542,522	2,542,522	2,542,522	2,542,522	2,542,522	**12,712,610**
External sources (preliminary figures)	14,813,855	13,673,545	13,775,735	13,035,265	13,035,265	**68,333,665**
Total financing	**17,356,377**	**16,216,067**	**16,318,257**	**15,577,787**	**15,577,787**	**81,046,275**
Funding gap	**3,006,208**	**3,842,921**	**1,811,025**	**3,426,655**	**3,409,131**	**15,495,940**
	15%	**19%**	**10%**	**18%**	**18%**	**16%**
Share of the financing from State Budget in TRR	12%	13%	14%	13%	13%	13%
Share of State Budget in total financing	15%	16%	16%	16%	16%	16%

According to the GARPR 2014, the government's share in the financing of the national response to the epidemic increased gradually from 36.9% in 2012 to 40.4% in 2014 as shown in Figure 21 below. A 5-fold increase in government expenditures financing occurred in 2013 from 1.4 in 2011 to 6.9 million US$ in 2013. In 2013, the total financing (18.8 million US$) exceeded the financing forecast of 16.2 million US$ (filling the funding gap by 50%).

Figure 21: Financing of the State Program by years and sources (GARPR)

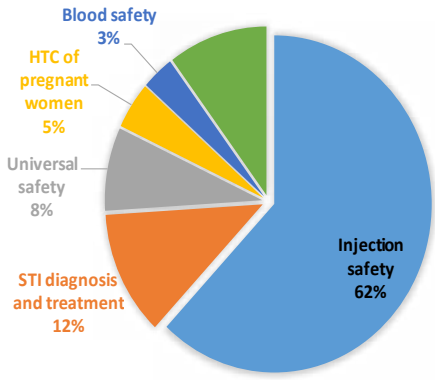


The study team noted that the government spent 1.5-1.6 times more than planned on the State Program in 2012-2013. This spending constituted 1.37% and 1.43% of the general government expenditures on health in 2012 and 2013 respectively, which is twice more compared to 0.61% in 2011. – National AIDS Spending Assessment (NASA) for 2012-2013 provided higher estimates of total expenditures on AIDS with higher share of the financing from domestic sources ((МЗ КР, ЮНЭЙДС 2014):

Figure 22: Comparison of planned and historical expenditures on the national response by sources, total for 2012-2013

	Budgeted expenditures	Financing forecasts		GARPR 2014		NASA 2014	
Domestic source		5,085,044	15%	$13,787,918	38%	$13,787,918	35%
External Source		28,487,400	85%	$22,918,217	62%	$25,440,493	64%
Private						$555,328	1%
Total	40,421,573	33,572,444	100%	$36,706,135	100%	$39,783,739	100%

Figure 23: Structure of government's spending on prevention (2012-2013)

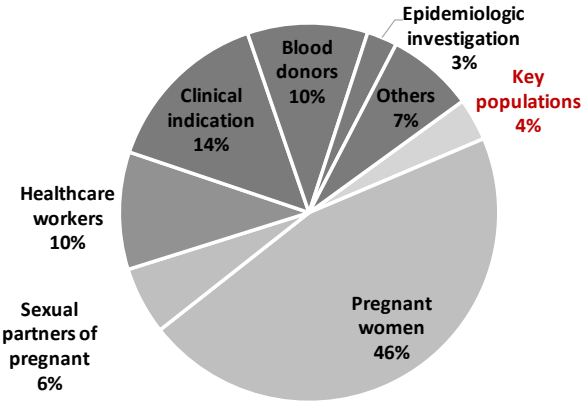


Source: (МЗ КР, ЮНЭЙДС 2014)

The total expenditures for 2012-3013 reported in GARPR were higher than the projections of the financing in the State Program, while NASA estimates were even higher and show that the budgeted resource requirements were almost met (39.8 million US$ expenditures against budgeted 40.4 million in 2012-2013). According to NASA:

- The government's share in total financing of the national response to the epidemic was 35%;
- 29% of the resources were allocated to NGOs compared to 66% spent by the public service providers or institutions.

Figure 24: Structure of the government's expenditure on HIV testing by target groups, 2014



A detailed structure of the expenditures by types of interventions, financing sources, and years (2012 – 2013) is provided in Figure 65 on page 97. The structure shows that the government financed 50.9% and 51.5% of the prevention programs in 2012 and 2013 respectively compared to 48.1% and 45.4% external financing. More detailed analysis of the expenditure structure financed by the government revealed that most of the public funds were spent on a) injection safety (62%), b) prevention, diagnosis, and treatment of STIs (12%), c) universal safety measures (8%), d) HIV testing and counselling of pregnant women under PMTCT(4.5%), and e) blood safety (3.2%).

According tothe presentation of RAC at the health summit in November 2015, the government spent 45.5 million KGS on HIV testing in 2014 (~ 940,000 US$):

- 46% of this funds were spent on pregnant women, and another 6% on their sexual partners (up to 484,000 US$);
- The key populations accounted for the smallest share of the government spending on HIV testing – 4% (see Figure 24 above).

Summary

- ✓ The share of the government financing of the national response has been increasing in the reporting period, and exceeded the financing projections of the State Program.
- ✓ The allocative efficiency of the government spending is questionable and has been offset by funding from external sources, particularly in relation to prevention.
- ✓ The implementation of the State Program is satisfactory when measured by the result against the target.

Objective 5.3 Improvement of the system of monitoring and evaluation and strategic information

Expected Result One M&E system is implemented and functions at the national and local levels

Measurement result

The study team cannot collect the information to measure the result measured by the following indicator "Percentage of implemented activities of the National M&E work plan".

One of the key activities envisaged by the M&E Plan, namely, an integrated bio and behavioral-surveillance study, was not conducted as required by the plan ("once in every two years"), which is sufficient to outweigh the implementation of the rest of the activities.

Discussion of the achievement

Technical soundness of the M&E Plan

The objective and the expected result are logically linked and consistent, despite the fact that the criteria for assessing whether or not a monitoring and evaluation system can be considered "implemented" or "functioning" are not defined clearly.

The proposed indicator is irrelevant for measuring the result:

a) It is a process indicator – it counts the quantity of implemented activities (as a % of a total number of the activities in the M&E work plan) which does not necessary mean that "one M&E system" functions;

b) An implied purpose of any M&E and "strategic information" is to supply evidence for decision-making; the indicator cannot capture if outputs of a functioning "One M&E system" are used for decision-making.

Interpretation of the achievements

Perceptions of "an implemented and functional M&E system" can vary among stakeholders unless they are clearly defined. The State Program (section 2.4 "Monitoring and Evaluation of the program") refers to the regulation on the M&E system which is comprised of 12 components, but lists only seven, including the set of M&E procedures («регламент» in Russian), epidemiologic (including bio- and behavioral-surveillance studies), monitoring of utilization of funds, reviews of the State Program, an information system for collection, storage, analysis, and distribution of information.

If the Manual of the Indicators of the M&E is equivalent to "the set of M&E procedures", then it provides a comprehensive definition of each indicator (so called "indicator passports"). However, it does not describe data flows and/or business processes that are necessary a M&E system to function.

As to integrated bio and sero-surveillance studies, the only study was conducted in 2013 as opposed to the two planned studies in 2012 and 2014.

The study team cannot assess whether or not the existing information management practices meet the requirements of a single system that collects, stores, analyses, and distributes the information as no technical report on the review of the information system or practices was available. While looking for information to measure results, the study team was exposed to two separate information management systems. At a glance, the team made the following observations:

- Information management systems (electronic databases and interfaces to interact with the databases) are physically and functionally disconnected entities, each serving its specific purpose:
  - MIS physically located in UNDP implemented GF project office contains detailed information on prevention services funded through the GF grant. Each beneficiary has a unique identification code (UIC) which excludes double-counting of beneficiaries, even if the same beneficiary was reached by two or more service providers. No contact information of the beneficiaries is provided. The primary purpose of the database seems to be managerial: it serves the registration and analysis of programmatic inputs and outputs, and generates performance reports.
  - Information management system is located in RAC, and contains detailed epidemiological and medical information on PLHIV registered for care (hereinafter referred to as "PLHIV database"). Full contact details for each person living with HIV is recorded. However, if the person was reached by prevention programs in the past and had UIC, no record is made. The primary purpose of this system is epidemiologic surveillance with a potential to be used for clinical (case) management.

- RAC provided the review team with a raw dataset (without personal information) from PLHIV database for conducting a cohort analysis (for the HIV continuum of care analysis). Unfortunately, it was impossible to extract a raw dataset with the dates of preventions services and testing for PWID from the MIS due to some technical and legal constraints.
- The review team did not use analytical modules of both information systems, and thus, could not comment on its functional capacity for analyzing and producing reports in a standard or customized format. However, the team found the quality of the data in PLHIV database to be poor, especially with regards to date variables (necessary to estimate, and consequently, to analyze a flow of PWID across the cascade of HIV care).
- The review team believes that while each of the information systems is an extremely valuable asset, there is a long way to a unified information management system in HIV area with a reliable (quality) data, standardized data collection, entry and verification procedures, and analytical and presentation functionalities that meet different requirements of various types of users.

Regardless of the existence of some important components of the "One M&E System" as described above, ultimately its functionality is measured by the system's ability to meet its purpose. The main purpose of such a M&E system is to analyze and produce performance reports with minimum efforts (i.e. with a click of a button). The study team could not find annual M&E reports (made manually or generated by the information management system), which should have been submitted by the line ministries, and consequently, analyzed and endorsed by the CCM. Instead of just compiling the existing annual M&E reports, the review team had no other choice but to calculate the results for some indicators on its own, or to compare and validate the existing calculations from different sources, and to struggle with inconsistencies between different sources/official reports.

The study team found that two types of reports on the programmatic performance or the status of the national response had been produced annually:

- A country Global AIDS Response Progress Report, mainly for external use, containing measurement of many indicators from the M&E Plan, but in a predefined format. In both reports, the section on M&E (2013 and 2014) reviewed by the team repeats the text from the State Program (section 2.4), and does not provide an update on the development in the process of building a fully functional "one M&E system";
- UNPD GF grant implementation reports cover only those interventions that were funded by the GF grant. HIV grant-related sections of 2013 and 2014 reports can hardly be qualified as a purely technical M&E reports – their content and design is better suited for public relations.

Therefore, the study team considers that while some important elements of the "One M&E System" are in place, the system is not capable of serving its purpose of generating regular M&E reports, and providing strategic information to the decision-makers.

Summary

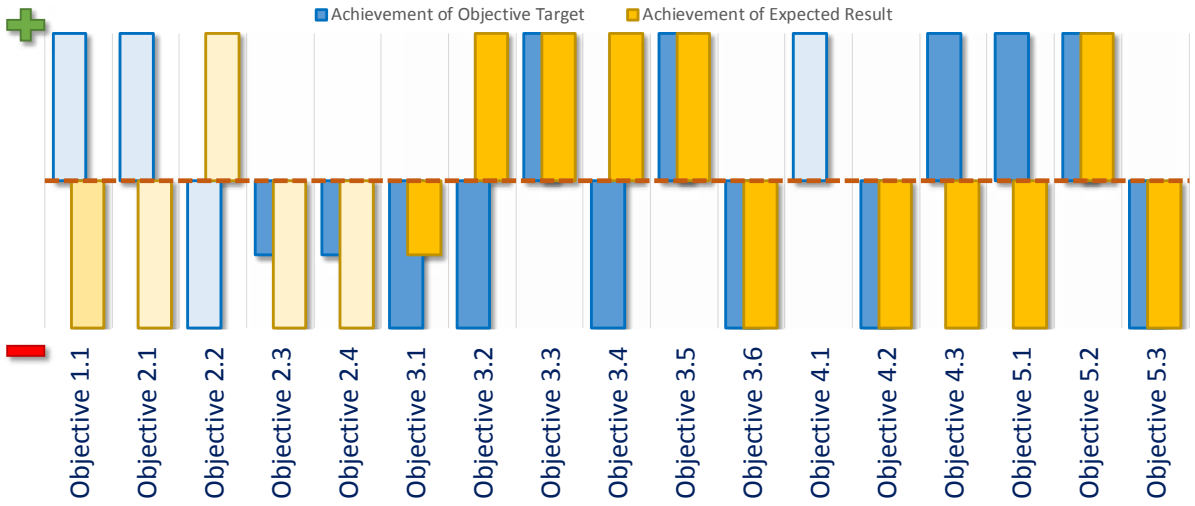
- ✓ The study team found that some critical elements of the M&E system were in place, but there was no evidence that the system produces M&E reports on a regular basis in accordance with the M&E Plan for internal use, or that designated entities (line ministries or the CCM) use these outputs for strategic oversight of the national response to the epidemic or State Program management.
- ✓ The implementation of the State Program was not satisfactory, although the study team was unable to assess the result for the only indicator for this objective in the M&E plan due to its irrelevance and lack of information.

3.1.2 Summary of the progress

Figure 25 below presents a graphical overview of the achievement for each of the 17 objectives of the State Program:

- Columns are pale for the cases where the study team did not have information for 2014, and used the latest available information (such as IBBS 2013) for measuring performance for the objectives 1.1 – 2.2 and the "expected results" for the objectives 1.1-2.4.
- Progress in the implementation of the State Program cannot be assessed by counting the number of the columns on "+" side:
  - The objectives have different importance in making the impact on the epidemic, although the study team refrained from ranking them by their relative weight, and thus, from calculating "a weighted average score" of the implementation of the strategies or the entire program
  - For most of objectives under the strategies 1 to 3, the expected results were logically inconsistent, and thus, often the achievements for each pair of the objective and the "expected results" are on the opposite sides of "+" and "- ".

Figure 25: Overview of the achievements by objectives



In summary, the study team can highlight the following achievements in the implementation of the State program as of January 2015 taking into account the availability of information:

- The following objectives were implemented as planned ("targets achieved"):
  - Objective 3.3 – "Provide HIV-positive pregnant women with a complex of services for the prevention of mother-to-child transmission (PMTCT)"
  - Objective 3.5 – "Objective 3.5 Develop potential of PLHIV community in ensuring universal access to services"
  - Objective 4.1 – "Integration of HIV related quality services into healthcare at all levels"
  - Objective 5.2 – "Ensure sustainable financing of the State Program"
- The following objectives were not implemented as planned ("targets underachieved"):
  - Objective 3.1 – "Ensure access to highly active antiretroviral therapy"
  - Objective 3.2 – "Provide PLHIV a universal access to diagnosis and prevention of opportunistic infections, including tuberculosis and viral hepatitis C"
  - Objective 3.6 – "Promote ("form") tolerance toward PHLIV and high risk groups"
  - Objective 4.2 – "Prevent nosocomial transmission of HIV"
  - Objective 5.3 – "Improvement of the system of monitoring and evaluation and strategic information"
- The team could not assess the implementation of the remaining 9 objectives because of either

the lack of IBBS information, or ambivalence of the link between achieving the objective, and the "expected result"-specific targets.

The State Program started formally in January 2013,[16] which implies that only 24-month period of its implementation can be assessed, appropriate for a typical mid-term review. However, unless the Government decides to adhere to 5-year implementation circle and to extend it till the end of 2017, only 12 months are left to implement it after this review. The study team was unaware of such intention, even though a theoretical possibility of the prolongation (that has its own merits) is not ruled out. Nevertheless, considering a 12-months period left for implementation of the Program, the study team does see a sufficient room for acceleration of the implementation, and for meeting the original targets by the end of 2016.

16 The Government of Kyrgyz Republic approved the State Program by issuing order 867, 29 in December 2012.

3.2 Continuum of HIV care for PWID

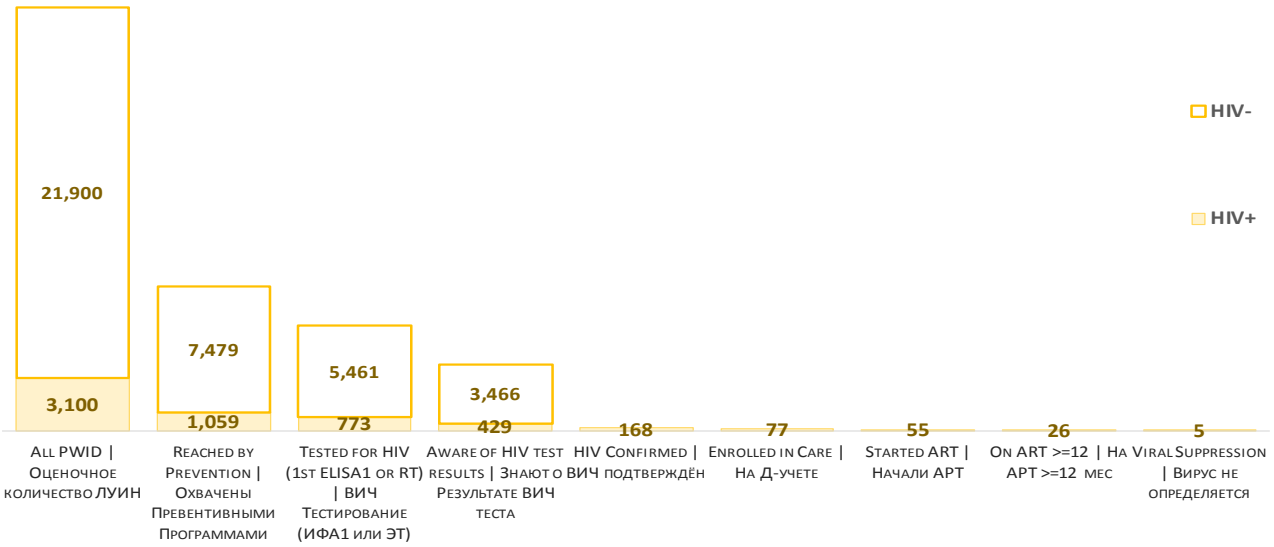
3.2.1 Flow of PWID along the HIV continuum of care

(1). National overview

The PWID size estimate was 2,500, out of which, 3,100 were HIV infected (both in 2013 and 2014).

Approximately 8,500 PWID were reached by prevention in 2013, out of which about 1,000 PWID were HIV infected. 4,560 PWID were tested for HIV (2,158 with rapid tests) in the civil sector, and another 1,674 PWID were tested in prisons (6,234 PWID in total). Presumably, 3,895 PWID knew the HIV testing results, out of which approximately 429 were suspected being HIV positive. Apparently, 171 PWID showed up for confirmation, and HIV infection was confirmed in 168 persons.

Figure 26: Flow of PWID along the cascade – all sectors, 2013



The same dynamics are illustrated in another chart where a base-10 logarithmic scale is applied to the vertical axis (the number of PWID), which shows better the flow of HIV infected PWID along the cascade (see Figure 43 on page 84).

Out of 168 PWID with confirmed HIV infection, 77 were registered at AIDS clinics. The international definition "Aware of HIV infected status" is applicable only to these 77 PWID, as post-test counselling was conducted and documented in a special form.

55 PWID out of the 77 enrolled in care started ART, but only 26 received the treatment for at least 12 months.

Finally, the viral load tests conducted in 12 months after starting ART revealed viral suppression in 5 patients out of 26. The result shows that at least 5 PWID had "undetectable" viral load out of 22 PWID tested for viral load in 12 months after starting ART. There was no information on viral load in the remaining 4 patients who were on ART for at least 12 months (see Figure 64 on page 96).

In Figure 44 on page 84, the flow of PWID along the cascade in the civil sector in 2013 shows that the pattern is the same. 49 PWID registered for care out of 122 PWID whose HIV infected status was confirmed in 2013 (compared to 28 and 46 in prisons). It is noteworthy, that in the civil sector, 13 PWID stayed on ART at least for 12 months out of 35 PWID who started treatment (in 2013 PWID cohort) – the result is same as in prisons, which is 13 out of 20 PWID who started ART.

(2). Comparison by years

The total number of PWID tested with at list HIV rapid test or ELISA1 in 2014 was slightly less compared to 2013, which is 6,068 and 6,234 respectively. However, 297 more HIV rapid test were made in 2014, bringing the estimate from 2,158 in 2013 to 2,455 in 2014. 199 PWID were tested with HIV rapid tests in prisons (0 – in 2013).

The estimated number of HIV infected PWID tested with either Elisa1 or HIV rapid test (425), as well as the number of PWID whose HIV infection was confirmed (170) in 2014 is very close to 2013 cohort estimates (429 and 168 respectively) as shown in Figure 49 "Flow of PWID along the cascade – all sectors, 2014 (a base-10 logarithmic scale)" on page 87. However, 101 PWID registered for care, as opposed to 77 in 2013 PWID cohort. As for the number of PWID who started ART, the estimate is 77 (out of 101 registered), compared to 55 (out of 77 registered) in the previous cohort.

It is noteworthy that out of 170 confirmed cases of PWID/PLHIV, 40 (or 24%) were first revealed by HIV rapid test, and the rest 130 were revealed with ELISA1, which is slightly higher than 33 (or 20%) and 135 in 2013 respectively.

(3). Comparison by geographic areas

Bishkek

Approximately 2,360 PWID were reached with prevention in 2013 out of the estimated 8,050 PWID living in Bishkek (see Figure 46 "Flow of PWID along the cascade – Bishkek, Civil Sector, 2013 (a base-10 logarithmic scale)" on page 85). 402 PWID were estimated to be HIV infected out of 2,360 reached by prevention. Approximately the half of them, 206 HIV infected PWID, were tested at least by ELISA1 or HIV rapid test (out of a total of 1,715 tested), and presumably, only the half of 88 HIV infected PWID aware of their status reached the confirmation stage.

14 PWID registered for care out of the total of 43 2013 PWID cohort in Bishkek. 9 PWID out of 14 started ART, and 2 stayed on ART at least for 12 months. Viral load test was not conducted for these 2 PWID after 12 months from starting ART, and therefore, the viral suppressions could not be confirmed ("0").

The number of PWID tested for HIV increased substantially to 2,229 in 2014 from 1,715 in 2013, but the number of rapid tests decreased to 783 in 2014 from 927 in 2013 (see Figure 51 "Flow of PWID along the cascade – Bishkek, the Civil Sector, 2014 (a base-10 logarithmic scale)" on page 88. Fewer PWID, namely 24 out of 160, who were aware of their HIV infected status reached the confirmation stage: (compared to 44 out of 88 in 2013). At the same time, the same number of PWID registered for care as in the previous year: 14 out of 24 confirmed HIV infected PWID (2014 cohort for Bishkek) compared to 14 out of 43 in 2013. Compared to the previous year, more PWID stayed on ART for at least 12 months: 5 compared to 2 in 2013 out of 9 who started ART. This number could be higher as it covers only those PWID who started treatment before November 2014.

Osh

Approximately 1,748 PWID were reached with prevention in 2013 out of the estimated 3,800 PWID living in Osh (see Figure 47 "Flow of PWID along the cascade – Osh, Civil Sector, 2013 (a base-10

logarithmic scale)" on page 86). 297 PWID were estimated to be HIV infected out of the 1,748 reached by prevention. Most of them- 248 HIV infected PWID- were tested at least by ELISA1 or HIV rapid test (out of a total of 1,457 PWID tested), and presumably, only the fifth of 79 HIV infected PWID who were aware of their status reached the confirmation stage (15).

Out of the total of 15 confirmed with HIV infection in Osh in 2013 PWID cohort, 9 PWID registered for care. All 9 PWID started ART, and 3 stayed on ART for at least 12 months. Only one PWID was tested for viral load after 12 months from starting ART, and the viral load was below the threshold.

The flow of PWID in 2013 in Osh differed from the flow in Bishkek at the following stages:

- Substantially higher coverage with HIV testing (ELISA1 or RT) of PWID reached by prevention, especially who were HIV infected:
  - All PWID: 1,243 out of 1,457 in Osh compared to 1,715 out of 2,367 in Bishkek;
  - HIV infected PWID: 248 out of 297 in Osh compared to 206 out of 402 in Bishkek.
- Substantially lower share of PWID who reached the confirmation stage among PWID were aware of their suspected HIV infected status: 15 out of 77 in Osh compared to 43 out of 88 in Bishkek;
- More than half of PWID whose HIV infection was confirmed registered for care (9 out of 14) in Osh compared to only quarter in Bishkek (14 out of 43);
- All registered PWID started ART in Osh compared 9 out 14 in Bishkek.

One more difference is that all 15 HIV confirmed cases were revealed by rapid testing in Osh (compared to 11 out of 43 cases in Bishkek). At the same time, only 15 PWID out of 84 with positive HIV test reached ELISA1 (and presumably, the confirmation) in Osh compared to 11 out of 45 in Bishkek.

The number of PWID tested for HIV in 2014 decreased to 1,342 (although the same number of rapid testing was conducted) contrary to increase in Bishkek (see Figure 52 "Flow of PWID along the cascade – Osh, the Civil Sector, 2014 (a base-10 logarithmic scale)" on page 88). However, the total number of PWID with confirmed HIV infection was higher (26 compared to 15 in 2013), because almost the half of 61 PWID with suspected HIV infection reached this stage (compared to one fifths in 2013). Similarly to the previous year, all 17 registered PWID started ART, and a third of them stayed on treatment for at least 12 months.

Chuy

Approximately 1,470 PWID were reached with prevention in 2013 out of the estimated 6,000 PWID living in Chuy (see Figure 48 "Flow of PWID along the cascade – Chuy, Civil Sector, 2013 (a base-10 logarithmic scale)" on page 86). It was estimated that 176 PWID were HIV infected out of the 1,470 reached by prevention. Most of them- 134 HIV infected PWID- were tested at least by ELISA1 or HIV rapid test (out of a total of 1,117 PWID tested), and presumably, the half of 108 HIV infected PWID aware of their status reached the confirmation stage.

23 PWID registered for care out of the cohort of PWID with confirmed HIV infection in 2013 of 56 in Chuy. 15 PWID started ART, and 8 stayed on ART for at least 12 months. 3 PWID were tested for viral load after 12 months from starting ART, and the viral load was below the threshold in all 3 cases.

A relatively high coverage with testing (ELISA1 or RT) of PWID reached by prevention in Chuy looks similar to the pattern in Osh. However, the situation was better than in Osh when it came to reaching the confirmation stage (the pattern similar to one in Bishkek).

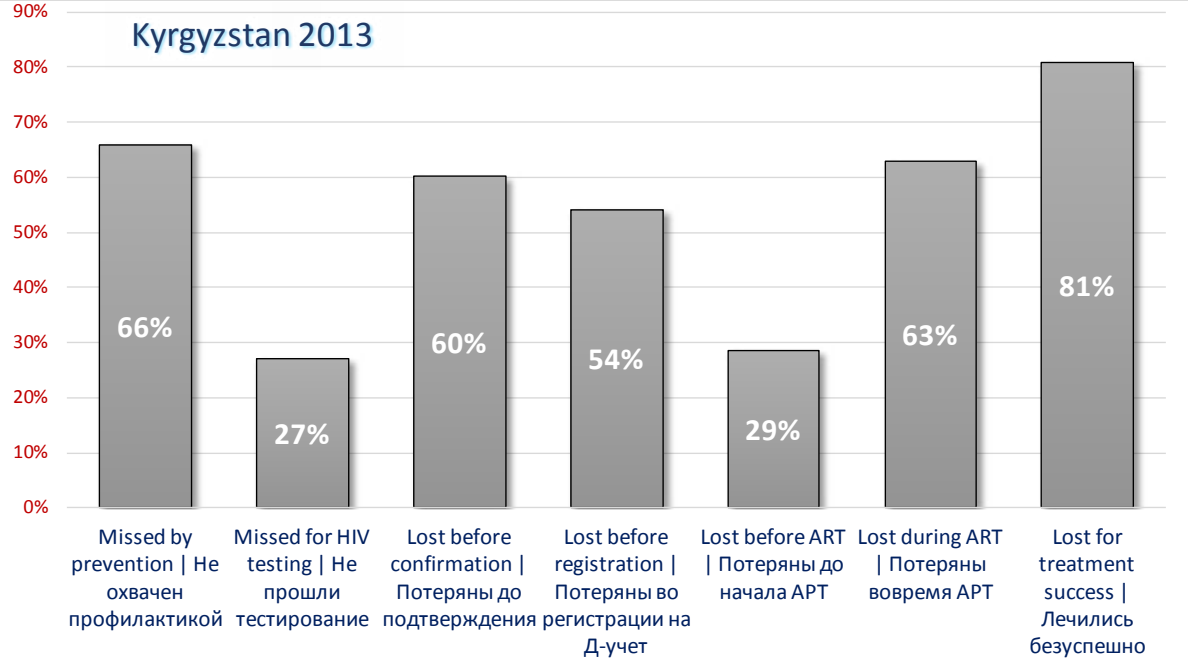
Chuy differed from both Bishkek and Osh by the highest share of PWID who stayed on ART for at least 12 months: 8 out of 15 compared to 2 out of 9 in Bishkek, and to 3 out of 9 in Osh.

The number of PWID tested for HIV in 2014 increased slightly up to 1,292 (see Figure 53 "Flow of PWID along the cascade – Chuy, the Civil Sector, 2014 (a base-10 logarithmic scale)" on page 89). All 5 PWID with positive result of the rapid test received ELISA1 (compared to only 7 out of 11 in 2013). More PWID, namely, 35 out 69 PWID with confirmed HIV infection, registered for care in 2014 compared to the previous year(compared to 23 out of 56 in 2013). Similar to the previous year, the majority of registered PWID (26 out of 35) started ART in 2014, and 11 stayed on ART for at least 12 months (compared to 8 out of 15 in 2013 cohort).

3.2.2 System's view

From a system's perspective, the leakage of PWID along the cascade is most informative as shown in Figure 27 on page 62:

Figure 27: Leakage of PWID along the cascade (all sectors), 2013

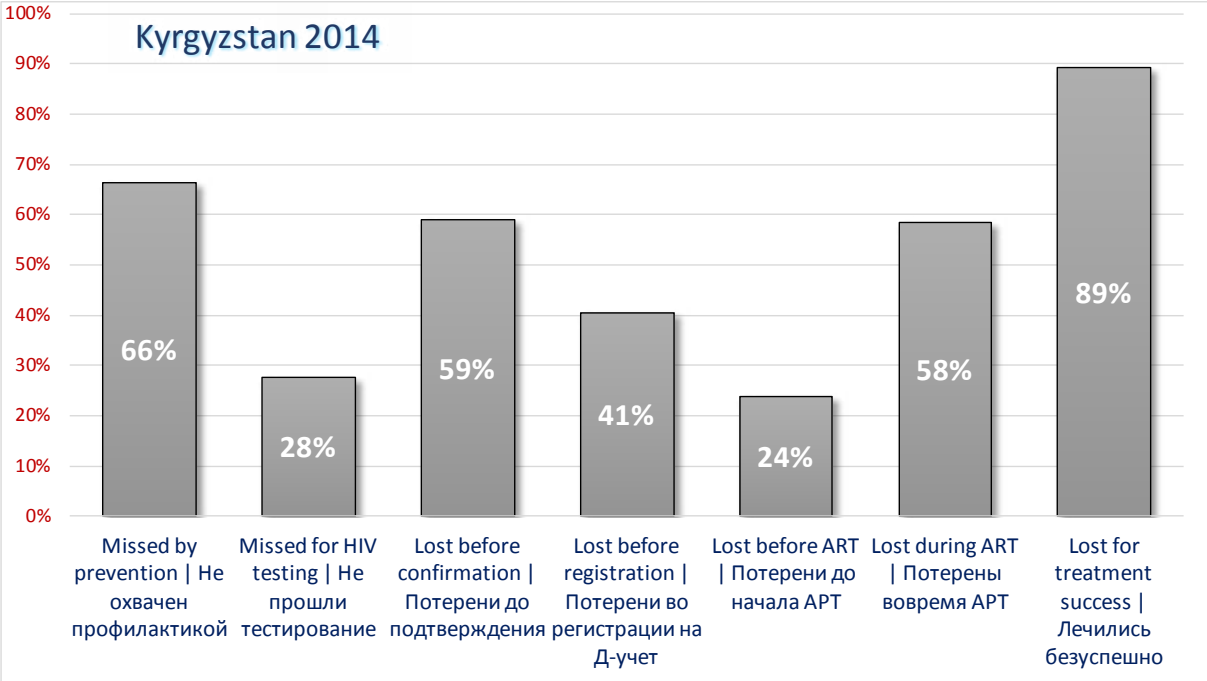


If the losses at the prevention stage (66%) are disputable as not everybody agrees with the PWID size estimate, and administrative and IBBS coverages differ, at least 27% PWID reached by prevention were missed for HIV testing. If administratively reported prevention coverage figures (higher than estimated based on IBBS 2013 findings) are used in the cascade model, than 51% PWID were missed by prevention, and 49% of PWID reached by prevention in 2013 missed HIV testing.

60% of HIV-infected PWID aware of ELISA2 test results did not reach the confirmation stage. Another critical leakage occurred between the confirmation and registration stages: 54% of PWID with confirmed HIV infection were lost. As reported by some key respondents, the losses are much less when PWID is escorted either by AIDS center staff member, especially after the confirmation of the virus to their registration. Some interviewed healthcare professionals complained that in specialized clinics the medical staff is overloaded. As the staffing positions were defined a decade ago when the workload was smaller, the increased workload today makes it impossible for the staff to spend t sufficient time with PWID (or other PLHIV) at the moment of registration, and to convince them to retain in care and treatment.

Further, almost third of the registered PWID did not start ART, and 63% of those who started did not stay on ART for 12 months. The outcome of ART treatment among those who stayed on ART for at least 12 months was either satisfactory or unknown among 81% in 2013.

Figure 28: Leakage of PWID along the cascade (all sectors), 2014

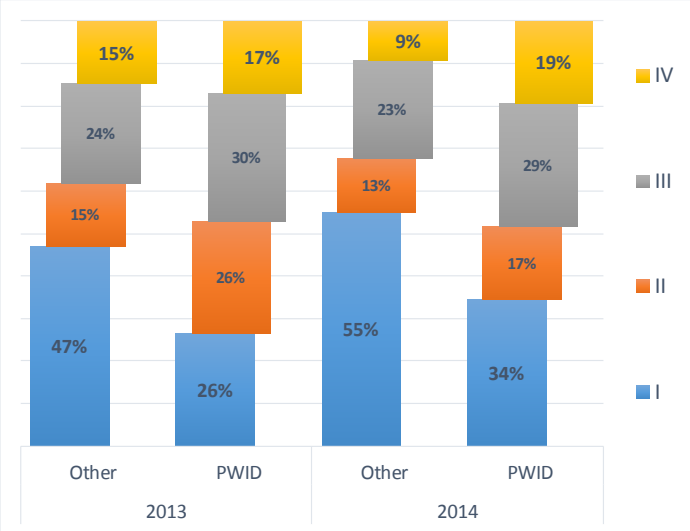


The situation was almost identical in 2014 as shown in Figure 28 above: less PWID were lost between the confirmation and registration stages, amounting to 41% compared to 54% in 2013. PWID leakages were relatively lower at ART stages: 24% were lost between the registration and starting ART (compared to 29% in 2013), and 58% were lost during the ART (compared to 63% in 2013).

PWID leakages across the cascade by regions and years are shown in detail in Figure 54 "Description of PWID leakages across the cascade by sectors and geographical areas, 2013" (on page 89) and Figure 55 "Description of PWID leakages across the cascade by sectors and geographical areas, 2014" (on page 90). It is noteworthy, that the number of PWID tested for HIV in prisons (1,674) was higher than the number of PWID reached by prevention in prisons (1,488 based on administratively reported figures). Therefore, the calculation of leakages shows "surplus" instead of the loss in prisons in 2013. The similar situation could be noted for "the rest" of the country in 2013 if administrative coverage figures for prevention services are used questioning the reliability and consistency of the existing statistics.

The late detection of HIV infection, and start of ART could be one of the consequences of the above-mentioned leakages of PWID as shown in Figure 29 below. If almost the half of "other" people had HIV disease at clinical stage I at the moment of the confirmation of HIV infection in 2013, only 26% of PWID had the mildest form of HIV disease at the moment of confirmation. The share of the patients with the most advanced HIV disease (clinical stage IV) among PWID was twice higher compared to others (19% and 9% respectively).

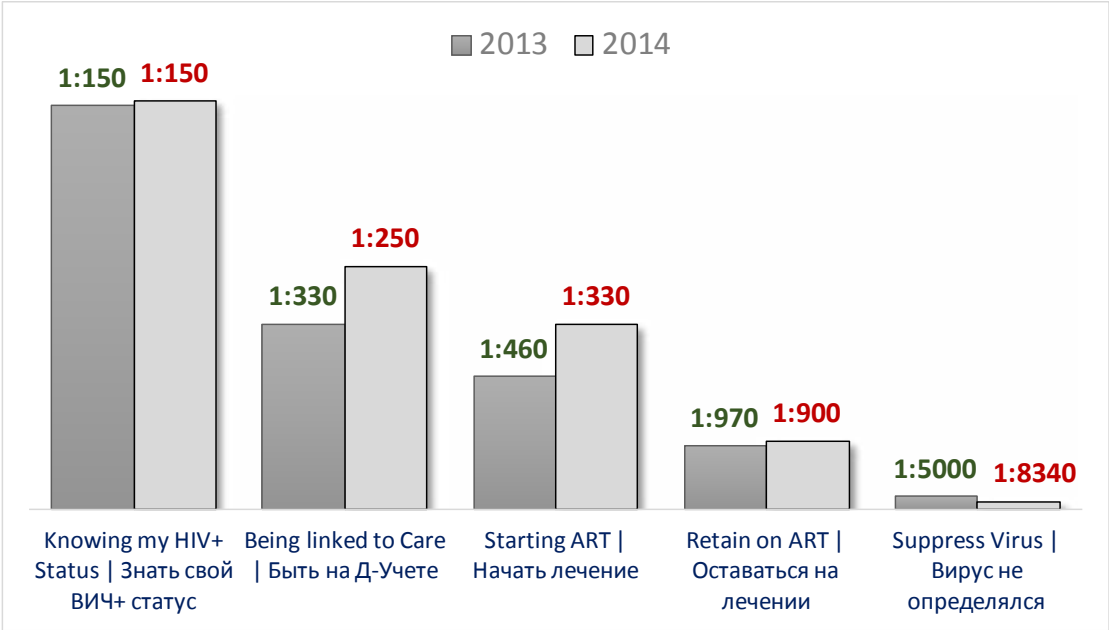
Figure 29: Comparison of the structure of HIV disease by clinical stages between PWID and others groups by years



3.2.3 PWID's view

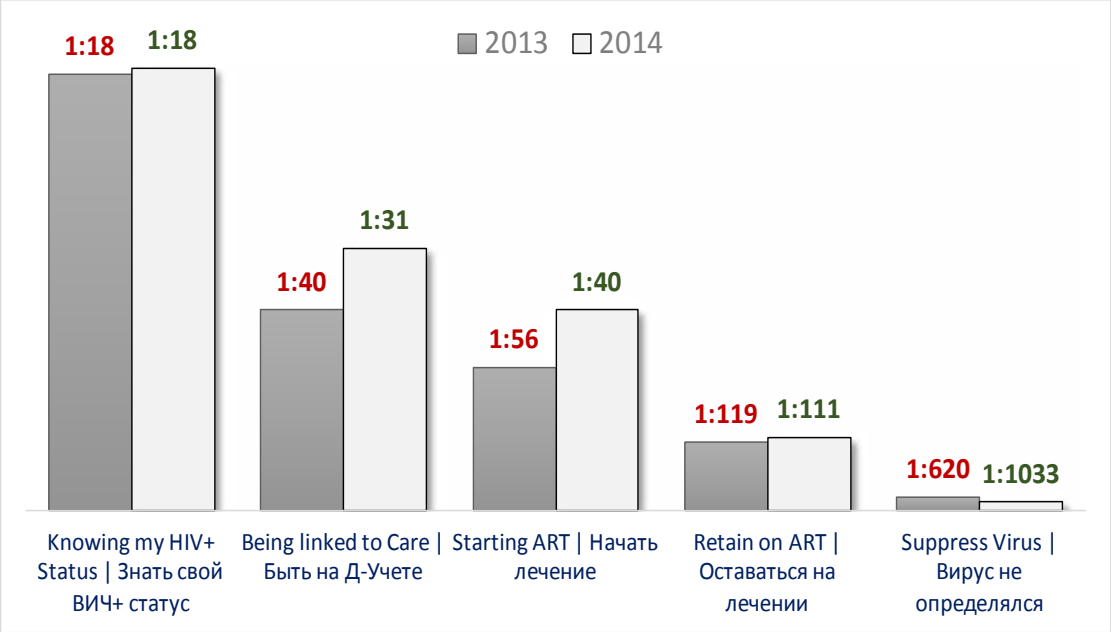
An "average" PWID had roughly a one out of ten chance of being HIV infected. However, the odds of knowing HIV infected status were 150 to 1 in 2013, of being linked to care were 330 to 1, of starting ART were 460 to 1, of staying on ART for at least 12 months were 970 to 1, and, finally, of suppressing the virus were 5,000 to 1 as shown in Figure 30 below. The odds of being linked to care, and of starting ART increased in 2014 amounting to 250 to 1, and 330 to 1 respectively.

Figure 30: The odds of reaching different stages of the cascade for a PWID in 2013 in Kyrgyzstan



Chances to reach different milestones increases for an HIV infected PWID as shown in Figure 31 on page 65. Still, the odds of getting "undetectable" viral load after 12 months of ART were 620 to 1, worsening in 2014 to 1000 to 1.

Figure 31: The odds of reaching different stages of the cascade for a HIV infected PWID in 2013 in Kyrgyzstan

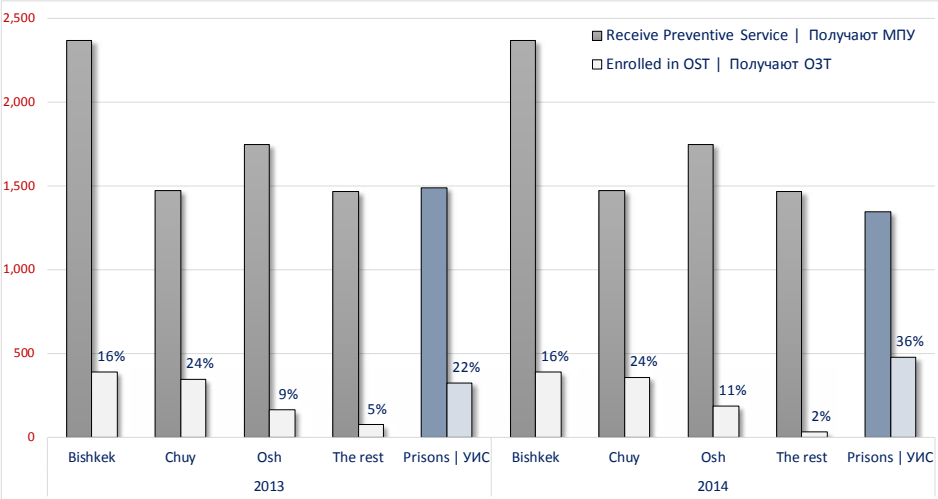


As reported by some PWID in Osh, the quality of prevention services declined. They claim that there was more direct interaction in the past with NGO representatives, "tea-breaks" or events for getting information or advice were more frequent, and even the police ("militia") were more friendly in the past. According to their claims, now the police 'hunts' for PWID near drop-in centers or OST sites. Additionally, according to some of the PWID the outreach workers were more educated in the past, while now all they do it just bring syringes and collect used ones, rather than talk with PWID. Similarly, while they bring information and education materials when meeting with PWID in the streets, there is a little time for interaction when this is done on-the-run.

As to the factors which make prevention services more attractive, many PWID interviewed highlighted the importance of incentives (food parcels, or units to charge personal accounts at mobile operators). Opinions regarding the distribution of syringes varied: some PWID think that handing out of the syringes is not needed because they are cheap and available in any pharmacy anyways. They believed that this activity should be replaces by testing for VHC or VHB, syphilis, or TB. Others think that syringes are fine, but should be more efficient at reaching beneficiaries instead of being sold on the black market.

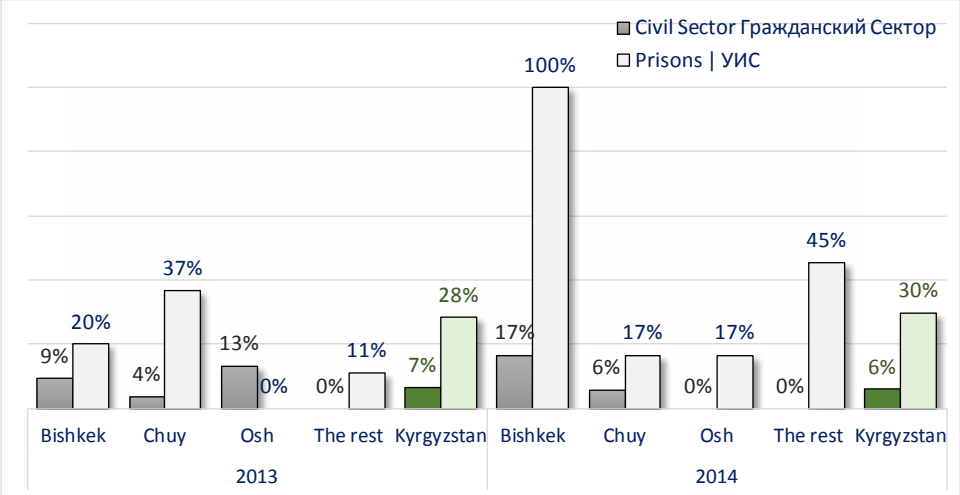
A PWID reached by prevention programs had different chances to enroll in OST, as the numbers varied from 5% in "the rest" oblasts to 24% in Chuy in 2013, but were the highest in prisons in 2014 (36%) followed by Chuy (24%) and Bishkek (16%) as shown in Figure 32 below.

Figure 32: The probability of being enrolled in OST program for a PWID reached by prevention by geographical areas/sectors and years



The probability of receiving OST services in case of the confirmed HIV infection did not increase, as shown in Figure 33 below.

Figure 33: The probability of being enrolled in OST program for a PWID staying on ART at least 12 months by geographical areas, sectors and years



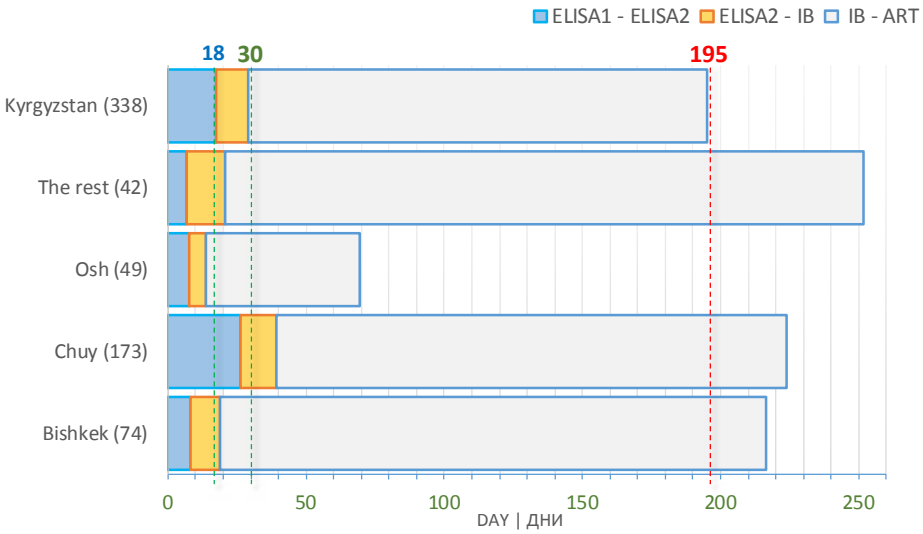
The highest chances to enroll in OST if HIV infection was confirmed in 2013 or in 2014 was in prisons: 28% and 30% respectively (the country average). Slightly higher chances were in the civil sector in Osh and Bishkek in 2013 (13% and 9% respectively), but this chances decreased in 2014.

A PWID should wait on average 18 days to receive the 2nd ELISA test (26 days in Chuy, and 8 days in Bishkek and Osh) as shown in Figure 34 below, and 30 days until the confirmation is issued (14 days in Osh, and 39 days in Chui). ART starts on average in 195 days from the 1st ELISA test (70 days in Osh compared to 216 days in Bishkek).

RAC recently announced that the testing algorithm had been simplified to reduce the "travel time" from the first HIV testing to HIV confirmation. However, the study team could not obtain a documented prove of the new algorithm. As explained by one of the key respondents representing the service providers, sub-national AIDS centers received new standard operational procedures, which instructs how to store and transport the blood samples properly. There are in the process of elaboration of new algorithm on HIV testing, which allow them to take blood sample for all three tests (ELISA1, ELISA2 and WB) at once. They believe that this type of optimization will shorten the period between

ELISA1 and IB results. Interviewed PWID reported that while the waiting time for HIV test results was much longer in the past, nowadays it takes one week on average, and 2-3 days in prisons.

Figure 34: The time lag between critical milestones (in calendar days) by Geographical areas (all sectors, 2013-2014 aggregated)



A PWID in Bishkek takes 155 days to agree on HIV testing after receiving the first prevention service, while the same estimate for Chuy is 538 days as shown inFigure 35 (below). Therefore, the entire journey from the first prevention service to starting ART can be as long as 800 days in Chuy, 371 days in Bishkek, and 438 days in Osh. As reported by some PWID in Osh (with the history of 5-12 years of drug injection), it took from 3 to 8 years to be reached by NSP or OST services from starting injecting drugs.

Figure 35: Time lags between critical stages including the start of prevention by selected geographical areas

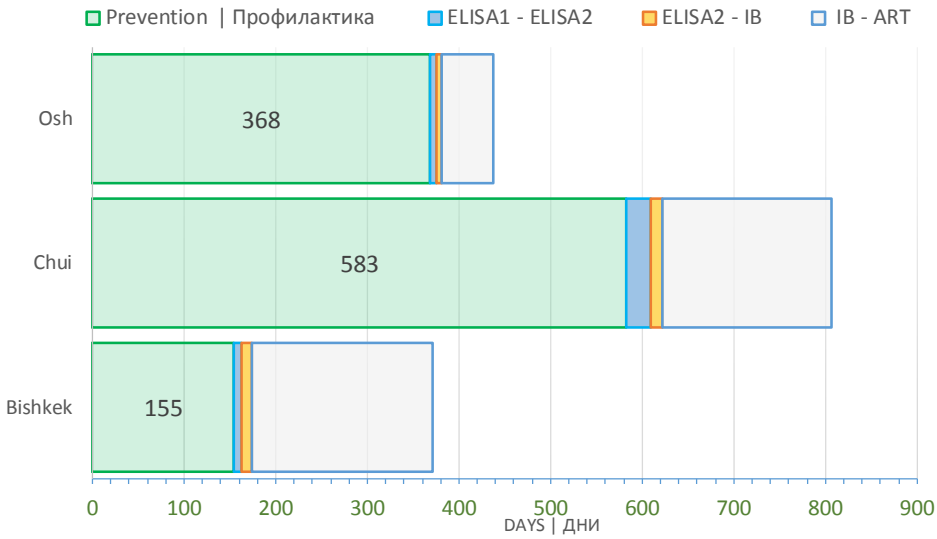


Figure 58 “Time lag between milestones (in calendar days) by years and geographical areas – the Civil Sector” (on page 91) and Figure 59 “Time lag between milestones (in calendar days) by years and geographical areas – the Civil Sector (only selected regions) (on page 92) provide more details by years, sectors, and geographical areas on the waiting time for PWID to move from one step of the cascade to another.

4 Discussion and analysis

4.1 Can the implementation of the State Program have an impact on the epidemic?

The study team assessed the implementation of the State Program in accordance with the M&E Plan, and by following the original structure of strategies and objectives. Regardless of the achievements in the implementation of the State Program (presented in sub-section 3.1 "Mid-term evaluation of progress in the implementation of the State Program on HIV/AIDS"), the main question remains unanswered: What impact can be expected from the implementation of the State Program on the epidemic? Put the other way around, can the stakeholders be optimistic that the next IBBS shows that the epidemic is stabilized (if not reduced)?

What do we know about the epidemic? It is concentrated in the following population:

	PWID	SWs	MSM	Prisoners	PWID sexual partners	TB Patients
HIV prevalence	**12.4%**	**2.2%**	**6.6%**	**7.6%**	**5%**	**3.5%**
VHC	45.6%	3%	1.6%	34.5%	15.5%	
Syphilis	8.3%	23.6%	7.9%	14%		

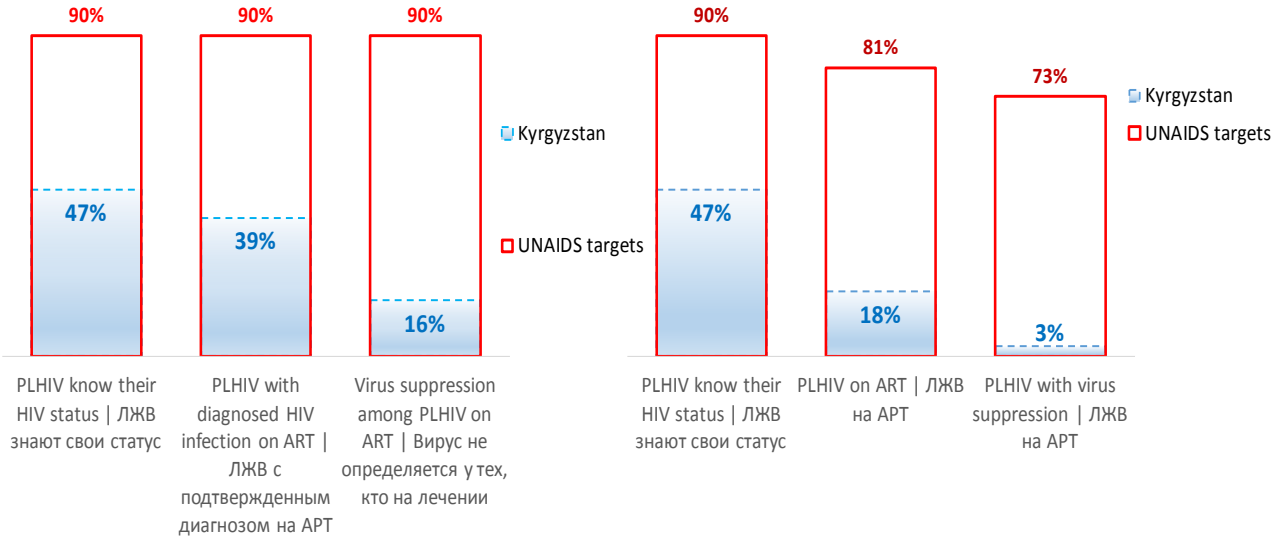
Where are we now with the response??

		PWID	SWs	MSM	PLHIV
Prevention	Reached by prevention[17]	**52%** of SE	**79%** of SE	**24%** 2,203 out of 9,000 accessible	
	Tested for HIV	**24%** of SE	**27%** of SE	**8%** 852 out of 9,000 accessible	
	Tested for STI		**22%** of SE	**7%** 597 out of 9,000 accessible	
	Knowledge of HIV infection	**46%**	**21%**	**56.8%**	
	Report safe practices	**55%**	**91%**	**82%**	???
Treatment	Enroll in ART				**28%** 1,718 out of 4,412 PLHIV who know the HIV status and is alive **68%** out of 2,538 accessible
	Virus suppressed				**16%** 262 out of 1718 on ART

17 Administrative figures for 2014 from the UNDP GF annual report

		PWID	SWs	MSM	PLHIV
Care and support	Palliative care				**13%** 142 out of 1,039 in need
	Support (peer to peer)				**67%** 1,710 out of 2,538 accessible
	Targeted social cash benefits				**32%** 551 out of 1,718 on ART

Where should the country be by 2030? How far is the country from UNAIDS 90-90-90 goals for 2020 (UNAIDS 2014)*?*



Can the State Program with no target for HIV testing, and with the current situation of 47% of PLHIV knowing the HIV status, have an impact when the percentage PLHIV who should know the HIV status in order to end the epidemic by 2030 should be 90%?

Can the State Program with the 40% target for 2016, and the actual ART coverage of 29%, have an impact when 81% of PLHIV should be on ART to end the epidemic by 2030?

How long does it take the HIV infection to spread and catch up with:

- VHC prevalence among PWID (45.6%) when 54% did not know HIV related risks, 76% were not tested for HIV, 97% did not benefit from OST, and 45% did not use sterile equipment for injection? And additionally, when already 5% of their sexual partners (not injecting drugs) were HIV infected...
- Syphilis prevalence among SWs (23.6%) when 79% did not know the HIV-related risks, 73% were not tested for HIV, and 78% were not tested for STIs?

4.2 Should the national response to the epidemic be re-conceptualized?

4.2.1 Why to rethink?

There are two main reasons for rethinking the national response to the epidemic, which are responsibility and effectiveness.

Responsibility

While the epidemic is still concentrated in the key populations, it is only the matter of time until it to becomes generalized, as it happened in Russian Federation or Ukraine.

The global community believes that the epidemic can end by 2030 if the countries set and reach 90-90-90 goals, "a new, final, ambitious, but achievable targets".

Therefore, today-in 2015-it is the time to make a choice between two scenarios:

Scenario 1: Kyrgyzstan without the epidemic in 2030

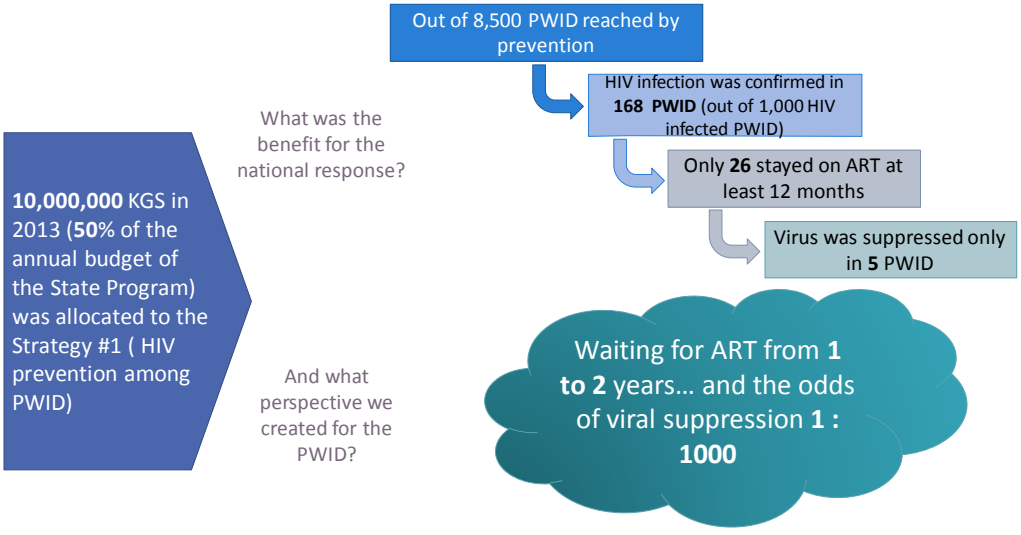
Scenario 2: Kyrgyzstan with generalized epidemic in 2030.

Whoever has moral, civil, professional, corporate, or political responsibility for the future of the country must make a choice now. Not doing so, which means continuing the business as usual, implies subscribing to Scenario 2, and by default accepting the responsibility for Kyrgyzstan sharing Russian Federation's or Ukraine's fate regarding the HIV epidemic.

Effectiveness

Is the national response to the epidemic about action, or about the result?

Whle there were a lot of actions taken for implementing the State Program, not much of the results were generated to stop the epidemic:



It is not too late to stop thinking in terms of "what do we do to stabilize the epidemic?", and instead, start thinking in terms of "do we deliver results sufficient to stabilize the epidemic?"

4.2.2 How to rethink?

The paradigm of the national response can be changed if the vector of thinking shifts:

- From carrying out "national response" to "stopping the epidemic", from focusing on the actions to focusing on the results, and

from thinking of "what interventions are most important for the national response?" to considering "what achievements are important for stopping the epidemic?";

- From demonstrating success at separate stages of the HIV continuum of prevention and care to assuming responsibility for the success along the entire cascade of prevention, linking to care, treatment, and support;
- From service providers to beneficiaries, from "what I want and can do?" to "what are the needs, preferences and expectation of the beneficiaries?";
- From "how much resources do we need to act?" to "How much can we deliver with given resources?"
- From "how well do we coordinate our efforts assuming responsibilities collectively" to "Who is accountable for which result?" and "how do responsible actors interact?".

The rethinking is about the paradigm change, and, only after the change comes selection of the most appropriate programmatic or technical solutions. The Government and the partners in Kyrgyzstan have done a lot of technical assessments in the last decade in various areas of the national response (such as harm reduction, HIV diagnosis, treatment, care and support, PMTCT, human rights, stigma and discrimination, etc.), and very useful solutions on how to design and implement the programs, or how to manage and track the progress are still waiting for their time to be implemented. The country accumulated invaluable experience of how things can be done at the best interest of ultimate beneficiaries and the society. Additionally, more can be learned from other countries. All these assets can be fully transformed into results only after changing the national response paradigm.

4.3 Is the State Program an adequate policy instrument?

The study team believes that a plan (especially a 5-year one) should meet the following requirements to be considered as an affective policy instrument:

a) A long term vision, a conceptual framework (reflecting the understanding of and the agreement among the major stakeholders on the key principles and the primary areas of the national response) underpins the plan;

b) The plan lays out actions along the chain of results to be achieved in a given time period, taking into account the capacity of the actors, lessons learnt, and the risks;

c) The resource requirements for the primary areas are fully met (or at least are balanced with the expected results), and if subsequently any resources are left, they are allocated to other areas of the national response;

d) Responsibilities for each result (along the chain of results) are clearly mapped with a single actor, proportional to the authority and to the resources given to the actor;

e) The monitoring and evaluation is not limited to measuring the progress or deliverables. Instead, it is combined with the obligation of and clear mechanisms for reacting on any instance of under-performance.

The study team did not find that the existing State Program meets any of the abovementioned requirements:

- There is no policy document with a longer timespan than the State Program that conveys the vision of the country with regards to the HIV epidemic, and that sets concrete measurable outcomes for the 5-year plan necessary for attaining the long term goals. Similarly, the other way around, there is no clear conceptual axis (or platform) that the plan should be built upon.
- Results in the State Program are presented in two layers: action-specific (outputs), and objective-specific (outcomes). There is no logical hierarchy of the results showing what is the overall outcome of achieving 4 objectives under strategy 2, or 6 objectives under strategy 3, or what is a success of implementing all 5 strategies (i.e. "overarching outcome") (to say nothing of logical inconsistencies between some of the objectives and their expected results). It is unclear why the strategy 1 "Decrease the vulnerability of PWID to HIV" dedicated to the epidemic among PWID has only one objective

concentrated on prevention, and does not touch upon the treatment, care, and support.

- The State Program declares priorities, but does not go further than verbal statements:
  - The State Program is silent about the consequences of mobilizing less resources than planned, or of inability to close the projected funding gap (16% of the total resource requirements).It is unclear which strategy or objective will get a full funding (thus, recognizing it as a high priority) in such a case, and which strategy or objective will be either suspended or downscaled (thus, recognizing it as a low priority);
  - Regardless of the availability of funding, can the strategy 3 or ART in particular (objective 3.1) be considered as a high priority when the target is set to 40%? Or what is the priority in the concentrated epidemic, testing all pregnant women for HIV, or the key populations? There is neither an expected result, nor an indicator and a target for testing the key populations for HIV, while the target for pregnant women is set at >90%. And the answer on what is the true priority of the Program as opposed to a declared one is only demonstrated in practice: out of more than 480,000 US$ spent on HIV testing, the testing of KP accounted for 4%, while the testing of pregnant women accounted for 46% of the funding.
- The State Program assigns responsibilities for reporting on results, but not for delivering them. There are critical areas along the HIV continuum of prevention and care where nobody is held responsible for the unacceptable leakages of the key populations with suspected or confirmed HIV infection.
- Formally, the M&E plan was attached to the State Program, but no evidence was found that a) annual performance reports (measured by objective & "expected result" specific indicators against the targets) had been submitted to the line ministries or CCM on a regular basis, that b) they had been reviewed by designated resources, and that c) the relevant decisions had been made within the strategic governance (or oversight) framework. Two reports prepared by RAC and presented to the Government reflect the progress in the implementation of the Work Plan of the State Program (measuring outputs), but not on the outcomes as defined in the M&E plan.

The mid-term review of the previous State Program pointed out that the program design lacked a) the prioritization of strategies and tasks, and b) the approved M&E Plan, as well as recommended identification of priorities at the level of strategies and objectives, usage of a log frame approach, and the focus on the final results. The response to these recommendations can be found in the current State Program design: a) the M&E Plan was developed, attached, and endorsed together with the State Program, followed by a technically detailed and useful manual for the indicators; b) instead of 19 strategies under 3 components and 54 objectives, the current State Program consists of 5 strategies and 17 objectives), although they still lack logical consistency; c) expected results are stated for each objective, but logical gaps remain between the expected results and the objectives, or between the objectives and the impact on the epidemic.

As to the impact on the epidemic, the previous mid-term review concluded that "despite undeniable achievements in various directions, the introduction of the State program (as of 2008) does not reduce the threat of further expansion of the HIV epidemic" due to the lack of prioritization, insufficient drive for results and inability to measure them, and the deficit of financial resources. The study team admits that most of the points of the 6-year old conclusions are still valid for the current State Program:

- Overall, the study team acknowledges the progress made in the design of the State Program, but recognizes that it is still limited to form rather than the substance. As in the previous case, the study team admits that the State Program design conforms to the needs and practices of strategic governance, and follows its evolution.
- Despite the significant intensification of prevention interventions targeting the key populations and ARV treatment, care, and support of PLHIV, the focus still remained on the scale rather on the quality and the outcomes.

5 Conclusions and recommendations

5.1 Conclusions

5.1.1 Regarding the progress in the implementation of the State Program

(C.1) It was impossible to assess properly the achievements of the strategies #1 and #2 on prevention of the HIV spread among the key populations due to the lack of strategic information; the picture will become clearer after conducting the next IBBS in 2016.

(C.2) The remaining three strategies, and strategy #3 "Ensuring access of PLHIV to treatment, care and support" in particular, had not been implemented fully as measured by the actual results against the targets.

(C.3) Despite upward trends in the coverage with prevention, treatment, and care and support, there is no evidence at the outcome level to believe that risk behaviors and vulnerabilities of the key populations had been declining. On the contrary, some evidence, such as a very low uptake of HIV testing and enrollment in HIV care and treatment services of the key populations, can avert new HIV infections as it was found among non-drug injecting sexual partners of PWID in 2014. Therefore, there is a little ground for optimism regarding the impact of the State Program implementation hon the HIV epidemic by 2016.

5.1.2 Regarding the effectiveness of the approaches and implementation

(C.4) The analysis of the HIV continuum of prevention and care in relation to PWID, as well of the interventions targeting other key populations, revealed that the existing approaches to the planning and implementation modalities are not effective:

a) Scaled up activities did not deliver outputs of the HIV result chain, such as the number of testing and counselling sessions conducted, confirmation of HIV infection, registration for care, and enrollment and retention in ART (World Health Organization 2015);

b) The outputs failed to produce the desired outcomes – viral suppression even among PLHIV who are registered and accessible;

c) The leakage of beneficiaries along the cascade of prevention, care, and treatment were intolerable undermining not only effectiveness of the interventions but also their efficiency when the outcomes (the proportion of PLHIV with viral suppression) are compared to the inputs.

(C.5) The causes of the observed ineffectiveness along the HIV continuum of prevention and care can be grouped under two categories:

a) Conceptual - The vision (concept) of the national response is built around the existing organizations/actors and areas of competences and interests, as opposed to be designed around the human being, especially the one with a high risk behavior. Consequently:

- Interventions are defined based on the principle "*which* actor does or wants to do *what*", rather than based on the principle "which outputs and outcomes are critical to stabilize the epidemic";
- Services conform to the preferences of providers rather than meet the needs and expectations of the beneficiaries.

b) Governance and/or managerial: the action (at each stage of the cascade) matters more than the ultimate result (in the end of the HIV continuum):

- The management system (including its routine M&E instruments) is blind to the huge leakages of the target groups between the stages of the cascade (for instance, between the first HIV test and HIV confirmation,

between HIV confirmation and registration for care, and between registration for care and enrollment in ART);

- Responsibilities for the flow of beneficiaries between these critical stages of the cascade were not assigned, which is why nobody can be held accountable for the leakages.

5.1.3 Regarding the State program as a policy/governance instrument

(C.6) Despite the notable progress compared to the previous version, the structure and the content of the State Program is still unable to meet the basic requirements for being a major policy/governance instrument of the national response to the epidemic:

a) The results (outcomes), and interventions (outputs) necessary to deliver the results are not prioritized;

b) There are gaps in a logical hierarchy of the HIV result chain between outputs, outcomes. and impact;

c) The responsibilities for delivering results are not defined.

(C.7) The M&E system of the State Program is not fully functional:

a) There was no evidence that the M&E framework had been used to report annually on the achievements measured by 62 indicators against the targets as defined in the M&E Plan, and that the authorized governance bodies had reviewed these reports, and took steps as needed;

b) A lot of information, especially quantifying processes and the outputs is collected and stored. However, it is still insufficient to generate strategic information in order to inform the governance of the national response as the information arrays are separated in two major electronic databases, and the quality and reliability of some data is questionable.

5.2 Recommendations

(R2) Rethink the national response to the epidemic by following the consecutive steps:

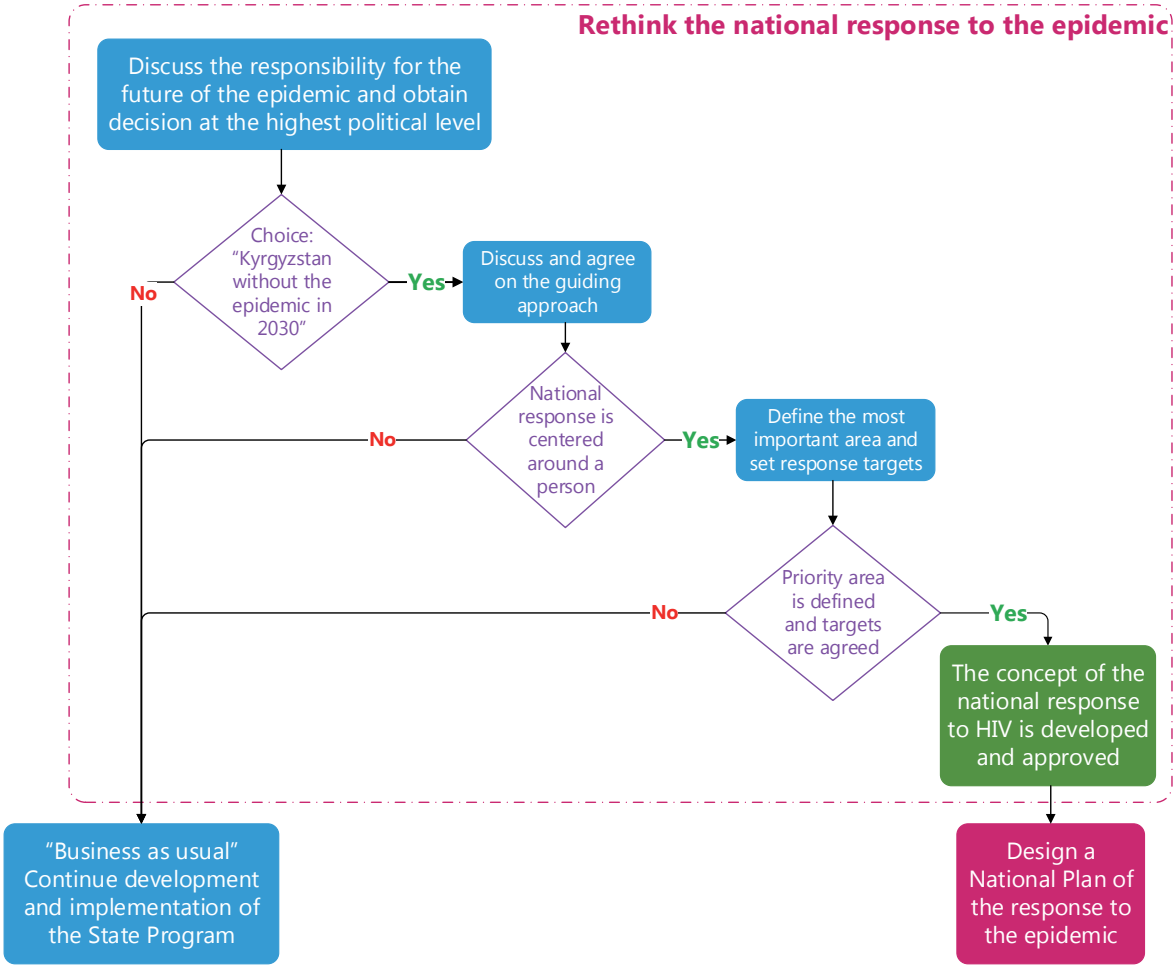
a) Define a clear vision of the epidemic in Kyrgyzstan by 2030 by making a choice between the two scenarios: committing explicitly to "Kyrgyzstan without the epidemic by 2030" at the highest political level, or continuing the business as usual, and by default subscribing to "Kyrgyzstan with the generalized epidemic by 2030".

b) If the choice is made in favor of "Kyrgyzstan without the epidemic by 2030" scenario, then define the two guiding principles of the national response (with criteria to assess the adherence to these principles):

- Building the response around the human being to be served, instead of around the interests or the mandates of implementers or donors;
- Building the response along the continuum of prevention, care, and treatment of the key populations;

c) If the abovementioned principles are defined and agreed upon by the key stakeholders, discuss and built consensus on the most important areas for stopping the epidemic, which should be fully funded before the resources are allocated to the rest, less important interventions.

d) Compile all of the above mentioned decisions into a "Conceptual framework of the national response to the epidemic" (conventional title), and endorse it at the highest political level in order for it to serve as a long term policy instrument which will planning and actions of the government, NGOs, service providers, and the partners.



(R3) Design a 3 to 5-year strategic plan (conventionally called The State Program) through the following consecutive steps:

a) Define a chain of results: from the highest level result (either impact such as HIV related mortality, or outcomes such as behavioral changes or viral suppression) down to outputs and inputs (see Figure 36 below):

- The highest level result should be clearly linked to (aligned with) the milestone of the conceptual framework;
- Set targets at each stage of the chain using at least 10 global indicators as recommended by the World Health Organization (see Figure 61 on page 93).

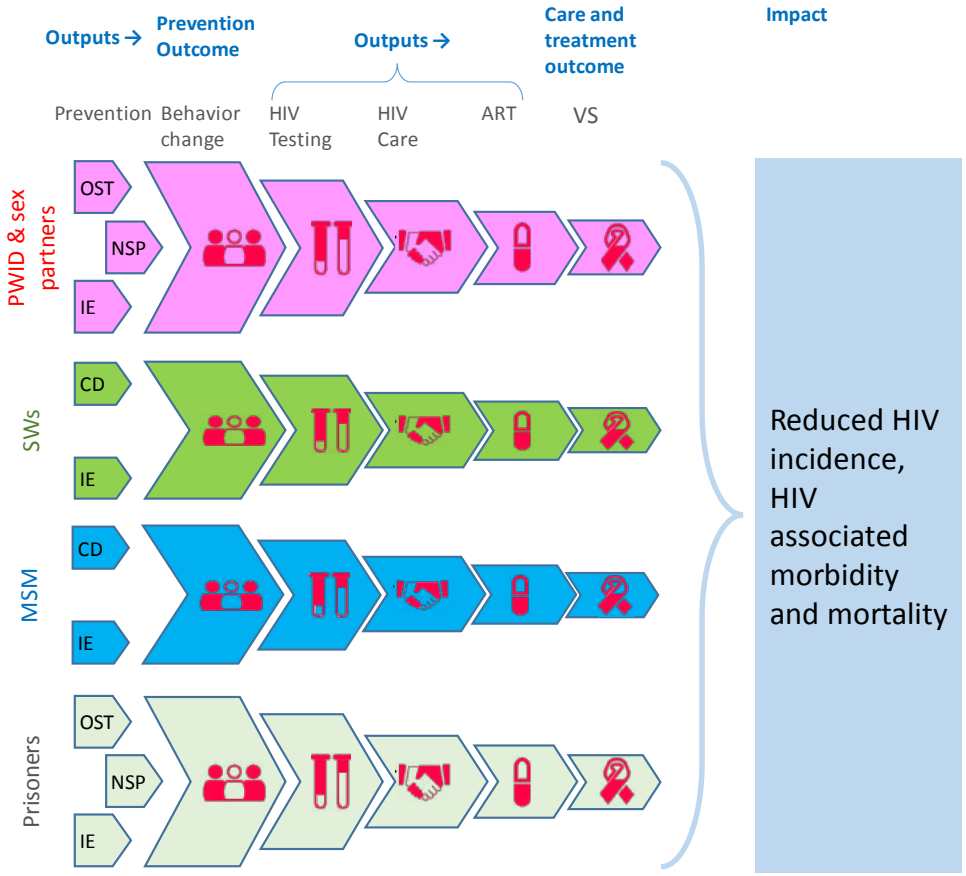
b) Select the most appropriate technical solutions based on the rich experience accumulated in the country and abroad in order to reach output and outcome targets in the HIV chain of results;

c) Estimate the resource requirements (financial, human, technological) for each solution / approaches. If financial resources are insufficient or capacity constraints are identified, develop at least two scenarios:

- Scenario with a funding gap and/or a capacity constraint: the original targets and the funding gap;
- Scenario without a funding gap and/or a capacity constraint: targets (for less important outputs and outcomes) balanced with the financing projections (the availability of resources).

d) Assign one responsible actor to each output and outcome in the HIV chain of results based on consultations and thorough assessment of the balance between the responsibility assigned, and the competence (or authority to assume control over the implementation and deliverables).

Figure 36: Illustrative HIV result chain for planning



(R4) Conceptualize the M&E framework as the major tool for strategic governance and oversight, and improve the M&E practices by concentrating efforts on the following directions:

a) Define a minimum set of output and outcome indicators to measure the progress, along with the progress reporting format;[18]

b) Define clearly responsibilities for the data flows, [19] data validation/quality audit, and calculation of the achievements by selected indicators and reporting followed by development of enforcement mechanisms (administrative and/or financial) and the resource requirement projections (necessary the M&E system to function);

c) Start streamlining the existing data collection, storage, and sharing practices advancing to a unified information management system in HIV through the following steps:

- Define clearly user requirements for the analysis and reporting at strategic (as described in point a) above) and operational/ programmatic level;
- Make a full inventory of variables that are necessary to meet the user requirements (i.e. to calculate indicators);
- Define data flows necessary to collect data for each variable and business processing related to data entry, validation, storage, transmission, and processing;
- Make a full inventory of the existing data arrays (stored in different electronic databases), assess the data quality and the feasibility of its transfer to the consolidated information system;
- Based on the results of the- above mentioned efforts, design a comprehensive plan for the development and operation of the unified information management system in HIV area that includes terms of reference for software developers, mechanism for ensuring confidentiality of sensitive information, and the requirements in hardware and modern communication technologies.

18 Irrespective of external reporting commitments, such as GAPRP

19 Ideally, responsibilities should be separated between implementers (in charge of data generation) and entities measuring performance and generating M&E reports

5.3 Actions to implementation the recommendations

The implementation of the recommendation R2 "Design a 3 to 5-year strategic plan" depends on the outcome of the implementation of the first recommendation R1 "Rethink the national response to the epidemic ".

The third recommendation R3 "Conceptualize the M&E framework as the major tool for strategic governance and oversight and improve M&E practices" can be implemented irrespective of the progress in implementation of the first two.

Figure 37: A plan of action for the implementation of the recommendation R1

Actions	Actors	Milestones / outputs	Time line
1. Start consultations within each constituency (donors/partners, the communities and NGOs, service providers, state agencies) on the feasibility of rethinking the national response to the epidemic	CCM, other constituency specific platforms for internal consultations	Opinions and expectations of the future steps among the key stakeholders are formed	January 2016
2. Develop an advocacy plan, and share it with the major constituencies	UNAIDS	Key messages, target audience, and mechanisms for coordinated interactions are defined	January – February 2016
3. Draft 3-5 page concept of the national response to the HIV with a focus on the guiding principles and the most important areas to end the HIV epidemic by 2030 ("advocacy tool")	UNAIDS, MoH	An advocacy tool is ready to be presented and discussed with political elites	February 2016
4. Start consultations (informal and formal meetings, round tables, etc.) in accordance with the agreed advocacy plan	All actors expressing willingness to support the advocacy efforts	Key policy makers are aware of their responsibility for the future of the country and implications of their choice	March – June 2016
5. In case of the success of advocacy efforts, elaborate details of the concept, such as milestones (at outcome and impact levels)	UNAIDS, MoH, partners / CCM	The policy tool is ready for endorsement	May – June 2016
6. Start the procedures for the endorsement of the concept of the national response to the HIV epidemic	Relevant policy making entity	The Concept of the National Response to end the epidemic by 2030 is approved	July – September 2016

The underlying assumptions of the proposed plan of action are as follows:

- The constituencies agree upon the implementation of the recommendation R1, express readiness to support the advocacy efforts, and assign actors to represent the constituency in the process;
- The advocacy efforts (actions #3 and #4) are successful, and necessary support is secured among opinion- and policy-makers in order to start the formal procedures (action #6).

Figure 38: A plan of action for implementation of the recommendation R2

Actions	Actors	Milestones / outputs	Time line
7. Design a detailed work plan (combining technical inputs, consultations, and decision making steps) and a ToR of a technical working group (TWG) for the development of the Strategy Plan	CCM or equivalent governing body	Work plan and ToR are endorsed	August 2016
8. Establish the TWG	CCM or equivalent governing body	TWG is established	August 2016
9. Define the HIV chain of results and set output (and outcome) targets[20]	TWG	The result framework is ready for consultations and endorsement	August – September 2016
10. The authorized decision making body reviewed and endorses the result framework	Authorized governing body	The result framework is endorsed	September 2016
11. Identify the most appropriate solutions/ approaches in order to define interventions necessary to deliver results, and the actors responsible for the results	TWG[21]	Strategies for achieving results are elaborated	September – October 2016
12. Estimate the resource requirements for the implementation of the strategies	TWG	Inputs, strategies, and results are defined, including possible funding gaps and/ or capacity constraints	October – November 2016
13. Discuss the results and identify the priority strategies to balance results and inputs in case of the funding deficit	TWG and authorized governing body	Scenarios (with and without funding gap) with respective result targets are agreed upon	November 2016
14. Finalize the strategic plan	TWG	Strategic plan is ready for the approval	November 2016
15. Review and approve the strategic plan	Authorized governing body	The strategic plan of the national response to the epidemic is approved	December 2016

The proposed plan of action for the implementation of the M&E related recommendations (R3) are divided into two phases:

- Actions from 1-7 are synchronized with development and approval of the Strategic Plan (as described above) as it has to produce the M&E Plan in 2016 for strategic management of the national response to the epidemic.
- The remaining actions are stretched over the year of 2016, and are dedicated to design and gradually introduce a more advanced unified management information system which meets the needs of all actors involved in either strategic or operational (program) management of the HIV related interventions.

20 Assuming that IBBS 2016 preliminary results are available to set baselines

21 Partners might provide external technical assistance as needed

Figure 39: A plan of action for the implementation of the recommendation R3

Actions	Actors	Milestones / outputs	Time line
1. Design a detailed work plan (combining technical inputs, consultations, and decision making steps) and a ToR of a technical working group (TWG) for the design of the M&E improvement plan	CCM or equivalent governing body	Work plan and ToR are endorsed	August 2016
2. Establish the TWG[22]	CCM or equivalent governing body	TWG is established	August 2016
3. Define a minimum set of output and outcome indicators in order to measure the progress, along with the progress reporting format	TWG	Indicators are selected and defined	September 2016
4. Define clearly responsibilities for the data flows, data validation/quality audit, and calculation of the achievements by selected indicators and reporting	TWG	Processed necessary to measure results by the selected indicators are defined	September 2016
5. Develop enforcement mechanisms necessary for the designated actors to fulfill the M&E related tasks (data collection, processing, calculations, reporting)	TWG	Implementation mechanisms are developed	September – October 2016
6. Estimate the resource requirements for M&E of the strategic plan	TWG	Financial and other resources needed for the functioning of the M&E of the Strategic Plan are defined	November 2016
7. Finalize and submit the M&E plan of the Strategic Plan to the technical working group on the Strategic Plan	TWG	The M&E is integrated into the Strategic Plan	November 2016
8. Define clearly user requirements for the analysis and reporting at all levels (strategic and operational/programmatic	TWG[23]	User requirements of the M&E system are defined	December 2016 – January 2017
9. Make a full inventory of the variables in accordance with the user requirements	TWG	The inventory of variables is developed	January – February 2017
10. Define data flows necessary to collect data for each variable and business processing related to data entry, validation, storage, transmission and processing	TWG	Business process analysis document is available	March – May 2017
11. Access existing data management practices, including database structures and the quality of data	TWG	A full inventory of existing data arrays is developed	May – June 2017
12. Develop a comprehensive plan for the improvement of M&E and for development of the unified information management system	TWG[24]	ToR for the selection of software developers is ready	June – July 2017

22 This and previous action can be combined with the actions #7 and #8 of the plan for the implementation of the recommendation R2

23 Partners might provide external technical assistance as needed

24 Partners might provide external technical assistance as needed

Actions	Actors	Milestones / outputs	Time line
13. Develop and introduce modern IT solutions for the unified information management system (UMIS)	TWG + selected MIS developer company	UMIS modules are gradually introduced and piloted	September – December 2017
14. Implement activities as defined in the comprehensive plan (for instance, introduce standard operational procedures, training of relevant staff)	As defined in the comprehensive plan	The environment is prepared to switch to the new UMIS	September – December

The implementation of the recommendation of R3 is more time and resource consuming. It will require technical and financial support from the partners in 2017, and it is highly desirable that the CCM explores such opportunities, and secures the support by the end of 2016.

6 Annexes

Annex 1: Technical details and data tables

Figure 40: Timeline (in calendar days) by different stages from the first HIV test to starting ART

	ELISA1–ELISA2	ELISA2 – IB	IB – CS	IB – ART	N
Civil Sector	**NoD**	**NoD**	**-17**	**113**	**997**
2013	**NoD**	**NoD**	**-4**	**163**	**427**
Other	NoD	NoD	-11	142	305
PWID	14	19	36	252	122
Bishkek	**7**	**15**	**36**	**324**	**43**
Chuy	**21**	**23**	**47**	**267**	**56**
Osh	**5**	**9**	**28**	**32**	**15**
The rest	**8**	**30**	**16**	**815**	**8**
2014	**21**	**6**	**-26**	**84**	**570**
Other	NoD	NoD	-40	82	437
PWID	21	6	38	89	133
Bishkek	**10**	**6**	**73**	**88**	**24**
Chuy	**33**	**6**	**50**	**127**	**69**
Osh	**9**	**5**	**19**	**49**	**26**
The rest	**7**	**5**	**14**	**52**	**14**
Prisons | УСН	**16**	**10**	**77**	**218**	**96**
2013	**16**	**14**	**79**	**338**	**52**
Other	NoD	NoD	86	700	6
PWID	16	14	78	320	46
Bishkek	**1**	**9**	**200**	**242**	**5**
Chuy	**21**	**12**	**67**	**308**	**30**
Osh	**0**	**17**	**NoD**	**361**	**2**
The rest	**8**	**26**	**40**	**371**	**9**
2014	**18**	**6**	**76**	**77**	**44**
Other	NoD	NoD	22	73	7
PWID	18	6	79	77	37
Bishkek	**21**	**5**	**7**	**77**	**2**
Chuy	**28**	**8**	**102**	**9**	**18**
Osh	**10**	**3**	**54**	**72**	**6**
The rest	**5**	**4**	**98**	**159**	**11**
Grand Total					**1,093**

Source: RP "AIDS" database and epidemiologic investigation forms

Figure 41: Modeling of PWID flow along the cascade of services in 2013

Use IBBS 2013 for Prevention Coverage | Использовать данные ДЭН 2013 для Охвата Превентивными услугами	Y
Use Loose Criteria for "Is on ART >=12" | Использовать легкий критерии для определения "На АРТ >=12 месяцев"	Y
Use only ELISA1 or ELISA1 and RT | Учесть только ИФА1 или ИФА1 вместе с ЭТ	Y
ELISA1+ELISA2 Specificity | Специфичность ИФА1 + ИФА 2 (% подтверждения ИБ результатов ИФА)	98%

		Bishkek	Osh	Chui	The rest	Total civil sector	Prisons	Total National
A	Size estimate	8,050	3,800	6,000	7,150	25,000		**25,000**
B	Covered by preventive programs	2,367	1,748	1,470	1,465	7,050	1,488	**8,538**
B1	Covered by OST	389	162	346	75	972	324	**1,296**
C	Tested for HIV (1st ELISA1 or RT)	1,715	1,457	1,117	271	4,560	1,674	**6,234**
C1	Tested and know results	1,307	1,243	555	100	3,205	690	**1,737**
C2	Tested and post-test counselling	199	211	328	106	844	608	**1,419**
C3	Tested positive (ELISA1+ELISA2)	88	79	108	27	302	127	**429**
C4	Applied for confirmation	44	15	57	8	124	47	**171**
D	HIV+ confirmed	43	15	56	8	122	46	**168**
E	Registered for care	14	9	23	3	49	28	**77**
F	Started ART	9	9	15	2	35	20	**55**
G	On ART after 12 months	2	3	8	0	13	13	**26**
H	Viral suppression	0	1	3	0	4	1	**5**
C_rt	**Tested with Rapid Test**	927	1,010	221	0	2,158	0	**2,158**
C1_rt	HIV+ and Knew result	45	84	11	0	140		**140**
C2_rt	Tested and post-test counselling	11	15	7	0	33		**33**
C3_rt	HIV+ Confirmed	11	15	7	0	33		**33**
	Specificity	*100%*	*100%*	*100%*		*100%*		
	HIV prevalence	*4.9%*	*8.3%*	*5.0%*		*6.5%*		
	Lost after rapid tests	*34*	*69*	*4*	*0*	*107*		
	% of Lost from Tested	*76%*	*82%*	*36%*		*76%*		
C	**Tested for HIV (1st ELISA1 or RT)**							
C	Tested for HIV (1st ELISA1)	799	462	903	75	2,435	1,674	**4,109**
C	*Tested for HIV (1st ELISA1 or RT)*	*1,715*	*1,457*	*1,117*	*271*	*4,560*	*1,674*	***6,234***
D	**HIV+ confirmed**	43	15	56	8	122	46	**168**
	ELISA1 + ELISA2	*32*	*0*	*49*	*8*	*89*	*46*	***135***
	RT + ELISA1 + ELISA2	*11*	*15*	*7*	*0*	*33*	*0*	***33***
		26%	*100%*	*13%*	*0%*	*27%*	*0%*	***20%***
B	**Covered by preventive programs**							
	Admin Report	4,651	2,628	3,456	42	10,777	1,488	**12,265**
	IBBS 2013	*2,367*	*1,748*	*1,470*	*787*	*7,050*	*1,488*	***8,538***
	Assumptions based on IBBS 2013							
C1	*Tested and know results*	*380*	*233*	*334*	*23*	*1,047*	*690*	*1,737*
C2	*Tested and post-test counselling*	*188*	*196*	*321*	*5*	*811*	*608*	*1,419*
	Cross checking with positive	*188*	*196*	*321*	*106*	*811*	*608*	*1,419*
C3	*Tested positive (ELISA1+ELISA2)*	*88*	*79*	*108*	*5*	*302*	*127*	*429*
	Cross checking with HIV+Confirmed	*88*	*79*	*108*	*8*	*302*	*127*	*429*
G	**On ART after 12 months**							
	Strict Criteria	2	2	1	0	5	4	**9**
	Loose Criteria	2	3	8	0	13	13	**26**
H	**Viral suppression**							
	Strict Criteria	0	1	1	0	2	1	**3**
	Loose Criteria	0	1	3	0	4	1	**5**

Figure 42: Modeling of PWID flow along the cascade of services in 2014

Use IBBS 2013 for Prevention Coverage | Использовать данные ДЭН 2013 для Охвата Превентивными услугами	Y
Use Loose Criteria for "Is on ART >=12" | Использовать легкий критерии для определения "На АРТ >=12 месяцев"	Y
Use only ELISA1 or ELISA1 and RT | Учесть только ИФА1 или ИФА1 вместе с ЭТ	Y
ELISA1+ELISA2 Specificity | Специфичность ИФА1 + ИФА 2 (% подтверждения ИБ результатов ИФА)	**98%**

		Bishkek	Osh	Chui	The rest	Total civil sector	Prisons	Total National
A	Size estimate	8,050	3,800	6,000	7,150	25,000		**25,000**
B	Covered by preventive programs	2,367	1,748	1,470	1,465	7,050	1,344	**8,394**
B1	Covered by OST	389	188	357	30	964	478	**1,442**
C	Tested for HIV (1st ELISA1 or RT)	2,229	1,342	1,292	417	5,280	788	**6,068**
C1	Tested and know results	1,475	1,189	677	233	3,574	243	**1,561**
C2	Tested and post-test counselling	352	175	354	179	1,060	214	**1,234**
C3	Tested positive (ELISA1+ELISA2)	160	61	118	41	380	45	**425**
C4	Applied for confirmation	24	27	70	14	136	38	**173**
D	HIV+ confirmed	24	26	69	14	133	37	**170**
E	Registered for care	14	17	35	9	75	26	**101**
F	Started ART	9	17	26	8	60	17	**77**
G	On ART after 12 months	5	6	11	3	25	3	**28**
H	Viral suppression	0	0	3	0	3	0	**3**
C_rt	**Tested with Rapid Test**	783	1,009	313	151	2,256	199	**2,455**
C1_rt	HIV+ and Knew result	25	73	5	1	104		**104**
C2_rt	Tested and post-test counselling	10	24	5	1	40		**40**
C3_rt	HIV+ Confirmed	10	24	5	1	40		**40**
	Specificity	*100%*	*100%*	*100%*		*100%*		
	HIV prevalence	*3.2%*	*7.2%*	*1.6%*	*0.7%*	*4.6%*		
	Lost after rapid tests	*15*	*49*	*0*	*0*	*64*		
	% of Lost from Tested	*60%*	*67%*	*0%*	*0%*	*62%*		
C	**Tested for HIV (1st ELISA1 or RT)**							
C	Tested for HIV (1st ELISA1)	1,456	357	984	29	3,064	589	
C	*Tested for HIV (1st ELISA1 or RT)*	*2,229*	*1,342*	*1,292*	*567*	*5,280*	*788*	
D	**HIV+ confirmed**	24	26	69	14	133	37	**170**
	ELISA1 + ELISA2	*14*	*2*	*64*	*13*	*93*	*37*	***130***
	RT + ELISA1 + ELISA2	*10*	*24*	*5*	*1*	*40*	*0*	***40***
		42%	*92%*	*7%*	*7%*	*30%*	*0%*	***24%***
B	**Covered by preventive programs**							
	Admin Report	4,654	2,792	4,285	77	11,808	1,344	**13,152**
	IBBS 2013	*2,367*	*1,748*	*1,470*	*787*	*7,050*	*1,344*	***8,394***
	Assumptions based on IBBS 2013							
C1	*Tested and know results*	*692*	*180*	*364*	*9*	*1,318*	*243*	*1,561*
C2	*Tested and post-test counselling*	*342*	*151*	*349*	*2*	*1,020*	*214*	*1,234*
	Cross checking with positive	*342*	*151*	*349*	*178*	*1,020*	*214*	*1,234*
C3	*Tested positive (ELISA1+ELISA2)*	*160*	*61*	*118*	*2*	*380*	*45*	*425*
	Cross checking with HIV+Confirmed	*160*	*61*	*118*	*14*	*380*	*45*	*425*
G	**On ART after 12 months**							
	Strict Criteria	3	1	4	2	10	0	**10**
	Loose Criteria	5	6	11	3	25	3	**28**
H	**Viral suppression**							
	Strict Criteria	0	0	2	0	2	0	**2**
	Loose Criteria	0	0	3	0	3	0	**3**

Figure 43: Flow of PWID along the cascade – all sectors, 2013 (a base-10 logarithmic scale)

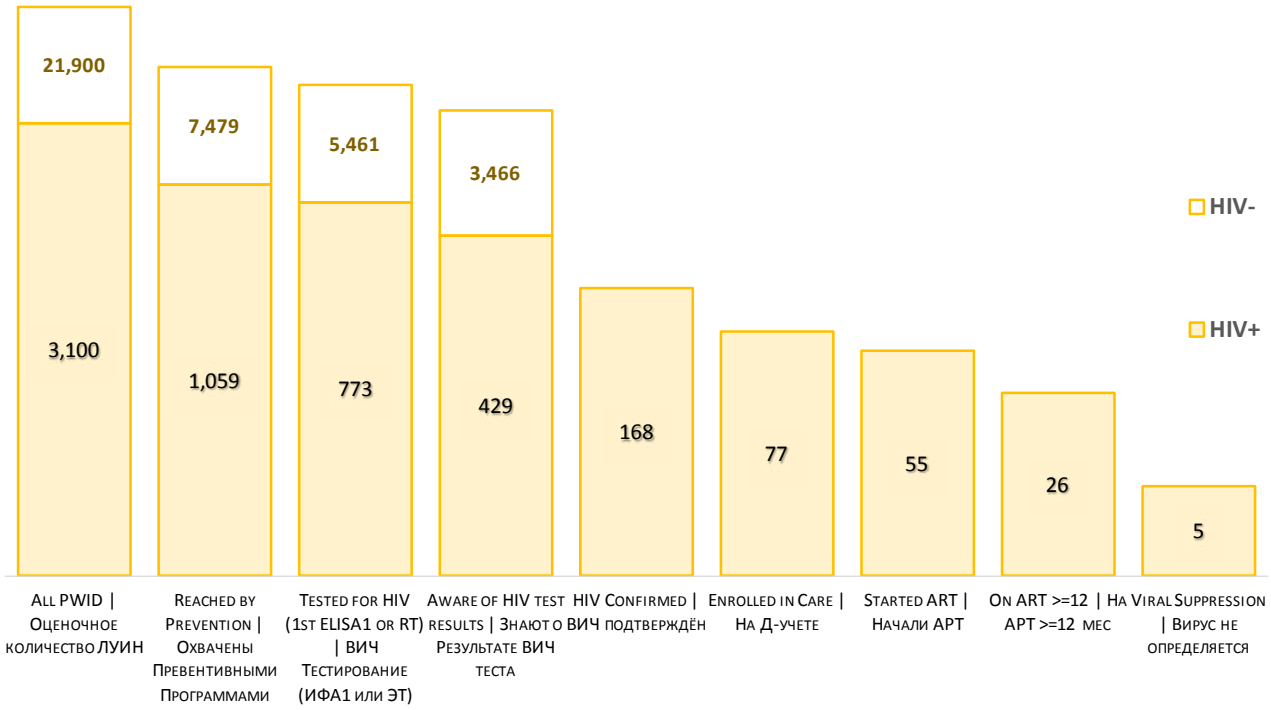


Figure 44: Flow of PWID along the cascade – Civil Sector, 2013

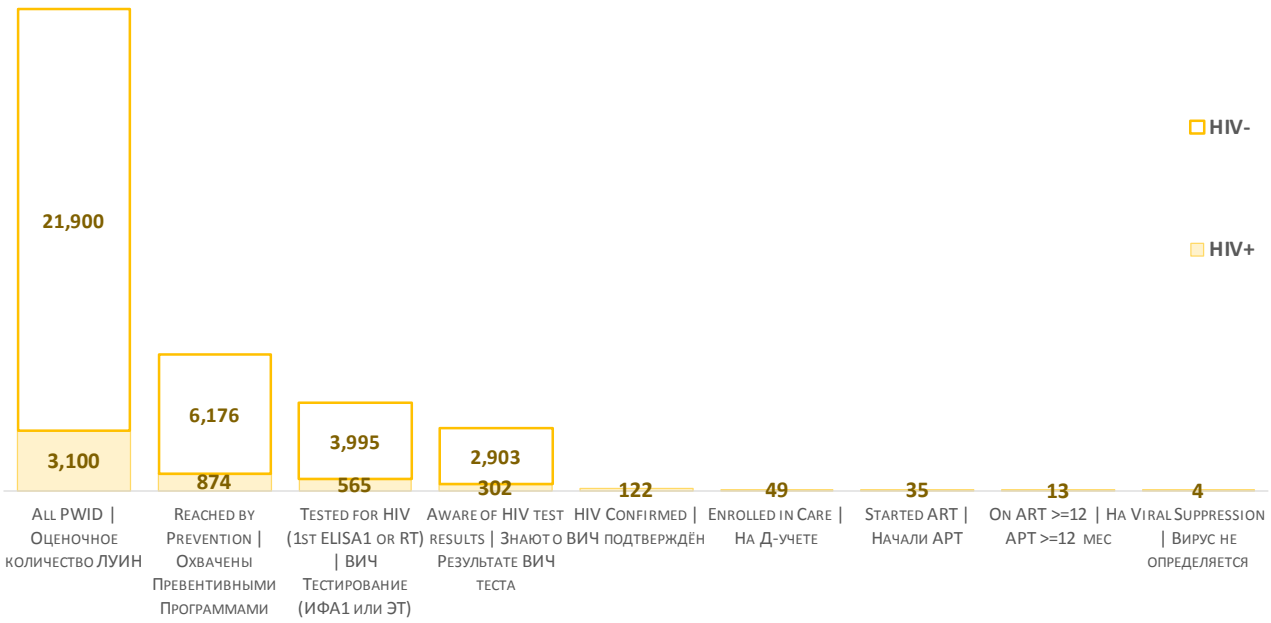


Figure 45: Flow of PWID along the cascade – Civil Sector, 2013 (a base-10 logarithmic scale)

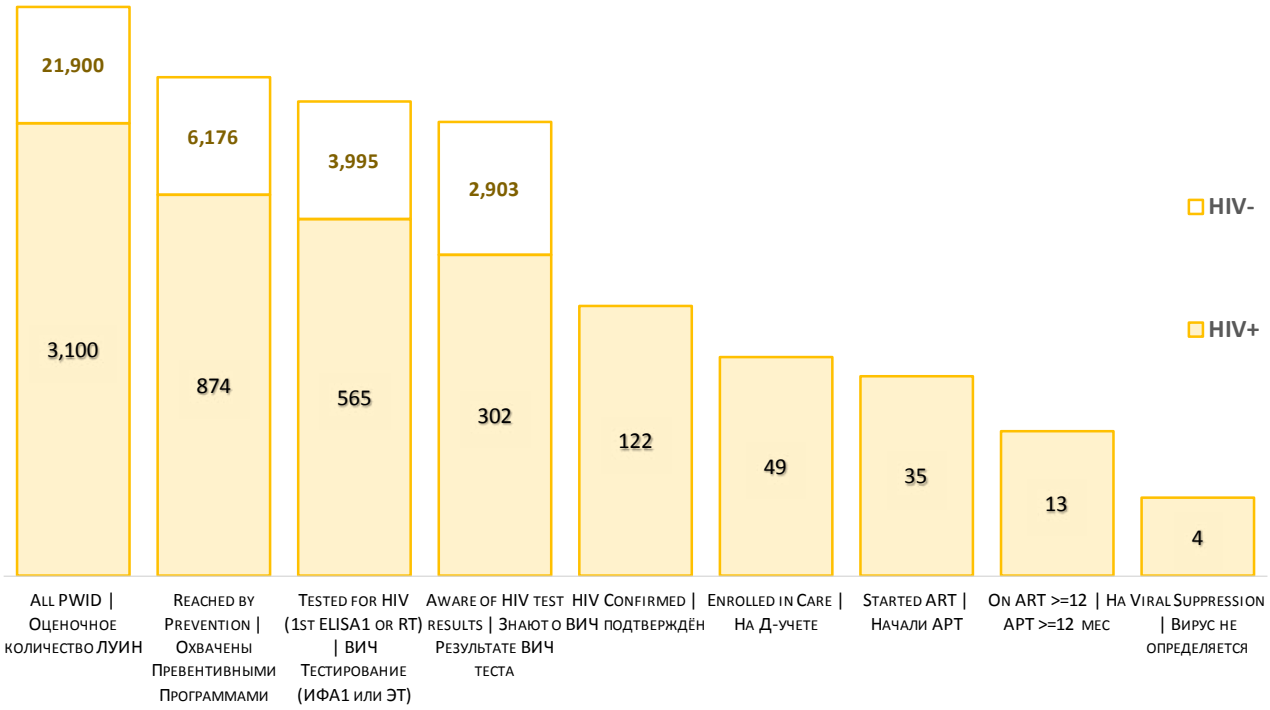


Figure 46: Flow of PWID along the cascade – Bishkek, Civil Sector, 2013 (a base-10 logarithmic scale)

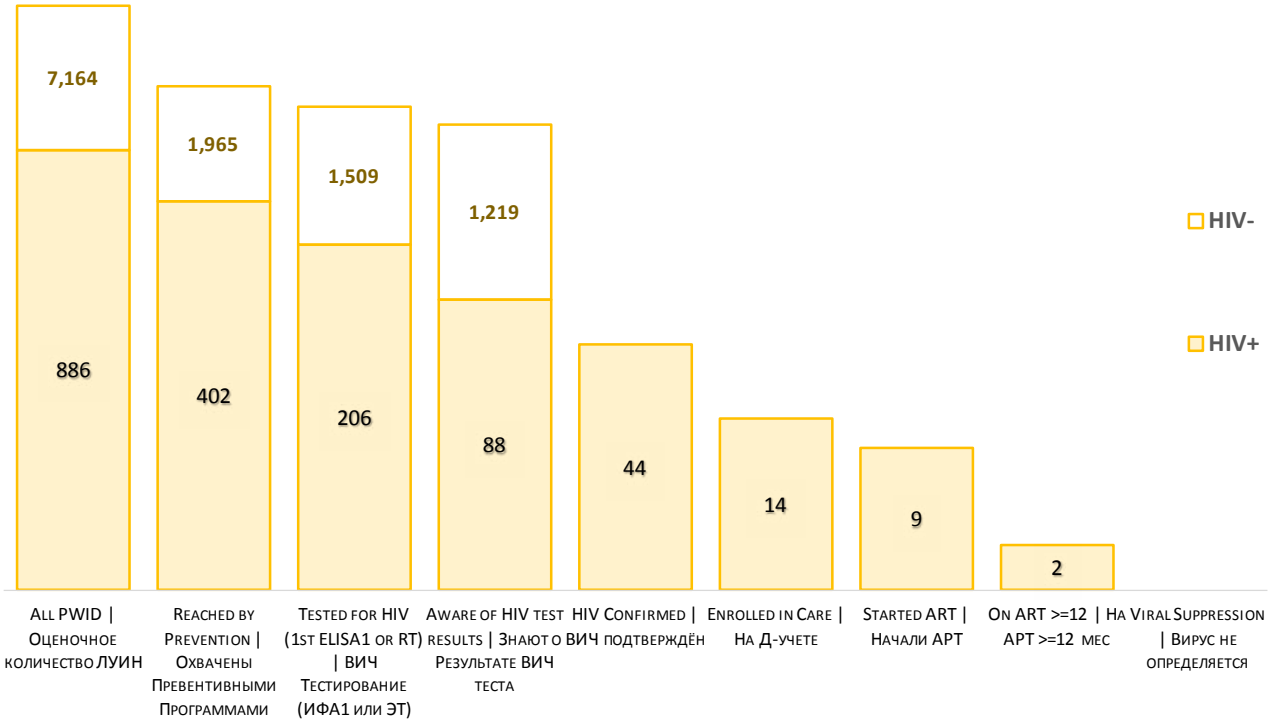


Figure 47: Flow of PWID along the cascade – Osh, Civil Sector, 2013 (a base-10 logarithmic scale)

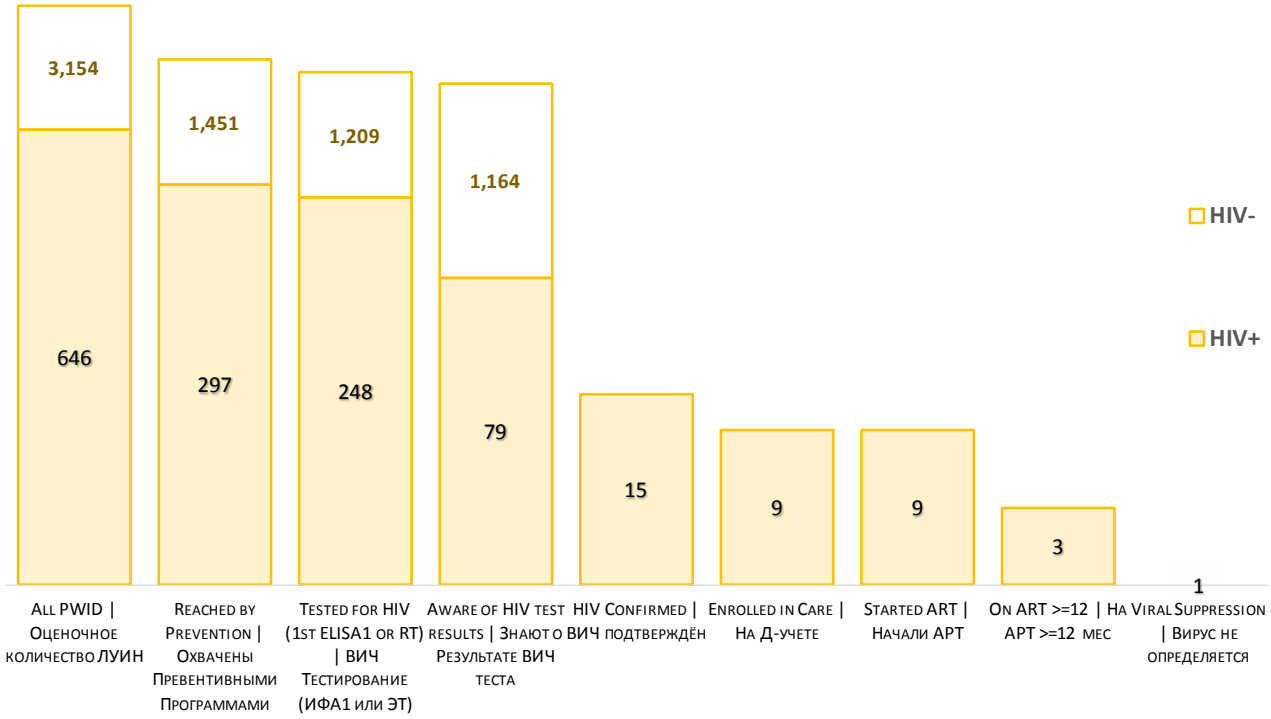


Figure 48: Flow of PWID along the cascade – Chuy, Civil Sector, 2013 (a base-10 logarithmic scale)

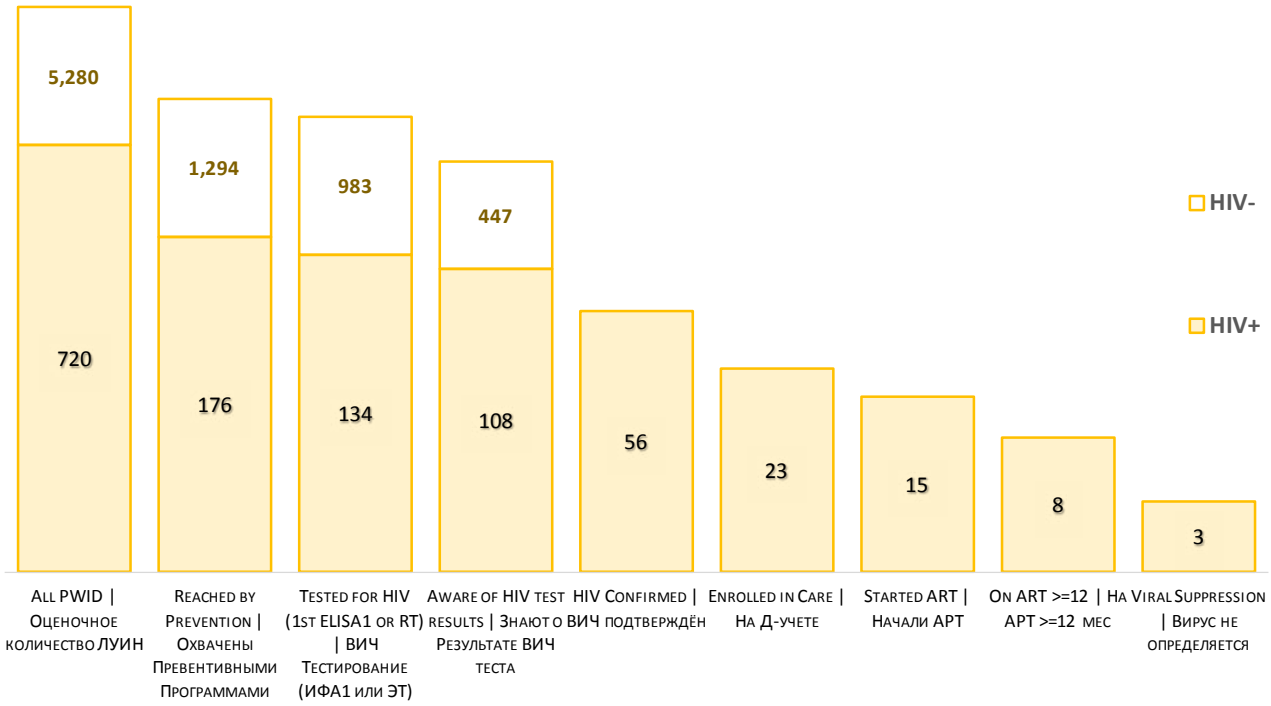


Figure 49: Flow of PWID along the cascade – all sectors, 2014 (a base-10 logarithmic scale)

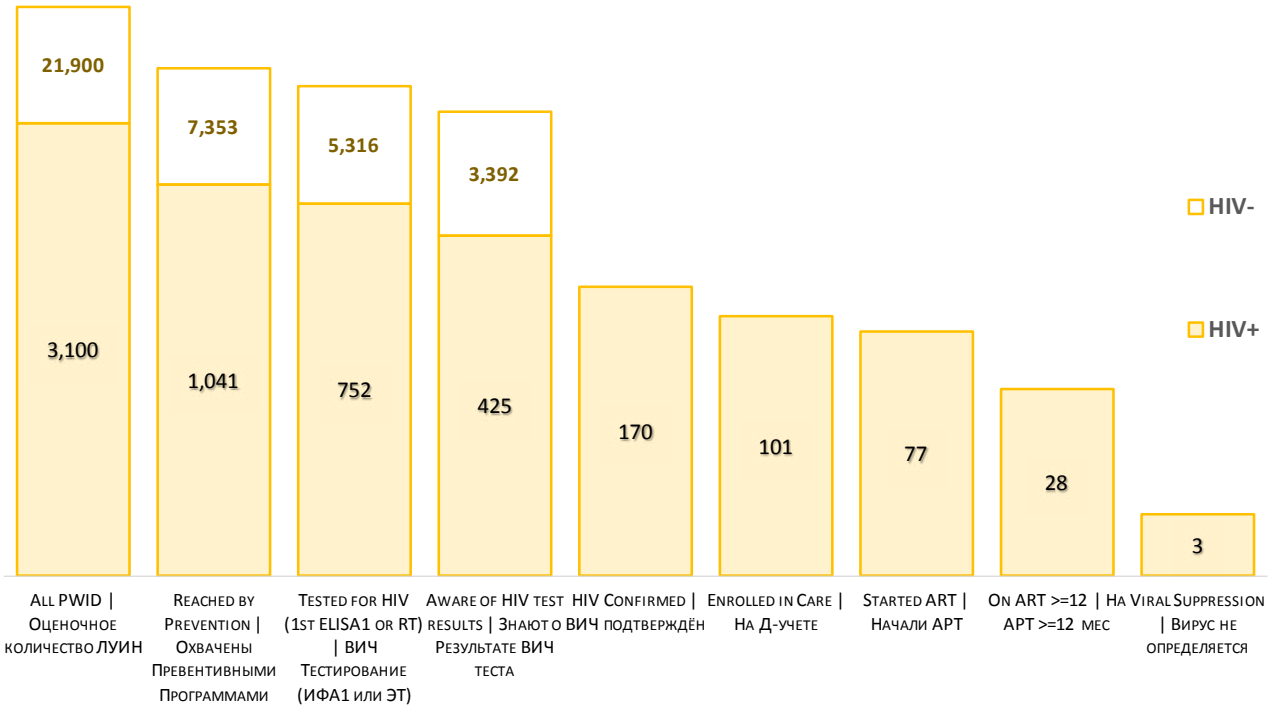


Figure 50: Flow of PWID along the cascade – the Civil Sector, 2014 (a base-10 logarithmic scale)

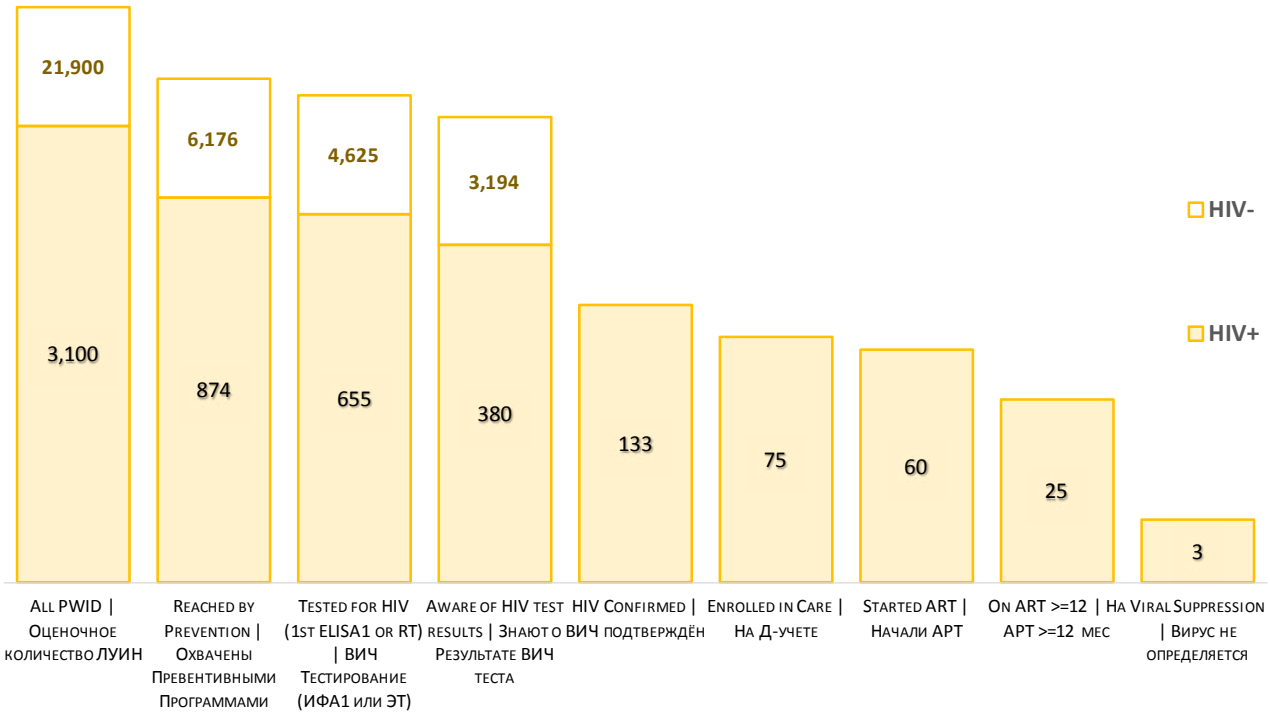


Figure 51: Flow of PWID along the cascade – Bishkek, the Civil Sector, 2014 (a base-10 logarithmic scale)

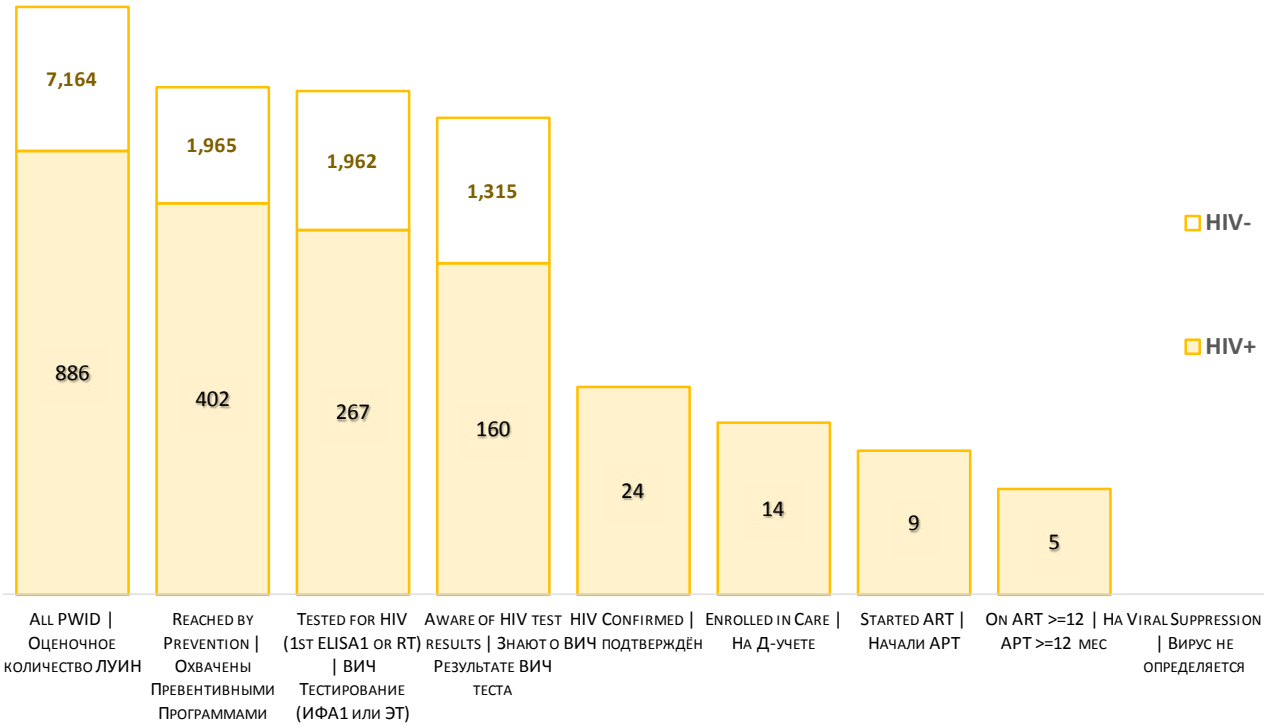


Figure 52: Flow of PWID along the cascade – Osh, the Civil Sector, 2014 (a base-10 logarithmic scale)

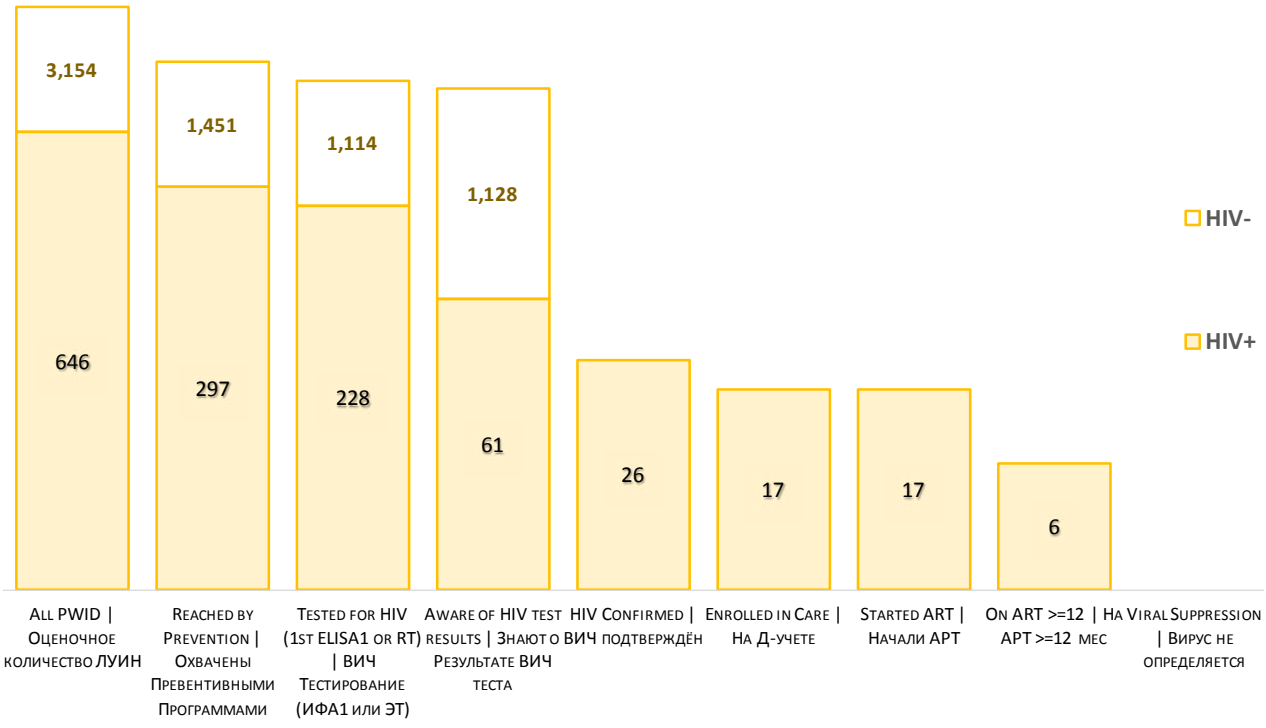


Figure 53: Flow of PWID along the cascade – Chuy, the Civil Sector, 2014 (a base-10 logarithmic scale)

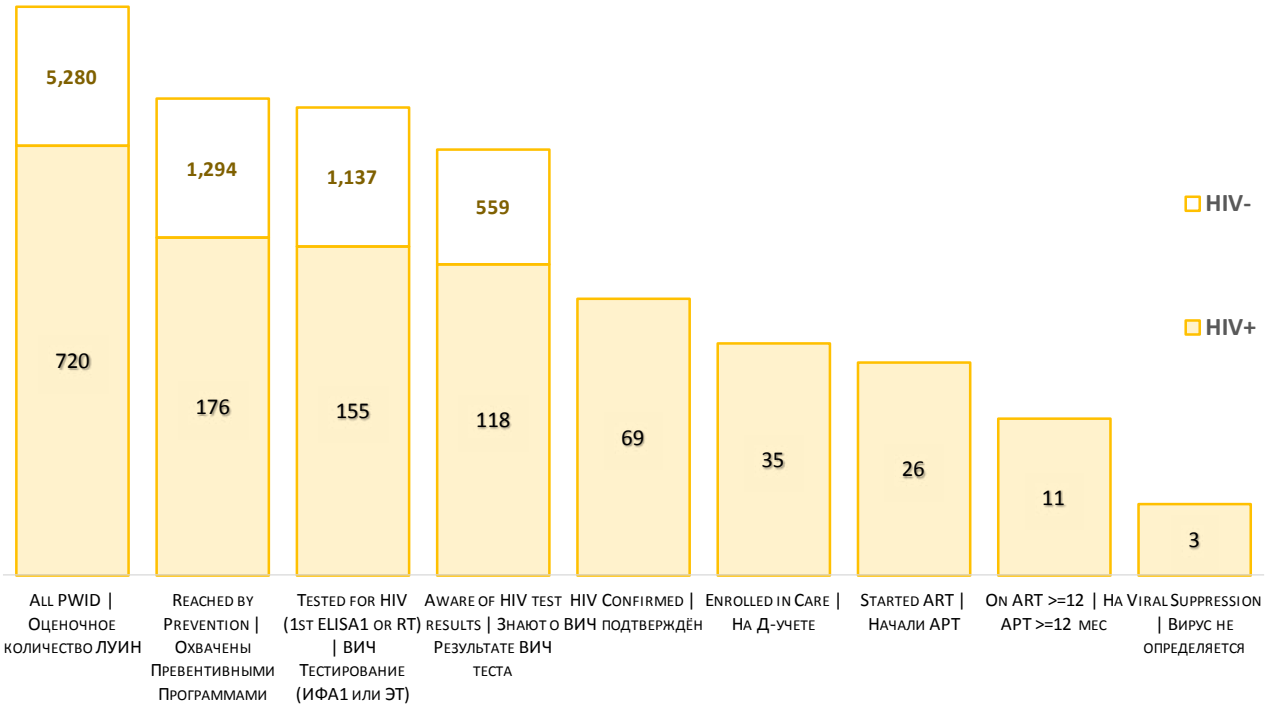


Figure 54: Description of PWID leakages across the cascade by sectors and geographical areas, 2013

		Bishkek	Osh	Chui	The rest	Total civil sector	Prisons	Total National
A-B	**Missed by prevention**	5,683	2,052	4,530	5,685	17,950		16,462
(A-B)/A	Не охвачен профилактикой	**71%**	**54%**	**76%**	**80%**	**72%**		**66%**
B-C	**Missed for HIV testing**	652	291	353	1,194	2,490	-186	2,304
(B-C)/B	Не прошли тестирование	**28%**	**17%**	**24%**	**82%**	**35%**	**-13%**	**27%**
C4-C3	**Lost before confirmation**	44	64	51	19	178	80	258
(C4-C3)/C4	Потеряны до подтверждения	**50%**	**81%**	**47%**	**70%**	**59%**	**63%**	**60%**
D-E	**Lost before registration**	29	6	33	5	73	18	91
(D-E)/D	Потеряны во регистрации на Д-учет	**67%**	**40%**	**59%**	**63%**	**60%**	**39%**	**54%**
E-F	**Lost before ART**	5	0	8	1	14	8	22
(E-F)/E	Потеряны до начала АРТ	**36%**		**35%**	**33%**	**29%**	**29%**	**29%**
F-G	**Lost during ART**	7	6	7	2	22	7	22
(F-G)/F	Потеряны вовремя АРТ	**78%**	**67%**	**47%**	**100%**	**63%**	**35%**	**63%**
H-G	**Lost for treatment success**	2	2	5	0	9	12	21
(H-G)/G	Лечились безуспешно	**100%**	**67%**	**63%**		**69%**	**92%**	**81%**

Figure 55: Description of PWID leakages across the cascade by sectors and geographical areas, 2014

		Bishkek	Osh	Chui	The rest	Total civil sector	Prisons	Total National
A-B	**Missed by prevention**	5,683	2,052	4,530	5,685	17,950		16,606
(A-B)/A	Не охвачен профилактикой	**71%**	**54%**	**76%**	**80%**	**72%**		**66%**
B-C	**Missed for HIV testing**	138	406	178	1,048	1,770	556	2,326
(B-C)/B	Не прошли тестирование	**6%**	**23%**	**12%**	**72%**	**25%**	**41%**	**28%**
C4-C3	**Lost before confirmation**	136	34	48	27	244	7	251
(C4-C3)/C4	Потерени до подтверждения	**85%**	**56%**	**41%**	**66%**	**64%**	**16%**	**59%**
D-E	**Lost before registration**	10	9	34	5	58	11	69
(D-E)/D	Потерени во регистрации на Д-учет	**42%**	**35%**	**49%**	**36%**	**44%**	**30%**	**41%**
E-F	**Lost before ART**	5	0	9	1	15	9	24
(E-F)/E	Потерени до начала АРТ	**36%**		**26%**	**11%**	**20%**	**35%**	**24%**
F-G	**Lost during ART**	4	11	15	5	35	14	35
(F-G)/F	Потерены вовремя АРТ	**44%**	**65%**	**58%**	**63%**	**58%**	**82%**	**58%**
H-G	**Lost for treatment success**	5	6	8	3	22	3	25
(H-G)/G	Лечились безуспешно	**100%**	**100%**	**73%**	**100%**	**88%**	**100%**	**89%**

Figure 56: Coverage of PWID with preventive services and OST by regions and years

		Civil Sector			Prisons			All Sectors		
		Receive Preventive Service	**Enrolled in OST**	Coverage	Receive Preventive Service	**Enrolled in OST**	Coverage	Receive Preventive Service	Enrolled in OST	Coverage
2013	**Kyrgyzstan**	7,050	**972**	**14%**	**1,488**	**324**	**22%**	**8,919**	**1,296**	**16%**
	Bishkek	**2,367**	**389**	16%				2,756	389	14%
	Chuy	1,470	**346**	24%				1,816	346	19%
	Osh	1,748	**162**	9%				1,910	162	8%
	The rest	1,465	**75**	5%				2,437	75	5%
2014	**Kyrgyzstan**	**7,050**	**964**	**14%**	**1,344**	**478**	**36%**	**8,014**	**1,442**	**18%**
	Bishkek	2,367	**389**	16%				2,756	389	14%
	Chuy	1,470	**357**	24%				1,827	357	20%
	Osh	1,748	**188**	11%				1,936	188	10%
	The rest	1,465	**30**	2%				1,495	30	2%

Figure 57: Enrollment of PWID with confirmed HIV infectionon in OST by geographical areas, sectors and years

		Civil Sector			Prisons			All Sectors		
		HIV+ Confirmed	**Started OST**	HIV+ Started OST	HIV+ Confirmed	**Started OST**	HIV+ Started OST	HIV+ Confirmed	Started OST	HIV+ Started OST
2013	**Kyrgyzstan**	**122**	**8**	**7%**	**46**	**13**	**28%**	**168**	**21**	**13%**
	Bishkek	43	**4**	9%	5	**1**	20%	48	5	10%
	Chuy	56	**2**	4%	30	**11**	37%	86	13	15%
	Osh	15	**2**	13%	2	**0**	0%	17	2	12%
	The rest	8	**0**	0%	9	**1**	11%	17	1	6%
2014	**Kyrgyzstan**	**133**	**8**	**6%**	**37**	**11**	**30%**	**170**	**19**	**11%**
	Bishkek	24	**4**	17%	2	**2**	100%	26	6	23%
	Chuy	69	**4**	6%	18	**3**	17%	87	7	8%
	Osh	26	**0**	0%	6	**1**	17%	32	1	3%
	The rest	14	**0**	0%	11	**5**	45%	25	5	20%
	Grand Total	255	**16**	6%	83	**24**	29%	338	40	12%

Figure 58: Time lag between milestones (in calendar days) by years and geographical areas – the Civil Sector

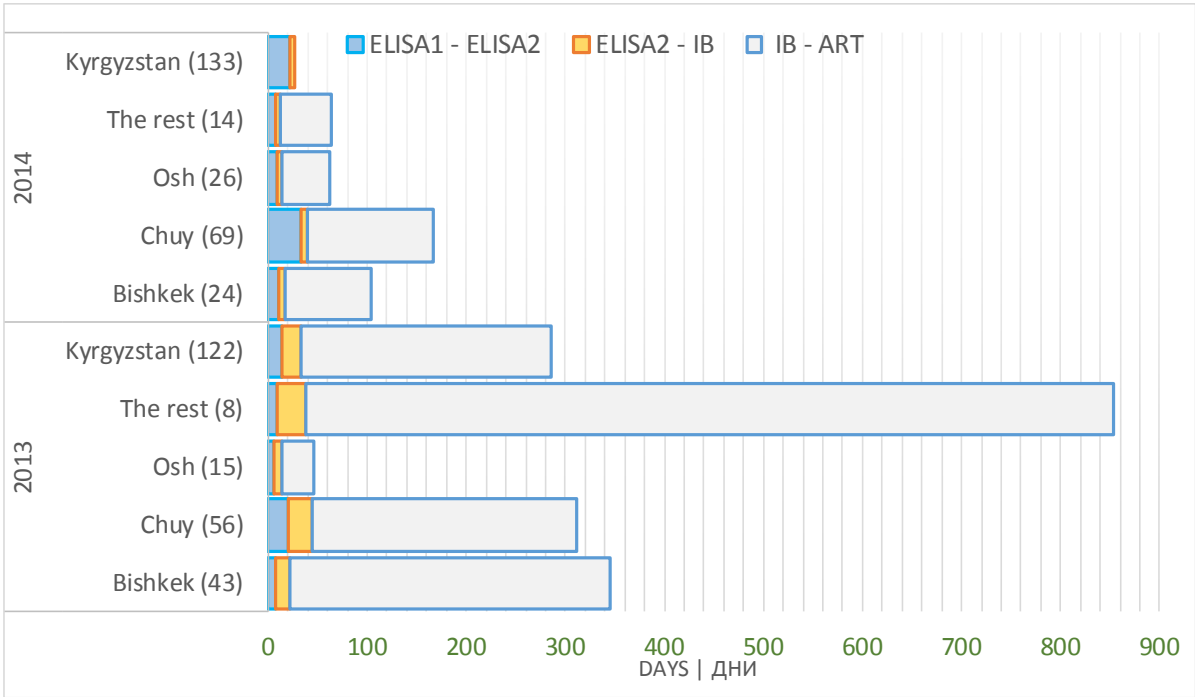


Figure 59: Time lag between milestones (in calendar days) by years and geographical areas – the Civil Sector (only selected regions)

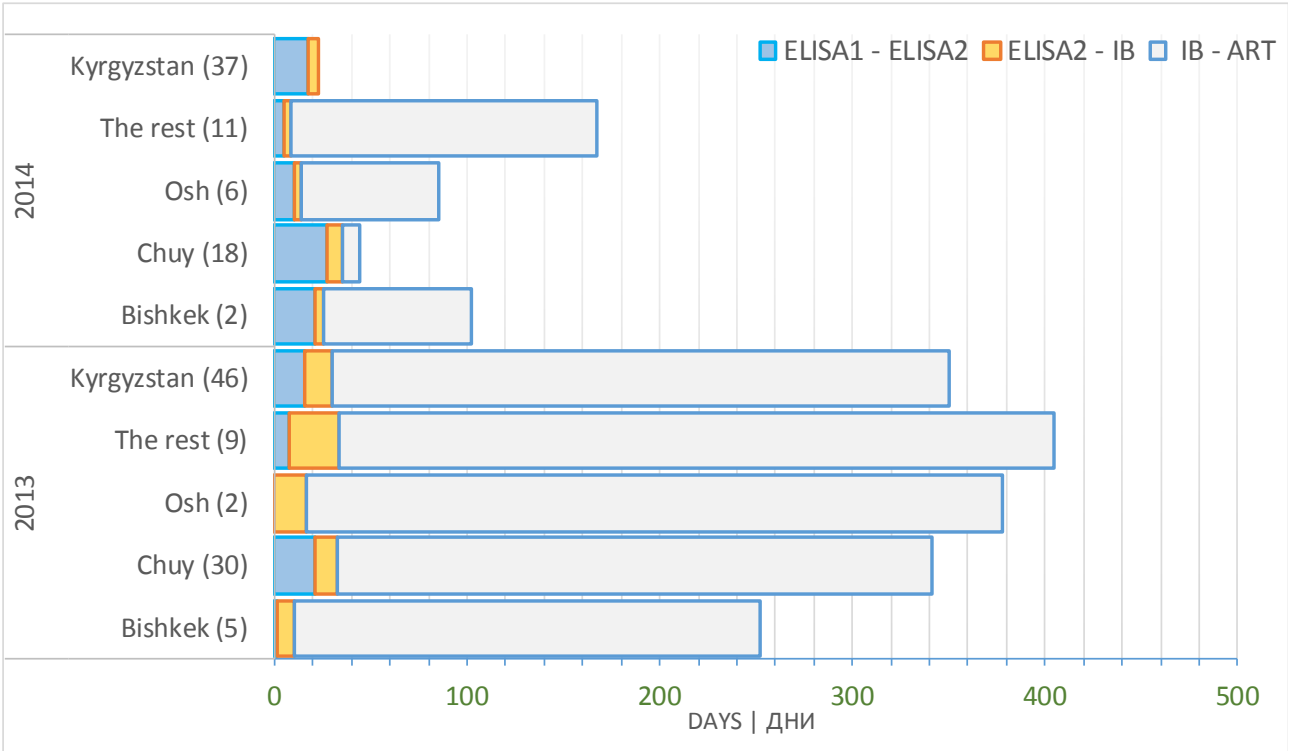


Figure 60: Distribution of PLHIV on ART in 2014 (n=1.718) by gender, age and geographical areas (offical statistics)

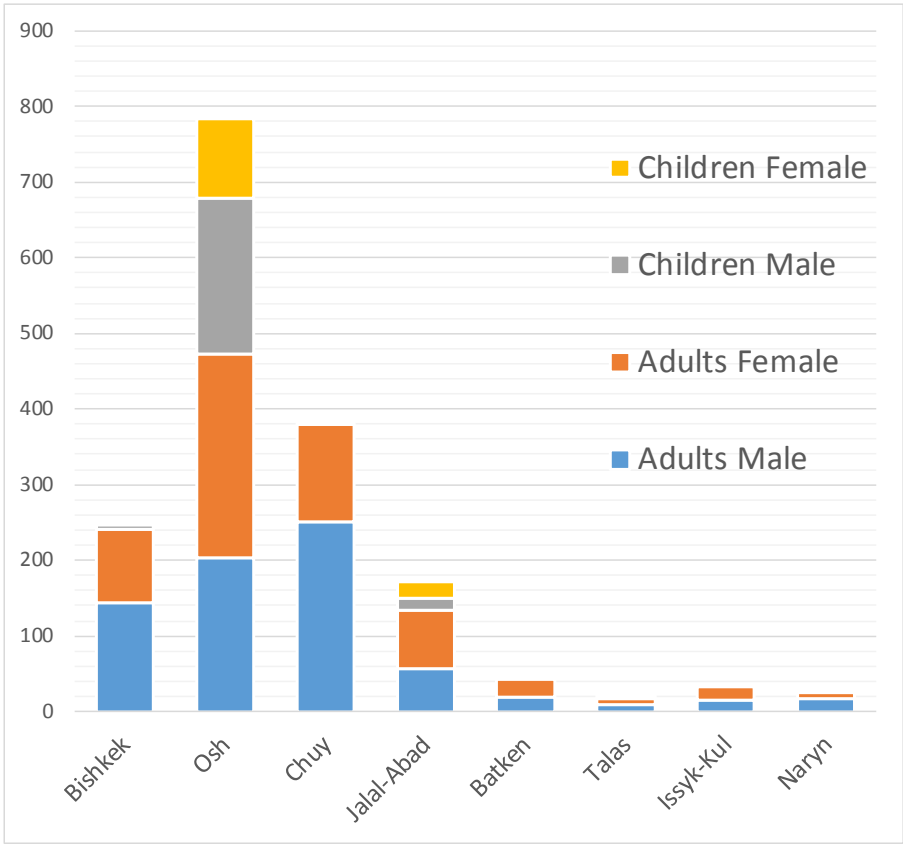
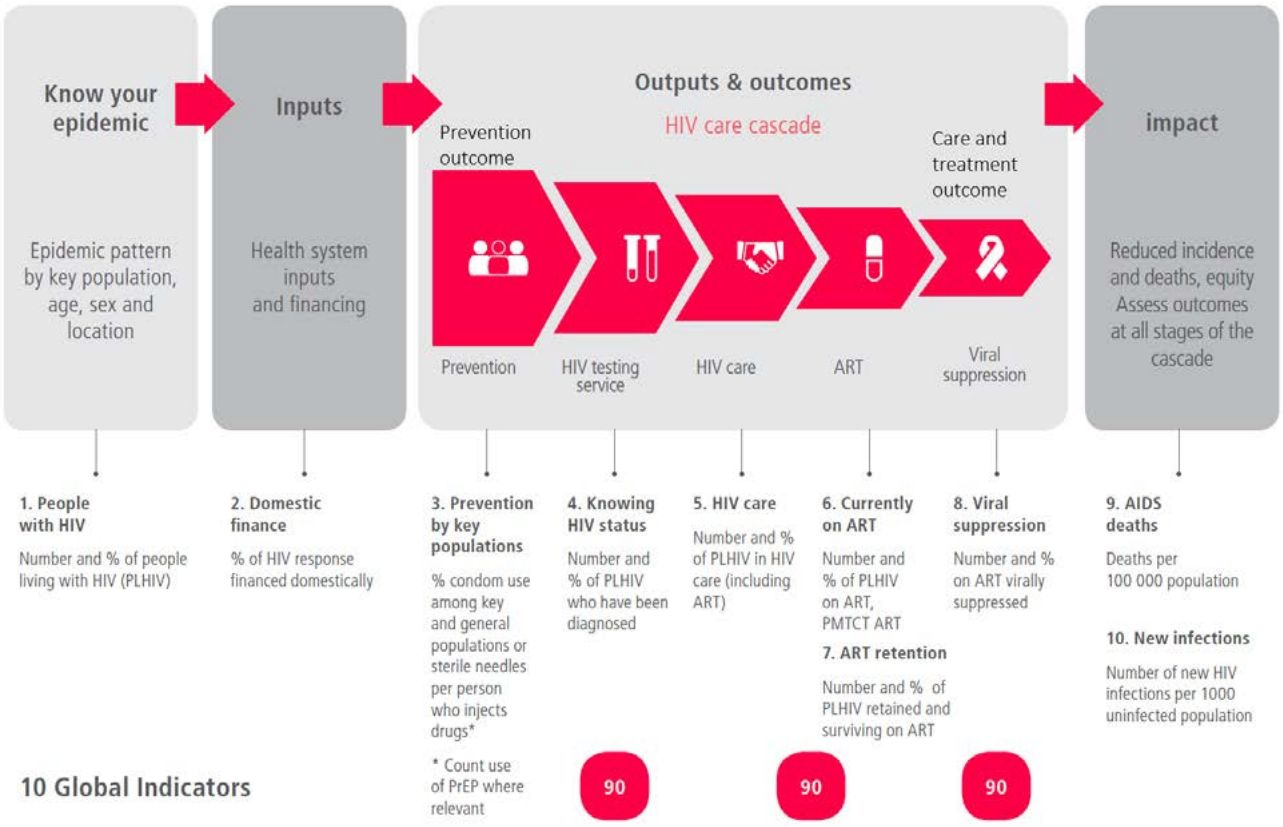


Figure 61: The HIV result chain and global indicators for the monitoring and evaluation of the health sector response to HIV



Source: (World Health Organization 2015), modified by authors

Figure 62: The HIV continuum of care statistics – Civil Sector

	HIV+ confirmed	Linked to Care	Retained in care >6 months	Retained in care >12 months	AIDS Diagnosed	Eligible for ART	Ready for ART	Started ART	Finished ART	Not finished ART	On ART 2nd time	Is on ART	Is on ART ≥12	Is on ART ≥12 Loose	CD4 tested	VL Tested	VL tested after ART >12	VS total	VS after ART	VS after ART ≥12	VS among on ART ≥12	VS among ART≥12 Loose	Death total	Death → HIV
2013	**427**	**231**	**116**	**99**	**283**	**191**	**178**	**181**	**26**	**155**	**51**	**155**	**90**	**108**	**217**	**163**	**52**	**101**	**87**	**39**	**35**	**38**	**83**	**31**
Other	**305**	**182**	**92**	**82**	**237**	**151**	**143**	**146**	**20**	**126**	**40**	**126**	**85**	**95**	**173**	**131**	**48**	**83**	**71**	**35**	**33**	**34**	**54**	**29**
PWID	**122**	**49**	**24**	**17**	**46**	**40**	**35**	**35**	**6**	**29**	**11**	**29**	**5**	**13**	**44**	**32**	**4**	**18**	**16**	**4**	**2**	**4**	**29**	**2**
Bishkek	43	14	6	3	8	11	9	9	1	8	2	8	2	2	13	10	0	5	5	0	0	0	3	1
Chuy	56	23	10	7	19	17	15	15	2	13	4	13	1	8	19	16	3	9	8	3	1	3	20	1
Osh	15	9	6	5	15	9	9	9	2	7	5	7	2	3	9	5	1	4	3	1	1	1	4	0
The rest	8	3	2	2	4	3	2	2	1	1	0	1	0	0	3	1	0	0	0	0	0	0	2	0
2014	**570**	**407**	**241**	**147**	**409**	**314**	**293**	**303**	**27**	**276**	**76**	**274**	**58**	**122**	**375**	**230**	**20**	**160**	**143**	**17**	**12**	**16**	**56**	**25**
Other	**437**	**332**	**197**	**125**	**334**	**253**	**236**	**243**	**21**	**222**	**66**	**220**	**48**	**97**	**305**	**180**	**15**	**130**	**114**	**14**	**10**	**13**	**39**	**18**
PWID	**133**	**75**	**44**	**22**	**75**	**61**	**57**	**60**	**6**	**54**	**10**	**54**	**10**	**25**	**70**	**50**	**5**	**30**	**29**	**3**	**2**	**3**	**17**	**7**
Bishkek	24	14	9	4	9	10	8	9	0	9	0	9	3	5	12	10	1	5	5	0	0	0	0	0
Chuy	69	35	21	10	32	26	24	26	3	23	3	23	4	11	32	28	4	16	15	3	2	3	9	3
Osh	26	17	10	8	24	17	17	17	2	15	7	15	1	6	17	7	0	5	5	0	0	0	5	3
The rest	14	9	4	0	10	8	8	8	1	7	0	7	2	3	9	5	0	4	4	0	0	0	3	1
Grand Total	**997**	**638**	**357**	**246**	**692**	**505**	**471**	**484**	**53**	**431**	**127**	**429**	**148**	**230**	**592**	**393**	**72**	**261**	**230**	**56**	**47**	**54**	**139**	**56**

Source: RC "AIDS" database

Figure 63: The HIV continuum of care statistics – Prisons

	HIV+ confirmed	Linked to Care	Retained in care >6 months	Retained in care >12 months	AIDS Diagnosed	Eligible for ART	Ready for ART	Started ART	Finished ART	Not finished ART	On ART 2nd time	Is on ART	Is on ART ≥12	Is On ART ≥12 Loose	CD4 tested	VL Tested	VL tested after ART >12	VS total	VS after ART	VS after ART ≥12	VS among on ART ≥12	VS among ART≥12 Loose	Death total	Death → HIV
2013	**52**	**31**	**9**	**6**	**8**	**21**	**19**	**21**	**2**	**19**	**1**	**19**	**4**	**13**	**28**	**20**	**7**	**7**	**7**	**1**	**1**	**1**	**2**	**0**
Other	**6**	**3**	**1**	**1**	**1**	**1**	**1**	**1**	**0**	**1**	**0**	**1**	**0**	**0**	**3**	**1**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**
PWID	**46**	**28**	**8**	**5**	**7**	**20**	**18**	**20**	**2**	**18**	**1**	**18**	**4**	**13**	**25**	**19**	**7**	**6**	**6**	**1**	**1**	**1**	**2**	**0**
Bishkek	5	2	0	0	1	2	2	2	0	2	0	2	1	2	2	2	2	0	0	0	0	0	0	0
Chuy	30	19	6	3	4	12	11	12	2	10	0	10	2	8	17	13	4	5	5	1	1	1	1	0
Osh	2	1	1	1	0	1	1	1	0	1	0	1	1	1	1	1	0	1	1	0	0	0	0	0
The rest	9	6	1	1	2	5	4	5	0	5	1	5	0	2	5	3	1	0	0	0	0	0	1	0
2014	**44**	**27**	**12**	**7**	**19**	**21**	**16**	**18**	**2**	**16**	**2**	**16**	**0**	**3**	**25**	**14**	**0**	**4**	**4**	**0**	**0**	**0**	**1**	**1**
Other	**7**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**0**	**1**	**1**	**1**	**0**	**0**	**1**	**1**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**
PWID	**37**	**26**	**11**	**6**	**18**	**20**	**15**	**17**	**2**	**15**	**1**	**15**	**0**	**3**	**24**	**13**	**0**	**3**	**3**	**0**	**0**	**0**	**1**	**1**
Bishkek	2	2	1	0	2	2	1	2	0	2	0	2	0	0	1	0	0	0	0	0	0	0	0	0
Chuy	18	11	3	2	4	7	6	7	1	6	0	6	0	1	11	6	0	1	1	0	0	0	1	1
Osh	6	3	1	1	4	2	2	2	0	2	1	2	0	1	3	2	0	1	1	0	0	0	0	0
The rest	11	10	6	3	8	9	6	6	1	5	0	5	0	1	9	5	0	1	1	0	0	0	0	0
Grand Total	**96**	**58**	**21**	**13**	**27**	**42**	**35**	**39**	**4**	**35**	**3**	**35**	**4**	**16**	**53**	**34**	**7**	**11**	**11**	**1**	**1**	**1**	**3**	**1**

Source: RC "AIDS" database

Figure 64: The HIV continuum of care statistics – all sectors

	HIV+ confirmed	Linked to Care	Retained in care >6 months	Retained in care >12 months	AIDS Diagnosed	Eligible for ART	Ready for ART	Started ART	Finished ART	Not finished ART	On ART 2nd time	Is on ART	Is on ART ≥12	Is On ART ≥12 Loose	CD4 tested	VL Tested	VL tested after ART >12	VS total	VS after ART	VS after ART ≥12	VS among on ART ≥12	VS among ART≥12 Loose	Death total	Death → HIV
2013	**479**	**262**	**125**	**105**	**291**	**212**	**197**	**202**	**28**	**174**	**52**	**174**	**94**	**121**	**245**	**183**	**59**	**108**	**94**	**40**	**36**	**39**	**85**	**31**
Other	**311**	**185**	**93**	**83**	**238**	**152**	**144**	**147**	**20**	**127**	**40**	**127**	**85**	**95**	**176**	**132**	**48**	**84**	**72**	**35**	**33**	**34**	**54**	**29**
PWID	**168**	**77**	**32**	**22**	**53**	**60**	**53**	**55**	**8**	**47**	**12**	**47**	**9**	**26**	**69**	**51**	**11**	**24**	**22**	**5**	**3**	**5**	**31**	**2**
Bishkek	48	16	6	3	9	13	11	11	1	10	2	10	3	4	15	12	2	5	5	0	0	0	3	1
Chuy	86	42	16	10	23	29	26	27	4	23	4	23	3	16	36	29	7	14	13	4	2	4	21	1
Osh	17	10	7	6	15	10	10	10	2	8	5	8	3	4	10	6	1	5	4	1	1	1	4	0
The rest	17	9	3	3	6	8	6	7	1	6	1	6	0	2	8	4	1	0	0	0	0	0	3	0
2014	**614**	**434**	**253**	**154**	**428**	**335**	**309**	**321**	**29**	**292**	**78**	**290**	**58**	**125**	**400**	**244**	**20**	**164**	**147**	**17**	**12**	**16**	**57**	**26**
Other	**444**	**333**	**198**	**126**	**335**	**254**	**237**	**244**	**21**	**223**	**67**	**221**	**48**	**97**	**306**	**181**	**15**	**131**	**115**	**14**	**10**	**13**	**39**	**18**
PWID	**170**	**101**	**55**	**28**	**93**	**81**	**72**	**77**	**8**	**69**	**11**	**69**	**10**	**28**	**94**	**63**	**5**	**33**	**32**	**3**	**2**	**3**	**18**	**8**
Bishkek	26	16	10	4	11	12	9	11	0	11	0	11	3	5	13	10	1	5	5	0	0	0	0	0
Chuy	87	46	24	12	36	33	30	33	4	29	3	29	4	12	43	34	4	17	16	3	2	3	10	4
Osh	32	20	11	9	28	19	19	19	2	17	8	17	1	7	20	9	0	6	6	0	0	0	5	3
The rest	25	19	10	3	18	17	14	14	2	12	0	12	2	4	18	10	0	5	5	0	0	0	3	1
Grand Total	**1093**	**696**	**378**	**259**	**719**	**547**	**506**	**523**	**57**	**466**	**130**	**464**	**152**	**246**	**645**	**427**	**79**	**272**	**241**	**57**	**48**	**55**	**142**	**57**

Source: RC "AIDS" database

Figure 65: Expenditures of the natoinal response to the epidemic by financing sources and years

Expenditure categories	State		External		Private		Total	
	2012	2013	2012	2013	2012	2013	2012	2013
Prevention	$6,135,632	$6,200,918	$5,794,324	$5,473,183	$114,416	$195,467	**$12,044,372**	**$11,869,569**
Care and treatment	$242,937	$228,275	$595,602	$862,870	$23,316	$44,339	**$861,855**	**$1,135,485**
Orphans and vulnerable children	$0	$0	$0	$0	$0	$0	**$0**	**$0**
Strengthening program management	$368,741	$360,986	$2,338,002	$2,493,238	$61,414	$116,847	**$2,768,158**	**$2,971,072**
Human resources	$35,126	$34,031	$1,912,269	$4,515,911	$163	$331	**$1,947,557**	**$4,550,273**
Social protection and services	$234,049	$234,427	$37,304	$323,560	$0	$0	**$271,353**	**$557,987**
Conducive environment	$14,256	$13,957	$1,199,335	$462,320	$3,311	$6,300	**$1,216,903**	**$482,577**
Research (excluding operational)	$40,808	$30,749	$33,481	$126,623	$2,054	$3,908	**$76,343**	**$161,280**
Total	**$7,071,549**	**$7,103,344**	**$11,910,317**	**$14,257,705**	**$204,674**	**$367,192**	$19,186,540	$21,728,242

Source: (МЗ КР, ЮНЭЙДС 2014)

Figure 66: The State Program implementation assessment matrix

Strategies Objectives	Expected results	Indicators (from the National M&E plan)	Target	Actual Result	Achievement
Strategy 1. Decrease the vulnerability of PWID to HIV					
Objective 1.1. Stabilization of HIV spread among PWID, including women who inject drugs	**≥60% of the estimated size of PWID receive quality preventive, curative and care services by 2016**	**1.1.1. Percentage of people who inject drugs who are HIV-infected (HIV-I5 | #855)**	**<20% (2013)**	**12.4%**	**Achieved Достигнуто**
		1.1.2. Percentage of people who inject drugs reached with HIV prevention programs (HIV-C-P2 | #845, HIV-P5 | #760)	**60% (2014)**	**28.2% (2013)**	**Not achieved**
		1.1.3. Percentage of people who inject drugs that received an HIV test in the last 12 months and who know the results (HIV-C-P7 | #854)	**60% (2014)**	**43%**	**Not achieved**
		1.1.4. Percentage of people who inject drugs tested and counseled for HIV (in last 12 months) and who received results (HIV-P7 | #537)	**50% (2014)**	**33.3%**	**Not achieved**
		(3.1.1.) Percentage of people who inject drugs receiving ART (from the estimated number of people who inject drugs eligible for treatment) (HIV-T1 | #649)		**19.3% (2014) (597/3,100)**	**Cannot be assessed**
		3.1.2. Percentage of adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy (HIV-I3 | #G3)	**85%**	**77.8% (2014) 147 / 189**	**Not achieved**
		3.1.3. Percentage of people living with HIV reached with palliative care and support out of the number in need (of medical service)		**No data**	**Cannot be assessed**
Strategy 2. Prevention of sexual transmission of HIV					
Objective 2.1. Limit HIV spread among sex workers and their clients	**At least 60% of sex workers are covered with a basic package of services by 2016**	**2.2.1. Percentage of sex workers who are HIV-infected (HIV-I2 | #844)**	**<5%**	**2.2%**	**Achieved**
		2.2.4. Percentage of sex workers reached with HIV prevention programs (HIV-P5 | #760)	**60% (2013)**	**24.8%**	**Not achieved**
		2.2.2. Percentage of SWS that received an HIV test in the last 12 months and who know the results (HIV-C-P7 | #854)	**55%**	**56%**	**Achieved**
		2.2.3. Percentage of SWs tested and counseled for HIV (in last 12 months) and who received results (HIV-P7 | #537)	**55%**	**39%**	**Not achieved**
		2.2.5. Percentage of female and male sex workers reporting the use of a condom with their most recent client (HIV-O4 | #842)	**90%**	**90.6%**	**Achieved**
		2.2.6. Percentage of SWs who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission (modified HIV-C-P1 | #658)	**40%**	**21%**	**Not achieved**

Strategies Objectives	Expected results	Indicators (from the National M&E plan)	Target	Actual Result	Achievement
Objective 2.2. Decrease the vulnerability of men who have sex with men (MSM) to HIV	**More than 30% of the estimated size of MSM are covered with a basic package of services by 2016**	**2.3.1. Percentage of men who have sex with men who are HIV infected (HIV-I4 | #850)**	**<5% (2013)**	**6.3%**	**Not achieved**
		2.3.4. Percentage of men who have sex with men reached with HIV prevention programs (HIV-P5 | #760)	**30[25]% (2014)**	**47.9%**	**Achieved**
		2.3.2. Percentage of MSM that received an HIV test in the last 12 months and who know the results (HIV-C-P7 | #854)	**60%**	**40%**	**Not achieved**
		2.3.3. Percentage of MSM tested and counseled for HIV (in last 12 months) and who received results (HIV-P7 | #537)	**60%**	**17.9%**	**Not achieved**
		2.3.5. Percentage of men reporting the use of a condom the last time they had anal sex with a male partner (HIV-O5 | #664)	**60%**	**83%**	**Achieved**
		2.3.6. Percentage of MSM who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission (modified HIV-C-P1 | #658)	**80%**	**56.8%**	**Not achieved**
Objective 2.3. Ensure access to STI prevention and treatment to groups at high risk	**Syphilis spread among high risk groups decreased by 50% by 2016**	**2.4.5. Percentage of pregnant women positive for syphilis who received treatment (#897)**	**94% (2014)**	**100%**	**Achieved**
		2.4.6. Percentage of sex workers with STI symptoms who received treatment	**80% (2014)**	**28%**	**Not achieved**
		2.4.7. Percentage of people who inject drugs with STI symptoms who received treatment	**50% (2014)**	**27.3%**	**Not achieved**
		2.4.8. Percentage of men who have sex with men with STI symptoms who received treatment	**70% (2014)**	**66.7%**	**Substantially achieved**
		2.4.1. Syphilis prevalence among people who inject drugs	**<5% (2014)**	**8.4%**	**Not achieved**
		2.4.2. Syphilis prevalence among sex workers	**<5% (2014)**	**23.6% (2013)**	**Not achieved**
		2.4.3. Syphilis prevalence among men who have sex with men	**<5% (2014)**	**7.9% (2013)**	**Not achieved**

25 60% was set as a target in M&E plan.

Strategies Objectives	Expected results	Indicators (from the National M&E plan)	Target	Actual Result	Achievement
Objective 2.4. Reducing the vulnerability of young people to HIV and STI	Ensure access to HIV prevention programs of at least 60% of young men and women aged 15 to 24 years by 2016	2.1.1. Percentage of young women and men aged 15–24 years who are HIV infected (HIV-I2 | #844)	<1% (2014)	0.007% (74 / 1116072) 0.03% (pregnant) (64 / 213688)	Achieved
		2.1.6. Percentage of people aged 15-24 years among new cases of HIV infection	<8% (2016)	12.1% (2014) 72 / 612	Not achieved
		2.1.3. Percentage of young women and men aged 15–24 years who both correctly identify ways of preventing the sexual transmission of HIV and who reject the major misconceptions about HIV transmission (HIV-C-P1 | #658)	60% (2013)	23.4% (2012) 937 / 4000	Not achieved
		2.1.5. Percentage of women and men aged 15–49 years who have had more than one sexual partner in the past 12 months reporting the use of a condom during their last sexual intercourse (HIV-O3 | #843)	90% (2013)	71.4% (2012) 100 / 140	Not achieved
Strategy 3. Ensure access of PLHIV to treatment, care and support					
Objective 3.1 Ensure access to highly active antiretroviral therapy (HAART)	By 2016, achieve the coverage with HAART of 80% in need, and retain 85% of them in the antiretroviral treatment more than 12 months	3.1.1. Percentage of eligible adults and children currently receiving antiretroviral therapy (HIV-T1 | #649)	35% (2014)	29% (1,718/5,838)[26]	Not achieved
		3.1.2. Percentage of adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy (HIV-I6 | #860)	85%	84.8% (2014) (434 / 512)	Substantially achieved
		4.1.2. Percentage of people living with HIV who received CD4 testing in reporting year	90%	50.3% (308 / 612)	Not achieved

26 ART Coverage/Охват: 18.3% (1,718 / 9,410) of estimated size of PLHIV / оценочного числа всех ЛЖВ | 75.8% (1,718/ 2,266) of PLHIV registered for care / состоящих на диспансерном учете| 67.7% (1,718/2,538) of PLHI-V available for care and treatment / доступных ЛЖВ в отчетном периоде

Strategies Objectives	Expected results	Indicators (from the National M&E plan)	Target	Actual Result	Achievement
Objective 3.2. Provide PLHIV an universal access to diagnosis and prevention of opportunistic infections, including tuberculosis and viral hepatitis C	Decrease TB related mortality among PLHIV by 20%-50% by 2016	3.2.1. Percentage of people who died of tuberculosis among people who died in reporting period due to HIV/AIDS-related causes	35%	32.8% (72 / 219)	Achieved
		Tuberculosis-related morbidity among people living with HIV (on 100 000 of population)		284 (72 x 1000 / 2538)	
		3.2.2. Number and percentage of adults and children enrolled in HIV care who had TB status assessed in the reporting period all adults and children enrolled in HIV care and seen for care in the reporting period (~TB/HIV-1 | #768)	60%	84.6%	Achieved
		3.2.3. Percentage of estimated HIV-positive incident TB cases that received treatment for both TB and HIV (C-TB/HIV | #651)	60%	72.8% (2013)	Achieved
		3.2.4. Number and percentage of adults and children enrolled in HIV care and eligible for co-trimoxazole prophylaxis (according to national guidelines) currently receiving Cotrimoxazole prophylaxis (HIV-CS1 | #764)	60%	100%	Achieved
Objective 3.3. Provide HIV-positive pregnant women with a complex of services for the prevention of mother-to-child transmission (PMTCT)	Vertical transmission of HIV does not exceed 3% of children born to HIV-positive women by 2016.	3.3.4. Percentage of child HIV infections born to HIV-infected women (HIV-I7 | #858 ???)	4%	3.4% (2 / 59)	Achieved
		3.3.1. Percentage of pregnant women who were tested for HIV and who know their results (#467)	80% (2013)	94.5% (179,131 / 189,422)	Achieved
		3.3.2. Percentage of HIV-positive pregnant women who received antiretrovirals to reduce the risk of mother-to-child transmission (HIV-P13 | #856 #528)	50%	96.1% (114 / 117)	Over achieved
		3.3.3. Percentage of infants born to HIV-infected women who are provided with antiretrovirals to reduce the risk of HIV transmission during breastfeeding (№882 ???)	50%	96.5% (110 / 114)	Achieved
Objective 3.4. Provide access of HIV-positive men, women, children and their family members to care and social support	More than 90% of HIV-positive women and children are covered with care and social support programs by 2016	3.1.3. Percentage of adults and children living with HIV who receive care and support services outside facilities (HIV-CS3 | #765)???	60%	13,6% (142 / 1039)	Not achieved
		3.1.4. Percentage of people living with HIV (adults and children) entitled for social support (pension and social allowances) and receiving in the reporting period (HIV-CS3 | #765 ???)	60%	Children – 91% (432 / 475) Adults – 67% (119 / 176)	Achieved Достигнут

Strategies Objectives	Expected results	Indicators (from the National M&E plan)	Target	Actual Result	Achievement
Objective 3.5. Develop potential of PLHIV community in ensuring universal access to services	60% of newly identified HIV-positive have access to care and support provided by PHLIV community	Percentage of people living with HIV who receive at least one service (treatment adherence, peer counselling) provided by CSO/NGO representing people living with HIV community	50% (2013)	75.5% (1710 / 2266)	Achieved
Objective 3.6. Promote ("form") tolerance toward PHLIV and high risk groups	Decrease HIV- related stigma and discrimination in the society, so that above 60% of socially important cycles demonstrate tolerance to PLHIV	3.4.2. Percentage of women and men aged 15–49 years expressing accepting attitudes towards people living with HIV (HIV-O9 | #474)	60% (2013)	2.9% (2012) Male – 2.1% Female – 3.6%	Not achieved
Strategy 4. Strengthening and ensuring sustainability of the healthcare system in the response to HIV epidemic					
Objective 4.1. Integration of HIV related quality services into healthcare at all levels	60% of PLHIV will receive quality medical services at the primary healthcare level	4.1.1 Percentage of health facility providing counseling and testing ≈ *Number of service outlets providing counseling and testing according to national or international standards (#429)* ≈ *Percent of facilities with a fully functional T&C service center (#373)*	50%	98.4% (191 / 194)	Achieved
		Percentage of people living with HIV who received quality medical services at the PHC healthcare level			
Objective 4.2. Prevent nosocomial transmission of HIV	Nosocomial transmission of HIV is eliminated by 2016	4.2.1. Number of new HIV cases with nosocomial way of transmission	0	14 (2014) 3 – born in 2000; 1 –in 2004; 8 –in 2006; 1 – born in 2008	Not achieved
Objective 4.3. Development of healthcare workforce capacity	80% of healthcare professionals engaged in HIV-related service provision and infection control at all levels of healthcare system are trained and receive specific certificate by 2016	4.3.1. Percentage of medicla staff who undergo special training in certified progams ≈ *Number of health care workers who successfully completed an in-service training program within the reporting period (#555)*	60%	15.5% (2013)	Not achieved

Strategies Objectives	Expected results	Indicators (from the National M&E plan)	Target	Actual Result	Achievement
Strategy 5. Improvement of strategic coordination and management and public policy administration					
Objective 5.1. Improvement of strategic coordination and public policy administration	**Three Ones principles are operationalized and sustainable: one state program, one national coordination system and one national monitoring and evaluation system by 2016**	**5.1.1. HIV Policy Index**	**0.8**	**0.8**	**Achieved**
Objective 5.2 Ensure sustainable financing of the State Program	**Share of the government's contribution in the financing of the Sate program is at least 20% by 2016**	**5.2.1. Share of domestic AIDS spending by categories and sources of financing** *≈Domestic and international AIDS spending by categories and financing sources (#861)* *≈ Government funding for HIV/AIDS (#459)*	**15%**	**23.8**	**Achieved**
Objective 5.3. Improvement of the system of monitoring and evaluation and strategic information	**One M&E system is implemented and functions at the national and local levels**	**5.3.1. Percentage of implemented activities of the National M&E work plan**	**90%**		**Cannot be assessed**

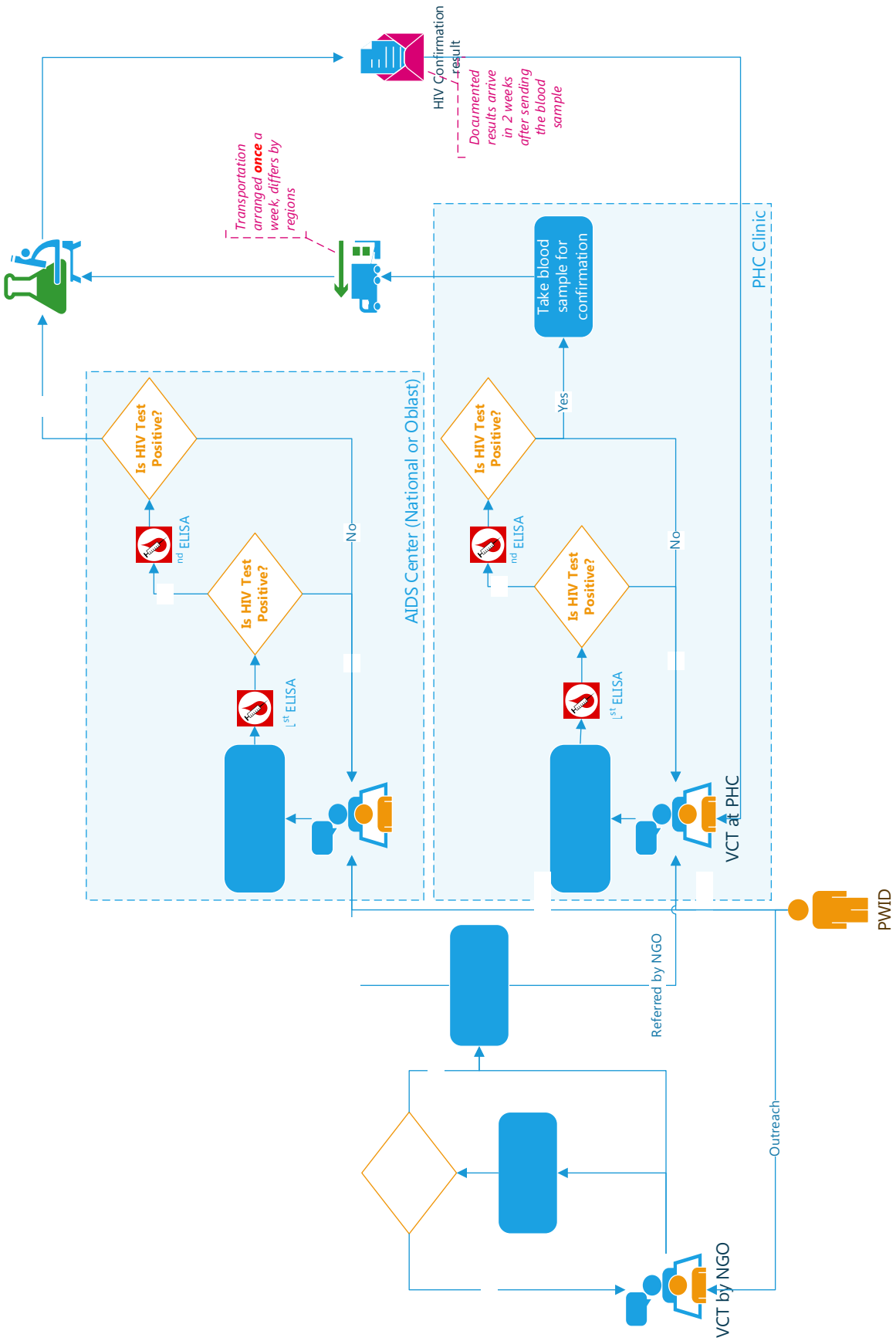


Figure 67: HIV testing pathways (in 2013-2014)

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