



RESULTS BASELINE ASSESSMENT
IN THE FRAMES OF THE REGIONAL PROJECT
«PARTNERSHIP FOR EQUITABLE ACCESS
TO HIV CARE CONTINUUM IN EECA»

ICO «EAST EUROPE AND CENTRAL ASIA UNION OF PLWH»
September 2017



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ACKNOWLEDGMENTS

ICO «East Europe and Central Asia Union of PLHIV» is grateful for the assistance and participation in the development of the report: TB Europe Coalition, Eurasian Network of People who Use Drugs (ENPUD), Sex Workers' Rights Advocacy Network (SWAN), Eurasian Harm Reduction Network (EHRN), Eurasian Coalition on Male Health (ECOM), Eurasian Women's AIDS Network (EWAN), WHO, UNAIDS, Kirby Institute for Infection and Immunity in Society.

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ACRONYMS AND ABBREVIATIONS

AIDS	Acquired Immunodeficiency Syndrome
AIDS Center	Center for Prevention and Control of HIV/AIDS
ART	Antiretroviral Therapy
ARV	Antiretroviral
ECUO	East European and Central Asia Union of PLHIV
EECA	East Europe and Central Asia
EHRN	Eurasian Harm Reduction Network
FG	Focus group
GFATM	The Global Fund to Fight AIDS, Tuberculosis and Malaria
GO	Governmental organization
HIV	Human Immunodeficiency Virus Infection
INI	Integrase inhibitor
KAP	Key affected populations
MSM	Men who have sex with men
NGO	Non-governmental organization
NNRTIs	Non-nucleoside reverse transcriptase inhibitor
NRTI	Nucleoside reverse transcriptase inhibitor
NSP	Needle and syringe exchange program
OST	Opioid substitution therapy
PHC	Primary healthcare
PI	Protease inhibitor
PLHIV	PLHIV
PLHIV/TB	PLHIV and co-infected with tuberculosis
PUD	People who use drugs
PUID	People who inject drugs
STIs	Sexually Transmitted Infections
SW	Sex workers
TB	Tuberculosis
UNAIDS	Joint United Nations Program on HIV/AIDS
WHO	World Health Organization

INFORMATION ABOUT ORGANIZATION AND THE PROJECT

International charitable organization «East Europe and Central Union of PLHIV» (hereinafter – ECUO) was founded in 2005 and officially registered in 2007.

ECUO is a regional partner organization established by PLHIV for PLHIV. ECUO unites PLHIV communities from 15 countries in East Europe and Central Asia to enhance their impact on scaling-up access to HIV treatment for all who need it through the use of effective regional and international tools. The ECUO Secretariat is located in Kiev (Ukraine).

The regional project «Partnership for equitable access to HIV care continuum in Eastern Europe and Central Asia» is being implemented in partnership with Eurasian Harm Reduction Network, with technical support from the World Health Organization and the Joint United Nations Program on HIV/AIDS. The project was approved under the New GFATM funding model.

The goal of the regional project is to increase the effectiveness, accessibility and sustainability of HIV treatment programs by contributing to ensure the HIV care continuum for PLHIV, with a special focus on KAP in the EECA region.

The goal of the project is to be achieved through a combination of activities at the regional and national levels, as well as by strengthening the interaction between communities, relevant ministries, departments and agencies, international and national organizations, and technical partners. One of the first steps of the project is to review the barriers faced by PLHIV, PLHIV/TB, and KAP when accessing the HIV care continuum.

INTRODUCTION

«Back in 2010 at the XVIII International AIDS Conference in Vienna, we drew the world's attention to the alarming situation with the HIV epidemic in our region via the information campaign «We are dying less, but we are dying faster!», said Vladimir Zhovtyak, President of ECUO in a Positional Statement of the EECA communities on the HIV situation in the region in 2016. – Six years have passed, and the situation is not improving. In the last year only, the number of new HIV cases has increased by 57%, over the last 15 years we see the threefold increase in AIDS-related deaths and, unfortunately, this is a natural result with a 20% coverage of a vital ARV treatment that not only prolongs and improves the quality of people's lives but also prevents the further spread of the virus!»

In November 2014, UNAIDS introduced a model to stop the spread of HIV epidemic by 2030. To do this, by 2020 90% of HIV-infected people in the world have to know their diagnosis, 90% – to get treatment, and 90% - to have undetectable viral load. The efforts of the world community are aimed at achieving the goals set for overcoming HIV epidemic globally. «However, the success in fighting the epidemic in Eastern Europe and Central Asia has not been achieved, – stated Ren Minghui, the Assistant on HIV/AIDS of the WHO Director-General. – The speed of infection prevalence is less than ten years ago, but there is an alarming trend.» Luis Loures, the UN Secretary General Assistant, Deputy Executive Director of UNAIDS, mentioned that the situation in EECA countries is «special, which implies undertaking special measures, since the traditional ones do not work.»

Indeed, according to UNAIDS global statistics, the number of PLHIV in EECA countries was estimated at 1.5 million in 2015, the number of new HIV cases is about 190,000, and the total number of HIV-related deaths has reached 47,000. The total number of people receiving ART in the region is 320,000.

The region of Eastern Europe and Central Asia in 2015 shows an alarming trend, which is clearly seen from the extremely unfavorable combination of indicators: 57% increase in the number of new HIV cases between 2010 and 2015, and 22% increase in AIDS-related deaths in the same period. The percentage of adults living with HIV and receiving ART is estimated at 21%. And mind the fact that EECA region includes Russian Federation – a huge country in terms of territory and population with an officially recognized low level of HIV testing. That is, the real figures for the growth of HIV epidemic in the region can be much higher.

«Based on the WHO classification, we can say that in Russia (in some regions) the generalized stage of the HIV epidemic is developing, – said Natalya Ladnaya, Senior Research Associate at the Federal Center for AIDS Control of Rospotrebnadzor, at the V International Conference on HIV/AIDS in Eastern Europe and Central Asia. – In Russia, it is mainly spread in the biggest regions with the highest number of population, which are most economically successful.» Also, the Minister of Health of the Russian Federation, Veronika Skvortsova, at the Conference opening said that «the geographical location of the most affected regions coincides with the main routes of drug trafficking in the country.» More than 80% of all new HIV cases occur in Russia. The experts attribute this to lack of preventive programs, especially among injecting drug users. More than half of new HIV cases in the entire post-Soviet region emerge among them. Russia also does not support the UN-recommended opioid substitution therapy, which involves taking methadone instead of the drug used by the drug users.

The above facts make it possible to predict that the situation with HIV prevalence in the EECA region can significantly deteriorate shortly.

ADVOCACY ACTIONS HAVE IMPACT ON ACCESSIBILITY OF HEALTH SERVICES INDIRECTLY, THROUGH CREATION AND STRENGTHENING OF LEGISLATIVE AND SOCIAL PROVISIONS THAT CONTRIBUTE TO EASIER ACCESS TO SERVICES AND REDUCING LEVEL OF DISCRIMINATION AGAINST THOSE WHO NEED THESE SERVICES. THE RESULTS OF ADVOCACY ACTIVITIES ARE ALWAYS SEEN AFTER A CONSIDERABLE TIME (MONTHS, AND SOMETIMES YEARS – SO MUCH TIME IS REQUIRED TO CHANGE LAWS AND SOCIAL PROVISIONS) AND, MOSTLY, ARE COMPREHENSIVE, BRING CHANGES IN SEVERAL INTERRELATED AREAS.

The activities within the regional program are related to creation of favorable conditions to increase the effectiveness, accessibility, sustainability, and scale-up the HIV treatment programs in the EECA region with particular emphasis on KAP.

Given the advocacy and technical focus of the project activities, it is impossible to use a quantitative approach to assess the impact and results of the program by calculating changes in HIV prevalence, morbidity, mortality; therefore, to determine the impact and results of the program, a qualitative approach has been developed, described below.

OBJECTIVE AND COVERAGE OF THE BASELINE ASSESSMENT

THE MAIN OBJECTIVE OF THE ASSESSMENT is to collect key data reflecting current situation regarding sustainable access to the HIV care continuum in the countries-participants of the ECUO regional project (hereinafter – the Project), which will be the project baseline to help assess the impact of the project after its completion.

In addition, the baseline assessment helps to develop evidence base for the dialogue with the key partners at national and regional levels, and helps to identify the focus of advocacy efforts at the national level.

GEOGRAPHY OF THE ASSESSMENT: baseline assessment was carried out (in full) in Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Russia, Estonia, and Uzbekistan. In other countries of the Project implementation (Armenia, Georgia, Latvia, Lithuania, Moldova, Tajikistan, Ukraine) the assessment was made partially: development of the cascade of services and identifying barriers to achieve the «90-90-90» strategy targets. The assessment in Turkmenistan was not carried out because of the limited amount of information on the matters covered in the survey.

METHODOLOGY/APPROACH

RESEARCH AREAS

For the baseline assessment, qualitative and quantitative methods have been used to describe the situation with the provision of the HIV care continuum at the beginning and at the completion of the Project, according to previously identified key areas for each of the Project tasks (Table 1):

TABLE 1: ASSESSMENT ELEMENTS AND RESEARCH QUESTIONS FOR BASELINE AND FINAL ASSESSMENTS

Elements and questions	Parts of the baseline assessment
<p><i>1. Barriers to HIV care continuum for PLHIV, including KAP (Project task 1: «To create conditions at the national and regional levels to improve the linkage between the main stages of HIV care continuum...»)</i></p>	
<p>1.1. What are the main barriers (legal/regulatory, institutional, financial, social), which adversely affect the HIV care continuum for PLHIV including KAP? Are there ways to overcome these barriers as result of project activities?</p>	<p>A. Overview of barriers (Annex 1);</p> <p>B. Opinion of the members of PLHIV communities about the barriers to access HIV services (Annex 2)</p>
<p>1.2. What is the situation with retention of patients on ART, including KAP, and what are the main causes of losing patients during the transition between the continuum steps? Has it changed after the grant implementation?</p>	
<p>2. Sustainability of HIV care continuum (Project task 2: "Advocate for the transition to strategic sustainability of state funding for the provision of the continuous HIV care")</p>	
<p>2.1. Have the countries established working mechanisms for the sustainable funding of services related to the HIV continuum (prevention, care and treatment)?</p>	<p>C. Assessment of the financial barriers and assessment of funding needs made by EHRN (Annex 3)</p>
<p>2.2. Are there meaningful efforts of national governments to support sustainable state funding for all elements of the HIV care continuum, including for KAP?</p>	
<p>2.3. How has the allocation of funding for each element of the HIV care continuum changed as result of the efforts made by the community?</p>	

ASSESSMENT METHODS

Data collection did not involve conducting studies in a quantitative methodology. The collected data are mostly of qualitative, descriptive nature, assuming the use of secondary literature analysis (normative and legal regulations, documentation of national partners, results of country studies), conducting FG discussions and semi-structured interviews. Quantitative epidemic data derived from official national statistics, reports of countries in UNGASS, assessments held by WHO, UNAIDS, UNDP, UNICEF, and other international agencies and projects.

A. OVERVIEW OF BARRIERS (ANNEX 1)

The overview of barriers is prepared based on a secondary analysis of available information and FG data in countries, it includes a detailed analysis of barriers in access to the HIV care continuum in 7 countries (Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Russia, Uzbekistan, Estonia), as well as short analysis for 7 additional countries (Armenia, Georgia, Latvia, Lithuania, Moldova, Tajikistan, Ukraine).

Information sources:

1. Desk review — includes collection and evaluation of existing data (official statistics, results of studies held in the region, cascades of access to treatment services in 14 countries, an assessment of social, political, and economic causes of the barriers detected in 7 countries), analysis of legislative documents, organization of medical and social care, cultural peculiarities affecting formation of barriers in access to HIV care continuum for all PLHIV, PLHIV/TB in EECA region, as of the end of 2014. For some countries, a cascade of services was analyzed based on available data for year 2015.

The main epidemic trends were analyzed in 14 countries based on results of routine statistics, epidemiological surveillance and special studies, the profile of key groups and their number were identified.

HIV treatment cascade was developed for some of 14 countries in EECA region. The treatment cascade for key groups was not developed when there was no data available on treatment coverage of separate KAPs (excluding incomplete data on cascade for PUID in Ukraine and Kyrgyzstan).

2) Focus groups were conducted with key informants from 7 countries of the region. The results allowed to analyze in details the barriers at national level from the viewpoint of both service providers and their clients.

B. OPINION OF THE MEMBERS OF PLHIV COMMUNITIES ON BARRIERS TO ACCESS TO HIV SERVICES (ANNEX 2)

This annex is an analysis of the opinions of focus group participants on the causes that contribute to limiting the availability of the entire HIV care continuum in the countries of the EECA region.

C. ASSESSMENT OF FINANCIAL BARRIERS AND INVESTMENTS (ANNEX 3)

The assessment of financial barriers is a separate comprehensive study that answers the question 2.2 («Are there meaningful efforts by the national governments to support sustainable state funding for all elements of the HIV care continuum, including for KAP?»). The research results are based on **desk review** of national documents, including an analysis of national budgets and national HIV/AIDS programs.

An assessment of needed investments was organized and carried out by the consultants and staff of the European Harm Reduction Network in 7 countries (Azerbaijan, Belarus, Estonia, Kazakhstan, Kyrgyzstan, Russia, and Uzbekistan).





Annex 1

OVERVIEW OF THE BARRIERS THAT HINDER
ACCESS TO HIV SERVICES FOR PLHIV, PUID,
SW, AND MSM

INTRODUCTION

The number of new HIV cases continues to increase in the EECA region. The key trend of the epidemic is the change in prevailing HIV transmission routes: the parenteral route of transmission since 2011 in most countries changed to the sexual route. During the period of 2004 – 2013, growth of heterosexual transmission in the EECA countries was 195%, the increase in the number of new cases among MSM was 206%. Introduction of harm reduction strategies has led to stabilization of the HIV spread among the PUD/PUID (the reduction of parenteral HIV transmission in the period of 2004 – 2013 by 36%) (1).

Based on international experience, most countries of the EECA region developed and implemented the strategies for counseling and testing, but in some countries (Russia, Belarus) testing coverage for KAP representatives is insufficient. On the other hand, in some countries, the standard for ART prescription is preserved at the immunosuppression level less than 350 cells/mm³, which significantly limits the patients' right in access to treatment (2). The rate of annual ART course of first-line drugs in 2013 ranged from 3,834\$ in Estonia to 187\$ in Kyrgyzstan (4). In most countries of the region, there were no studies aimed at assessing the HIV treatment coverage for PLHIV and KAP representatives, assessing adherence, the reasons for interrupting medical observation and ART drop-outs.

Some countries (Estonia, Russian Federation) record significant number of treatment drop-outs, the percentage of patients who reached viral suppression is critically low, resulting in a risk of development of drug-resistant strains of HIV, and mortality increase.

One of the key activities of HIV-servicing NGOs in the EECA region is advocating access to treatment at all stages to all PLHIV categories without any exceptions. ECUO as part of the regional project «Partnership for equitable access to HIV care continuum in Eastern Europe and Central Asia» with the GFATM support in 2016 held an overview of barriers hindering access to the HIV care continuum for PLHIV, PUID, SW, and MSM aiming to assist national NGOs in developing an effective advocacy strategy.

METHODOLOGY OF BARRIERS OVERVIEW

The methodology is based on the analysis of secondary data: official statistics in 14 EECA countries, country reports, policy briefs, results of biobehavioral research and other relevant documents complemented by results of the FG and in-depth interviews in 7 countries (Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Russian Federation, Uzbekistan, Estonia), national HIV treatment guidelines, etc. in order to identify systemic barriers in EECA region impeding access to the HIV care continuum for all PLHIV, PLHIV/TB, and individual KAP (PUID, SW, MSM). Data collection on additional 7 countries (Armenia, Georgia, Latvia, Lithuania, Moldova, Tajikistan, and Ukraine) was limited to analysis of the main official country reports, development of treatment cascades, and determination of the key barriers (if information was available).

A comparative analysis of the main trends in the epidemic was carried out based on routine statistics data, epidemiological surveillance and special studies followed by development of a detailed analysis

of the barriers at national level, description of national treatment cascades, and development of areas for advocacy at national level to overcome those for Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Russia, Uzbekistan, and Estonia. For 7 non-priority countries of the project, there were treatment cascades developed and key barriers detected.

Purpose of the overview: to identify systemic barriers (legal, political, economic, organizational, medical, social, cultural, etc.) in EECA region hindering access to HIV care continuum for all PL-HIV, PLHIV/TB and individual KAP (PUID, SW, MSM).

TASKS OF THE OVERVIEW

To analyze the barriers faced by PLHIV, PLHIV/TB, and some KAP (PUID, SW, MSM) at the HIV care continuum in 7 countries of EECA: Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Russia, Uzbekistan, and Estonia.

To develop advocacy areas to overcome barriers at the level of the EECA region and national levels for each of the 7 countries: Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Russia, Uzbekistan, and Estonia.

To identify key barriers and develop treatment cascades for 7 non-priority countries.

TARGET GROUPS OF THE OVERVIEW:

- People living with HIV
- People coinfecting with TB
- Key affected populations (KAP)
 - people using injecting drugs (PUID)
 - sex workers (SW)
 - men who have sex with men (MSM).

GEOGRAPHY OF THE OVERVIEW

- 7 priority countries: Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Russia, Uzbekistan, and Estonia.
- 7 countries: Armenia, Georgia, Latvia, Lithuania, Moldova, Tajikistan, Ukraine.

GENERAL ALGORITHM FOR DATA COLLECTION

The overall approach was characterized as comprehensive, it was based on use of official sources of information, and secondary analysis of available information.

1. Analysis of available documents

Available sources were analyzed, which include documents related to national policies and programs; epidemiological data; expert evaluations published in the 2014-2015 years. In the absence of data for the indicated period, the previous period data was used, but not before 2012.

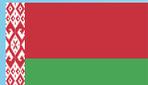
2. Expert group discussion

In order to obtain more information and recommendations, the first version of the overview was considered by the expert group, which included representatives of *TB Europe Coalition*, *Eurasian Network of People who Use Drugs (ENPUD)*, *Sex Workers' Rights Advocacy Network (SWAN)*, *Eurasian Coalition on Male Health (ECOM)*, *Eurasian Women's AIDS Network (EWAN)*, *WHO*, *UNAIDS*, *Kirby Institute for Infection and Immunity in Society*.

TABLE 1. FG COMPOSITION BY COUNTRIES

FG participants							
PLHIV (ART-)	10	11	11	12	10	9	8
PUID	5	7	7	6	5	6	6
SW	2	2	4	3	2	4	
Adolescents	1	1		1	1		1
PLHIV			1				1
MSM	1	2	3	2	3		
PLHIV/TB	1	1	2	5	1	2	
Migrants						4	

TABLE 1. FG COMPOSITION BY COUNTRIES (CONT.)

FG participants							
<i>PLHIV (ART +)</i>	11	11	12	12	11	9	10
<i>PUID</i>	7	7	7	7	5	4	7
<i>SW</i>	2	2	4	2	2	3	
<i>Adolescents</i>	1		2	2	1	1	
<i>PLHIV/TB</i>		5	3	3	1	1	
<i>MSM</i>	1	2	2	1	3		2
<i>PLHIV</i>							1
<i>Migrants</i>					2		
<i>Service providers</i>	10	10	11	12	10	7	9
<i>GO</i>	4	4	9	6	3	3	4
<i>NGO</i>	6	6	2	6	7	4	5
<i>In-depth interviews</i>	5	6	5	6	5	7	5
<i>Women</i>	1	1	1	1	1	1	1
<i>Adolescents</i>	1	1	1	1	1	1	1
<i>PUID</i>	1	2	1	2	1	2	2
<i>MSM</i>	1	1	1	1	1	1	1
<i>SW</i>	1	1	1	1	1	1	
<i>Migrants</i>						1	

3. Interview in FG with representatives of key population groups

Specially elaborated guidelines helped to carry out FGs considering the peculiarities of the countries and target groups. ECUO selected moderators for FG in 7 countries of EECA region. During online briefings to prepare the moderators, the main rules of the FG-discussions, goals, and objectives of the study, peculiarities in studying certain target groups, discussion tools and rules of asking questions, the method of report preparation based on results of the field phase of the study were highlighted. Moderators were acquainted with the ethical principles and organizational provisions of the study.

During the FG in 7 countries, the methodological support was provided online. In each of the countries, 3 FG were carried out, which included the communities' representatives, as well as in-depth interviews with representatives of state structures, specialists of AIDS Centers.

After completing the analysis of the documents and holding FG with key populations all collected information was analyzed, key barriers were identified, recommendations for advocacy campaigns were made.

The results of the desk review were presented to representatives of five regional community organizations to discuss the first version of the report (TB Europe Coalition, Eurasian Network of People who Use Drugs (ENPUD), Sex Workers' Rights Advocacy Network (SWAN), Eurasian Coalition on Male Health (ECOM), Eurasian Women's AIDS Network (EWAN)).





Chapter 1.

**BARRIERS OVERVIEW IN ACCESSING HIV
TREATMENT IN AZERBAIJAN, BELARUS,
KAZAKHSTAN, KYRGYZSTAN, RUSSIAN
FEDERATION, ESTONIA, UZBEKISTAN**



AZERBAIJAN REPUBLIC

SECTION 1.

EPIDEMIOLOGICAL SITUATION IN AZERBAIJAN REPUBLIC

In Azerbaijan Republic, HIV-infection is in the concentrated stage with the prevailing involvement of PUID.

To increase the effectiveness of measures to prevent the epidemic in Azerbaijan the working group of the Country Coordination Committee, with the support of UNAIDS, has developed a new “National Strategic Action Plan to Combat HIV/AIDS epidemic for 2014 – 2018”. Since 2004, the Country Coordinating Committee for HIV/AIDS, Tuberculosis and Malaria (CCC) coordinates and integrates the efforts of governmental, international and non-governmental organizations, including PLHIV organizations aimed at combating the spread of HIV infection in the country. CCC regularly (at least once a quarter) holds meetings raising matters on the status of documents implementation in the area of HIV response. CCC allowed ensuring effective implementation of the project “Enhancing response to AIDS epidemic by strengthening national capacities and scaling up prevention and treatment of HIV/AIDS among high-risk groups, with the participation of civil society” funded by GFATM (6). The amount of public funding of activities aimed at overcoming the epidemic has increased. The political support and increased funding, including through the GFATM grant, resulted in significant progress in providing access to the HIV prevention, treatment and care services. These efforts will provide antiretroviral therapy to PLHIV: in Azerbaijan Republic, ARV therapy is accessible to all in need, and the level of laboratory monitoring of therapy has improved (6).

To further preserve public health of the Republic, including the HIV infection counteraction, another state program was approved “On fight against illicit drugs, their precursors, psychotropic substances, and the spread of drug addiction in Azerbaijan Republic for 2013-2018” as of June 24, 2013, No. 2966; the Order of Ministry of Health of Azerbaijan Republic “On fight against the disease caused by HIV” as of 31.08.2012, No.65 helps to make the measures in combating HIV/AIDS effective and achieve universal access to HIV services (6, 8).

As of January 1, 2014, in Azerbaijan Republic, 4,298 HIV cases were registered. HIV prevalence per 100,000 population is 44.3.

The main trend of the epidemic in Azerbaijan is the change of the transmission routes: despite the fact that the parenteral route of HIV transmission has been a major route for a long time, since 2006, there has been an increased incidence of HIV infection via sexual transmission, especially among women. The sources of infecting population by sexual transmission, most likely, are KAP representa-

tives (PUID, MSM). In addition, a significant number of HIV cases occur outside the country, mainly in Russian Federation, which underlines the importance of migration processes in the development of HIV infection (6).

HIV prevalence is characterized by the territorial unevenness (higher in Shirvan, Hajigabul district, Astara district, Lankaran district, Sumgait city and several other territories) (6).

According to observations over the past two years, relative stabilization of HIV infection is observed in the Republic: the incidence in 2012 was 5.6 per 100 thousand population, in 2013 – 5.3 per 100,000. Compared to the year 2011 (the incidence was 6.0), in 2013 the incidence of HIV infection fell by 11.7% (6).

According to cumulative data (1987-2013), 56.9% of HIV cases occurred as a result of the parenteral transmission (intravenous drug use), 31.9% cases – through unprotected heterosexual intercourse. Thus, the main route of transmission is parenteral, while the sexual transmission rises, which corresponds to the dynamics of the epidemic development worldwide (6).

Men dominate in the total structure of the HIV-infected, and at the end of 2013 constitute 78% of the reported cases for the entire period of the epidemic, however, one can observe an increase in the number of HIV-infected women (in 2011-2013 a share of HIV-infected women has increased from 18.3% to 22%) (6).

The number of patients who are at the stage of AIDS and died of AIDS has increased in the country. As of 12/31/2013, there were 1,319 PLHIV registered at the AIDS stage, and 368 deaths cumulatively (6).

In 2013, out of newly registered HIV cases 84.3% accounted for population aged 25-49 years. The most affected populations are injecting drug users. HIV prevalence in this group is 9.5%, among SW – 0.7%, MSM – 2%, and among prisoners – 5.8% (6).

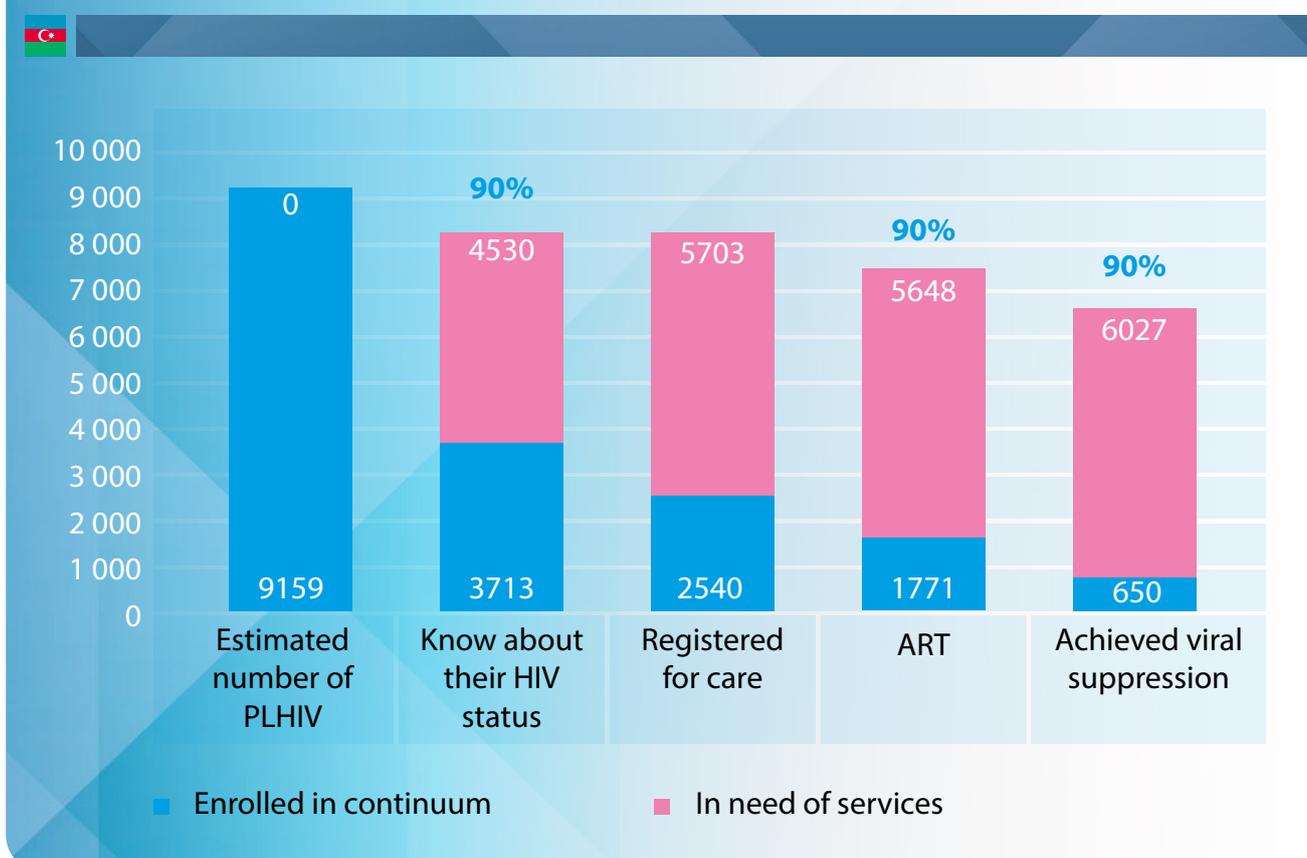
In 2013, the estimated number of PUID was 71,283 people, SW – 25,054, prisoners – 17,000. The estimated number of MSM was the lowest among all KAP – 6572, however, this figure could be underestimated (5).

SECTION 2.

ANALYSIS OF HIV TREATMENT CASCADE

In 2015 and 2016 Azerbaijan Republic did not submit to UNAIDS a report on implementation of the Declaration of commitment on combating HIV/AIDS, therefore, the 2013 HIV treatment cascade was analyzed, which was developed by the WHO mission based on the Republican AIDS Center data (5) (Fig. 1). In addition, the treatment cascade in 2015 was constructed based on the data from AIDSinfo (Fig. 2)

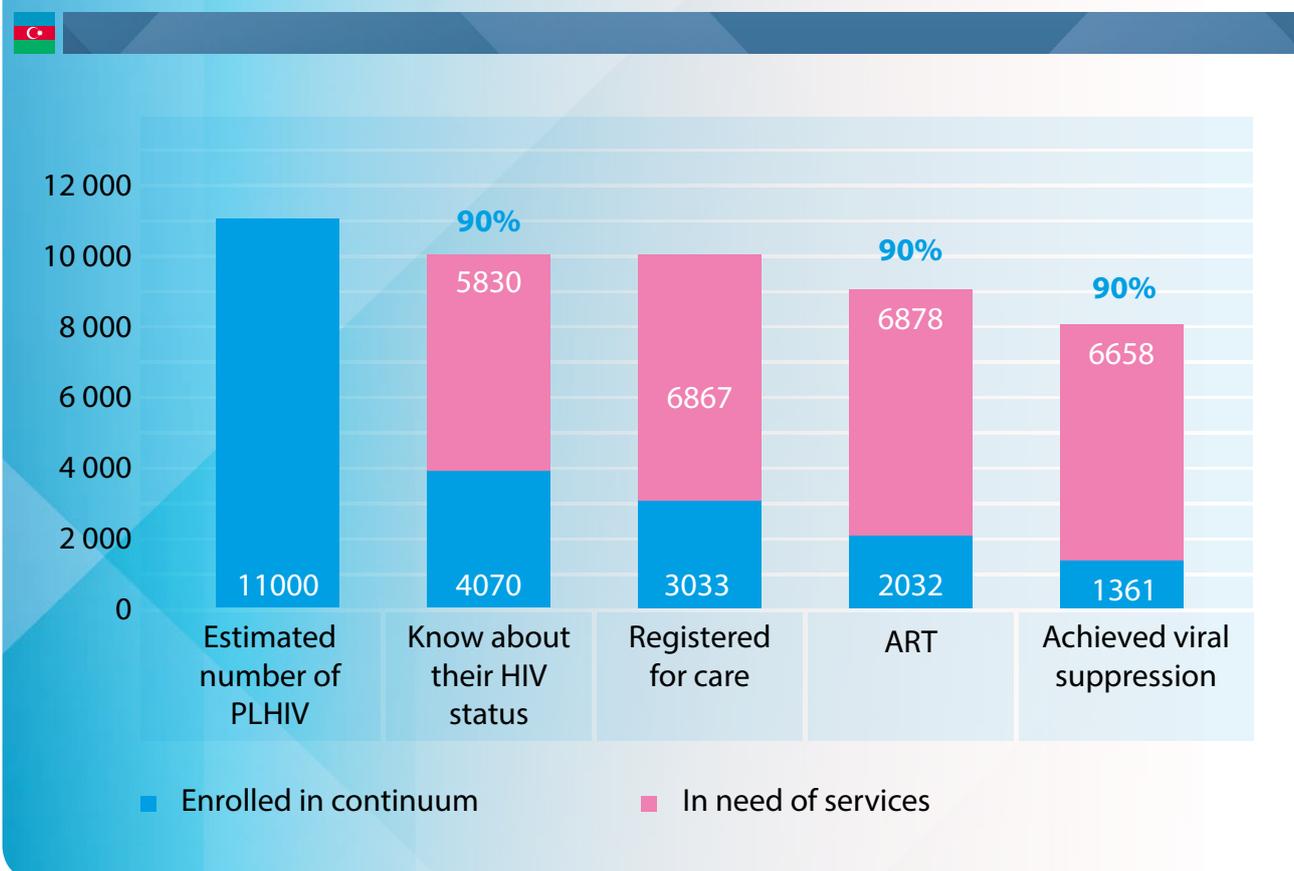
FIGURE 1. HIV TREATMENT CASCADE, AZERBAIJAN REPUBLIC, 2013



In 2013, the estimated number of PLHIV was 9,159. Of these, only 3,713 (41% of the estimated number) were aware of their positive HIV status, 2,540 PLHIV (28% of the estimated number, or 68% of those who know their status) were registered at healthcare institutions, 1,771 (19% of the estimated number, or 70% of those registered for care) received ART, and only 650 (7% of the estimated number, or 37% of those receiving ART) achieved viral suppression.

The least access to services is at the testing stage (59% losses in comparison with the estimated number of PLHIV) and achievement of viral suppression (53% losses in comparison with the total number of PLHIV who take ART).

FIGURE 2. HIV treatment cascade, Azerbaijan Republic, 2015



According to UNAIDS, in 2015, the estimated number of PLHIV in Azerbaijan Republic amounted to 11,000, of which 4,070 (37% of the estimated number) were aware of their HIV-positive status. The group of those registered for care was 3,033 PLHIV (28% of the estimated number, or 75% of those who know their status). 2,032 PLHIV received ART (18% of the estimated number of PLHIV, or 60% of PLHIV registered for care). From those PLHIV receiving ART, 1,361 (12% of the estimated number of PLHIV, or 67% of those receiving ART) achieved viral suppression. 2015 data show improvement in achieving viral suppression – 67% against 37% in 2013. The most problematic stage of the treatment cascade is the detection of HIV infection – 63% of PLHIV were unaware of their HIV status. The issues of registration for care and access to treatment remain valid.

Based on the above data, the priority efforts of all stakeholders in Azerbaijan Republic should be focused on optimization of testing strategy and expansion of ART coverage, where the majority of drop-outs take place.

Disaggregated data on access of KAP representatives to HIV testing and treatment are limited.

SECTION 3.

ANALYSIS OF ACCESS TO HIV CARE CONTINUUM FOR PLHIV AND KAP, DETERMINING BARRIERS TO SERVICES

3.1. Counseling and Testing

In Azerbaijan Republic, HIV testing is done both using laboratory techniques and rapid tests. Rapid tests are mostly used in maternity hospitals and mobile testing sites (6). HIV testing is performed only by medical professionals (5). Guidance on HIV testing was revised in 2012, it contains the recommendations on organization of voluntary counseling and testing (VCT), including minimum standards for pre- and post-test counseling.

National policies on HIV testing and counseling are related to all population groups, including KAP, and include provider-initiated testing (according to the WHO 2007 recommendations). HIV testing in Azerbaijan Republic is free of charge for all categories of population. Provider-initiated HIV testing is offered at all TB centers, centers of primary health care, and other institutions, including detention facilities.

Throughout the country, there are 39 HIV testing sites for KAP, and 24 sites in the penitentiary system. In 2013, 13,034 patients were tested for HIV at diagnostic laboratories, 7,685 – at drug and TB dispensaries and dermato-venerology dispensaries, and 5,501 – at the mobile testing sites. The use of mobile clinics and their increased number to 12 significantly expanded KAP coverage by testing (5).

TABLE 2. HIV testing for KAP representatives in 2013 (5)

KAP	Total examined	HIV+	% tested from the estimated number of KAP	% tested from achievable number of KAP
PUID	5 484	38	7,7	41
SW	880	0	3,5	14,2
MSM	606	2	10	34,6
Prisoners	16 500	70	97	
Total	23 470	110	1 HIV+ per 213 tested	

Out of 6,970 KAP representatives (except prisoners) tested for HIV in 2013 (Table 2), majority (5,501 representing 79% of the total number tested) were examined with rapid tests. 40 HIV positive patients were detected (38 PUID and 2 MSM), all of them were included in treatment and care programs. When testing prisoners (16,500 persons), 70 PLHIV were detected. Testing coverage for PUID and MSM remains insufficient, SW are practically not covered by testing.

HIV testing coverage of patients with TB is rather high, e.g., in 2014, it reached 93% (7).

According to the FG participants, one of the barriers to HIV testing is the self-stigma, fears, and myths that prevail among the KAP representatives:



- *«They have little information, they are afraid that even if they go to donate blood, they will get infected. They just think that if one gets tested for AIDS there all are infected. Also, no time for this, probably.»*
- *«Many do not want to know about their illness, especially those who lead such a lifestyle, for example, take drugs, they do not want to know about it because they know that they can have it. The main reason is fear.»*
- *«Who voluntarily goes to the AIDS center? Especially drug addicts. Since they do not trust the state, it is easier for them to work with NGOs.»*
- *«They (husbands) do not allow their wives. They are afraid that if their wives are positive, they will attack their husbands. They are afraid of publicity.»*



BARRIERS TO TESTING:

- **lack of access to the community-based HIV testing using rapid tests;**
- **significant number of myths prevailing among KAP representatives, high level of self-stigma;**
- **closed KAP communities, especially MSM and SW.**

3.2. Registration for care

Seven medical institutions provide services to PLHIV. Outpatient services for HIV-positive people are available at the Republican AIDS Center in Baku. The AIDS Center maintains a database containing the information about patients on ART, the results of the viral load tests, and the level of CD4-cells (5). During 2012 – 2013, decentralization of ART services in the regions has led to improvement of access to ART: by Ministry of Health Order of 03/18/2011 No.40, there were six ARV therapy centers organized. However, the majority of PLHIV continues to be observed in Baku and do not wish to proceed under the supervision of the regional centers (5).

Services for HIV diagnostics and treatment are available in its full scope at the institutions subordinate to Ministry of Justice.

One reason for the patients' losses during the testing phase can be a complex and lengthy HIV testing algorithm, which leads to the fact that the waiting period before the test result, in case of positive result, can be 3 days in Baku, and up to one month in remote districts (5). Data from the Republican AIDS Center indicate the late appearance for medical help by PLHIV. In 2013, out of 476 new patients, 297 (62%) were diagnosed at the III-IV stage of HIV infection (5).

In 2014, TB screening was made for 1,661 HIV-positive patients of the total number of PLHIV registered for care, while isoniazid preventive therapy (IPT) has been prescribed only to 296 PLHIV/TB (7).

Also, the FG participants discussed the issues of TB chemoprophylaxis by isoniazid:



Medical Officer: «All patients who need prevention get isoniazid at the AIDS center. Full stop.»

Patient on ART: «And what is isoniazid? I haven't heard at all about it.»

Patient: «I've heard nothing about it (about isoniazid).»

FG participants noted the following barriers when registering at the Republican AIDS Center or other medical institutions located in small cities of Azerbaijan:



Geographical remoteness: «There are people who live far away. They can not come.»

Fear to disclose the diagnosis and misunderstanding the need for treatment: «They feel good and do not believe that they are sick. Afraid of disclosure.»



BARRIERS RELATED TO ACCESS TO HEALTH CARE:

- **incomplete decentralization of services, patients from remote districts have to go to Baku;**
- **many PLHIV/PUID are unemployed, so the expenses to travel to the AIDS Center may be too high for them;**
- **lack of information about opportunities to get treatment free of charge.**

Low coverage of PUID with OST services and other harm reduction programs are the key barriers in involving PUID/PLHIV to HIV healthcare system (5).

3.3. ART

The delivery of test systems and ARVs in 2013 was regular and continuous. The Order of Ministry of Health of Azerbaijan Republic was developed “On combating disease caused by HIV” dated 08/31/2012, No.65, which sets out the general safety regulations for HIV prevention in health care facilities, the routine procedure for holding HIV tests, rules and regulations on laboratory diagnostics of HIV, the instruction for the voluntary HIV testing and counseling, the instruction to confirm the HIV diagnosis and registration of HIV cases in Azerbaijan Republic, guidelines on palliative care and care of HIV patients in health care facilities and at home, the procedure for post-exposure prophylaxis. The logistics to provide medicines is determined by the Law of Azerbaijan Republic “On state procurements in Azerbaijan Republic” of December 27, 2001, No. 245-IIQ in the edition of February 12, 2010, No. 954-IIIQD (9).

The country has committed itself to a phased scaling-up access to ART, with the expansion of the indications to take ART on the background of expanding social services and ensuring the viral load control as per WHO recommendations (5). In 2014, the principles of ART prescription in the country were in line with the WHO 2013 guidelines (6, 61). An advantage for the ART initiation for adult patients is the level of CD4<350 cells/ml. Also, ART is prescribed without regard to the level of immune suppression for children; patients coinfectd with HIV/TB and HIV/hepatitis C; PLHIV of discordant pairs (61).

The state provides funding only for one fifth of the demand for ARVs, the treatment of PLHIV is highly dependent on international funding.

ART for prisoners is entirely covered by the medical service of the penitentiary system in line with national and international standards.

Patients co-infected with HIV/TB get treatment according to WHO standards. In 2014, 148 patients with dual pathology were detected, 101 (68%) of them started ART (7). In accordance with national law, patients coinfecting with TB/HIV are treated in TB hospitals. In-patient departments of TB facilities lack necessary conditions for infection control, which increases the risk of developing resistant forms of TB. In TB facilities, ART and TB treatment are carried out under the supervision of health workers. Patients with HIV/TB co-infections are most often prescribed ART regime TDF/FTC/EFV (5).



THE KEY BARRIERS TO ACCESS ART SHOULD BE REGARDED:

- **inconsistency of national treatment guidelines with the latest WHO recommendations and «90-90-90» targets;**
- **use of didanosine drug which has severe side effects;**
- **lack of knowledge among patients about the services provided by the regional AIDS centers;**
- **insufficiently developed social support system for patients, especially KAP representatives;**
- **inadequate integration of services for PLHIV/PUID and PLHIV/TB.**

3.4. Achieving viral suppression

In Azerbaijan Republic, application of OST for the purposes of adherence to ART is limited – OST is provided for 155 PUID (0.2% of total PUID, or 0.02 % of the estimated number of PUID in the country) (5). The issue with access to OST was also voiced during the FG:



- *«We have two substitution maintenance therapy sites in Azerbaijan, which are located in the city of Baku, we do not have them in other cities. ... drug addicts who live in other districts or cities simply can not come. There is no such possibility»*

FG participants noted a range of other obstacles to achieve viral suppression: side effects of ARV drugs, which adversely affect the adherence and effectiveness of treatment, as well as the low level of knowledge and understanding among patients:



«There are people who take the medicine and get dizzy, or the temperature rises, or they feel sick with nausea. So, they refuse. For example, 5 days they take, 5 days no.»

«There is a problem. Because you feel bad when receiving ARV.»

«Their immunity increases, they think that they are already healthy, so they drop drugs.»

Low OST coverage for patients on ART, lack of developed integrated services negatively affect adherence to treatment among PLHIV, particularly, HIV-positive PUID (5).

SECTION 4.

RECOMMENDED DIRECTIONS FOR ADVOCACY ACTIONS

- Joining efforts of all stakeholders aiming to amend the legislation to extend the community-based HIV testing with rapid tests.
- Bringing together all stakeholders to ensure the full spectrum of HIV services for KAP representatives.
- Carrying out (in collaboration with national and international partners) analysis and introducing changes into the national standards for HIV screening and diagnostics to simplify the testing algorithm, optimize the use of resources and reduce the time before the final test result is available.
- Holding analysis of referrals to the regional AIDS centers to reduce geographic barriers for PLHIV, those living in remote regions of Azerbaijan Republic, popularization of the regional AIDS centers among patients.
- Joining efforts of all stakeholders with the aim of generating an effective social support system for "complicated" patients in all phases of HIV services to minimize patients' losses at all stages of care.
- Revision (involving all stakeholders) of the national HIV treatment guidelines , including management of ART side effects, ensure compliance thereof with the WHO 2016 recommendations, development of a plan for maximum patients coverage with care.
- Revision of the list and amount of procured ARV drugs and diagnostic agents for the effective utilization of budget resources, lowering prices and achieving the "90-90-90" targets.
- Advocacy of scaling-up access to OST as a method of maintaining adherence to ART, as well as expanding access to integrated services for PLHIV/PUID, PLHIV/TB.
- Creating and ensuring effective functioning of ART side effect management system to minimize treatment interruptions.
- Mobilization of communities to improve the effectiveness in the fight against stigma and self-stigma, patient motivation to get HIV-related medical services.
- Joining efforts of all stakeholders to develop care continuum and integrated services for PLHIV/PUID, PLHIV/TB for maximum and timely coverage of patients with antiretroviral treatment.



REPUBLIC OF BELARUS

SECTION 1.

EPIDEMIOLOGICAL SITUATION IN REPUBLIC OF BELARUS

HIV epidemic on the territory of Republic of Belarus is at concentrated stage.

In Republic of Belarus, the state program “Health of people and demographic security of the Republic of Belarus” is approved for 2016 – 2020. The corresponding decision is affirmed by the Council of Ministers Resolution of March 14, 2016, No. 200. The activities in the area of HIV prevention and treatment are legally regulated by Subprogramme 5 “HIV infection”.

The main trends of the epidemic’s development in Republic of Belarus are as follows:

- HIV prevalence mainly remains within most vulnerable to HIV groups: injecting drug users, women involved in sex-business, and men who have sex with men (10);
- prevailing sexual transmission route among new HIV cases (63.9% among new cases in 2015);
- reduction of parenteral route share – 34.4% among new cases in 2015.

Cumulatively, as of 01/01/2016, in Belarus, there were 19,827 cases detected, and the number of PLHIV 15,378. The prevalence rate was 162.2 per 100,000 population.

In 2015, 2,305 HIV cases were detected. The incidence rate was 24.3 per 100 thousand people (for the same period in 2014 – 19.1). Growth rate – 27.2%. Most of the new HIV cases were concentrated in the 30-39 years age group (14).

HIV prevalence among pregnant women – 0.1%. The most affected populations are injecting drug users. HIV prevalence in this group is 25.1%. HIV incidence among female sex-workers – 6.8%, among men who have sex with men – 5.7% (10, 14).

The biobehavioral studies data in 2015 show an increase in HIV prevalence among PUID (from 14.0 to 25.1%), female sex workers (from 5.8 to 6.8%), and MSM (from 4.5 to 5.7%) compared to 2013 (10, 14).

In 2015, there were 2,305 HIV-positive patients detected (in 2014 – 1,811). The incidence rate was 24.3 per 100,000 population, which is 27.2% higher than in 2014. The general structure of HIV-infected male to female ratio is 1.5 to 1 (11,788 males and 8,039 females). The cumulative number of AIDS cases as of 01/01/2016 is 5,134, including 490 patients diagnosed in 2015 (in 2014 – 474). Among HIV-positive patients, 4,449 people died (including at the AIDS stage – 2,521). In 2015, 454 persons died (in 2014 – 497), including at the AIDS stage – 257 (in 2014 – 273). The mortality

rate has decreased in comparison with 2014 and was 4.8 per 100,000 population (in 2014 – 5.2 per 100,000) (10, 14).

The estimated number of PLHIV in 2014 amounted to 25,000 people according to UNAIDS (68). According to the estimates, in Republic of Belarus a number of PUID is about 75,000. According to epidemic surveillance data in 2013, the level of HIV infection among PUID at different surveillance sites varied largely – from 2.3% to 43.7%.

The estimated number of MSM in Belarus is 60,000 (11), and HIV prevalence in this group, according to surveillance in 2013, was 2.9%.

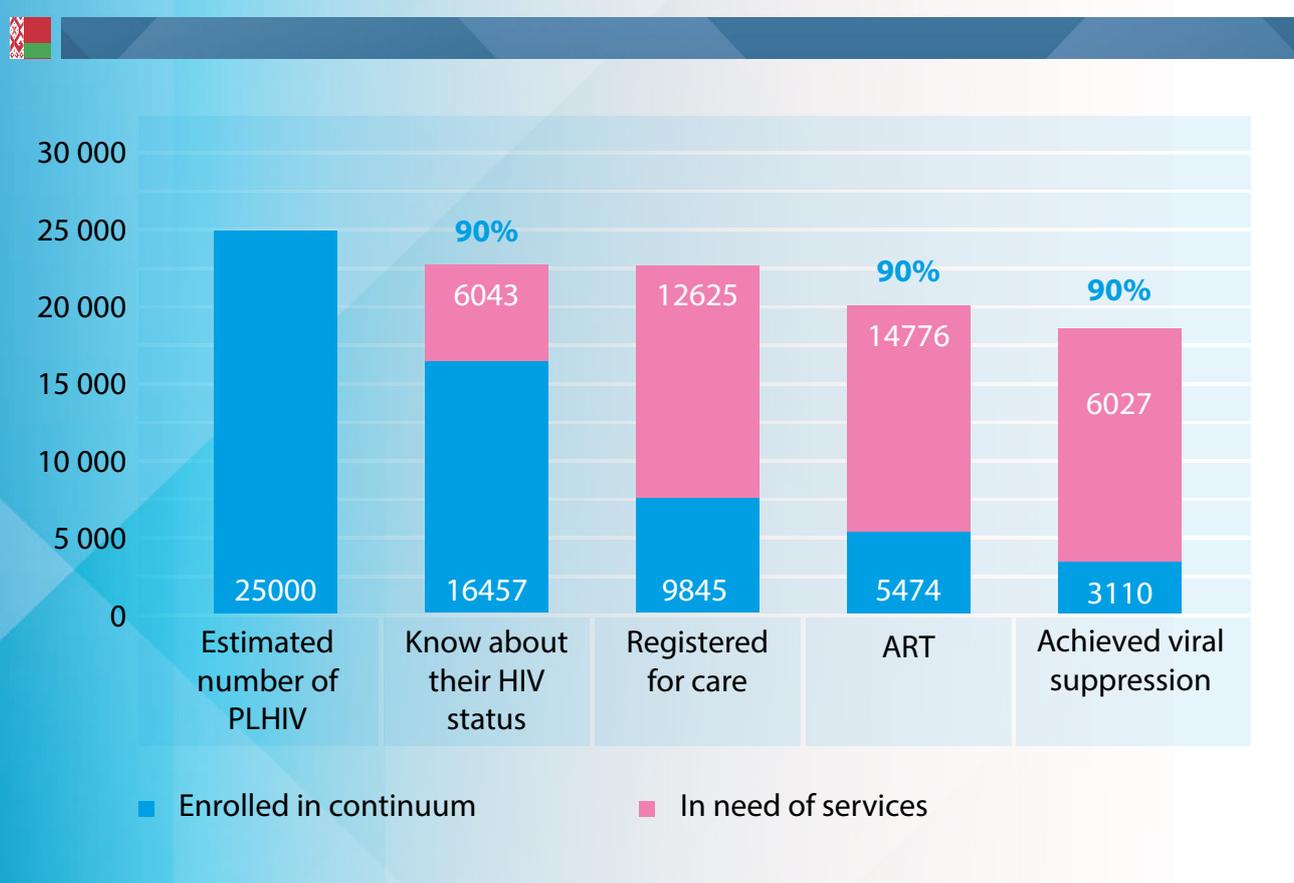
The estimated number of SW is 22 000, and HIV prevalence in this group – 3.9%.

SECTION 2.

ANALYSIS OF HIV TREATMENT CASCADE

To ensure the reliability of care continuum data, this review uses the WHO mission data (12) of November 2014.

FIGURE 3. HIV treatment cascade, Republic of Belarus, 2014



As demonstrated in Fig. 3, out of 25,000 PLHIV, which are estimated to reside in Republic of Belarus, 16,457 (66%) are aware of their HIV-status, and 9,875 (40% of the estimated number, or 60% of those who know about their status) are registered for care, 5,474 (22% of the estimated number, or 55% of those registered for care) are on ART, and only 3,110 (12% of the estimated number, or 57% of those on ART) achieved viral suppression.

The data reveal the PLHIV drop-out at all stages of care, however, the priority efforts should be directed to registration for care and ART initiation, where the highest losses occur.

The care continuum data disaggregated by age, gender, patients belonging to KAP are not available.

SECTION 3.

ANALYSIS OF ACCESS TO THE CARE CONTINUUM FOR PLHIV AND KAP, DETERMINING BARRIERS TO SERVICES

3.1. HIV counseling and testing

HIV testing in Republic of Belarus, in most cases, is voluntary and most often is provider-initiated. According to the national legislation, there are several categories of people for whom HIV testing is mandatory (pregnant, TB patients, patients with clinical manifestations of HIV-infection, prisoners, PUID, representatives of certain professions) (13).

Belarus annually holds about 1 million HIV tests, most HIV-tested are pregnant women, blood donors, and military personnel (12).

HIV testing of NGO clients is made by health professionals in mobile sites using rapid tests or by referring KAP representatives for testing at public clinics. The major gap in organization of testing at the mobile sites is in ensuring linkage with the treatment and care programs after positive test result (12). HIV testing algorithm consists of several steps, and it can take several weeks to get the final result. As a result, up to 75% of patients do not pass the final confirmation step (12). Express testing is limited to pilot projects (12).

FG participants indicated the need for repeated visits to health facilities for the confirmatory testing.

PUID coverage with HIV testing remains low. Thus, in 2014, out of the estimated number of PUID (75,000), only 11% (8,480) were tested for HIV. A share of MSM who were tested for HIV in 2014 and are aware of the result, was 46.2%. A similar index among SW was slightly higher – 63.4% (10).

FG participants noted high level of stigma in small towns due to lack of accurate information about HIV/AIDS. Most FG respondents noted the complexity of HIV testing in small settlements:



«There the attitude towards HIV is different. That is, they are like lepers.»

«... as soon as a person comes, the word of mouth starts working right away, that someone has come to be tested. Often people from Kalinkovichi come here, as well as from other cities, so that no one back there got to know about it.»

FG participants pointed to the mandatory nature of testing for certain categories of clients, as well as to the need for psychological help after receiving a positive test result:



«To date, all have obligatory to test for HIV. Even if this is against your will.»

«The majority takes it painfully (news of HIV). So, there must be some psychologist, a good psychologist. To prepare a person, to inform, to calm down. To give hope.»

MSM during FG discussions noted the high cost of HIV rapid tests in pharmacies.



THE KEY BARRIERS TO ACCESS TESTING SERVICES ARE AS FOLLOWS:

- **low motivation of KAP representatives for testing and subsequent treatment;**
- **limited capacity (legal and organizational) of NGO- and community-based testing;**
- **limited use of rapid tests;**
- **significant delays in getting the confirmation test results;**
- **high level of self-stigma among the KAP.**

3.2 Registration for care

In Republic of Belarus, HIV healthcare provision is carried out at the place of registration, which limits access to HIV services, particularly, for internal migrant workers. Linkage with treatment for HIV-positive clients is an area for strengthening and improvement in the NGO activities (12).

In 2014, on the basis of narcological clinics and clinical hospitals there were 19 OST sites operating, and the number of patients on substitution treatment was 1,066 people (10). According to the FG respondents, HIV testing in OST sites is held on a regular basis.

FG participants noted that social workers accompany clients with positive NGO-based test result to the AIDS Center for clinical registration, often even if this is not a part of their job. Although this tactic is effective when working with MSM clients, this approach is not always justified when we talk about SW. According to most respondents - service providers, SW simply run away at the first opportunity:



«We also tried to do so. But for now, they (SW) just run away. While we arrived at the polyclinic and a person went to the doctor to say that new patients arrived, they are already gone.»

Fears and self-stigma among KAP prevent timely referral for help:



«Although the specialists explain on pre-test counseling that it is important to go further and register, they (SW) simply do not go, as here responsibility comes into force, up to the criminal one. And they just live with this, do not take therapy, do not know about their status in the long run, but they know that HIV was somewhere there once, as they say.»

Presence of vertical services used in HIV and TB programs can be regarded as a major barrier to obtaining timely access to quality diagnostics, treatment and the care continuum for patients with HIV/TB co-infection (15). The Order of Ministry of Health of Republic of Belarus No. 1217 of November 11, 2010, has approved the "Instruction on the organization of medical care for patients with HIV-associated tuberculosis". It stipulates that TB/HIV patients get TB treatment in TB dispensaries, where they get consultations of infectious disease specialists, including the ART prescription. This order defines the purpose of isoniazid preventive therapy (IPT) for PLHIV with latent TB and for people who are in close contact with TB patients. Despite the existence of regulations on IPT, in 2014, only 539 patients were enrolled in this type of TB prevention (16).



BARRIERS TO REGULAR MEDICAL CHECK-UP:

- **limited range of services for the KAP, especially for SW and PUID, at the AIDS Center;**
- **- weakness of social support for KAP representatives who received a positive test result at mobile site, to be registered at the health facility;**
- **- lack of services for patients with dual diagnosis – HIV/TB, PLHIV/PUID**

3.3. ART

Purchase of ARVs in Republic of Belarus is carried out both through a GFATM grant and the state budget. In the transition period, the Ministry of Health plans to sufficiently ensure procurement of ARV drugs under the state budget, which could lead to the purchase of low-quality and expensive drugs. Prices of drugs may be higher compared to the prices negotiated between the GFATM and suppliers through the voluntary pooled procurement (VPP) system. In the transition to procurement of drugs for the state budget funds, it is vital to ensure compliance of the drugs procured with the WHO pre-qualification requirements (14).

In 2014-2015, there were cases of drugs shortage in some regions. This challenge was resolved by re-distributing the drugs from other regions, however, there were delays in the allocation of ARVs in clinics. There were individual cases of pediatric ARVs (syrups or suspensions) use for adults due to lack of drugs in stock, and non-compliance with the principles of the combined regimens consisting of three drugs in cases the drugs were out of stock. The national quality control system for medicines is under registration. Also, the system to register side effects from ARVs operates in the country (14).

In Belarus, 22 first-line ART regimens are used. For 2014, a gradual transition to the treatment regimens according to the WHO criteria is planned (17), but the priority remains to prescribe ART to patients with symptomatic HIV-infection and CD 4 \leq 350 cells/mm³, patients with dual pathology (HIV/TB, HIV/hepatitis C) (12).

FG participants pointed to a large number of needed laboratory and instrumental investigations, which a patient must pass before having the ART prescribed:



«As a rule, the maximum period for getting all the necessary tests results is about 1.5-2 weeks. That is, within 2 weeks we will have a complete picture of the patient's health status.»

According to patients, the examination takes longer than it could be, and requires a visit to various health facilities:



«To get the coupon for the ultrasound in Minsk, it's easier to pay for it, because you will wait a year and a half, just to make an abdominal ultrasound.»

«For example, I had such a problem: they tell you that you should urgently, this week go and make test. And you can also have some other plans. E.g., your own schedules, some other activity.»

Barriers to ART access are also myths and prejudices prevalent among patients:



«They say they know that therapy helps to kill them even faster. Why do they think so? They say that heard testimonials from people who are on therapy, how the physician treats them.»

For many patients, the barriers are the fear of diagnosis disclosure and self-stigma:



«Personal viewpoint, in connection with what they use. They are afraid that someone will find out their diagnosis, that it will spread through polyclinics. They are afraid that they wouldn't get work, they are afraid of the reaction from relatives, the social perception.»

«This is fear, lack of information about this disease, and general misunderstanding what to do about it. It's scary to tell the relatives. I do not know how to say. My relatives still do not know. I'm afraid of losing contact with them. And suppose, I do not have a family, and I do not know how to deal with it at all, how to get acquainted and what issues may occur. How to tell this to a person without this status, and what attitude I will face. It's all complicated.»

«And it's even frightful that you can not get a job. Society will not accept you, and that's all. And if you work, it's frightful that you will be fired, because sooner or later it will reach the top managers.»



KEY BARRIERS TO ART ACCESS:

- **interruptions of ART supply;**
- **inconsistency of national guidelines with the WHO recommendations;**
- **large number of treatment regimens which increases the risk of mistakes during redistribution of treatment regimens between health facilities that provide care to PLHIV;**
- **lack of integrated services for PUID, which impacts on a large number of treatments drop-outs among this group;**
- **fears, lack of knowledge about ART, self-stigma among PLHIV.**

3.4. Achieving viral suppression

According to the specialist of AIDS Center, FG participant:



«Patients understand poorly how the delay in treatment affects their health; therefore, the treatment drop-outs are common. When a patient begins to receive HIV care, the result of HIV test is told by the epidemiologist, while an infectious disease specialist includes the patient to the treatment program».

Belarus has launched multidisciplinary teams who follow-up patients on ART, and their work requires strengthening and enhancement. The patients' misunderstanding of the need for treatment and its continuity is quite common. The number of "peer" consultants is limited; the social support is not sufficiently developed (12).

Data on number of PLHIV/PUID receiving ART and OST are not available.

In 2010, a new clinical OST Guideline was approved, which eliminated many barriers to PUID to access this service. Treatment guidelines for mental diseases and OST guideline do not contain algorithms for early HIV and TB detection (HIV rapid tests and TB screening) and do not regulate application of integrated approaches to care provision for patients with double or triple diagnosis. In case of a patient hospitalization to another health facility the staff of OST site is forced to deliver methadone to a patient every day, which increases the cost of OST services.

Cooperation between NGOs and TB facilities as part of the programs for TB diagnostics and treatment among PLHIV is limited (15). In 2014, all TB patients of TB facilities of Republic of Belarus were examined for HIV. In 2014, out of all TB patients, 271 patients with HIV were detected, 191 (71%) of whom were prescribed ART. All TB/HIV patients received preventive treatment with cotrimoxazole (16).

High level of stigma and self-stigma among PLHIV and KAP should be mentioned: 42% of PLHIV are subjected to physical persecution or threats because of their status, 25% mention problems with employment because of their HIV status; most PLHIV blame themselves and feel ashamed



BARRIERS TO ACHIEVING VIRAL SUPPRESSION:

- **lack of knowledge and motivation among patients to retain on treatment and achieve viral suppression;**
- **limited social support and activities to develop adherence;**
- **lack of integrated care sites on the basis of AIDS centers and TB facilities.**

SECTION 4.

RECOMMENDED DIRECTIONS FOR ADVOCACY

- Establishing effective social support system for timely health service coverage for people with a positive HIV test, especially KAP representatives.
- Advocacy for introducing changes to the legal and regulatory framework to liberalize legislation on testing (exclusion of mandatory testing of individual categories, increased use of rapid tests to reduce barriers to access examination, implementation of community-based testing strategies).
- Communities mobilization aiming at systematic approach to efforts to reduce stigma and self-stigma.
- Joining forces of international and national partners to revise national standards and HIV-infection screening and diagnostic algorithms to improve the diagnostics quality, reduce the time to get the final result, optimize the use of available resources.
- Development and introduction (with the participation of all stakeholders) of PLHIV social support system at all stages of care to maximize coverage and minimize the drop-outs.
- Advocacy for scaling-up OST programs for PLHIV/PUID, providing integrated services with a focus on patients receiving ART.
- Strengthening cooperation between NGOs, HIV-servicing and TB facilities to create conditions for maximum and timely coverage of patients coinfecting with HIV/TB with prevention, diagnostics, and treatment of HIV-infection and tuberculosis.
- Advocacy for scaling-up access to TB screening and isoniazid preventive therapy by institutions providing services to PLHIV.
- Revision and update in line with the WHO recommendations of the list and the quantities of the procured ARV drugs and diagnosticums for budget optimization, price reduction, and achieving the “90-90-90” targets.



REPUBLIC OF KAZAKHSTAN

SECTION 1.

EPIDEMIOLOGICAL SITUATION IN REPUBLIC OF KAZAKHSTAN

HIV-infection in Kazakhstan is at concentrated stage with the prevailing involvement of KAP.

In 2009, two basic strategic health documents were adopted: Code of Republic of Kazakhstan “On public health and health care system” and the Concept of the consistent national health system of Republic of Kazakhstan. Both documents suggest conducting the national measures to improve public health with the emphasis on disease prevention and the establishment of joint responsibility of the state and citizens for health (19). In Kazakhstan, the responsibility for public health and promotion of a healthy lifestyle is assigned to various agencies, including the SES, the Centers for HIV/AIDS Prevention and Control, the National Center for Healthy Lifestyle, providers of primary healthcare services, NGOs, and international organizations. The most significant challenge in the area of public health is the coordination, rationalization, and clear distribution of roles and responsibilities between various agencies and organizations involved in the activities concerning the protection and promotion of public health (19).

The key trend of HIV epidemic in Kazakhstan is the prevailing sexual transmission route (the transmission route changed in 2011). According to official statistics, as of December 31, 2015, cumulative number of HIV cases among the citizens of the Republic of Kazakhstan reached 24,427 people. The number of PLHIV in 2014 was 17,726, the HIV prevalence – 10.3 per 100,000 population. According to UNAIDS data, as of 12/31/2015, 14,933 PLHIV were registered for care, which is 75% of the estimated number.

PUID dominate among PLHIV, their share in 2014 accounted for 56.3% of all registered HIV cases (18).

According to the sentinel surveillance data, in 2015, HIV prevalence among PUID was 8.2%, among SW – 1.3%, and MSM – 3.2%.

The estimated number of PUID (those who injected drugs over recent 12 months) as of 12/31/2015 was 127,800 people (18). In Republic of Kazakhstan, OST had been introduced as a pilot for several years. As of 12/31/2015, OST sites operate in 10 cities of Kazakhstan, cover 292 patients, which is far from meeting the existing need (18).

In Kazakhstan, the work with MSM takes place in 9 regions (Aktobe, East – Kazakhstan, Zhambyl, South – Kazakhstan, Karaganda, Kzyl-orда, Pavlodar, and Almaty city, Astana city). In the same areas, the number of MSM equals to 39,800 people, as per the estimations held. In 2015, 6,660 MSM were covered by preventive programs. In 2014, 699,579 condoms were distributed to MSM.

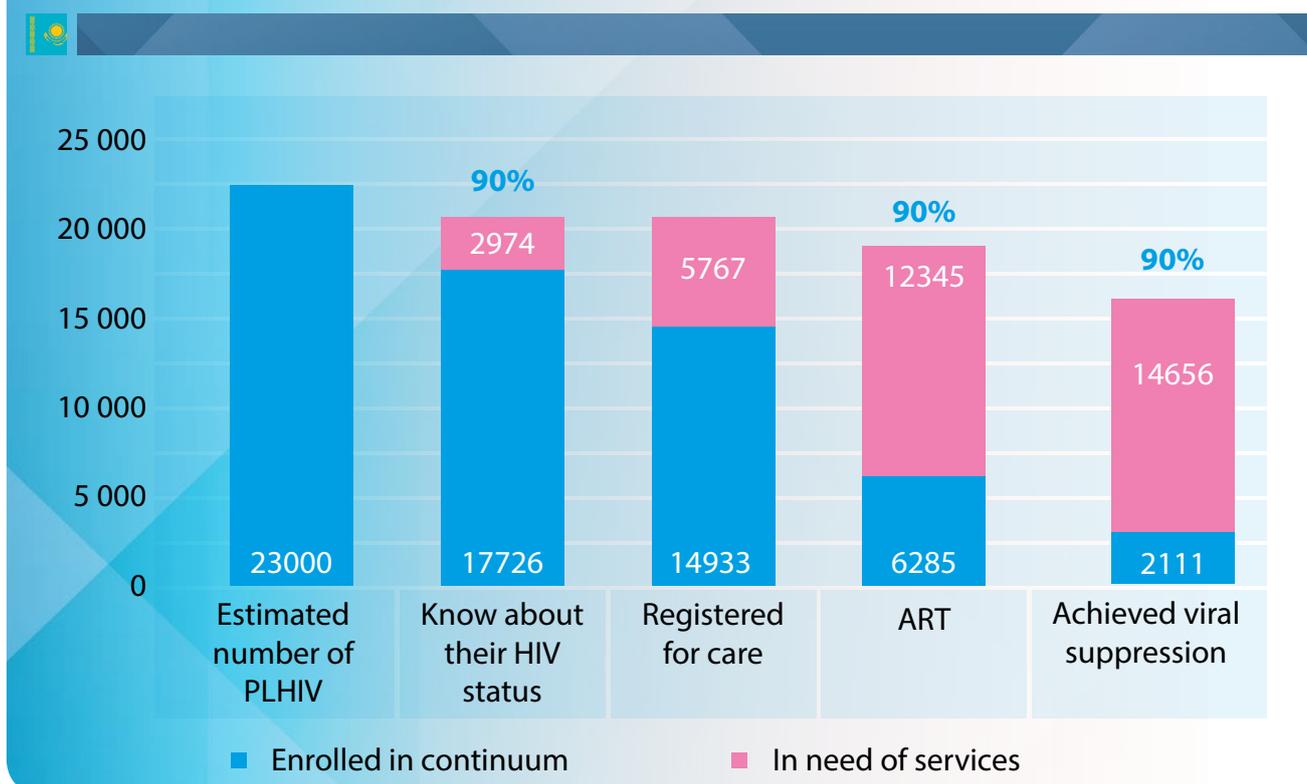
In 2015, HIV prevention programs enrolled 16,995 SW (86% of the estimated number). In the same year, a similar coverage indicator among MSM was 6,660 people (17% of the estimated number).

SECTION 2

ANALYSIS OF HIV-INFECTION TREATMENT CASCADE

Kazakhstan has achieved good results in the delivery of HIV care continuum for PLHIV and approximated closely to achieve the first target – 90% PLHIV diagnosed – 17,726 persons are aware of their positive HIV status (77% of the estimated number of PLHIV) (Figure 4). 14,933 HIV-positive patients are registered for care (65% of the estimated number of PLHIV, or 84% of the number of PLHIV who know their HIV status). Much more challenging is the situation with ART prescription – only 6,285 HIV-positive patients get ART (27% of the estimated number of PLHIV, or 42% of the number of PLHIV registered for care). Even more challenging issue is achieving viral suppression – only 2,111 patients reached undetectable viral load, which is only 9% of the estimated number of PLHIV, or 34% of the number of patients receiving ART.

FIGURE 4. HIV treatment cascade, Republic of Kazakhstan, 2015.



According to the treatment cascade data, the bulk of the losses in care continuum is observed on the stages of ART prescription and achieving viral suppression. Registration for care requires less attention.

Unfortunately, more detailed information – treatment cascade for KAP – is unavailable. The reports on researches conducted in Kazakhstan miss the data on PLHIV disaggregation by sex and HIV transmission routes, making it difficult to analyze the causes of treatment drop-outs and regular medical check-up.

SECTION 3

ANALYSIS OF ACCESS TO CARE CONTINUUM FOR PLHIV AND KAP, DETERMINING BARRIERS TO SERVICES

3.1. HIV counseling and testing

Every year in Republic of Kazakhstan more than 2 million people are tested for HIV, i.e. 14% of the population per year. An essential task in HIV testing is to provide people with high-quality pre- and post-test counseling. In 2015, 50,756 PUID were tested for HIV (39% of the estimated number, or 84% of PUID covered by preventive programs) (18, 62). Examinations with rapid HIV tests were made for 73% of the total PUID tested in trust offices. Totally, in 2015, 18,764 SW were tested for HIV, including with rapid tests – 15,403 people (82%). HIV prevalence among SW in 2015 was 1.3%. In Kazakhstan, rapid HIV tests are widely used, including for KAP representatives. Thus, totally, 1,824 MSM were tested for HIV, including with rapid tests – 1,706 (18). All TB patients receive provider-initiated counseling, 98% of them were screened for HIV (20).

Barriers to access testing in Kazakhstan are practically absent, the percentage of PLHIV who know their status is 77% of the estimated number.

3.2. Registration for care

In the regional and city AIDS centers 14,933 PLHIV are registered (85% of the number of PLHIV who know their status). The work of health facilities providing HIV services is integrated with the activities of TB services (in terms of prescription and provision of ART), with prenatal care system, and with mother and child healthcare (in the implementation of PMTCT programs), as well as other services conducting sexual and reproductive health programs (18).

In recent years, a project to provide OST services at 10 sites involving 292 patients is being implemented in the Republic of Kazakhstan. However, OST coverage is significantly lower than the existing need (18). After the approval of the Order of Ministry of Health and Social Development of the Republic of Kazakhstan dated 12/30/2014, No. 367, a series of barriers to OST were eliminated, making this service more accessible (19).

FG participants noted the following barriers to registration: fear of losing their jobs and being rejected by society, feeling ashamed because family members can learn about the HIV status:



«We have a completely different mentality, we are brought up differently, because of this there can be problems if relatives find out, because it is shameful, as they say.»

On the other hand, respondents from PLHIV involved in FG talked positively about AIDS centers' staff (in particular, about the employees of AIDS Center in Almaty and Semipalatinsk cities):



«And I would like to note, those who reached other medical institutions, as they talk to us in the AIDS Centers, no one talks to us like that anywhere – respectfully, knowingly, most likely, they do not even look at the fact that you are using actively, still they talk with you like with a person. I was surprised how they talk. So affectionately, as in the AIDS center, nowhere people talk so affectionately»

In Kazakhstan, PUID constitute the majority of PLHIV, so it can be assumed that dropping out of regular medical check-up and treatment in this group, due to its difficult access to health care, can be more frequent.

As a part of procedure for inclusion to HIV healthcare programs at the AIDS center, many PLHIV are screened for TB at primary health care (PHC) facilities. In case of cough and/or other complaints suspicious for TB, AIDS center specialists refer PLHIV to territorial PHC for TB diagnosis. When registering for care, PLHIV with negative TB screening are referred to a TB specialist for isoniazid preventive treatment. Since January 2013, PLHIV are included in the group of those tested for TB with rapid tests (Gene-Xpert). At PHC facilities, the contact between PLHIV and TB patients is excluded, since TB patients receiving treatment at the PHC are not discharging bacteria. DOT rooms have separate entrance and exit (18).

One of the key issues is lack of regulations that determine the procedure for provision of health services and ART prescription to migrants, persons released from prison, and citizens of other countries (preventive services for these categories are available) (21, 63).



BARRIERS TO REGULAR MEDICAL CHECK-UP:

- **insufficient coverage of OST programs for PUID;**
- **myths and fears prevailing among KAP;**
- **bureaucratic issues when registering for care for labor migrants and those released from prison, foreign nationals permanently residing in Kazakhstan.**

3.3. ART

In Republic of Kazakhstan there are 23 healthcare facilities that provide ART. Since 2009, ARV drugs for adults and children are fully ensured by public funds. Medical care for HIV-positive patients is provided in the framework of the guaranteed volume of free medical care.

At the end of 2015, ART was given to 6,285 patients, which accounted for 42% of the PLHIV who are registered for care, which is stipulated by ART prescription eligibility criteria. Indication for ART is the level of $CD4 < 350$ cells/mm³ (18). The major reasons of losses in HIV care continuum at this stage are the patients' refusal to start taking drugs, poor adherence, and side/toxic effects, low availability of OST, insufficient development of integrated services, and drugs use (18).

Similar to the stage of registration for care, an unresolved issue while ART prescription is service provision for homeless, those released from prisons, and internal migrants.

FG participants noted low level of patient awareness about the availability and accessibility of HIV infection in the country:



«For example, yesterday a child was diagnosed, and the mother didn't want to come. As she thought that there is no treatment, and that her child will die in any case.»

In 2014, ART was prescribed to 472 patients with HIV/TB, while the coverage of ART of patients with dual pathology was only 43.3%, and coverage of cotrimoxazole preventive therapy was 78% (20).



BARRIERS TO ART PRESCRIPTION:

- **treatment guidelines provide for ART prescription at the level of $CD4 < 350$ cells/mm³, which limits access to treatment for PLHIV;**
- **insufficient coverage of HIV-positive PUID with OST services, which leads to adherence issues, treatment drop-outs, and refusals from treatment in this group of patients;**
- **inadequate management of side effects;**
- **myths and lack of information on ART among patients**

3.4. Achieving viral suppression

In 2015, the VL test was conducted for 3,093 patients, of which a significant number – 2,111 (68%) patients had VL less than 1000 copies/ml (20). However, the VL test itself was held for 60% patients only.

The results of FG discussions revealed that the most common causes of refusals from ART are the side effects in patients receiving ARV drugs, and chemical dependence (use of drugs or alcohol). Also, respondents noted the reluctance of PLHIV to tell their relatives about the disease and the treatment, which leads to refusals from ART. Many respondents noted the barriers associated with the remote and inconvenient location of AIDS centers, the need to regularly visit them to get ARV drugs – which is difficult for PLHIV because of the lack of funds for the trip.



BARRIERS TO ACHIEVING VIRAL SUPPRESSION:

- **issues of adherence development and maintenance;**
- **issues of organizing the monitoring and management of side effects;**
- **lack of access to OST for PLHIV receiving ART;**
- **lack of access to viral load test**

SECTION 4.

RECOMMENDED DIRECTIONS FOR ADVOCACY

- Joining efforts of all stakeholders to create the conditions and shape an effective system of social support of the KAP representatives to HIV testing, and timely coverage with health services of persons with a positive HIV test.
- Joining efforts of the government agencies and non-governmental organizations to motivate KAP representatives to health care, to fight stigma and self-stigma.
- Advocacy of scaling-up access to OST as the adherence tool to healthcare services and ART among PLHIV/PUID.
- Revision and bringing in line with WHO recommendations of the list and the quantities of the procured ARV drugs and diagnosticums for the efficient use of budget funds, price decrease, and achieving the “90-90-90” targets.
- Creation and ensuring effective functioning of the integrated services and social support systems for patients with the dual/triple diagnosis (HIV/TB, HIV/TB/PUID) to ensure timely diagnostics, prevention, and treatment, as well as reduce treatment drop-out risks.



KYRGYZ REPUBLIC

SECTION 1.

EPIDEMIOLOGICAL SITUATION IN KYRGYZ REPUBLIC

HIV epidemic in Kyrgyz Republic is at the concentrated stage. Kyrgyz Republic has adopted the “State program on stabilization of the HIV epidemic in Kyrgyz Republic for 2012-2016” and the healthcare reform program “Den Sooluk” for 2012-2016. The state program for the stabilization of the HIV epidemic is part of the Country Development Strategy, which is based on the Millennium Development Goals. The program is aimed at preventing further spread of HIV, ensuring access to diagnostics, treatment, care and support for PLHIV, enhancing healthcare system. In oblasts, the work on HIV prevention is implemented based on the regional programs and insitutional plans for the implementation of the State Program. Implementation of activities in the framework of the State Program strategies is monitored by national indicators and reports on the ongoing activities. Data collection is made by Ministry of Health, which annually provides a consolidated report to the Government of Kyrgyz Republic (22).

According to the estimates of the “Spectrum” program, in 2014, the estimated number of PLHIV in the country was 8,012 (22).

The main trends of the HIV epidemic in Kyrgyzstan are:

- prevailing sexual route of HIV transmission (among new HIV cases – from 33% in 2010 to 62.3% in 2014, while the parenteral route share was 28.6% and decreased from 59% in 2010) (22, 23);
- increase in share of women among new HIV cases (in 2010, women accounted for 30% of the number of newly registered PLHIV, and in 2014 - 43.7% already (22, 23);
- decrease in HIV prevalence among young PUID, under 25 years, is 6.4% (2010 – 8%, 2013 – 1.6%) (22, 23).

Kyrgyz Republic remains a country with low HIV prevalence. According to Regional AIDS Center data, as of January 1, 2015, a total of 5,760 PLHIV are registered, of which 5,505 are citizens of Kyrgyzstan, and 691 patients were at the terminal stage. In 2014, share of PLHIV who use injecting drugs was 28.6%. The HIV incidence in Kyrgyz Republic per 100,000 population was: in 2011 – 10.8, in 2012 – 12.5, in 2013 – 8.5, in 2014 – 10.5 (22).

HIV cases are reported in all regions of the country. According to Regional AIDS Center data, as of January 1, 2015, the largest number of PLHIV were registered in Chui oblast (29.9% of all registered), in Osh oblast (19.6%), Osh city (16.8%), and Bishkek city (15%). The smallest number of PLHIV registered were in Talass (1.3%) and Naryn (1.5%) oblasts (22).

Over the past five years (from 2010 to 2014) the number of officially registered cases of HIV infection in the country has increased twice (from 2718 cases as of 01/01/2010 to 5760 cases as of 01/01/2015), and the number of women – by 2.2 times. Of these women 2.4% are drug users, 10% have sexual partners – PUID, 87.6% women had sexual partners who had nothing to do with the drug use (22).

The main share of HIV detection is within the category of working and reproductive age of 20-39 years – 67.4%. Share of HIV-positive children under the age of 15 years was 9.6% (22).

KAP in Kyrgyzstan include PUID, prisoners, SW, MSM; however, PUID remain primary drivers of the epidemic. Despite the fact that PUID share among new cases has declined cumulatively, PUID comprise 58% of PLHIV who know their diagnosis (25). HIV prevalence among PUID, according to epidemiologic surveillance data, was 12.4% in 2013, and varied considerably in different regions (23, 24). A positive factor is a reduction by 6.4% of HIV prevalence among young PUID under the age of 25 (in 2010 – 8%, in 2013 – 1.6%).

MSM in Kyrgyz Republic is a closed group, so sentinel surveillance data related to MSM are representative only for Bishkek city. HIV prevalence among MSM was 13.3% (27, 28).

HIV prevalence among prisoners almost halved from 13.7% in 2010 to 7.6% in 2013 and remains high.

In Kyrgyz Republic there are registered cases of children infected by the parenteral route due to the outbreak of HIV-infection in the Osh oblast in 2007: as of 01/01/2015, 523 children were registered, including with the parenteral route of transmission – 345, vertical route – 155, sexual route – 2, unspecified – 21.

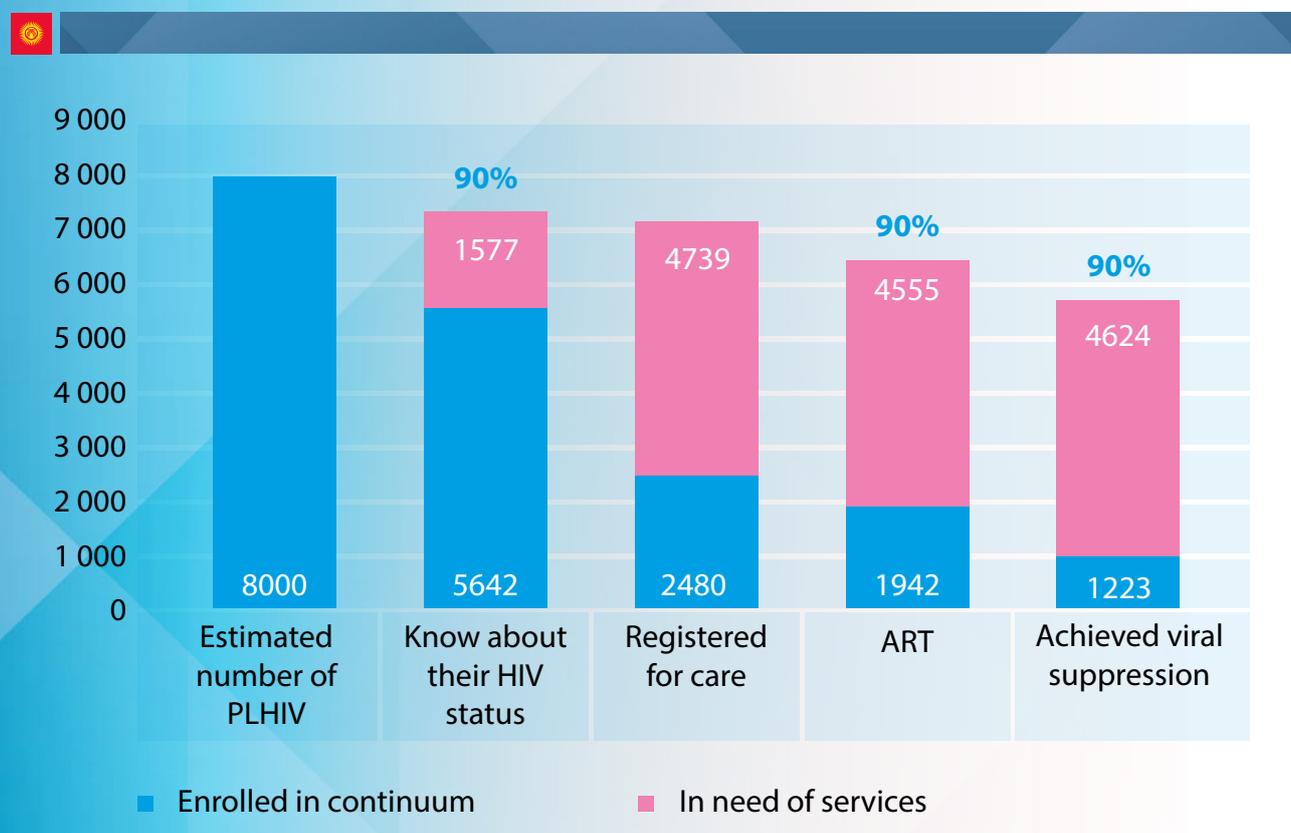
During the whole period, 1,096 PLHIV died, including 346 persons at AIDS stage. HIV death rate has increased significantly in recent years and has tripled compared to 2008. This worrying trend reflects late diagnosis and late health coverage, late ART prescription and retention issues, the rising incidence of HIV/TB, and poor HIV/TB case management. In 2013, TB was the cause of 58% of PLHIV deaths (23)

SECTION 2.

ANALYSIS OF HIV TREATMENT CASCADE

As of 01/01/2015, the estimated number of PLHIV in Kyrgyz Republic was 8,021, of which 5,642 (70%) were aware of their HIV status, 2,480 (31% of the estimated number, or 44% of those who know their status) were registered for care due to HIV, 1,942 (24% of the estimated number, or 78% of the patients registered for care) received ART, 1,223 (15% of the estimated number, or 63% of those receiving ART) achieved viral suppression (Fig. 5).

FIGURE 5. HIV treatment cascade, Kyrgyzstan, 2014



Actually, as the treatment cascade demonstrates, at all HIV care stages, a substantial loss of patients is observed, but these losses are the most significant at the registration for care stage.

SECTION 3.

ANALYSIS OF ACCESS TO CARE CONTINUUM FOR PLHIV AND KAP AND DETERMINING BARRIERS TO SERVICES

3.1. HIV counseling and testing

The procedure of HIV testing is governed by the provisions of “Law on HIV/AIDS in Kyrgyz Republic” adopted on June 27, 2005. In Kyrgyz Republic, HIV testing is most often carried out voluntarily. Mandatory testing is required during the examination of blood donors, biological fluids, organs and tissues; foreign citizens and persons without citizenship in the cases provided for by international agreements; as well as representatives of some professions. Compulsory HIV testing can be carried out by a decision of the court, with maintaining confidentiality. HIV testing for all categories of population is free of charge.

VCT using rapid tests (including saliva testing) is performed by 20 NGOs (23). Also, HIV testing is available in 63 healthcare institutions across the country: 9 AIDS Centers and 54 public health institutions (including 21 TB dispensary, 10 PHC centers, and 11 health facilities in the penitentiary system). In Kyrgyzstan, 46 diagnostic laboratories perform HIV screening by ELISA, and two reference laboratories (at the National AIDS Center and AIDS Center in Osh city) conduct confirmatory studies by immunoblotting. Because the blood samples of positive patients are delivered to the reference laboratory for confirmation, a patient must wait for confirmation test results for more than one month (23).

All patients of TB facilities have access to HIV testing. In 2014, HIV infection was first detected in 7,052 patients with TB (25).

In 2014, 436,347 citizens of Kyrgyz Republic representing 7.5% of the population of the country were tested for HIV, of which 92% found out their results. Majority of tests was made by pregnant – 43.4%, and 0.04% of those tested had a positive result. Despite the fact that the level of HIV infection among KAP is high enough, the testing coverage for these groups is insufficient (PUID – 20%, SW – 17%, and MSM – 1.2%) (22).

To improve access to HIV testing, in 2012 the guidelines for rapid HIV testing for KAP, including the saliva test, were developed and approved (Order of Ministry of Health of Kyrgyz Republic of 18/09/2012, No. 517 “Introduction of HIV testing by rapid method among vulnerable groups”). In 2014, the order to expand the rapid testing for nine new NGOs was approved (Order of Ministry of Health of Kyrgyz Republic of 04/15/2014 No.394 «On scaling-up of HIV rapid testing among vulnerable groups”). HIV rapid testing is provided by the trained staff of 19 NGOs.

In 2014, 7,273 KAP representatives were tested with the rapid tests, and 305 PLHIV (4.2%) were detected, however, only 91 persons (30% of the detected) were registered for care (23) (Table 3).

TABLE 3. Characteristics of the NGO-based VCT services provision and linkage with medical supervision for KAP representatives, Kyrgyz Republic, 2014

KAP	Tested	HIV +	Included in D-registry
PUID	3 885	233	58
MSM	836	34	21
SW	2 552	38	12
Total	7 273	305	91

According to the FG participants, one of the barriers to testing is the fear:



«Simply because of fear». (Because of fear of what?) «That it will be revealed and then. The first thing, when we find it out, it is very difficult. When there is no support nearby, someone to say: donot worry, and so on. It's very hard. Therefore, me, for example, too, when I found out for the first time it was a shock. I just had a husband nearby, and he supported me. And if he wasn't there, I do not know, probably, I would already have been dead. We are just afraid of this.»

«Fear, afraid to know the diagnosis. Few information about where and how it can be done.»



Barriers to HIV testing access are:

- **low motivation for testing among KAP (25);**
- **longstanding procedure of confirmatory tests;**
- **self-stigma and fear among KAP representatives;**
- **insufficient coverage of key groups by NGO services.**

3.2. Registration for care

In Kyrgyz Republic, KAP representatives get medical services irrespective of the place of registration. Registration for care in Kyrgyzstan is one of the key issues of the care continuum. Only 31% of the estimated number of PLHIV is registered, or 44% of PLHIV who know their status (2,480 patients). In 2014, only 30% were registered of the total number of HIV-positive patients who were detected with the assistance of NGOs (23).

The issue of late HIV diagnostics still remains, especially among PUID. The ratio of PLHIV with the CD4 level ≤ 350 cells/mm³ and presence of clinical symptoms of HIV infection for the moment of diagnosis was 40%. In 2013, 66% of new PLHIV- PUID cases had CD 4 level less than 200 cells/mm³ (23).

According to the FG participants, the core barriers when seeking medical care are fear, self-stigma, lack of attention to their health:



«Fear. They are also afraid that they will be seen there, that if he went into this room, then something is wrong with him. There are, for example, such girls in hijabs, as if they stand to another room, she looks around that there is no one in the corridor, and at once goes into this room.»

«The state of health is normal, people feel good and do not turn for care.»

«There is a category of people, especially women, what are they afraid of? First, how will I tell it to my husband? My husband will see me here and what will he say? And who was the source? - Husband! Then, if a woman is pregnant, a real puzzle begins. You need to save the child, and psycho-emotional state, and keep the family, and how you can also not to say?»

«And men who come here: «How will I tell my wife? «I always tell them openly – if you are a gentleman, if you are a man, you will say!»



Barriers to regular medical check-up:

- **low level of social adaptation of the majority PUID: no registration; identity documents, permanent residence, work, moving within and outside the country;**
- **lack of proper motivation to preserve personal health;**
- **high level of self-stigma and the myths;**
- **insufficient quality of social support and referral mechanisms from NGOs to HIV health facilities.**

3.3. ART

In Kyrgyzstan, the main document regulating government procurement is the Law "On public procurement" No. 69 of May 24, 2004; more detailed provisions are included in other laws and regulations. Kyrgyzstan has a centralized system for drugs procurement. Based on applications received from healthcare institutions, the Ministry of Health produces a summary application for centralized procurement of drugs for one year with a quarterly breakdown by oblasts and makes an application to the Mandatory Health Insurance Fund not later than two months before the beginning of the year. The Fund carries out the centralized procurement of medicines following the requirements of the Law "On public procurement". In 2014 all ARVs in Kyrgyzstan were purchased within the frames of GFATM project (26).

In 2014, CD4 cell count testing was only available for half of all patients receiving services in healthcare institutions (24). Clinical HIV guidelines approved by the Ministry of Health of Kyrgyz Republic as of 01/22/2015, No. 29, were amended, thus expanding access to ART for HIV-positive patients:

It is recommended to prescribe ART at the level $CD4 \leq 500$ cells/mm³ (priority for patients with $CD4 \leq 350$ cells/mm³). Moreover, it is recommended to prescribe ART regardless of CD4 level for patients with III and IV stages of HIV infection, co-infection (TB, hepatitis B or C), pregnant, or nursing mothers, HIV-positive partner of discordant pairs.

The standard first-line antiretroviral therapy is the regimen of two NRTIs, a third component may be NNRTI or boosted PI.

There are 76 healthcare facilities providing ART in the country. ARVs are procured at the expense of GFATM and are distributed among AIDS centers (7 oblasts, 1 city), and further on to the district Centers of Family Medicine or Family Physicians Groups (23).

According to the FG results, some PLHIV are not aware of the fact that ART is available and free of charge:



«I also know a person who does not know about ART, he is HIV positive, couples, they do not know that there are medicines and that they should take it.»

Also, patients reported interruptions in drug supply:



«Once, my husband and I went for his medicine, I do not know what they had in there, the doctor opened the tube and said, that there are simply no medicines, you are not alone, and he wrapped small bags and put 10 pieces to each one. And he said to come again in 10 days. We said that there is no possibility to come often, no money, but it was necessary to divide for all.»

In 2015, clinical guideline on “Treatment of TB and HIV co-infection among adults and adolescents” was approved. TB treatment for patients with HIV/TB co-infection is usually performed in the inpatient facilities during the intensive phase of TB treatment. Outpatient services are delivered in seven TB dispensaries. In institutions providing medical services to PLHIV, there are difficulties with the care for TB/HIV patients, including high level of stigma against people with HIV and TB, limited number of employees, and high staff turnover. ARV drugs are not available in TB facilities, and TB treatment is not available in medical institutions providing care to PLHIV. The system to refer patients from the TB services to AIDS service and vice versa is not established (23).

In 2014, 84.6% PLHIV were screened for TB. As of January 1, 2015, there were 679 patients with HIV/TB co-infection registered, of whom 421 (62%) were receiving ART. In 2014, the isoniazid preventive treatment was received by 17.6% PLHIV. The cotrimoxazole preventive treatment was received by mostly all patients with co-infection (25). Of the 219 PLHIV dead in 2014, 73 people died of TB, which constitutes 33% (22).

FG participants also pointed to the difficulty of obtaining medical care for HIV/TB patients:



«For PLHIV/TB, there is special treatment. First, they start HIV treatment, then they are referred for TB treatment, as there is no cure for these two diseases at once. They have different medicines, very different programs. For PLHIV/TB, when drugs are issued, they are issued for 2-3 months at once».

«...it's necessary to treat TB firstly, and then prescribe ART, with rare exceptions.»



Barriers to ART access:

- **lack of knowledge among patients about the availability of free treatment;**
- **interruptions in the supply of ARVs.**

3.4. Achieving viral suppression

In 2014, no interruptions with the ARV supply were registered. Number of PLHIV (adults and children) on ART after 12 months after the start of the therapy was 85% (22).

From 1,718 PLHIV receiving ART, 1111 PLHIV had viral load test, in 692 of them (62.3%) the VL was 0 – 500 copies/ml, and 720 (64.8%) did not exceed 1000 copies/ml (22).

Given that over 50% of PLHIV are PUID, the coverage of OST services remains vital. OST in Kyrgyzstan is available at 30 sites across the country, including penitentiary institutions. As of 01/11/2014, the number of OST clients has reached 1,424 people (the estimated number of PUID is 25,500 people). The reasons for dropping out OST require further analysis. The methadone substitution therapy programs covered more than 3000 clients, but after 12 months, only 29 - 40% of them continued OST (23).

FG participants mentioned the importance of integration of OST sites and HIV services:



«In the city AIDS center there was such a practice, an open window, there was a methadone site, there were only HIV, there was also a consultation of the infectious disease specialist, TB doctor, CD4 and viral load, but it worked only 1 year. Why it was closed, I can not say.»

One of the FG participants described the reasons for refusal from ART:



«Addiction, alcohol, drugs, and then disbelief in the effectiveness of ARV, when they simply did not provide the information, and the person simply does not take it. There are a lot of nuances; someone went deep into drugs, someone into alcohol.»



Barriers to achieving viral suppression:

- **low adherence to treatment among PUID;**
- **issues of ART side effects management.**

SECTION 4.

RECOMMENDED DIRECTIONS FOR ADVOCACY

- Combining efforts of all stakeholders to develop and implement an effective mechanism of social support for clients after testing, including community-based, for timely registration for care, provision of treatment.
- Mobilization of the representatives of the communities and NGOs to motivate KAP representatives to testing and treatment.
- Revision (in collaboration with international and national partners) of the algorithm of the laboratory stage of HIV testing to reduce the time for the confirmatory test results.
- More active work of the communities in the fight against stigma and self-stigma to prevent KAP representatives from dropping out of HIV care.
- Revision and compliance with WHO guidelines of the list and quantities of the procured ARVs and diagnosticums for cost-effective use of resources, the price reduction to reach the “90-90-90” targets; shaping an effective system of planned ARVs procurement for the national budget.
- Advocacy of scaling-up access to OST programs for PLHIV/ PUID as a method to develop and maintain treatment adherence.
- Development of integrated services for patients among KAP based on facilities that provide HIV services, which will contribute to development of adherence and retention of patients on ART.



RUSSIAN FEDERATION

SECTION 1.

EPIDEMIOLOGICAL SITUATION IN RUSSIAN FEDERATION

Russian Federation is a country with the largest scale of the HIV epidemic development in EECA, where, according to the director of the Federal Scientific and Methodological Center for AIDS Prevention and Control (Federal AIDS Center), the academician Vadim Pokrovsky, the epidemic in a range of regions has changed from the concentrated to a generalized stage. The Law of Russian Federation as of March 30, 1995 “On Measures for the Prevention of Spread of the disease caused by the human immunodeficiency virus (HIV)” sets out a framework of state policy in the area of HIV infection (29). Currently, the main tool for implementation of this policy is the Russian Federation state program of “Healthcare development” approved by the Resolution of Government of Russian Federation as of April 15, 2014, No. 294, as well as regional programs. Financial assurance for implementation of activities aimed at the HIV prevention, detection, treatment, and treatment monitoring is covered by various sources, but the main expenses are made from the federal budget (29).

The funds from the federal budget were transferred to the subjects of the Russian Federation for the purchase of diagnostic products and ARVs for HIV prevention, detection, treatment, and treatment monitoring of PLHIV, viral hepatitis B and C, as well as for implementation of measures to prevent HIV-infection and hepatitis B and C, including campaigns to inform and educate various groups of the population on means and methods to prevent HIV-infection and hepatitis B and C.

One of the key issues is lack of consistent system of HIV monitoring in Russian Federation: the Federal AIDS Center data differ from the Ministry of Health data. According to data provided by the country in the “Report on measures to combat HIV/AIDS for 2014”, the total number of PLHIV registered in the Russian Federation as of January 1, 2015, amounted to 742,631 people, of whom 61% are men (452,892 cases) and 39% are women (289,739 cases) (29). According to the Federal AIDS Center data, as of 01/01/2015, 937,068 PLHIV were registered (30). For this overview, the information provided by Russia in the “Report on measures to combat HIV/AIDS for 2014” was majorily used.

The main trends of the epidemic in Russian Federation in 2014 were:

- transition of the epidemic to the generalized stage in certain regions of the country, as evidenced by the expansion of the epidemic from vulnerable groups to general population;

- increase in the share of parenteral routes of HIV transmission among drug users;
- prevalence of the parenteral HIV transmission route (in 2014 – 57.3% among new cases);
- TB morbidity and mortality among PLHIV, including those on ART (in 2014, 14,394 new cases of TB/HIV registered, comprising 38% among new TB cases. 6,685 patients with TB/HIV died) (29).

According to the Federal AIDS Center data, as of 01/01/2015, the estimated number of PLHIV was 13,000, PUID – 2,500,000, MSM – 1,500,000 and SW – 1,000,000.

In 2014, there were 92,613 new HIV cases registered. Among the newly diagnosed PLHIV, 40% of cases are women (37,144 cases) and 60% are men (55,469 cases). Share of foreign citizens was 2% of all PLHIV and 4.3% among new HIV cases (29).

In 57.3% of PLHIV newly diagnosed in 2014 with established risk factors, a major risk factor was drug use with non-sterile tools. Heterosexual contacts as the main risk factor were indicated in 40.3% of newly diagnosed PLHIV in 2014. Share of PLHIV - MSM among new HIV cases in 2014 was 1.2%. 3.4% (24,940) of the registered PLHIV died in 2014 (29).

In 2014, there were 522,611 of PLHIV registered for care. Among the registered patients, 37,217 (7%) patients were at AIDS stage. In the reporting year, the AIDS stage was diagnosed in 9,151 people (9.8% of the newly diagnosed). 6,753 people (18% of the total patients with AIDS) died of AIDS (29).

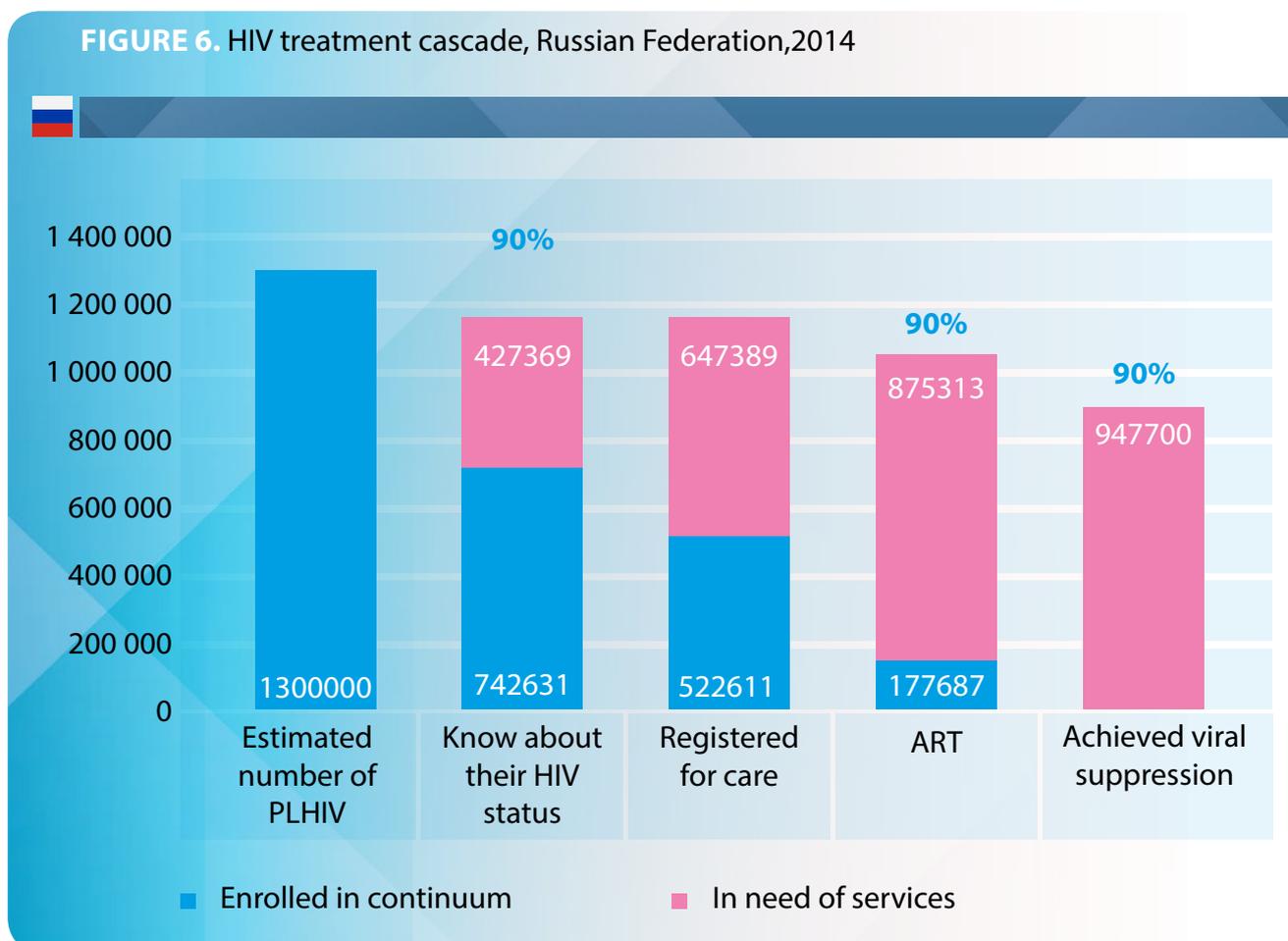
Of 522,611 PLHIV registered for care, 461,295 patients (88.3%) were examined in 2014. The test to determine the degree of immunosuppression was performed for 439,912 patients (84% of those registered for care), the viral load was detected in 415,472 patients (79% of registered for care) (29).

SECTION 2.

ANALYSIS OF HIV TREATMENT CASCADE

As of 01/01/2015, in Russian Federation, 742,631 people (only 57% of the estimated number of PLHIV) knew their status (Fig. 6). There were 522,611 people registered for care (40% of the estimated number of PLHIV, or 70% of those who know their status). 177,687 patients (14% of the estimated number of PLHIV, or 34% of those registered for care) received ART (2). Data on the number of PLHIV who achieved viral suppression are not available publically.

FIGURE 6. HIV treatment cascade, Russian Federation, 2014



Interruptions from the care continuum are observed at all stages of the cascade, but key areas of the advocacy activities (based on the above data) may be the issues of PLHIV detection, coverage with care services, and access to ART (34). Unfortunately, more detailed information – treatment cascade for KAP – is unavailable.

SECTION 3.

ANALYSIS OF THE ACCESS TO CARE CONTINUUM FOR PLHIV AND KAP, DETERMINING BARRIERS TO SERVICES

3.1. HIV counseling and testing

According to the national standards, HIV testing is made by ELISA method, with confirmation by immunoblotting. The period for getting the confirmatory test result takes from 3 – 7 days to one month (32). In accordance with the national clinical guidelines for HIV diagnostics and treatment in adults, using rapid tests is provided for screening of donor blood samples, pregnant admitted to maternity clinic without the planned results of HIV testing, but is not provided for KAP examination (32).

Coverage of TB patients with HIV testing did not exceed 50% in 2014.

The reduction of international funding for services for KAP provided by non-governmental sector limits the access to preventive services. HIV testing strategy is poorly focused on KAP and limits the access of KAP to HIV testing. Most often, HIV testing is done in detention facilities, is provider-initiated during a visit to a health facility, or while preparing various official documents, employing on a job(33).

In Russian Federation, there is a problem of late diagnostics of HIV infection, which is particularly acute in the most affected regions of the country and regions with low coverage by HIV testing (29, 34). Thus, in 28.6% HIV patients registered for care the secondary clinical manifestations were registered, including 13.2% cases which had prominent clinical manifestations of HIV infection (29).

FG participants noted the barriers to access to testing related to inefficient logistics of testing, and the need to pay for the test for persons without clinical manifestations:



«First time I've been tested in the district clinic. The test was inaccurate. Still not clear yes or no. And in order to retest, I went to the Center, there is a special department, you can make a test anonymously as well as with passport ...I was told by phone that the test is positive. They haven't prepared me, they did not tell me to come.»

«According to the legislation of Russian Federation, every citizen has the right to free testing. The compulsory medical insurance system prescribes why the therapist can refer him/her – this is code 113, that is, the presence of clinical manifestations. That's it. If they are not present, then please excuse – go and pay.»



BARRIERS TO ACCESS TO TESTING:

- **delays in obtaining the confirmatory test result;**
- **limited access of KAP to testing services using rapid tests;**
- **limited access to community-based testing.**

3.2. Registration for care

Totally in 2014, there were 73,538 PLHIV, including 42,520 men (57%) and 31,018 women (43%) registered for care. Among PLHIV who were first registered 6.5% patients had acute HIV stage, 64% - asymptomatic stage of the disease (29).

According to the FG participants, for PLHIV – the internal labor migrants who do not have registration at the place of actual residence, it is difficult to get HIV services:



«In Moscow, not very many doors are open, because I do not have a registration, I will only have registration outside Moscow. And so far I do not know where to go. Recently, I came to the Federal AIDS Center, where the doctor was compassionate, and said that he only accepts the local ones and without a specific place of residence, but since I need to pass so much laboratory tests, he will make at least viral load for free».

«I can not register for care in another city. I came to be registered. I came to Moscow, they refused me too. They say that without a record on a local residence they cannot register me for care. Now I'm registered in my city, and it's expensive to go for drugs».

Lack of correct information about the disease and availability of HIV treatment among PLHIV community leads to delays in coming for HIV services:



«I can say about myself why I did not want to get registered. I saw that there are a lot of HIV-positive people around me and everything is fine with them, they do not die like flies. Live with this diagnosis. And why should I run for registration? I did not care – register or not to register. What for? People get registered when they need to receive some services in this specialized center»

Individual FG participants noted lack of trust in the correctness of the test result, fears, and often discriminatory actions when registering:



«I had a fear that they would start to ask for the points, who with whom, where they stabbed, who stabbed. These questions.» (PUID)

«I ran into this when registering, I was directly interrogated. Where with whom, how many people.» (SW)

Among PLHIV registered for care 34,225 patients, or 90.8% of the number of patients with active TB, received TB treatment. TB chemoprophylaxis with isoniazid was delivered to 27,900 patients (5.3% of those registered for care).



BARRIERS TO REGULAR MEDICAL CHECK-UP:

- **transportation issues to the health facilities, dissatisfaction with services quality;**
- **negative attitudes of staff of health facilities;**
- **personal barriers of KAP representatives: low value of personal health; internal stigma and desire to hide their HIV status, fear to know the real health situation;**
- **limits of access to services for internal labor migrants;**
- **centralization of services: the provision of HIV services, only in AIDS centers**

3.3. ART

According to official data, in 2014, there were 177,687 people on ART. According to the calculations of the Federal AIDS Center, the number of people who need it is not less than 350,000 (3). According to World Bank estimates, the total number of PLHIV in Russia by 2020 will be between 5.4 million to 14 million people. Accordingly, the need in ARVs will increase significantly. FG participants noted that big amount and cost of tests prescribed during the first visit to the infectious disease doctor at the AIDS center lead to a delay in the ART prescription:



«Previously, everything was free, and we even received coupons for tomography. Now, of course, no coupons. Some tests, for example, hormones that are not related to HIV infection, but, nevertheless, they have to be paid for in the AIDS Center. Even for HIV-positive.»

National clinical guidelines for HIV diagnostics and treatment in adults in 2013 in the Russian Federation meet WHO 2013 guidelines. It is recommended to initiate ART for all patients with CD4 <500 cells/mm³, and without taking into account the level of immunosuppression, ART is given to all patients with TB/HIV coinfection, hepatitis C, pregnant and nursing mothers (31). In Russian Federation there are several scientific centers that, among other things, develop treatment guidelines; as a result, in various regions the approaches to treatment differ (35). Publically, three documents have been found that regulate the provision of medical care for adult PLHIV (35):

- PHC standards for HIV-caused disease which are approved by the Order of the Russian Federation Ministry of Health as of December 24, 2012, No. 1511;
- "National clinical guidelines for the HIV diagnosis and treatment in adults in Russian Federation" dated 2013. The recommendations are approved by the dedicated committee on HIV diagnosis and treatment of the Russian Federation Ministry of Health and the National Virological Association;
- The minutes of dispensary observation and treatment of HIV patients which are approved at the plenary session of the National Scientific Society of Infectious Diseases Specialists.

ART coverage in 2014 reached 34% among adult patients registered for care, meanwhile, share of PUID was only 26% (31). Among the FG participants there were PLHIV who refused to take ART due to lack of correct information about it, denial of the disease, and personal fears:



«I do not go into details deeply. Something about the cells, the load, that you will die soon. And I'm working, why do I need this. Why should I change something?»
«I refuse because they told me that I would start taking more medicines... I'm poorly informed, one says this, another says that. I'm constantly afraid. They said, if I start taking these, it will be even worse. And me, I already have TB.»

Among HIV services, a special place is reserved for services for patients with HIV/TB co-infection. According to the official data, among the total number of PLHIV there are 55,051 TB cases (7.4%) detected, including active TB in 37,698 cases (68%). Totally, in 2014, there were 14,394 new cases of HIV/TB comorbidity detected, and among active TB cases – 38%. In 2014, there were 6,685 deaths from HIV/TB registered (30). The data on the coverage of HIV/TB patients with cotrimoxazole preventive therapy and ART are not available.



BARRIERS TO ART ACCESS:

- **lack of consistent national standards for determining the clinical stage of HIV-infection and the indications for ART initiation;**
- **absence of an implementation strategy for NGO-based social support, and reduction of the role of NGOs in the provision of services for registration for care, development and maintaining adherence, which contribute to retaining patients on treatment;**
- **limited service package for PUID to develop and maintain adherence to health care and ART;**
- **myths and prejudices about ART prevalent among PLHIV.**

3.4. Achieving viral suppression

Among HIV patients registered for care in 2014 (522,611 people), viral load test was performed for 415,472 of them (79%) (29). As mentioned earlier, the data on the number of PLHIV who achieved viral suppression is not available publicly.

There are significant issues in treatment and retention of patients with HIV/TB coinfection. These issues are caused by the vertically oriented healthcare system, with narrow personnel specialization to treat specific diseases or groups of patients. This rigid system prevents PLHIV/TB treatment, in particular, general practitioners do not consider themselves responsible for the management of such cases, which does not correspond to the objectives of the services decentralization (34). According to the FG participants, the causes of treatment losses are the side effects from ARVs, lack of services for PUID and interruptions in the ARVs supply:



«Actually, I have a friend who was given half of the drug, and the other half no. Runs all the time somewhere, it is generally inconvenient.»

«I know a person. He was given 2 drugs and the third drug he had to buy himself.»

SECTION 4.

RECOMMENDED DIRECTIONS FOR ADVOCACY

- Scaling-up access to testing for opulation, including KAP representatives, introduction of community-based HIV testing, .
- Introducing changes to the guidelines on the laboratory HIV diagnostics to simplify the testing algorithm and reduce the time for the final result.
- Mobilizing communities to enhance social support component to provide access to a whole HIV care continuum, motivation of KAP representatives for testing and treatment.
- Introducing changes to the legislation to reduce barriers for PLHIV – internal labor migrants when registering for care by the place of actual residence.
- Decentralization and integration of services for PLHIV and KAP representatives in the PHC network to provide universal access to HIV services.
- Social mobilization of communities to fight internal stigma and work on adherence to health services among PLHIV.
- Bringing together all stakeholders to develop and implement standardized treatment guideline for HIV-infection in accordance with WHO recommendations, aimed at treatment standardization and maximum coverage of PLHIV with treatment services.
- Advocacy for introducing consistent M&E system for collection and analysis of epidemiological data, including data on ART coverage among KAP representatives and viral suppression data .
- Centralization and optimization of drug procurement in accordance with WHO recommendations and modern standards, creating an up-to-date pharmaceutical management system of ART to reduce prices and to prevent supply disruptions.
- Capacity building and development of cooperation between communities, NGOs, and health facilities to create a system of ART side effects management .
- Joining efforts of all stakeholders to improve access to the outpatient TB treatment model among PLHIV.



REPUBLIC OF UZBEKISTAN

SECTION 1.

EPIDEMIOLOGICAL SITUATION IN REPUBLIC OF UZBEKISTAN

In Republic of Uzbekistan, the epidemic of HIV-infection is at the concentrated stage.

Currently, a Strategic Program for combating the spread of HIV is being implemented in the Republic. The programs to combat HIV-infection are funded both under the state budget (over 55% of investments to overcome HIV epidemic in the Republic of Uzbekistan), as well as under donor funds (37).

Key trends of the epidemic in the Republic of Uzbekistan:

- the sexual transmission route of HIV prevails in the country (in 2014, the parenteral route was 24.4%, the sexual route – 64.7 %) (37);
- key populations in Uzbekistan are represented by PUID, MSM, SW, as well as labor migrants (38);
- an epidemic is spreading among people of working age (25-49 years) (37, 38).

In 2014, the estimated number of PLHIV was 36,600 persons (38).

In the Republic of Uzbekistan as of 01/01/2015 there were 30,315 PLHIV registered. The number of PLHIV varies widely in different administrative territories of the country. The largest number of HIV-infected people live in the city of Tashkent, Tashkent, Andijan, Ferghana, and Samarkand regions.

The number of new HIV cases in 2014 was 4,236 (13.5 per 100 thousand population). In 2014, among new HIV cases, women accounted for 44.6%, men – 55.4%. In 2014, 66.1% of the newly registered HIV cases are aged 25-49 years. Share of the parenteral route of transmission was 24.4% in 2014, share of sexual transmission route was 64.7%. HIV transmission from mother to child was 0.2% (37).

In 2014, under the UNAIDS initiative, the triangulation data study was conducted in the Republic. PUID and SW still remain the key groups in spreading HIV in the country. The role of the MSM group as spreaders of infection is unclear since by the estimated number of MSM in the country is not defined. According to the results of the sentinel surveillance held in 2013, the HIV prevalence among separate KAP exceeds 5%. In particular, the HIV prevalence among PUID was 7.2% (37).

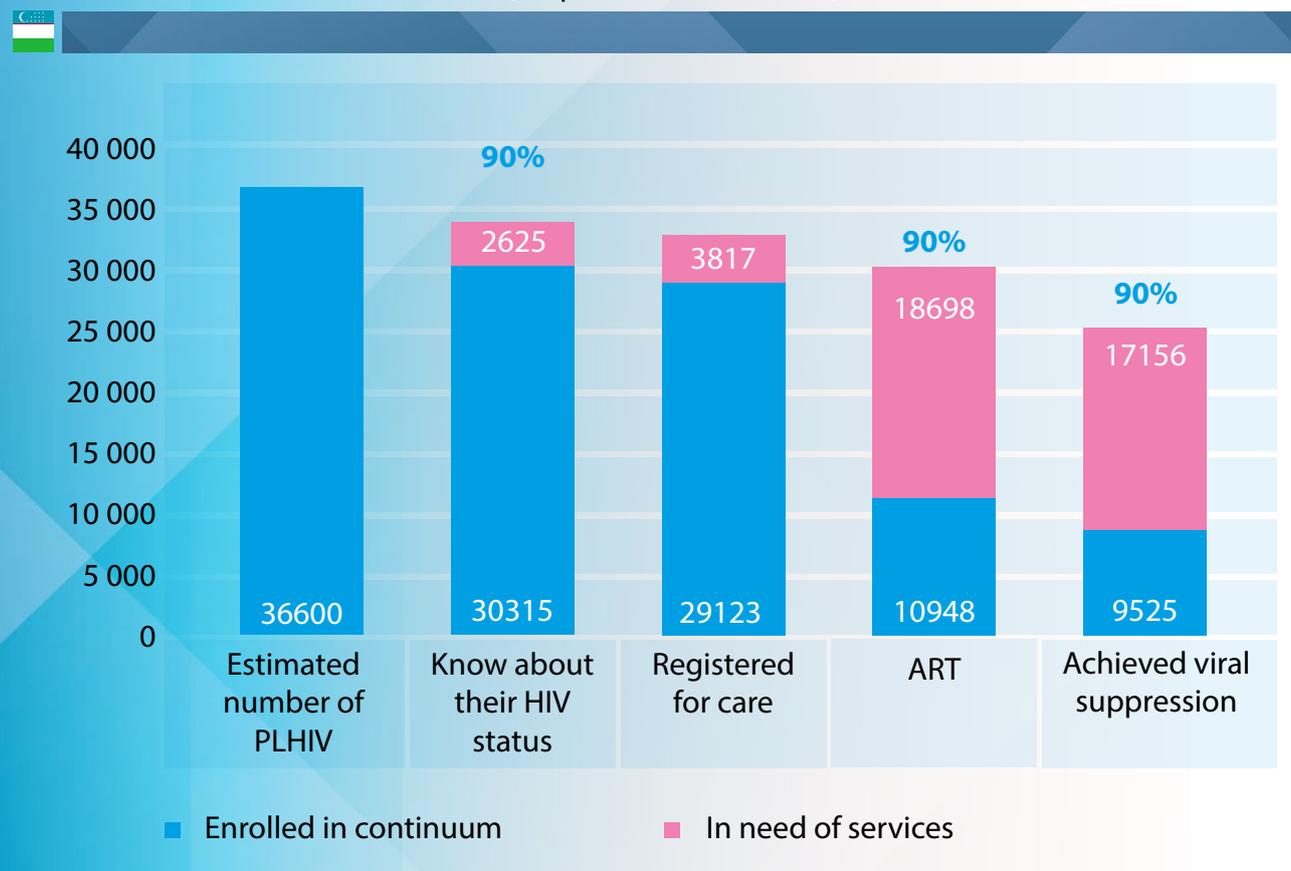
In 2014, there are more than 230 trust offices in the Republic.

There are regional differences in the service packages, as the geographic scope of work of GFATM sub-recipients is limited. As result, the access to psycho-social support for PLHIV is available in 10 regions, services for MSM are available in 3 regions only (38).

SECTION 2.

ANALYSIS OF HIV TREATMENT CASCADE

FIGURE 7. HIV treatment cascade, Republic of Uzbekistan, 2014



Uzbekistan has achieved significant successes in testing – 30,340 PLHIV (83% of the estimated number) know their status. 29,123 patients (81% of the estimated number, or 96% of those aware of their status) are registered for care(38). ART coverage in 2014 reached 10,948 PLHIV (30% of the estimated number of PLHIV, or 38% of those registered for care). 9,525 PLHIV achieved viral suppression (26% of the estimated number, or 87 % of those receiving ART).

The main efforts of cooperation between governmental and non-governmental organizations should be focused on providing the motivation and access to ART and retention on ART of KAP representatives.

Unfortunately, more detailed information: treatment cascade for KAP is unavailable.

SECTION 3.

ANALYSIS OF THE ACCESS TO CARE CONTINUUM FOR PLHIV AND KAP, DETERMINING THE BARRIERS TO SERVICES

3.1. HIV counseling and testing

In 2014, there were 2,859,575 HIV tests held across the Republic. The number of newly registered cases of HIV infection was 4,236 (intensive indicator per 100 thousand population – 13.5). In 2014, among the newly diagnosed PLHIV, 44.6% were women, 55.4% - men. 66.1% are people aged 25-49 years. Share of the parenteral route of transmission is 24.4%, and share of the sexual route is 64.7%. Among them, 6.9% are PUID. The vertical route was 0.2% (37).

For testing the following methods are used: ELISA of III and IV generation, rapid tests with the sensitivity of at least 99% and specificity of 95-98%, and immunoblotting as a confirmatory test.

As a rule, the final test results arrive to the regional AIDS center within a week. The patient can receive the final test result in 2-4 weeks after the first positive test result (38).

According to the Law of the Republic of Uzbekistan «On combating infection caused by the human immunodeficiency virus (HIV)» No. LRU-353 of 23/09/2013, there is a compulsory testing of certain groups of population who may be susceptible to infection when in contact with high-risk groups. These include pregnant women; children born by HIV-positive mothers; persons who left the country for a long time; donors; persons who marry before the age of 50 years; sexual partners of HIV-infected people; persons with clinical manifestations of STIs and immune deficiency (37). Studies among populations subjected to mandatory testing have shown that the HIV detection among them remains consistently low.

The survey revealed that some of the barriers to the involvement of MSM in HIV testing are high levels of stigma regarding this group, and preserving provisions of legislation criminalizing same-sex relations. Many MSM do not mention their belonging to this group when seeking for VCT services.

According to the FG participants, one of the barriers to HIV testing among population is the fear:



«People?? It turns out in unbelief, unacceptance. People have so many problems, and then comes HIV. They somehow withdraw, they can not imagine that they can infect someone. They cannot believe this fact.»

Several FG participants noted the existence of social and cultural peculiarities that impact the testing coverage:



«They believe that this is a disease of prostitutes and drug addicts. That this is haram and impure people. Again, it's about our mentality. Many need to give birth to children, marry their children. And, God forbid, neighbors will know, you will not marry your child.»

3.2. Registration for care

As of 01/01/2015, the number of those registered for care and visiting the healthcare facilities (at least one visit per year) included 26,989 of 30,340 people who know their status. Presumably, people who did not attend healthcare facilities are those who need time to accept the diagnosis or have other reasons not to get medical care. WHO expert team could not find the patients who are registered and quit the observation (38).

In 2014, 98% PLHIV registered for care were screened for TB, of whom 780 HIV-positive patients were diagnosed with TB. IPT was delivered to 2,438 PLHIV from PLHIV registered at TB dispensary.

According to the FG participants, in Uzbekistan there are no serious barriers to registration for care neither for citizens no for foreigners:



«If they are not citizens of Uzbekistan, they have a complicated situation to get ART. For example, there were cases when patients from Kazakhstan came, but for certain reasons, relatives and parents live here, and, naturally, they do not get ART. But when, for example, NGOs other non-governmental organizations intervened, it was possible to get ART»

3.3. ART

The consolidated WHO 2015 guidelines were adopted in Uzbekistan with the support of UNAIDS country office. The new national guideline contains a recommendation to initiate ART at a level of CD4 <350 cells/mm³. To achieve the "90-90-90" targets the country has approved a transition plan for the introduction of ART to all patients regardless of their level of immunosuppression in 2018 (38).

As of 01/01/2015, 10,948 people were receiving ART, of whom 5,525 are women (50.4%), and 5,423 are men (49.6%), and 3,855 are children under the age of 15 years (35.2%). 15 institutions provide ART in the Republic (37).

FG participants told about their experience in receiving ART:



«I was in the hospital. The doctor talked to me, explained how to take the drug. I've started it and dropped it at once.»

«I was also offered ART in the city clinic. At first, I've taken it. Then it was replaced. 2-3 days I took them, felt bad. A couple more days and I stopped.»

In 2014, more than 98% TB patients were tested for HIV, out of which there were 780 positive results. 79% (615 patients) of 780 HIV/TB cases received cotrimoxazole preventive treatment, 45% (354 patients) started ART (38).

In Republic of Uzbekistan, OST programs were closed in 2009, which impacts negatively to the coverage of PUID/PLHIV with antiretroviral treatment, and adherence.

The FG participants commented treatment refusals as follows:



«It's irresponsible, I do not know what it is, I have an example: a person says, I will die anyway, why do I need to treat?»

«There are those who feel very bad with their status, and each time as if pulling them out of grave and still they do not go for treatment or testing.»



BARRIERS TO ART ACCESS:

- **lack of knowledge among patients about the availability of treatment;**
- **myths and self-stigma among patients;**
- **insufficient management of side effects.**

3.4. Achieving viral suppression

In 2014, share of the patients retained on ART for 12 months after its initiation was 89.4%, for 24 months – 82.2% (38). One of the reasons for treatment drop-outs, according to FG participants, is ART side effects.



«Many drop out because of side effects, no patience, the same sort of things day after day, annoying. Many due to ignorance, they considered that the results are good. I will say for myself how it was, when I started, the doctor prescribed it to me, I had a slightly raised CD, I immediately dropped out, I did not say anything to the doctors, did not go there and did not take it»

National guidelines recommend to detect the level of viral load before starting ART, 3 months after ART initiation and then every 12 months, which is costly and does not correspond to WHO recommendations (38).

Since 2013, the multi-disciplinary teams (MDT) began to work in the Republic, and their work was initiated jointly by the NGO "Ishonch va Hayet", the Cancer Society, and AIDS Center. The multidisciplinary teams provide social and psychological support when registering for care and ART initiation, as well as services for social and household issues. MDT is the link between HIV-service organizations and PHC network institutions. Thus, remains the care continuum between various levels and profiles of health and socio-psychological services.

SECTION 4.

RECOMMENDED DIRECTIONS OF ACTIVITIES

- Community mobilization to combat self-stigma among KAP and for motivation to get the entire spectrum of HIV services.
- Joining efforts of all stakeholders to liberalize the legislation regarding some KAP (SW and MSM).
- Bringing together the representatives of government agencies, NGOs and communities to create a system of social support and motivation to the treatment of all PLHIV, including work with the parents of HIV-positive children.
- Development of services for KAP representatives at AIDS centers to maximize treatment coverage for "difficult" patients.
- Joining efforts of all stakeholders: communities, NGOs, and government agencies, in the struggle for building PLHIV motivation to ART.
- Strengthening capacity of the country coordination mechanism through active participation in its operations by the community members to implement the most effective and acceptable for KAP services.

SECTION 1.

EPIDEMIOLOGICAL SITUATION IN ESTONIAN REPUBLIC

The epidemic of HIV infection in Estonian Republic is at concentrated stage (40).

In 2005, the National Strategy for HIV/AIDS for 2006 – 2016 was developed and approved in Estonia. Also, the Intersectoral Governmental Committee on HIV/AIDS was established as an advisory body for the government aiming to coordinate measures to implement the new strategy. In Estonia, the National Health Plan for 2009-2020 has been developed, which unites a large number of strategic documents related to various areas, including the National Strategy on HIV/AIDS (41).

As of 31/12/2014, there were 11,745 HIV cases registered in Estonia. The HIV incidence halved over the past 10 years (from 46 in 2005 to 23 per 100,000 in 2014).

Main trends of the epidemic

- prevalence of the sexual transmission route among new HIV cases;
- reduced HIV incidence over the last 10 years (from 46.0 cases in 2005 to 20.5 cases per 100,000 in 2015);
- significant decrease in the number of new HIV cases among children and young people (in 2014 - 2 cases, in 2015 – 5 cases, in 2001 – 560 cases in the group 15-24 years).

Since 2009, the sexual transmission route of HIV prevails in Estonia.

The estimated number of PUID (since 2005 till today) was 9,000 following the UNAIDS evaluation criteria (45). Drug users are mainly concentrated in Tallinn and in northeastern Estonia (Kohtla-Järve and Narva) (40). In these areas, the HIV incidence among PUID reached 46 and 81 per 100,000 people, at an average incidence rate in Estonia – 2 per 100,000 population (41). The reduction programs for PUID have been working in the country since 1997, currently being implemented by 9 NGOs in the capital and the Northeast area. There are 14 stationary and 22 mobile syringe exchange points, which in 2014 were visited by about 6,300 clients (40).

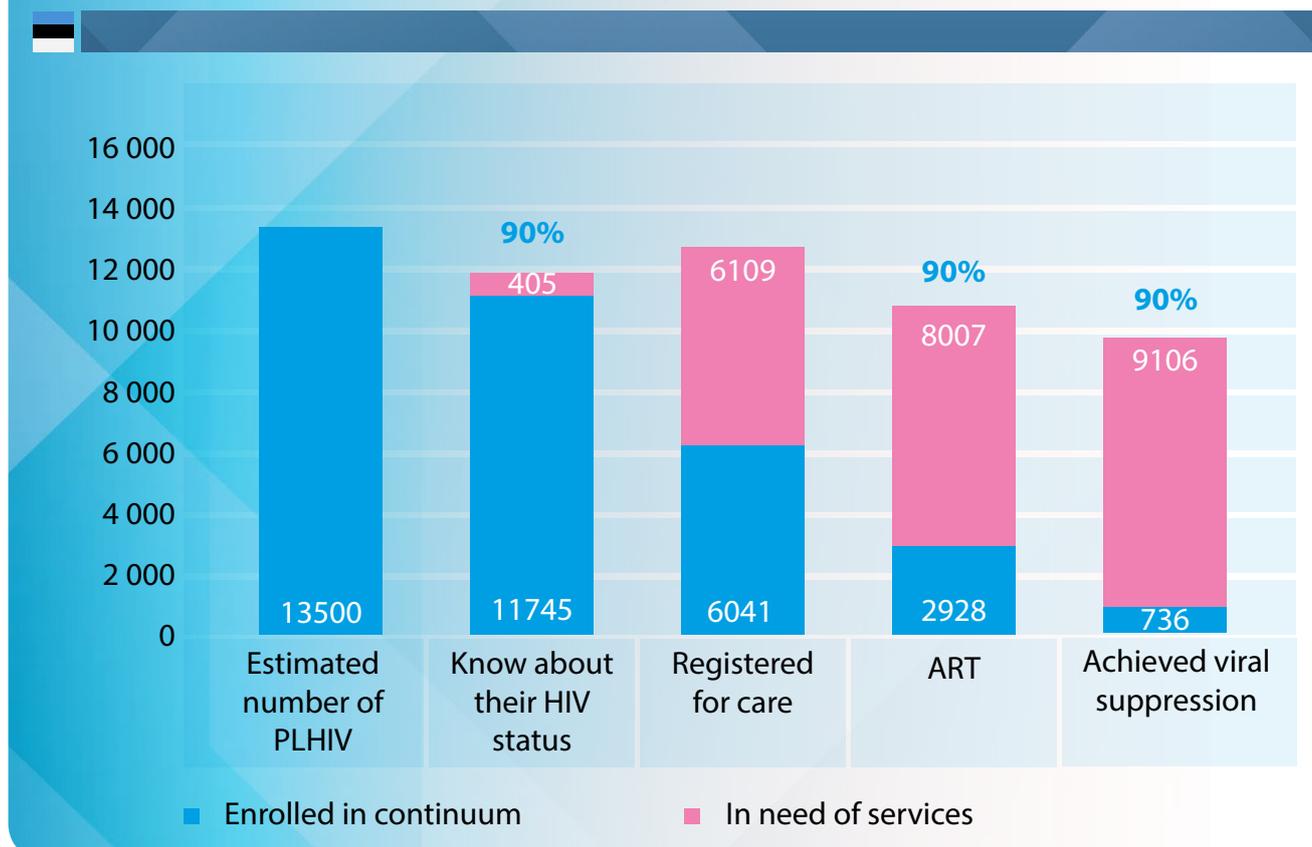
Estimated number of MSM in the last few years is 9,000. HIV prevalence among MSM has increased to 2-4% in recent years (40).

The number of SW in Estonia is estimated at 3,000, and they work mainly in Tallinn. HIV prevalence among SW was 6% in 2011 based on the study data.

SECTION 2.

ANALYSIS OF HIV TREATMENT CASCADE

FIGURE 8. HIV treatment cascade, Estonia, 2014



As the cascade of access to HIV services demonstrates (Figure 8), the testing goal in Estonia is almost reached: 11,745 people (87% of the estimated number of PLHIV) know their status.

6,041 patients (45% of the estimated population, or 51% of those who know their status) are registered for care in medical institutions. 2,928 patients (22% of the estimated number of PLHIV, and 48% of the registered for care) received ART. Viral suppression was achieved in 736 patients (5% of the estimated number of PLHIV, or 25% of those receiving ART).

As seen from the above information, significant PLHIV losses in the care continuum occur at the stage of ART coverage, and at the stage of the treatment effectiveness monitoring.

Unfortunately, more detailed information – treatment cascade for KAP – is unavailable.

SECTION 3.

ANALYSIS OF ACCESS TO THE CARE CONTINUUM FOR PLHIV AND KAP, DETERMINING OF BARRIERS TO SERVICES

3.1. HIV counseling and testing

HIV testing in Estonia is performed by 33 HIV diagnostic laboratories located in major health facilities all over the country, and one reference-laboratory in Tallinn. HIV testing is voluntary. Any doctor in Estonia can recommend HIV testing based on clinical manifestations, risk assessment, or at the request of the patient. In 2012, on the basis of WHO recommendations, the Ministry of Health has developed guidelines on provider-initiated testing. The results of HIV tests are usually available within three working days.

In Estonia, the main groups that are recommended for HIV testing are pregnant women, prisoners, patients with clinical manifestations of AIDS-indicative diseases, KAP representatives. Testing is carried out only by medical personnel. Any citizen older than 16 years can be screened for free, anonymously if desired.

Rapid tests for anonymous testing are used on some VCT/STI sites, youth counseling rooms, and some NGOs in collaboration with health facilities (41).

In 2014, the number of people tested and the number of tests made has increased both for general population and for KAP representatives. In 2014, more than 152,000 people were tested for HIV (11.6% of the total population, a total of 116 people per 1,000 population, 55 people per 1,000 population, excluding pregnant women and donors), the total number of tests was 212,000 (40).

The testing coverage for risk group is usually higher. Among PUID, up to 94% were tested at least once in their life, and 93% of PLHIV/PUID know their diagnosis. Among MSM, in 2013, 70% were examined at least once in life, and 37% were tested during the last 12 months. In a study conducted among SW in Tallinn in 2010, 93% were tested at least once in life, and 69% in the last 12 months (40).

All patients with TB are tested for HIV on the advice of TB specialist. Testing is carried out at early stage of TB diagnostics.

According to FG participants, Estonia has access to testing, KAP representatives receive information about the possibility of testing from the media, the Internet, booklets distributed by NGOs. FG participants noted fear, self-stigma, especially among residents of small settlements:



«If I live in the countryside, I would ... even if something was available, I would not go. So small town, and you go, and have the impression that everyone is looking at you and everyone knows everything, and if in the countryside that's it ... well, generally ... everyone will know everything.»

3.2. Registration for care

In Estonia, the most affected populations are PUID and their partners. The behavioral peculiarities of this group determine the complexity of registering PUID patients and providing treatment. According to a number of researchers, the barriers to getting care for PLHIV-PUID, who are mostly unemployed and have no medical insurance, are the inability to pay for a visit to a doctor, lack of desire and interest to take care of one's health and, possibly, the hope of getting a social pension when the CD4 level will reduce significantly (43).

In Kohtla-Jarve, after receiving a positive test result, the patient should make an appointment with an infectious disease specialist, the appointment waiting time is between 1 – 5 days. For such patients, there are no support services or control of registration for care. The 5 euro cost of a visit to a doctor is one of the factors that reduces motivation for a visit to an infectious disease specialist for PLHIV-PUID who do not have their medical insurance (43). According to various estimates, 20 – 30% PUID do not have compulsory insurance, therefore, as a result, access to medical services is significantly hampered for them.

Among PLHIV, in 2014, share of patients co-infected with HIV/TB was 9.2% (21 person). Generally, since 2000, 423 cases of TB/HIV coinfection have been registered in the country (40).

Since 1999, OST programs have been implemented in Estonia. The number of OST clients in 2014 was 919, which is critically insufficient. In Estonia, OST is available in detention facilities. In North-East Estonia, there are two clinics providing HIV and STI services for PUID and their partners (40).



BARRIERS TO REGULAR MEDICAL CHECK-UP:

- **lack of social support for KAP at the stage of registration;**
- **need to pay for a visit to doctor for patients who do not have medical insurance;**
- **the waiting period for the visit to the doctor is 1-5 days for KAP;**
- **need to pay the cost for extra examination for people who do not have medical insurance.**

3.3. ART

According to a number of studies, a low level of KAP involvement in testing programs and clinical follow-up leads to late detection of patients, a heavy burden on public health, and an increase in mortality from diseases associated with HIV infection (41).

ART in Estonia is funded from the state budget. Drugs are distributed in HIV clinics in large cities for free.

In Estonia, late treatment coverage is detected: in 2014, out of 445 patients who started ART, 43% had a CD4 level of less than 200 cells/mm³, share of PUID is unknown (in 2013, among those initiating ART, PUID accounted for 44%) (40).

The reasons for delaying the initiation of ARV-treatment and low ART coverage can be both low motivation to treatment among PLHIV- PUID and a fear of side effects, as well as difficulty in orienting in the healthcare system: lack of medical insurance, need to pay fees, and other issues can serve as barriers to access (41).

In 2014, share of PLHIV among TB patients was 9.2%. Of 24 patients with TB/HIV co-infection, 19 patients (79%) received ART.

Patients have access to OST on the basis of TB clinics, HIV treatment clinics, in detention facilities (in 2014, 56 patients received OST with methadone in prisons).

Services for the HIV care and treatment, including ARV therapy, are available in the penitentiary system of Estonia. In 2014, 528 PLHIV were provided with full medical care in detention facilities (40).



THUS, THE MAIN BARRIERS TO THE ART PRESCRIPTION:

- **for patients without medical insurance, a fee of 5 euro is required for each visit to the doctor;**
- **need to travel to another city to receive ARVs;**
- **need to treat opportunistic infections in the case of late PLHIV detection, which sometimes postpones and complicates ART initiation.**

3.4. Achieving viral suppression

In Estonia, there is a significant share of treatment drop-outs among HIV-positive patients. So, in 2014, 464 people started ART, and 377 (58%) stopped treatment during the year (40).

Considering that the majority of PLHIV are PUID, the main cause of treatment drop-outs is poor adherence to treatment, lack of a social support system and tracking of visits to infectious diseases specialist (47). Patients need constant social assistance to navigate in the existing municipal social support system (41).

PLHIV in Estonia generally understand that refusal from pills can lead to resistance; meanwhile it is widely believed that there is a risk of resistance if drugs are not taken for a long time – a month or two, and skipping one pill or interrupting therapy for a week does not affect adherence to ART (43).

The existing myths about treatment do not contribute to retention of patients on ART:



«I know that they are given terrible retroviral drugs, which put them out of action, literally. That is, a person feels very badly, in a deplorable state. About a week or two, or even a month or longer, depending on when body gets used to it. That these drugs, actually, help them, by cell analysis. To be honest, I did not go into that seriously. I know that there is per one cubic centimeter, milliliter, a certain number of cells. When it reaches a critical level, they are given antiretroviral drugs. That's all I know.»

«I know very little. I know that enterovirus drugs, they are different, because everyone has his/her own regime, and it fits not to everyone. I know that it's needed to take them constantly, for a lifetime. That's probably all.»

SECTION 4.

RECOMMENDED DIRECTIONS FOR ADVOCACY

- Advocating the development of a national strategy for social support of patients aimed to minimizing drop-outs among community representatives at all stages of HIV care;
- Advocating the introduction of changes to the national legislation of the state-guaranteed minimum package of services for patients who do not have medical insurance;
- Social mobilization of communities, partnering NGOs to maximize the involvement of PLHIV in health care, develop PLHIV adherence to ART, retain at ART, fight with myths about ART among PLHIV;
- Advocating the revision of national HIV treatment guidelines and bringing them in line with WHO standards to maximize coverage of PLHIV treatment.





Chapter 2.

**SUMMARY OF ACCESS TO HIV TREATMENT
SERVICES IN ARMENIA, GEORGIA, LATVIA,
LITHUANIA, MOLDOVA, TAJIKISTAN, UKRAINE**



REPUBLIC OF ARMENIA

SECTION 1.

EPIDEMIOLOGICAL SITUATION IN REPUBLIC OF ARMENIA

Armenia belongs to countries with low HIV prevalence. In 2014, the number of PLHIV was estimated at 4 000.

As of December 31, 2014, 1,953 HIV cases, including 38 children, have been registered cumulatively since 1988. Throughout the history of the epidemic, there were 1,006 cases of AIDS, the number of AIDS-related deaths was 417 (44).

In 2014, the sexual route of HIV transmission was 65.4% (including cases of HIV infection among MSM – 2.4%), the parenteral route was 28% (45).

Armenia has high level of labor migration (between 22 and 40% of the working population works abroad), which affects the registration of new HIV cases among labor migrants. In 2014, 57% of new cases of HIV infection were migrants (44, 45)

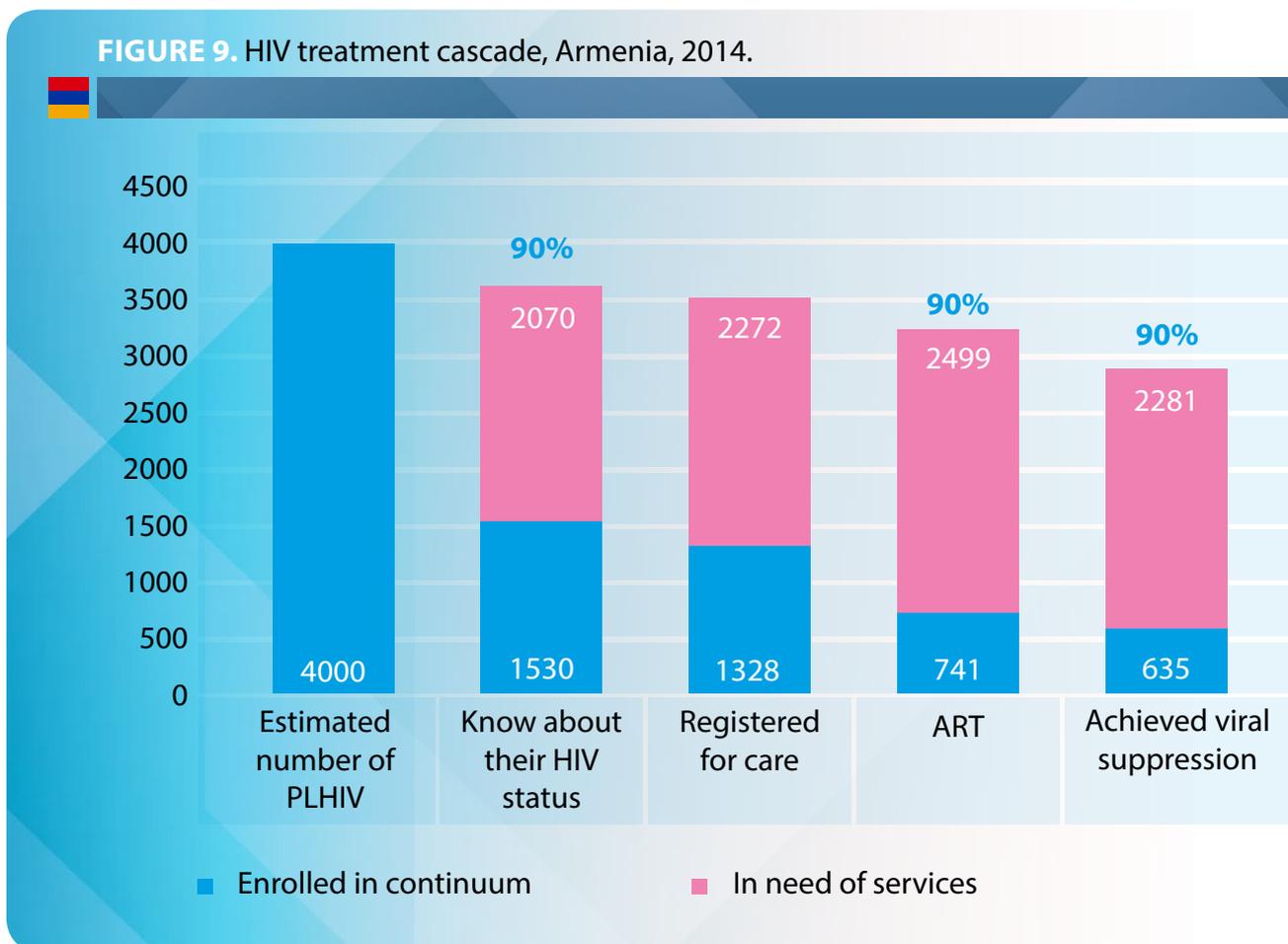
SECTION 2.

ANALYSIS OF HIV TREATMENT CASCADE

According to official data, as of December 31, 2014, only 38% of the estimated number of PLHIV (1,530 people) in Armenia know their status. 1328 people were enrolled to treatment and care programs, which is 33% of the estimated number, or 87% of those who know about their HIV status. 741 people are on ART (56% of those registered for care, or 19% of the estimated number), 635 people achieved viral suppression (16% of the estimated number, or 86 % of those receiving ART).

As we can be seen from these data, the main losses occur at the stage of PLHIV detection, which may be due to the high level of labor migration, insufficient coverage of testing for KAP representatives, as well as with very high level of stigma and discrimination in society, which means that people do not very much want to know their HIV status. Cascade data disaggregated by sex, age, KAP affiliation, is unavailable and need further study (44).

FIGURE 9. HIV treatment cascade, Armenia, 2014.



SECTION 3.

ANALYSIS OF ACCESS TO THE CARE CONTINUUM FOR PLHIV AND KAP, DETERMINING BARRIERS TO SERVICES

3.1. HIV counseling and testing

3 approaches to testing are used in Armenia (45):

- provider-initiated testing for patients with clinical indications, for KAP representatives, and for other groups (prisoners, labor migrants, their partners, and pregnant women);
- client-initiated testing;
- compulsory tests: donors of blood and organs, for children born from HIV-positive mothers.

The blood sample tests are carried out according to the classical scheme – after receiving 2 positive ELISA test results, a confirmatory immunoblotting is carried out (44). The first result can be received by a patient during one day at the Republican AIDS Center; if one is tested in the district center, the period to get test result can be extended up to 7 - 30 days, which is linked to transportation of the samples of blood serum. Patients from remote districts have to come to Yerevan for confirmation test (44). Rapid tests are mostly used by the laboratory at the Republican AIDS Center (45).

The community-based counseling and rapid testing have increased slightly among PUID, MSM, and SW, but remain relatively low (44).

3.2. Registration for care

In Armenia, all PLHIV are registered only in the Republican AIDS Center, all additional examination methods are available only on the basis of this facility.

The available data on the CD level at the time of HIV diagnosis indicate serious issues with late detection and late initiation of treatment (47). In 2014, 55% of newly diagnosed patients had levels of CD 4 <350 cells/ml and 37% of them – CD4 <200 cells/mm.

3.3. ART

ART is prescribed only by specialists of the Republican AIDS Center, so patients have to come to Yerevan every 3 months and more often. HIV treatment guidelines were revised in 2014 in accordance with the consolidated 2013 WHO guidelines, but the beginning of the implementation was postponed till June 2015, when the necessary supply of ARVs would be available (44).

As of January 1, 2015, 741 PLHIV (adults and children) received ART on the basis of the National AIDS Center (44, 45).

OST is available on 4 sites. The integrated services for patients with double or triple diagnoses are not provided. In narcological clinics, HIV testing (screening) is available, other HIV-related services are not available.

HIV testing of patients of TB dispensaries is carried out either on the basis of the TB service sites in the PHC network, or they are referred to the Republican AIDS Center. In 2014, 1,342 TB patients were tested for HIV, positive results were detected in 84 patients (6%) (44). Among TB/HIV coinfecting patients, only 54 patients (64%) were enrolled in ART and cotrimoxazole preventive treatment. 265 HIV+ patients (20% of those registered for care and visiting healthcare institution at least once for the past year) were screened for TB at the AIDS center, IPT was not prescribed. OST services are provided by the Republican TB dispensary (46).



KEY BARRIERS TO ACCESS SERVICES:

- **The country has a problem of ignorance of their HIV status (70%), due to both the high level of labor migration (22-40% of the population) and limited access to VCT services for all layers of the population, including KAP.**
- **For the registered patients, significant barrier to access to services is the centralization of services (from confirmation tests to ART) solely at the national AIDS center(44).**
- **HIV testing services, including rapid tests, etc. are mainly provided by the Republican AIDS Center, which limits access to services for KAP members and those living in remote districts.**
- **Late HIV diagnostics reduces the chances of patients for treatment success, significantly increases the cost of treatment of opportunistic infections, and causes death among patients receiving medical services (44).**
- **Absence of the active TB screening system for PLHIV on the basis of the AIDS Center is a serious barrier to access to prevention and early treatment of TB among PLHIV.**



GEORGIA

SECTION 1.

EPIDEMIOLOGICAL SITUATION IN GEORGIA

In 2014, the HIV prevalence was 83.2 per 100,000 population, the HIV incidence – 12.7 per 100,000 population. The estimated number of people living with HIV in Georgia was 6,800 (48).

Cumulatively, in Georgia there were 4,695 HIV cases registered in 2014, 69% of them were men, 31% - women (48).

Mostly, new HIV cases were detected among KAP representatives: MSM, SW, PUID. HIV prevalence in 2012 among MSM accounted for 13% (48). The estimated number of PUID in Georgia is 45,000, HIV prevalence among PUID ranges from 0.4% to 9.1% according to the sentinel surveillance data (48).

HIV prevalence data among SW are limited. This group includes male SW. HIV prevalence among female SW ranges from 0.8% to 1.3% (48).

In Georgia sexual route of HIV transmission dominates: in 2013 it accounted for 49%, parenteral route – 35% of the new cases (48).

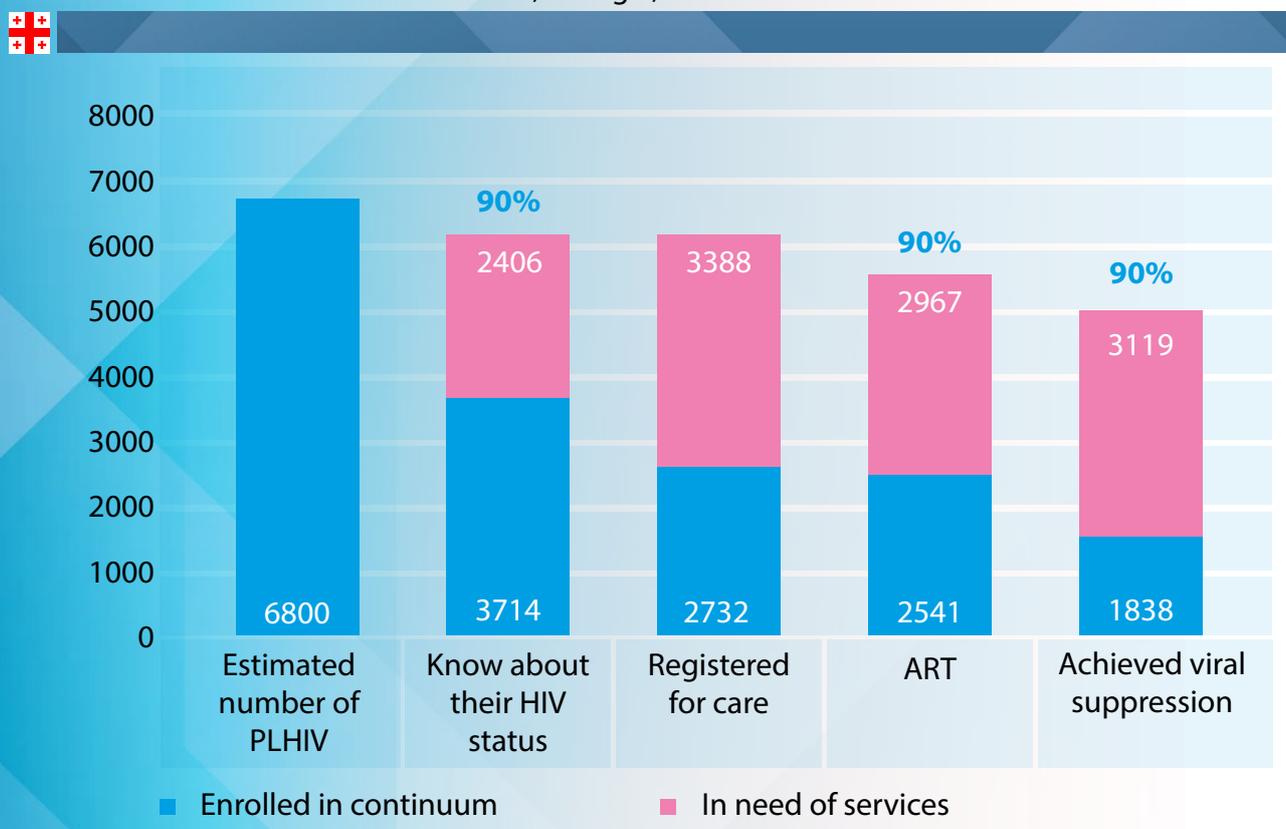
SECTION 2.

ANALYSIS OF HIV TREATMENT CASCADE

Data on coverage of PLHIV with HIV-related services are reflected in the cascade of services (Figure 10).

3,714 PLHIV (55% of the estimated number) are aware of their HIV status. 2,732 people (40% of the estimated number, or 74% of PLHIV who know their status) are registered. HIV treatment services are received by 2,541 people (37% of the estimated number, or 93% of the registered patients). 1,838 PLHIV reached viral suppression (27% of the estimated number, or 72% of those receiving ART).

FIGURE 10. HIV treatment cascade, Georgia, 2014.



SECTION 3.

ANALYSIS OF ACCESS TO CARE CONTINUUM FOR PLHIV AND KAP, DETERMINING THE BARRIERS TO SERVICES

3.1. HIV counseling and testing

In 2014, the total number of adults who had HIV test and know its result was 85,964, more than half of them (44,869) were pregnant.

The approaches to testing among at-risk populations are weak – according to some studies, share of KAP representatives had test and know its result remains low, as evidenced by the analysis of HIV services cascade.

3.2. Registration for care

In Georgia, high level of stigma preserves against PLHIV, KAP representatives, especially MSM (48).

State criminal legislation, laws and policies on drugs and preventive interventions to PUID are the limiting factor. The law on the prevention and control of drug use does not support implementation of effective interventions, both in civil society and in the penitentiary system (49).

OST became more available both in the civil sector (20 sites) and in penitentiary institutions (2 sites). As of 31/12/2014, about 2,600 patients were receiving OST (48).

Late HIV diagnostics and late ART initiation impact negatively on the effectiveness of treatment and are the reasons for 90% of deaths in the context of ART initiation (49).

3.3. APT

In Georgia, the National HIV treatment guidelines were revised in line with the 2013 WHO recommendations. Since 2014, the main criteria to initiate ART is the level of $CD4 < 500 \text{ cells/mm}^3$.

There is no data on treatment drop-outs, the percentage of those who achieved viral suppression is 73% of those who initiated treatment (48).

According to UNAIDS estimates, Georgia reached maximum ART coverage of patients registered for care (95% of those receiving medical services) (48, 49). Patients should visit the AIDS center many times before ART initiation and for ART monitoring (49)



KEY BARRIERS TO ACCESS SERVICES:

- **large percentage of undiagnosed HIV cases suggests limited access to testing for KAP representatives;**
- **high level of stigma in relation to KAP, especially MSM, is a significant barrier to access to HIV services, for community members;**
- **limited access to OST as a factor that ensures adherence to ART among PUID;**
- **large number of visits to the AIDS Center before and after ART prescription is a major barrier for the patients who live far from the AIDS Center.**



LATVIAN REPUBLIC

SECTION 1.

EPIDEMIOLOGICAL SITUATION IN LATVIAN REPUBLIC

As of 31/12/2014, in Latvia there are 6,214 HIV cases recorded cumulatively, including 1,521 AIDS cases. In 2014, there were 347 new HIV cases registered (HIV incidence – 17.3 per 100,000) (50).

In Latvia the sexual route of HIV transmission dominates: in 2014, the sexual transmission was registered in 38% of new cases, and only in 21.3% of cases infection occurred via the parenteral route. Furthermore, in the country there is relatively high HIV incidence via unidentified transmission route – 31.4% (50).

SECTION 2.

ANALYSIS OF HIV TREATMENT CASCADE

Due to limited data, there is no possibility to develop the treatment cascade.

SECTION 3.

ANALYSIS OF ACCESS TO THE CARE CONTINUUM FOR PLHIV AND KAP, DETERMINING THE SERVICES BARRIERS

In Latvia there are 18 HIV prevention sites in 16 cities. Three mobile clinics provide prevention services for KAP (former prisoners, homeless, PUID, MSM, SW, immigrants, ethnic minorities). In 2014, 1,984 HIV rapid test were made, resulting in 5% of positive results. The network of HIV prevention sites is coordinated by the municipalities and cooperates with health facilities and NGOs.

Antiretroviral therapy is funded by the state budget, it is available to all, without exception, patient groups.



KEY BARRIERS TO ACCESS TO SERVICES:

cannot be determined due to the limited data on the services cascade, as well as on the cooperation between NGOs and public institutions in ensuring achievement of "90-90-90" targets.



LITHUANIAN REPUBLIC

SECTION 1.

EPIDEMIOLOGICAL SITUATION IN LITHUANIAN REPUBLIC

In 2014, in Lithuania, there were 141 new HIV cases (HIV incidence – 4.8 per 100,000) and 37 AIDS cases registered. As of 31/12/2014, 2,378 HIV cases were cumulatively registered in the country, 415 of which were AIDS cases (51). In 2014, in Lithuania sexual transmission route dominated among new HIV cases.

Cumulatively, the HIV cases by transmission routes distributed as follows:

- the parenteral route (drug use) – 63.5%;
- heterosexual contact – 19.2%;
- homosexual contact (MSM) – 7.1%;
- MTCT – 0.2%;
- not specified – 10.0% (51)

HIV prevalence among PUID is 3.2%, among MSM - 2.7%. There is no data on HIV prevalence among SW as of 31/12/2014, but in 2013, this figure was 1.8 % (51).

As of 31/12/2014. cumulative number of AIDS-related deaths in Lithuania was 190 (51).

Due to limited data, there is no possibility to develop treatment cascade/

Since 1998, ART has become accessible to PLHIV who are eligible for ART. ART is available to all population groups. In Lithuania, all PLHIV are provided with compulsory medical insurance from public funds. ART is provided without extra-fees by patients. ART expenditure is fully compensated by the National Health Insurance Fund (51). In 2014, out of 2,378 PLHIV who received medical services, 547 received ART following national treatment guidelines (51).



KEY BARRIERS TO SERVICES ACCESS:

cannot be determined due to the limited data on the services cascade, as well as on cooperation between NGOs and public institutions in ensuring the achievement of "90-90-90" targets.



REPUBLIC OF MOLDOVA

SECTION 1.

EPIDEMIOLOGICAL SITUATION IN REPUBLIC OF MOLDOVA

HIV epidemic is at concentrated stage. As of 01/01/2015, there were 9,398 HIV cases cumulatively registered at the whole territory of Moldova (52). As of 01/01/2015, 6,891 PLHIV were registered for care, including 54% of men and 46% women.

In 2014, 234 new HIV cases were registered. Cumulatively, in Moldova, 2,789 AIDS cases were registered. In 2014, 302 PLHIV died. Since 2011, the sexual transmission route is leading in HIV transmission in the Republic of Moldova and reached 86.6% of new cases in 2014 (52). The estimated number of KAP in Moldova: MSM – 13,500 people; PUID – 30,200 people; SW – 12,000 people. HIV prevalence among KAP in Moldova reached: among MSM – 5.7%; among PUID – 8.5%; among SW – 11.6%.

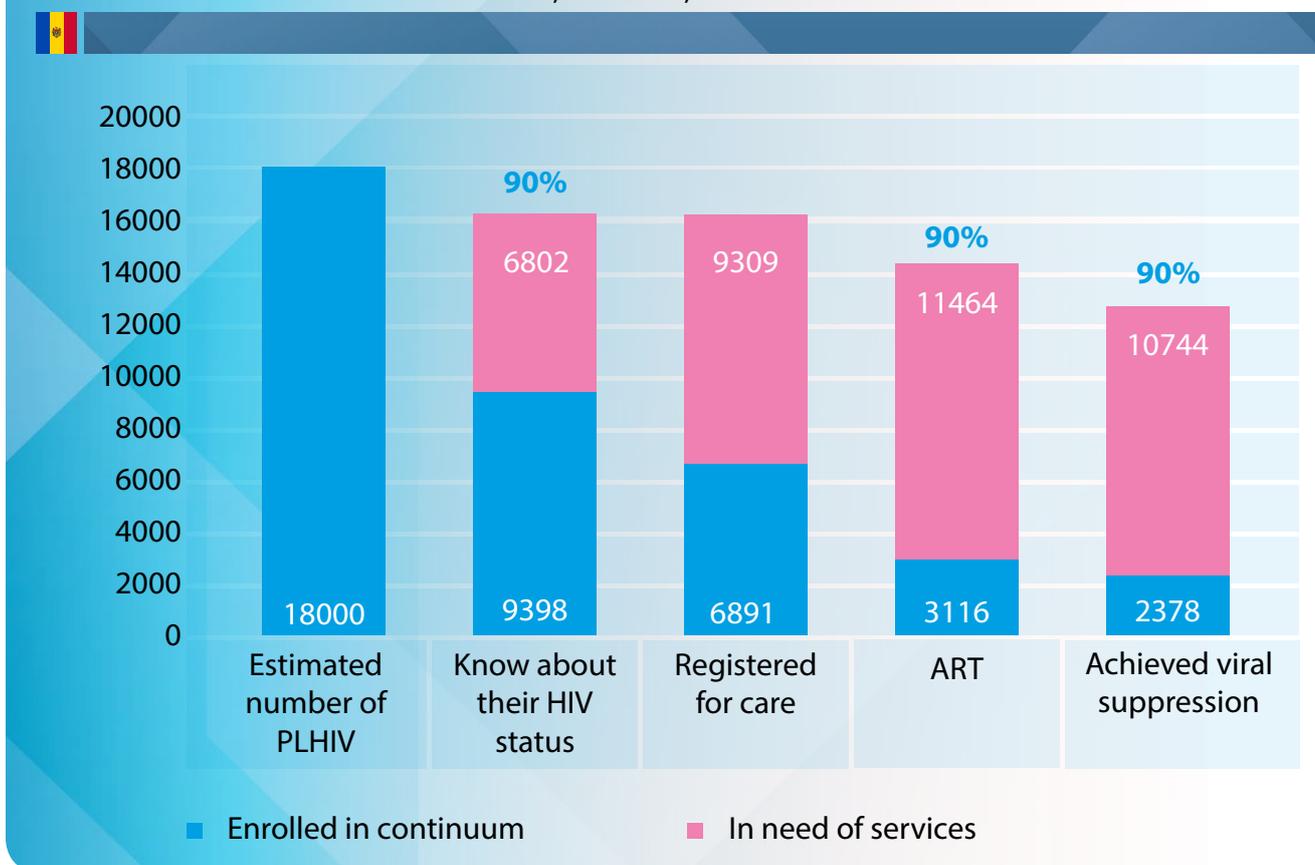
SECTION 2.

ANALYSIS OF HIV TREATMENT CASCADE

In Republic of Moldova, 9,398 people know their HIV-positive status (52% of the estimated number of PLHIV), 6,891 people are registered for care (38% of the estimated number, or 73% of those who know their status), 3,116 PLHIV get ART (17% of the estimated number of PLHIV, or 45% of those registered for care). According to official data, 2,378 people achieved viral suppression (13% of the estimated number of PLHIV, or 76% of those receiving ART) (64).

According to the cascade data, the greatest losses of PLHIV occur at the stage of diagnostics, as well at the stage of ART initiation. It is noted that in Moldova there are no waiting lists for ART, and lack of drugs or disruptions in their supply is not reported (52). This fact can indicate the need to improve the work of non-governmental organizations to provide social support services.

FIGURE 12. HIV treatment cascade, Moldova, 2014



SECTION 3.

ANALYSIS OF ACCESS TO CARE CONTINUUM FOR PLHIV AND KAP, DETERMINING BARRIERS TO SERVICES

VCT guidelines in Moldova fully comply with international standards. To provide access to testing rapid tests are widely used. Also, in recent years, the legislation was updated with anti-discrimination provisions regarding KAP rights, scaling up access to OST, which contributes to reducing barriers to access to services for KAP representatives (52).

In Moldova, ART guidelines were revised following international standards that ensure access to treatment for all who need it. ART is prescribed by doctors at AIDS center (52).

The OST service coverage remains low: as of 31/12/2014, substitution therapy was provided to less than 1% of those in need. Moreover, there is a low quality of services in OST: lack of multidisciplinary

approach, the drugs are given in doses lower than the approved clinical guidelines, etc. (52).

The key challenges of treatment organization are low adherence to ART, late HIV diagnostics, and late ART initiation. In Transnistria, there is no possibility to provide palliative care for children and adults with AIDS (52).

In 2014, there were no problems with the supply of ART (52). Drugs are purchased for the costs of the GFATM grants and state funds.



KEY BARRIERS TO ACCESS HIV SERVICES:

- **limited access to testing for general population as a whole and, in particular, KAP, especially in Transnistria, limited use of the rapid tests;**
- **limited cooperation of non-governmental organizations and healthcare institutions in the areas of information exchange, ensuring multidisciplinary approach to case management;**
- **issues of adherence to ART, especially for PUID, associated with insufficient OST coverage and poor service quality.**



REPUBLIC OF TAJIKISTAN

SECTION 1.

EPIDEMIOLOGICAL SITUATION IN REPUBLIC OF TAJIKISTAN

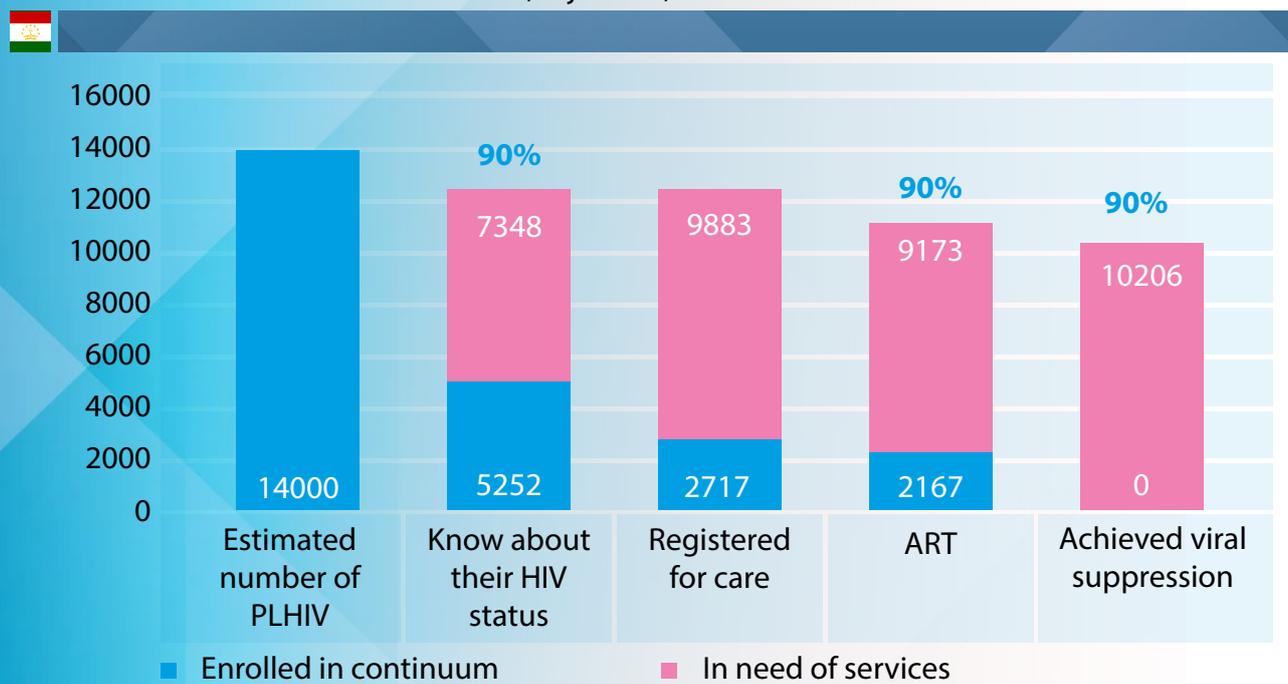
According to official statistical data (SI RAC data), as of 31/12/2014, the number of PLHIV was 5,242 people, among them 1,737 women (33.1%), and 3,505 men (66.9%). HIV prevalence in the country as of 31/12/2014 amounted to 64.9 per 100.000 population (53).

A key trend in development of HIV epidemic in Tajikistan is the prevalence of sexual transmission route of HIV: in 2014, share of sexual transmission among all routes was 60.4%, the proportion of parenteral route – 24.2% (53).

As of December 2013, the estimated number of PLHIV in Tajikistan was 14,000 (by UNAIDS/WHO estimates). The number of registered cases was 5,550 (60% of the estimated number were not detected) (54).

The estimated number of KAP: PUID – 23,100 persons; SW – 14,100 persons; MSM – 13,400 persons. HIV prevalence among PUID – 13.5%; among MSM – 2.7%, among SW – 3.5% (53).

FIGURE 13. HIV treatment cascade, Tajikistan, 2014



SECTION 2.

ANALYSIS OF HIV TREATMENT CASCADE

In Republic of Tajikistan, 5,252 people know their HIV-status (37% of the estimated number of PLHIV), 2,717 people are covered by healthcare services (19% of the estimated number, or 51% of those aware of their HIV status), 2,167 person get ART (15% of the estimated number, or 79% of those registered for care). The data on viral suppression is unavailable (53, 54).

SECTION 3.

ANALYSIS OF ACCESS TO CARE CONTINUUM FOR PLHIV AND KAP, DETERMINING THE BARRIERS TO SERVICES

Access to HIV testing is limited to KAP. Testing was not held in places of KAP concentration, based on NGOs that provide services to PUID and SW, for example, in syringe exchange sites, OST sites (53). One of the key problems is the late diagnostics and late coming for medical care, which leads to the risk of opportunistic infections and late ART initiation. Among those registered in 2013 (n = 384), level of CD4 was determined in 333 patients, in 67% CD4 level was less than 350, and in 40% CD4 level was <200. All patients with clinical manifestations and immune suppression started ART (54).

Patients losses occur at all stages of care continuum, which may be caused by an extended waiting period for the confirmation test result, insufficient control of coming for medical care, ineffective use of resources (54). ARV-therapy is available in the country since 2006, and at the end of 2013, 1,399 people get ART (51% of those registered for care). The estimated number of those in need of ART in 2013 is 3,400 persons, thus, the ART coverage was 35%. The coverage of estimated number of PLHIV has reached 8% (53). Insufficient coverage of patients with ART, the issues of retention on treatment, especially of PUID, harms patients directly and affects the epidemiological situation in the country as a whole. The healthcare system is unable to provide necessary support and care to PUID to ensure adherence. The coverage by OST and harm reduction programs is rather low (54). At the beginning of 2014, there were 6 OST sites in the country located in the cities: Dushanbe (2 sites), Kulyab, Kurgan-Tube, Khorog, and Khujand. OST covered 677 PUID, but by the end of 2014, OST was continued by 577 PUID, of which 117 PLHIV. 52 of PLHIV were receiving antiretroviral treatment alongside with OST.



KEY BARRIERS TO ACCESS SERVICES:

- **extended algorithm for HIV testing using laboratory diagnostic methods;**
- **lack of social support services impact negatively on PLHIV adherence and retention in treatment, in particular, for KAP representatives;**
- **low coverage by harm reduction programs and OST of PUID creates additional barriers to ART and retention on antiretroviral therapy for this group of patients.**



UKRAINE

SECTION 1.

EPIDEMIOLOGICAL SITUATION IN UKRAINE

HIV-infection in Ukraine is at concentrated stage. In 1987 – 2015, Ukraine recorded 479,358 HIV-positive results from the laboratory studies, 280,358 cases of HIV – infection are officially registered among Ukrainian citizens.

As of 31/12/2015, 126,604 PLHIV were registered for care (the prevalence is 297.2 per 100 population), including 34,016 AIDS patients (55).

The estimated number of PLHIV by UNAIDS data in 2014 was 220,000 people. In Ukraine the sexual transmission route prevails, which was more than 70% in 2014 (56).

PUID is the prevailing male group, and the largest age group is older than 25 years – 86.6%. 36,642 of the estimated number of 61,070 PLHIV/PUID know their status. Data on ART coverage is not available (57).

MSM in Ukraine: the average age is 28 years, share of adolescents (14-19 years) is 11%. 79% of MSM surveyed were never married. Of 10,369 MSM (the estimated number), 6,222 know their status, 5,288 are registered for care (58).

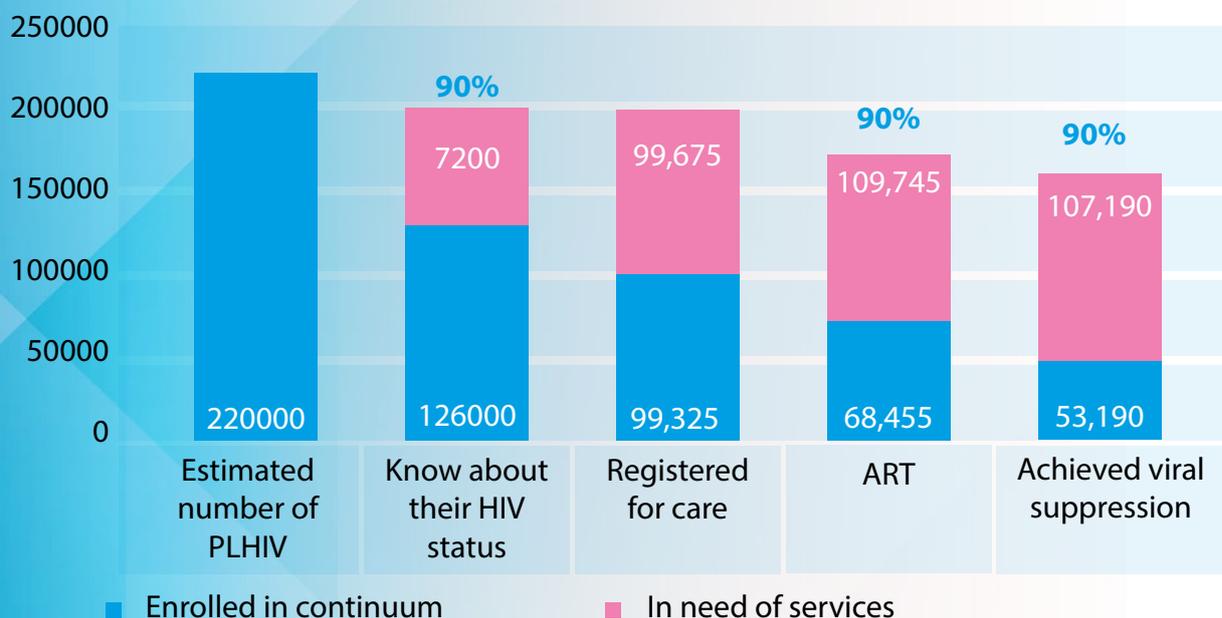
SW: average age – 28.5 years. The dynamics of SW distribution by age demonstrates the reduced share of SW in the age group of 14-19 years. Majority are not married, do not have a regular sexual partner (65.7%). The estimated number of SW in Ukraine is 5,827, 3,496 know their status, 3,146 are registered for care . The data on ART coverage is not available (59).

SECTION 2.

ANALYSIS OF THE HIV TREATMENT CASCADE

The care continuum cascade demonstrates the gaps in treatment service provision of PLHIV (55). According to the 2015 data, only 126,000 PLHIV (57% of the estimated number) know their status, 98,325 persons (45% of the estimated number, or 78% of those who know their status) involved in HIV services, 68,455 people (31% of the estimated number, or 70% of those registered for care) get ART. 53,190 people reached viral suppression (24% of the estimated number, or 77% of those receiving ART) (55)..

FIGURE 14. HIV treatment cascade, Ukraine, 2015



SECTION 3.

ANALYSIS OF ACCESS TO THE CARE CONTINUUM FOR PLHIV AND KAP, DETERMINING THE BARRIERS TO SERVICES

HIV testing in Ukraine is based on the principles of voluntariness and confidentiality. To engage the patients of TB clinics, pregnant women and some other categories to testing, the provider-initiated testing is used. In Ukraine, rapid tests are widely used, including for KAP testing. There is an experience of pilot projects on assisted self-testing which is used for the KAP representatives' examination, especially PUID and MSM (70).

In Ukraine, the final test result can take from a few days to a month, due to the need to transport blood serum samples to the reference-laboratories of the oblast centers (56).

In the country, the decentralization of HIV-services takes place, which would reduce barriers to access to ART for PLHIV. One of the key issues is the adherence to ART for PUID, internal labor migrants, displaced people.

The percentage of PLHIV/AIDS receiving treatment for 12 months after ART initiation was 85.43% for the period from 01/01/2014 to 31/12/2014 (12,254 people continued to be treated out of 14,344 people who initiated treatment in 2013 cohort).

As of 31/12/2015, the OST services were provided to 8512 people, of which 7306 were taking methadone pills, 298 – liquid methadone, 908 – buprenorphine



KEY BARRIERS TO ACCESS HIV SERVICES:

- **low motivation among KAP and general population for HIV testing (55);**
- **decentralization of services is implemented not in all regions, creating a geographical and organizational barrier for PLHIV;**
- **insufficient OST coverage, insufficient development of integrated services for PUID /PLHIV, PUID/PLHIV/TB are serious barriers to access services for patients with the dual/triple issue**



KEY FINDINGS

The key trend of the epidemic in the EECA region is the change in the prevailing HIV transmission routes: since 2011, in most countries, the parenteral route was replaced with the sexual one. The establishment of the sexual transmission route as a leading one among male HIV cases happens. In recent years, the heterosexual transmission grew by 165%, the increase in the number of new cases among MSM was 205%. The introduction of harm reduction strategies has led to stabilization of HIV-infection spread among PUID. Yet it should be noted that, in comparison with other regions of the world, share of new HIV cases caused by injecting drugs use remains very high. HIV-positive injecting drug users account for 38% of all new HIV cases in EECA countries being the highest percentage compared with other subregions. Due to the wide implementation of harm reduction programs in the region, the epidemic among PUID has stabilized, but in some countries (such as Estonia and the Russian Federation) PUID remain the main drivers of the epidemic.

As a kind of success we should note that in recent years, the EECA countries have made significant progress in the liberalization of the national legislation: partially canceled and mitigated the rules of law regarding drug users and MSM decriminalization (Armenia, Azerbaijan), expanded coverage and reduced the thresholds for OST appointment, revised the approaches to testing (reduced list of persons subject to mandatory testing), canceled the discriminatory norms against PLHIV and some KAP (canceled the deportation of PLHIV and mandatory HIV testing for foreigners in Turkmenistan), there is a possibility for labor migrants to get HIV treatment in Azerbaijan, Uzbekistan, Estonia, Latvia and Tajikistan.

In most countries of the EECA region on the basis of the international experience, the strategies for counseling and testing were developed and implemented, but, according to the treatment cascade data, the scope of testing for KAP representatives is insufficient. On the other hand, in some countries the rule for ART prescription is maintained at a level of immunosuppression of less than 350 cells/mm³, which significantly limits the rights of patients to access treatment.

Ongoing growth of HIV-infection in EECA countries indicates lack of effectiveness of the measures taken by the countries in combating the epidemic, as well as the fact that the national HIV programs are not sufficiently effective. The reasons for this situation are currently existing legal barriers and political resistance to the introduction of OST, inefficient use of the limited financial resources, as well as some of the healthcare system issues (vertical programs aimed at the general population, leading to the isolation of KAP members).

One of the key issues of national HIV/AIDS programs is the lack of service coverage for PLHIV and KAP, in particular: HIV testing for key populations; PLHIV involvement in the system of care for final test result and registration under medical supervision; availability of antiretroviral therapy for key populations and support of HIV treatment adherence; laboratory monitoring of treatment efficacy. In most of the EECA countries being registered for care and ARV treatment is not a continuum practice after the HIV diagnosis. The discrepancy between the number of diagnosed PLHIV and the number of those receiving treatment is unacceptably high. Many PLHIV fall out of the health care system at various stages of HIV treatment and care, which leads to the late diagnostics of PLHIV and late ART

initiation, low adherence to HIV treatment, especially among key populations and, as result, high level of AIDS-related mortality.

Thus, the main challenges for the EECA region are: the epidemic of HIV infection is growing faster than the access to antiretroviral therapy, tuberculosis is the main co-infection and cause of death among people living with HIV, mortality continues to increase.

GENERAL ADVOCACY AREAS IN EECA COUNTRIES

Based on the above, the following advocacy areas are recommended at the regional level:

1. Joining efforts of all stakeholders to review approaches to HIV testing to simplify the testing algorithm, extensive use of rapid tests both at the screening stage and at the stage of confirmation tests to reduce the period for getting final result and to minimize the loss of patients during the testing phase.
2. Revise the approaches to the organization and implementation of harm reduction strategies with a focus on the patient support at all stages of diagnostics and treatment, expand access to OST for PLHIV/PUID on ART as a method of development of adherence to treatment and retention of patients in treatment.
3. By close cooperation between international and national organizations to reconsider approaches to the organization of social support for patients in all stages of services in order to create a sustainable patient referral system, which will eliminate the loss of "difficult" patients.
4. Be proactive in terms of revision of national guidelines for HIV treatment in accordance with 2016 WHO recommendations for HIV treatment as soon as possible, and in development of the national plans for the gradual transition to the new criteria for ART prescription and monitoring.
5. Advocate for establishment of an adequate pricing policy for ARV-drugs and diagnostic tools in the region to ensure universal access to treatment.
6. Bring together all the organizations working in the countries of the region to achieve the "90-90-90" targets.

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Annex 2

OPINION OF MEMBERS OF PLHIV
COMMUNITIES ABOUT BARRIERS
TO ACCESS HIV SERVICES

The data collected during the Barriers Overview show an alarming picture of the mass drop-out of PLHIV from the HIV care continuum at all stages and in all countries of the region despite different situations in the EECA countries. For example, in Azerbaijan, more than 50% of PLHIV are unaware of their HIV status, and in Kyrgyzstan, 50% of PLHIV who know their HIV status do not use the HIV-related healthcare services; in Kazakhstan and Estonia, the number of PLHIV taking ARVs is less than 30%, while in Russia the open data on the ART effectiveness for PLHIV is not available.

Despite the obvious differences in the causes of loss of PLHIV from the HIV care continuum across the region and the situation with access to these services as a whole, on the basis of the data collected, and based on the opinion of people who are "inside" the issue, we can note trends common to all countries in the EECA region that have a negative impact on access to HIV services for PLHIV.

In this Annex to the Barriers Overview, we analyze the opinion of focus group participants held in the EECA region, i.e. directly the members of KAP communities and representatives of health care providers.

Focus group participants often mention fear of disclosing their HIV status, which would also mean that they belong to certain KAP, because they are afraid to be noticed by the state bodies and to be persecuted. It leads to the practice of avoiding formal confirmation of their HIV status and, as a consequence, treatment rejection. This situation is explained by the presence in the legal framework of some EECA countries of the laws, regulations, and official procedures commonly discriminatory and even repressive for different KAPs. Distrust to government services frequently extends to the medical institutions.

In countries with a democratic legislative base, the fear of stigma towards a person representing community with socially disapproved behavior is at the forefront, which is especially evident in small towns. In the Central Asia countries, both the fear of stigma and self-stigma are relevant, creating obstacles in determining a person's HIV status and the opportunity to get effective treatment. Our respondents explain this phenomenon by some religious and socio-cultural peculiarities of national mentality represented in the region.

- *"If I live in the countryside, I would ... even if something was available, I would not go. So small town, and you go, and have the impression that everyone is looking at you and everyone knows everything, and if in the countryside that's it ... well, generally ... everyone will know everything" (focus group female participant from Estonia)*
- *"They believe that this is a disease of prostitutes and drug addicts. That this is haram and impure people. Again, it's about our mentality. Many need to give birth to children, get their children married. And, God forbid, neighbors will know, you will not get your child married" (focus group participant from Uzbekistan)*
- *"People?? It turns out in unbelief, unacceptance. People have so many problems, and then comes HIV. They somehow withdraw, they can not imagine that they can infect someone. They cannot believe in this fact" (focus group participant from Uzbekistan)*
- *"Fear. They are also afraid that they will be seen there, that if he went into this room, then something is wrong with him. There are, for example, such girls in hijabs, as if they stand to another room, she looks around that there is no one in the corridor, and at once goes into this room" (focus group participant from Kyrgyzstan)*

- *"They (husbands) do not allow for their wives. They are afraid that if their wives are positive, they will attack their husbands. They are afraid of publicity" (focus group female participant from Azerbaijan)*
- *"And there (in a small town) the attitude to HIV is different. They are like lepers ... as soon as a person comes, word of mouth starts working right away, that someone has come to be tested. Often, people from Kalinkovichi come here, and from other cities, so that no one back there knows about it " (focus group participant from Belarus)*
- *"And it's even frightening that you can not get a job. Society will not accept you, and that's all. And if you work, it's terrible that you will be fired, because sooner or later the top managers will become aware about it" (focus group participant from Belarus)*
- *"This fear, lack of information about this disease and general misunderstanding, what to do about it. It's scary to tell to the relatives. I do not know how to say. My relatives still do not know. I'm afraid of losing contact with them. And suppose, I do not have a family, and I do not know how to deal with it at all, how to get acquainted and what issues may occur. How to tell this to a person without this status, and what attitude I will face. It's all complicated" (focus group participant from Belarus)*
- *"Personal viewpoint, in connection with what they use. They are afraid that they will find out their diagnosis, they are afraid that it will spread through polyclinics. They are afraid that they wouldn't get work, they are afraid of reaction from relatives, the social perception" (focus group female participant from Belarus)*

Common to almost all EECA countries challenges in testing organization, drawbacks of pre- and post-test counseling, lack of support programs for community members explain the often noted by the participants of the focus groups sense of fear which prevents finding out their HIV status.

- *"First time I've tested in the district clinic. The test was inaccurate. Still not clear yes or no. And to retest, I went to the Center, there is a special department, you can make a test anonymously, as well as by passport ... I was told by phone that the test is positive. They haven't prepared me, they did not tell me to come" (focus group female participant from the Russian Federation)*
- *"The fear, afraid to find out the diagnosis. Little information where and how to do it" (focus group participant from Kyrgyzstan)*
- *"Majority takes it painfully (news of HIV). So, there must be some psychologist, a good psychologist to prepare a person, inform, calm. To give hope" (focus group participant from Belarus)*
- *"Many people do not want to know about their illness, especially those who lead this kind of lifestyle, for example, taking drugs, he does not want to know about it, because he knows that he can have it. The main reason is fear" (focus group female participant from Belarus)*
- *"Simply because of fear". (Because of fear of what?) "That it will be revealed and then. The first thing, when we find out, it is very difficult. When there is no support nearby, someone to say: do not worry, and so on. It's very hard. Therefore, for example, also, when I found out for the first time it was a shock. I just had a husband nearby, and he supported me. And if it wasn't him, I do not know, probably, I would already have been gone. We are just afraid of this" (focus group female participant from Kyrgyzstan)*

Careful consideration must be given to the issue with legislative frameworks for labor migrants in the EECA countries and, as result, the limited access to HIV care continuum for migrants. Focus group participants pointed out the issues of external migrants as well, when people come to another country and can not get treatment, and challenges arising due to the internal labor migration, such as in Russian Federation, when the citizens of this state move to a different region of the country.

- *"If they are not citizens of Uzbekistan, they have a complicated situation to get ART. For example, there were cases when patients from Kazakhstan came, but for certain reasons, relatives and parents live here and, naturally, they do not get ART. But when, for example, NGOs, other non-governmental organizations intervened, it was possible to get ART"* (focus group participant from Uzbekistan)
- *"In Moscow, not all doors are open because I do not have a registration, I will only have registration outside Moscow. And so far I do not know where to go. Recently, I came to the Federal AIDS Center, where the doctor was compassionate, and said that he only accepts the local ones and without a specific place of residence, but since I need to pass so much laboratory tests, he will make at least a viral load for free"* (focus group female participant from Russia)
- *"I can not register for care in another city. I came to be registered. I came to Moscow too, they refused me. They say that without a record on a local residence they cannot register me for care. Now I'm registered in my city, and it's expensive to go for drugs"* (focus group participant from Russia)

Upon receipt of the first HIV-positive result the stage of the final diagnosis comes. Respondents noted already at this early stage the negative impact of lengthy, extended in time procedure on development of adherence to HIV treatment due to personal, time-related, financial, and territorial challenges.

- *"Patients who were tested, anonymously or not, need to visit the healthcare facility at least 5 times. We just checked how many times he has to go to a facility for testing or for the result. For a person who takes drugs it is a very long period"* (focus group participant from Belarus)

To preserve the treatment adherence and reduce the number of treatment drop-outs it is necessary to overcome a number of obstacles that are common to most EECA countries. Focus group participants pointed to the difficulty of obtaining timely, free diagnostic and therapeutic medical care for PLHIV and PLHIV/TB issue when changing ART regimens and shifting individual ARV drugs, interruptions in the ARV supply. Specifically, it is necessary to pay attention to such negative factors as poor management of ART side effects. As PLHIV do not entirely understand what happens on the background of their health deterioration while taking ARVs, they violate ART regimen or completely refuse from further treatment, it contributes to maintaining the myths about HIV/AIDS in the minds of the KAP representatives. PLHIV often have no idea of the ART possibilities for the future improvement of their lives' quality. The described above does not help to develop adherence to treatment among PLHIV.

Legal barriers have significant impact on the situation with access to HIV treatment for the KAP representatives. The discriminatory legislation, including criminalization of HIV transmission, is one of the major obstacles in obtaining any medical assistance for HIV. Key groups representatives are afraid

to seek medical care because of criminal sanctions for drug use, paid sexual services, for the threat of infecting their partners with HIV. This repressive legislation creates a persistent distrust in any and all public institutions, including health facilities. People avoid treatment because of fear of persecution by the state bodies.

- *"I did not want to get registered because I understood that it falls under criminal responsibility, the provision of sexual services for money" (focus group female participant from Belarus)*
- *"It is better not to be spotted at all, so that they do not know about you, still, you will not recover from it, but will face lots of problems. Police ... where, with whom, when? Will ask your family" (focus group participant from Russia)*
- *"I faced with this when registering, I was directly interrogated. Where, with whom, how many people" (focus group female participant from Russia)*
- *"I had a fear that they will begin to question who with whom, where stabbed, who stabbed. Such questions" (focus group participant from Russia)*
- *"Although the specialists explain on pre-test counseling that it is important to go further and register, they (SW) simply do not go, as here responsibility comes into force, up to the criminal one. And they just live with this, do not take therapy, do not finally know about their status, but they know that HIV was somewhere there once, as they say" (focus group female participant from Belarus)*
- *"Who goes to the AIDS Center voluntarily? Especially drug addicts. Since they do not trust the government, and it's easier to work with NGOs for them" (focus group participant from Azerbaijan)*

In a number of countries, HIV testing among some groups is mandatory, defined by state structures regulations. This practice is discriminatory, restricting personal freedom.

- *"Today everyone has to test for HIV. Even against your will" (focus group participant from Belarus)*

Lack of trained medical personnel, issues related to organization of pre- and post-test counseling, lack of follow-up programs for community members have the same destructive effect on accessibility to HIV services. However, many FG participants noted that the professional attitude of healthcare workers of AIDS centers well-informed on HIV/AIDS treatment issues and prepared to meet the community members compares favorably with the situation in other hospitals and, generally, facilitates access to HIV treatment (Kazakhstan, Ukraine, Uzbekistan). Therefore, a good level of training of medical staff on the issues of HIV and their professional readiness to meet people from KAP improves PLHIV access to all kinds of treatment they need.

- *"And I'd like to point out, those who applied to other medical institutions, in no other place people talk to us as they talk at the AIDS Center – with respect, understanding, mostly they do not care if you are in active drug use, they still talk to you as to a person. I was surprised, how they talk. So kindly as in AIDS center, nowhere people speak so kindly" (focus group female participant from Kazakhstan)*

Lack of correct information about HIV as a disease, and the severity of its consequences, about the

access to HIV treatment in the PLHIV community leads to misunderstanding of the need to be under medical supervision and to late coverage of clients.

- *"I can tell about myself, why I did not want to be registered. I saw a lot of HIV-positive people around me, and they were fine, did not die like flies. Live with this diagnosis. And what's the point to run and register? I did not care – to be registered or not to be. What for? They get registered to receive some special services (focus group participant from Russia)*

The challenge of registration and staying under medical observation and treatment appears immediately after diagnosis. Focus group participants mentioned the following barriers to registration: fear of disclosure of diagnosis and lack of understanding of the treatment need, low value of personal health; internal stigma and desire to hide their HIV status, fear to know the real situation with regard to their health, lack of hope for the understanding of the family, territorial and geographical remoteness.

- *"They feel well and do not believe they are sick. Afraid of disclosure" (focus group participant from Azerbaijan)*
- *"The state of health is normal, people feel well, and do not refer" (focus group female participant from Kyrgyzstan)*
- *"We have a very different mentality, we are brought up differently, because of this, we also can have problems – that the relatives will know, that it's embarrassing, as they say" (focus group female participant from Kazakhstan)*
- *"There is a category of people, especially women, what are they afraid of? First, how will I tell it to my husband? My husband will see me here and what will he say? And who was the source? – Husband! Then, if a woman is pregnant, a real puzzle begins. You need to save the child and psycho-emotional state and keep the family, and not also say, how?!" (focus group female participant from Kazakhstan)*
- *"There are people who live far. They can not come" (focus group female participant from Azerbaijan)*

The focus group participants from Belarus noted that social workers often accompany clients with a positive test result done on the basis of NGOs to the AIDS Center to register them for care, even if this is not part of their job. If it works effectively with MSM clients, when working with the SW, this approach is not always justified. According to most respondents – service providers, the SW when there is an opportunity they simply run away, fearing that their registration will entail prosecution.

- *"We tried to do so, as well. But for now they (SW) just run away. While we came to the clinic and went to the doctor to tell that the group come, and they are no longer there" (focus group participant from Belarus)*

Focus group participants indicated the difficulties in organizing the process of diagnosing, getting an affordable, timely, free diagnostic care for PLHIV. Particularly, in Belarus, a large number of necessary laboratory and instrumental tests, which must complete the patient before initiating ART are mentioned as an obstacle, and in Russia, the increasing number of paid tests and examinations for PLHIV in the AIDS Center become a challenge:

- *"As a rule, the maximum period to get all necessary results is about 1.5-2 weeks. I.e. within 2 weeks we will have a complete picture of the state of health of the patient" (focus group participant from Belarus)*
- *"To get the coupon for the ultrasound in Minsk, it's easier to pay for it, because you will wait a year and a half, just to make an abdominal ultrasound" (focus group participant from Belarus)*
- *"For example, I had such a problem: they tell you that you should urgently, this week go and have test. And you can also have some other plans. E.g., your own schedules, some other activity" (focus group participant from Belarus)*
- *"Previously, everything was free, and we even received coupons for tomography. Now, of course, no coupons. Some tests, for example, hormones that are not related to HIV infection, but, nevertheless, they have to be paid for in the AIDS Center. Even for HIV-positive" (focus group participant from Russia)*

Everything described above is still valid while analysis of the situation with the achievement of viral suppression in PLHIV as a result of ART. The FG participants mention critically low level of knowledge among PLHIV and KAP representatives about HIV/AIDS as a disease, its course, consequences, and treatment options. The same state of things is in the area of understanding by PLHIV of the positive impact of achieving viral suppression for every person with HIV infection personally, and for the society, as a whole. Deep-rooted myths about the disease, unwillingness to tolerate the side effects of ARVs, common to many KAP members lack of faith and motivation to achieve treatment outcomes have negative impact on PLHIV.

- *"Their immunity increased, they think that they are healthy, so they stop taking drugs" (focus group participant from Azerbaijan)*
- *"There is a problem. Because you feel bad when receiving ARV" (focus group participant from Azerbaijan)*
- *"Some people take the medicine and they get dizzy, or the temperature rises, or they feel sick with nausea. So, they refuse. For example, 5 days they take, 5 days no" (focus group participant from Azerbaijan)*
- *"They say they know that therapy helps to kill them even faster. Why do they think so? They say that heard testimonials from people who are on therapy, how the responsible physician treats them" (focus group participant from Belarus)*
- *"I do not go into the details. Something about the cells, the load, that you will die soon. And I'm working, why do I need this. Why should I change something?" (focus group participant from Russia)*
- *"I refused because they told me that I will start taking more medicines... I'm poorly informed, one says this, another says that. I'm constantly afraid. They said, if I start taking, it will be even worse. And me, I already have TB" (focus group female participant from Russia)*
- *"For example, yesterday a child was diagnosed, and the mother didn't want to come. As she thought that there is no treatment and that her child will die in any case" (focus group participant from Kazakhstan)*

- *"I also know a person who does not know about ART, he is HIV positive, couples, they do not know that there are medicines and that they should take it" (focus group participant from Kyrgyzstan)*
- *"I was in the hospital. The doctor talked to me, explained how to take the drug. I've started it and dropped it at once" (focus group participant from Uzbekistan)*
- *"I was also offered ART in the city clinic. At first, I've taken it. Then it was replaced. 2-3 days I took them, felt bad. A couple more days and I stopped" (focus group participant from Uzbekistan)*
- *"It's irresponsible, I do not know what it is, I have an example: a person saying, I will die anyway, why do I need to treat?" (focus group participant from Uzbekistan)*
- *"There are those who feel very bad with their status, and each time as if pulling them out of grave and still they do not go for treatment, or testing" (focus group participant from Uzbekistan)*
- *"Many drop out because of side effects, no patience, the same sort of things day after day, annoying. Many due to ignorance, they considered that the results are good. I will say for myself how it was, when I started, the doctor prescribed it to me, I had a slightly raised CD, I immediately dropped out, I did not say anything to the doctors, did not go there and did not take it" (focus group participant from Uzbekistan)*
- *"Drop out. Because they feel bad when receiving ARV" (focus group participant from Azerbaijan)*
- *"I know that they are given terrible retroviral drugs, which put them out of action, literally. That is, a person feels very badly, in a deplorable state. About a week or two, or even a month or longer, depending on when body gets used to it. That these drugs, actually, help them, by cell analysis. To be honest, I did not go into that seriously. I know that there is per one cubic centimeter, milliliter, a certain number of cells. When it reaches a critical level, they are given antiretroviral drugs. That's all I know" (focus group female participant from Estonia)*
- *"I know very little. I know that enterovirus drugs, they are different, because everyone has his/her own regime, and it fits not to everyone. I know that it's needed to take them constantly, for a lifetime. That's probably all" (focus group participant from Estonia)*
- *"Addiction, alcohol, drugs, and then disbelief in the effectiveness of ARV, when they simply did not inform, and the person simply does not accept it. There are a lot of nuances, someone went deep into drugs, someone into alcohol" (focus group participant from Kyrgyzstan)*

Interruptions in the supply of ARV drugs do not contribute to the development of treatment adherence among PLHIV.

- *"Actually, I have a friend who was given half of the drug, and the other half no. Runs all the time somewhere, it is generally inconvenient" (focus group participant from Russia)*
- *"I know a person. He was given 2 drugs, and the third drug he had to buy himself" (focus group participant from Russia)*
- *"Once, my husband and I went for his medicine, I do not know what they had in there, the doctor*

opened the tube and said, there are no medicines, you are not alone, and he wrapped small bags and put 10 pieces to each one. And he said to come again in 10 days. We said that there is no possibility to come often, no money, there was a necessity to divide for all" (focus group female participant from Kyrgyzstan)

Application of OST as a method of development and maintenance of ART adherence in EECA is limited. For example, in Azerbaijan, 130 PUID receive OST (1% of the estimated number of PUID), participants note its low availability for non-capital residents.

- *"We have two substitution therapy sites in Azerbaijan, which are located in the city of Baku, we do not have them in other cities. ... drug addicts who live in other districts or cities simply cannot come. There is no such possibility" (focus group participant from Azerbaijan)*

Focus group participants pointed to the difficulty in getting medical care for patients coinfecting with HIV/TB.

- *"They say that you must first treat TB, and then initiate ART, exceptions are rare " (focus group participant from Kyrgyzstan)*
- *"For PLHIV/TB, there is special treatment. First, they start HIV treatment, then they are sent for TB treatment, as there is no cure for these two diseases at once. They have different medicines, very different programs. For PLHIV/TB, when drugs are issued, they are issued for 2-3 months at once. Well, not everyone takes them..." (focus group participant from Kyrgyzstan)*



Daria Matyushina, Danielle Parsons



REGIONAL REPORT

Programmatic and Finance Gaps
for Key Populations in a Selection
of Eastern Europe and Central Asia
Countries

ICO “East Europe and Central Asia Union of PLWH”

This report was produced within the Regional Program “Partnership for equitable access to the HIV care continuum in the EECA region, three-year program (2015–2018), implemented by the ICO “East Europe and Central Asia Union of People Living with HIV” in partnership with the Eurasian Harm Reduction Network with the financial support of the Global Fund to Fight AIDS, Tuberculosis and Malaria. The program began on November 1, 2015.

ACRONYMS AND ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral Therapy
ECDC	European Center for Disease Control
ECUO	ICO “East Europe and Central Asia Union of People Living with HIV”
EECA	Eastern Europe and Central Asia
EHRN	Eurasian Harm Reduction Network
ELISA	Enzyme-linked Immunosorbent Assay
EPP	Expenditure Per Person
HIV	Human Immunodeficiency Virus
MSM	Men who have Sex with Men
NSP	Needle Syringe Programs
OST	Opioid Substitution Therapy
PLHIV	People Living with HIV
PWID	People Who Inject Drugs
SW	Sex Workers
TB	Tuberculosis

INTRODUCTION

Context & Rationale

This report, and its underlying assessment process, were conceived and conducted in the context of a regional Global Fund Program, “Partnership for Equitable Access to the HIV Care Continuum in the Eastern European and Central Asian (EECA) region,” by the East Europe and Central Asia Union of People Living with HIV (ECUO).

The regional Program’s goal is to enhance the effectiveness, accessibility, sustainability and scale-up of HIV treatment programs in the EECA region, with a special focus on key populations. The project has two discrete objectives:

- **Objective 1.** Create enabling conditions at national and regional levels for facilitating access to HIV care and improving linkages between the main elements of the HIV care continuum for key populations in at least five participating countries in the region by 2018.
- **Objective 2.** Advocate for transition to the strategic and sustainable state funding of the HIV care continuum, based on evidence and on the needs of key populations, in at least five participating countries in the region by 2018.

The assessment described below was conducted and managed by the Eurasian Harm Reduction Network, as a sub-recipient of this grant.

Aim and Objectives of Assessment

The aim of this assessment was to capture a snapshot of the financial landscape surrounding the HIV response for people living with HIV (PLHIV) and key populations at increased risk for HIV in Azerbaijan, Belarus, Estonia, Kazakhstan, Kyrgyz Republic, Russian Federation, and Uzbekistan. For the purpose of this assessment, key populations were defined as people who inject drugs (PWID); men who have sex with men (MSM); and sex workers (SW).

The specific objectives of this assessment were:

1. To assess service coverage and total expenditure, both as absolute figures and as a percentage of national funding, for all categories of services within the continuum of HIV for PLHIV, SW, PWID, MSM.
2. To provide an assessment of the unit costs for all categories of services within the continuum of HIV and TB care for PLHIV, SW, PWID, MSM.
3. To estimate how much funding is needed to meet the full need of key affected populations, how much of that funding can be secured domestically, and what is the remaining gap that needs to be secured through outside funding.

Assessment Methods

In order to capture a comprehensive range of financial and programmatic data necessary to complete analysis, an Excel-based database was developed to allow for systematic capture and processing of data. Categories of data included the following:

- General information: basic country demographics; economic indicators; total health expenditure; total HIV expenditure, as planned by program area;
- Coverage levels: population size estimates for each of the key populations; number of people receiving each service in the care continuum, disaggregated by key population group;
- Actual expenditures: real expenditures on the HIV program, including target group specifics and cost categories, as well as sources of funding.

A tool was designed to facilitate user-friendly collection of data, presenting clear definitions of terms and concepts, and providing the user with a range of a possible analyses which could be conducted based on quality and detail of data available. Three specific analyses are automatically run by the tool, each in its own labeled worksheet:

- Analysis of intervention by funding source
- Analysis of intervention implementation by target population
- Analysis of intervention by cost

As further described below, not all of these analyses were able to be completed during this assessment, due to lack of available data; however, the database is sufficiently powered to conduct these analyses when data are available.

The analysis was based on the following data:

- Annex 1. Coverage of Key Population with HIV Prevention. Data for 2015
- Annex 2. Coverage of Key Population with HIV Testing. Data for 2015
- Annex 3. HIV Treatment Cascade. Data for 2015

Data Collection Procedures, Sources and Sampling

Data collection was managed by national consultants in each country, who were trained during a two-hour online session to use the data collection tool, and counselled on methods of data collection. Consultants used only publicly available, published data. Sampling of data was not a significant issue for this analysis, as all data collected was collected from national-level resources.

All findings presented here are using data capture from the secondary sources cited in the References section, starting on page 28.

As anticipated, every country investigated was found to have unique strengths and weaknesses, which combine to present a distinct set of barriers and challenges to strengthening the continuum of HIV care.

HIV SERVICE COVERAGE AND EXPENDITURE

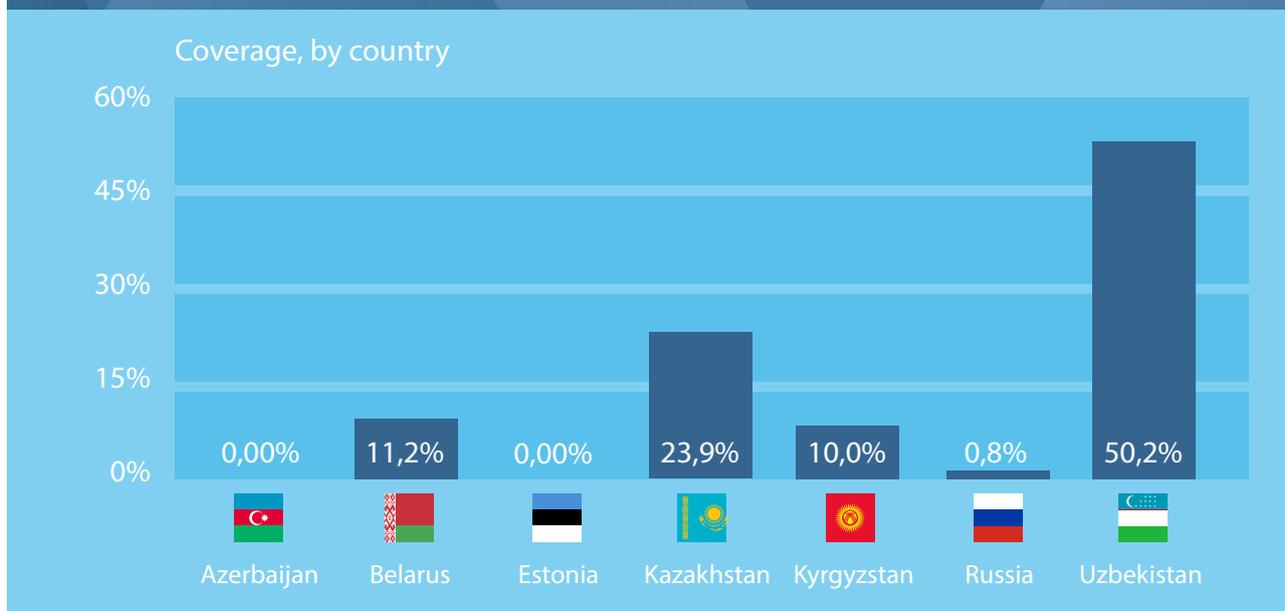
Coverage of Key Populations with HIV Prevention Services

International coverage targets, as defined by UN bodies, are expressed as percentages. Optimal coverage with prevention services used to be defined in UNAIDS and WHO prevention guidelines as 60%. Political declaration adopted by the UN General Assembly in 2016 reflects countries' commitments to provide 90% key populations with HIV prevention services¹. Since the current report analyses data of 2014 - 2015, it compares coverage reached in the focus countries with 60% target.

Annex 1 provides estimates of the numbers of key populations (PWID, MSM and sex workers) from each country, their coverage with HIV prevention services and programmatic gaps calculated per key population. For data source of the information provided in this section below please refer to Annex 1.

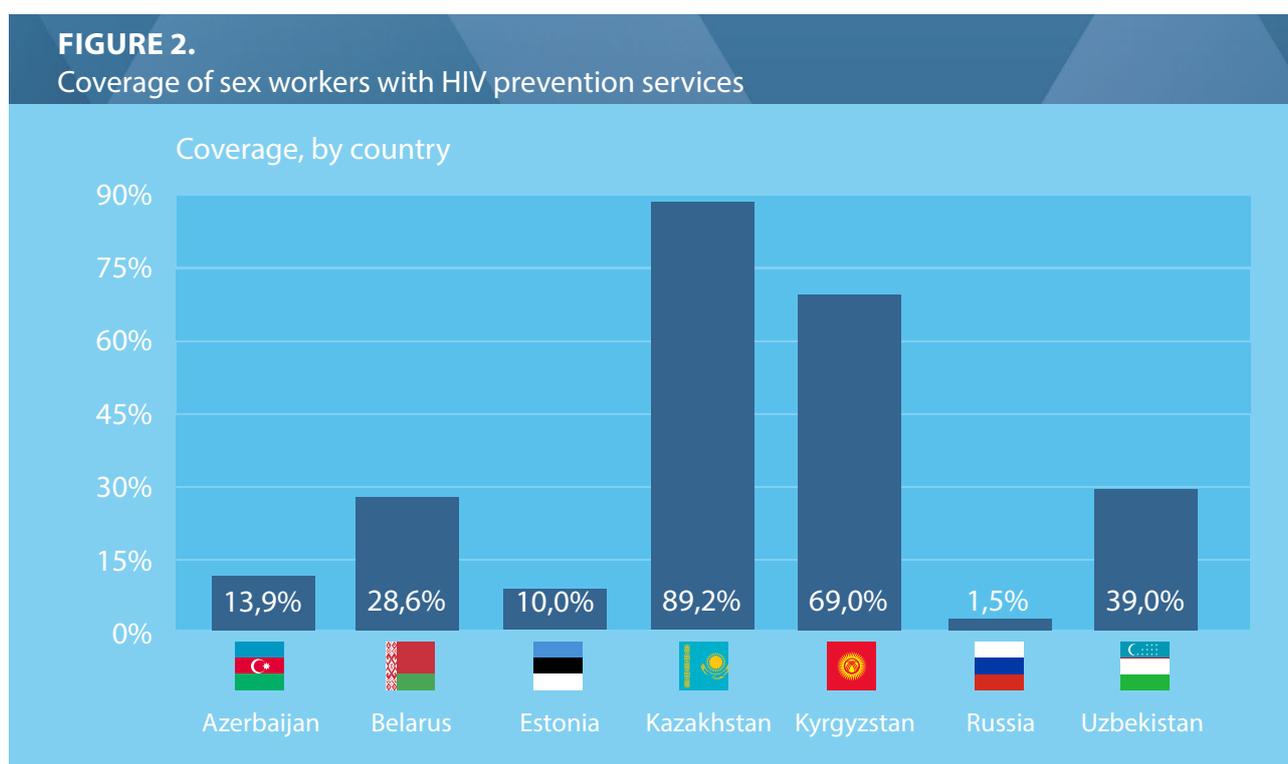
According to data available for 2014-2015, MSM were largely excluded from prevention service coverage, with 2015 coverage levels reaching only 10.0% in the Kyrgyz Republic and 11.2% Belarus. Kazakhstan covered 23.9% of all MSM with prevention services. In Uzbekistan, coverage is reported to be 50.2%, but this assumes a very modest total MSM population of 3,000 (0.01% of Uzbekistan's general population), and therefore should be interpreted with great caution. No MSM-specific program data were available for Azerbaijan and Estonia in 2014 or 2015.

FIGURE 1.
Coverage of MSM with HIV prevention services



¹ Resolution adopted by the General Assembly on 8 June 2016. 70/266 Political Declaration on HIV and AIDS: On the Fast Track to Accelerating the Fight against HIV and to Ending the AIDS Epidemic by 2030. Available online: <http://www.unaids.org/en/resources/documents/2016/2016-political-declaration-HIV-AIDS>

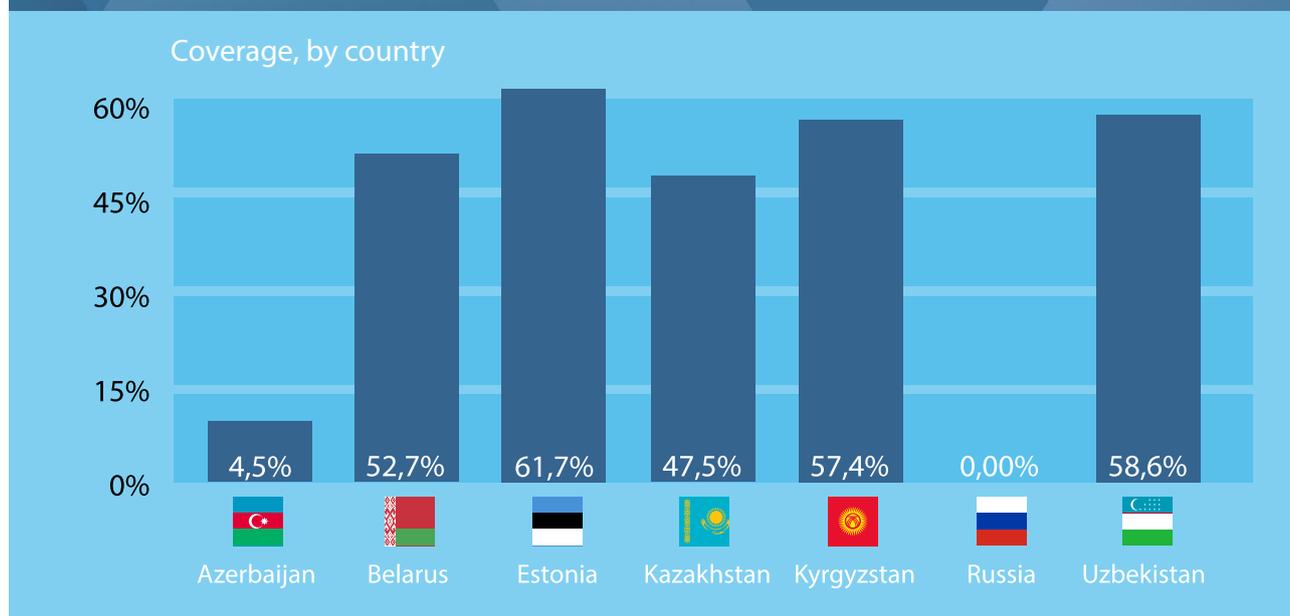
Sex workers have better access to HIV services than MSM. In two countries – Kazakhstan and Kyrgyzstan – the percentage of sex workers reached by services (89,2% and 69% respectively) surpassed the UNIADS recommended 60%. These numbers are extremely promising, though their validity is based on the assumption of accurate population size estimates and information tracking systems, as further detailed in the Discussion below. Uzbekistan (39%), Belarus (28,6%) and Azerbaijan (13,9%) are in the middle of the scale and yet far below the UNAIDS recommendation. The least access to prevention services among SW is in Estonia (10%) and in Russia (1,5%), the last having sex workers even not mentioned in its national HIV/AIDS strategy.



PWID fared better in most settings, with 61.7% NSP coverage in Estonia, 58.6% in Uzbekistan, 57.4% in the Kyrgyz Republic, 52.7% in Belarus, and 47.5% in Kazakhstan; these levels approach or exceed the WHO recommendation of 60% coverage for PWID with NSP. Assuming that both population size estimates and the package of services provided are adequate, this indicates promising interventions in all five countries. However, Azerbaijan and Russian Federation fell far short of international targets, with Azerbaijan reporting coverage of only 4.5%, and Russia not reporting NSP coverage figures in official reports in 2014 or 2015².

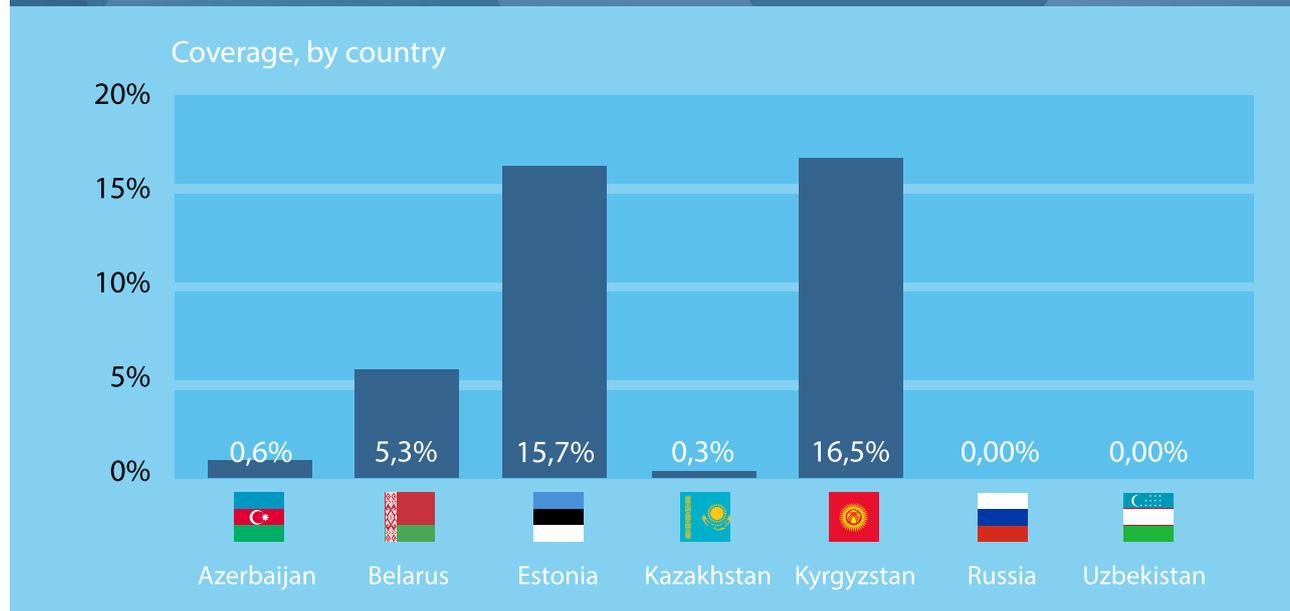
² While NSP exists in the Russian Federation through the support of Global Fund funding, coverage is not reported in official national reports - including the National Health Development Strategy reports and Global AIDS Response Progress Reports. While it is common for countries in the region to rely heavily or solely on external resources such as the Global Fund to fund programs, the Russian Federation is unique in declining to officially report any coverage of this programs.

FIGURE 3.
Coverage of PWID with NSP



Additionally, all countries are still well below the WHO ideal of 40% access to opioid substitution therapy (OST) for all opioid users, with only Estonia and the Kyrgyz Republic reaching double-digit coverage of 15.7% and 16.5%, respectively. Belarus reaches 5.3% of all opiate users; while Kazakhstan and Azerbaijan each serve less than 1% of the population in need of this service. The Russian Federation and Uzbekistan do not have OST programs.

FIGURE 4.
Coverage of People who Use Opioids with OST



With all the differences between the seven countries analyzed, it can be concluded that on the regional level the best picture is with the access of PWID to needle and syringe programs (with the exception of the Russian Federation), while least progress has been reached for HIV prevention among MSM and access to OST programs.

HIV Testing Among Key populations

All the focus countries annually reach high numbers of population with HIV testing - mainly with ELISA, but rapid tests are also available in most places, while they are significantly less accessible than ELISA.

Annex 2 provides estimates of the numbers of key populations (PWID, MSM and sex workers) from each country, their coverage with HIV testing and programmatic gaps calculated per key population, as well as the general population testing coverage. For data source of the information provided in this section below please refer to Annex 2.

In most settings, MSM experienced very low access to HIV testing. Only 2.1% of all estimated MSM in Azerbaijan received an HIV test in 2015; in Uzbekistan, only 52 individuals were tested, constituting 0.7% of the estimated population (see note above about conservative population size estimate). In Estonia, 3.3% of MSM accessed testing in 2015; and in Kazakhstan, 6.5%. The Kyrgyz Republic provided significantly better access, with 40.0% of all estimated MSM accessing testing, and Belarus reported testing coverage of MSM to account for 64.5% of the estimated population. Except for Belarus, where 96.9% of all reported tests were express test technology, all reported testing is presumed to be through traditional enzyme-linked immunosorbent assay (ELISA) technology.

SW access to HIV testing followed a pattern similar to that of PWID: Belarus recorded enough testing events to cover 66.3% of the estimated sex worker population, while Kazakhstan tested 98.5% of all estimated SW, and in the Kyrgyz Republic, 55.9%. Uzbekistan reached a smaller percentage of all estimated sex workers, with only 9.29% tested in 2015. Access to testing in Azerbaijan was very low, at 0.3%, and neither Estonia nor the Russian Federation report any data on testing for SW in 2014 or 2015.

As for PWID, which get relatively good access to needle and syringe programs, the linkage between prevention services and access to testing is concerning: in Belarus, only 21.7% - less than half of those reached with prevention services - accessed testing in 2015. In Kazakhstan, only 39.4% of PWID accessed testing; Uzbekistan, 39.7%; and in the Kyrgyz Republic, 43.0%. Azerbaijan, on the other hand, reached 5.7% of its PWID population with HIV testing, despite reaching only 4.5% with prevention services. Neither Estonia nor the Russian Federation report any data specific to testing of PWID in 2014 or 2015.

Table 1 provides a comparison between the proportions of general population, which received HIV testing, with testing rates among MSM, SW and PWID, and the share of targeted testing for key populations among all tests performed. Only a small fraction (0,32% - 5,39%) of these tests are performed among key population groups, in which new infections are most likely to be found (Table 1, e).

Keeping in mind the UNAIDS/WHO recommended 75% target for testing among key populations and the 90% target set by the Political Declaration of 2016³, adequate coverage with HIV testing has been only reached in Kazakhstan and only for sex workers. However, in order to get high coverage with testing, countries will not to increase funding for testing for KAP, but rather reallocate 1,6- 12,97% of existing funding for general population testing to purchase HIV tests for low threshold services for PWID, sex workers and, most importantly for MSM (see column f of the Table 1).

TABLE 1.
Coverage with HIV testing

Country	Coverage with HIV Testing (ELISA), %					
	General population (a)	MSM (b)	SW (c)	PWID (d)	% of KAP tests among all tests performed (e)	% of reallocation for KAPs***** (f)
Azerbaijan**	6,88	2,1	0,27	5,7	0,76	12,97
Belarus**	<i>no data</i>	64,5	66,3	21,7	-	-
Estonia**	12,09	3,3	<i>no data</i>	<i>no data</i>	0,19	9,74
Kazakhstan**	15,51	6,5	98,5	39,4	2,62	2,2
Kyrgyzstan**	7,32	40,0	55,9	43,0	5,39	3,91
Russia*	21,28	0,19	0****	9,66	0,8	11,43
Uzbekistan**	9,9	0,7***	9,29	14,88	0,32	1,6

* 2014; **2015; *** Rapid tests (no information on ELISA testing available), **** no targeted testing provided, ***** Percentage of tests for general population that need to be reallocated to provide 75% coverage of KAPs with HIV testing.

Treatment Cascades: Coverage of PLHIV with Key Services

The UNAIDS Fast Track to End AIDS calls for reaching the 90-90-90 targets by 2020: that is, 90% of all PLHIV are diagnosed and know their status; 90% of all those diagnosed are enrolled and retained on ART; and 90% of all those on ART achieve virological suppression. With the ambitious goals to scale these targets up to 95-95-95 by 2030, in order to end AIDS globally, every country must act urgently to move towards 90-90-90.

Annex 3 provides estimates on the treatment cascade and data source for each country.

³ Resolution adopted by the General Assembly on 8 June 2016. 70/266 Political Declaration on HIV and AIDS: On the Fast Track to Accelerating the Fight against HIV and to Ending the AIDS Epidemic by 2030. Available online: <http://www.unaids.org/en/resources/documents/2016/2016-political-declaration-HIV-AIDS>

The EECA countries assessed here fall far short of reaching any of these targets. Figures 5 and 6⁴, below, provide visual representation of the treatment cascades for each country, quantifying the estimated number of PLHIV, the number who know their HIV status, the number in care for HIV infection, the number receiving ART, and the number achieving virological suppression. For each 90-90-90 benchmark (knowledge of status; treatment with ART; virological suppression), a red bar is provided, indicating the gap between achievement and target.

For the first indicator, diagnosis and knowledge of status, Uzbekistan and the Russian Federation come closest to achieving the target, at 87% and 77% respectively – but both still fall below the 90% needed to move towards epidemic control. In addition, as with prevention, it is important to note the significance of the accuracy of denominator in this coverage equation – in this case, the total estimated number of PLHIV. If the current estimate is conservative due to lack of robust surveillance, or surveillance which does not accurately target representative samples within key populations, the total number of estimated PLHIV may be lower than reality. These conservative estimates could make coverage rates appear artificially high. This is of particular concern in countries like Russian Federation and Uzbekistan, where other coverage indicators for key populations are irregular or absent.

Diagnosis is even lower in Estonia, Kazakhstan, and the Kyrgyz Republic, ranging from 70% to 56% of all PLHIV having knowledge of status. The lowest achievers in the assessed countries include Belarus and Azerbaijan, at 44% and 34%, respectively.

For the second indicator, enrolment and retention on ART for 90% of all diagnosed PLHIV, none of the assessed countries passes 36%. This is not surprising given the steep drop-off between diagnosis and linkage to care: of all those diagnosed, only 34% (Belarus) to 53% (Russian Federation) are linked to care to start with; an expectedly smaller number successfully enroll and are retained onto ART.

Given the lack of achievement of the first and second indicators, it would be impossible to approach achievement of the third indicator, virological suppression. On the regional level, viral level suppression ranges from 9,76% to 17,53% of all PLHIV: Azerbaijan reports on achieving 17,53% virological suppression, Kazakhstan - 14,85%, Kyrgyzstan 12,12%, and Belarus - 9,76%), while 72,9% of all PLHIV should have viral suppression to reach “the third 90”. Two countries - Russia and Uzbekistan - did not report on the viral suppression neither in 2014, not in 2015.

⁴ Data for Russian Federation is presented separately, due to scale (i.e. the number of estimated PLHIV is several orders of magnitude greater than any other countries assessed).

FIGURE 5.
Treatment Cascades Across the Region

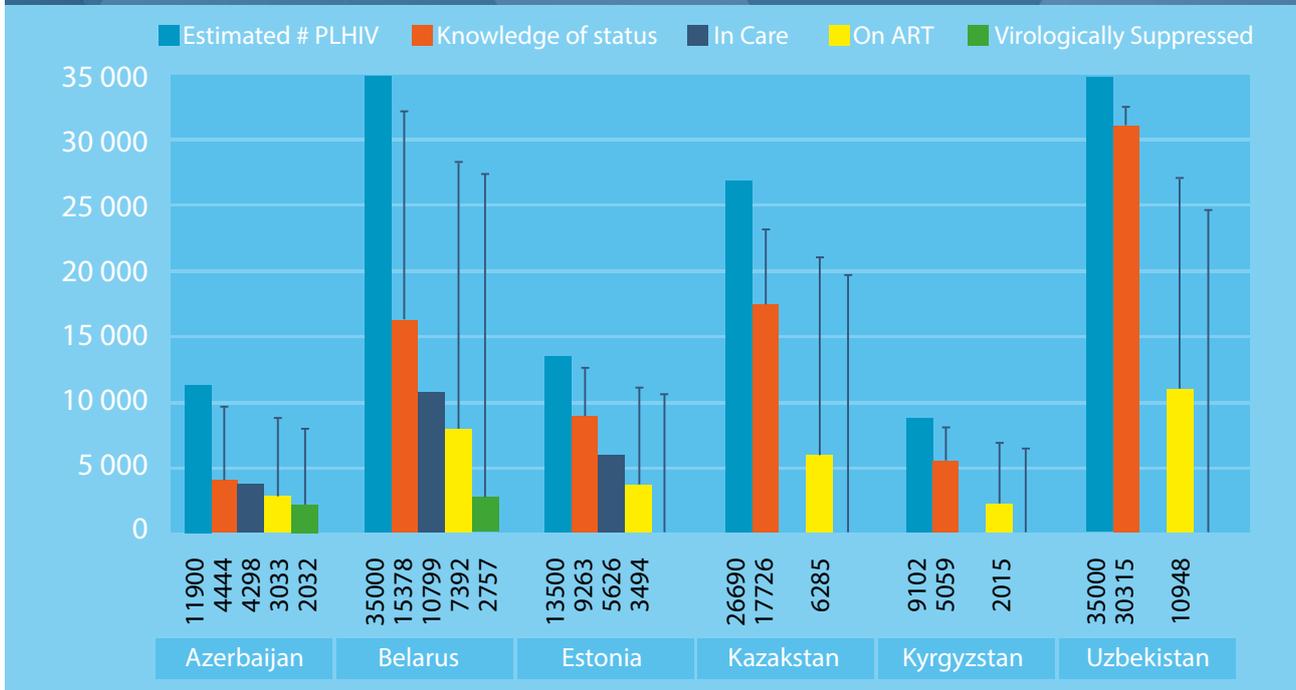
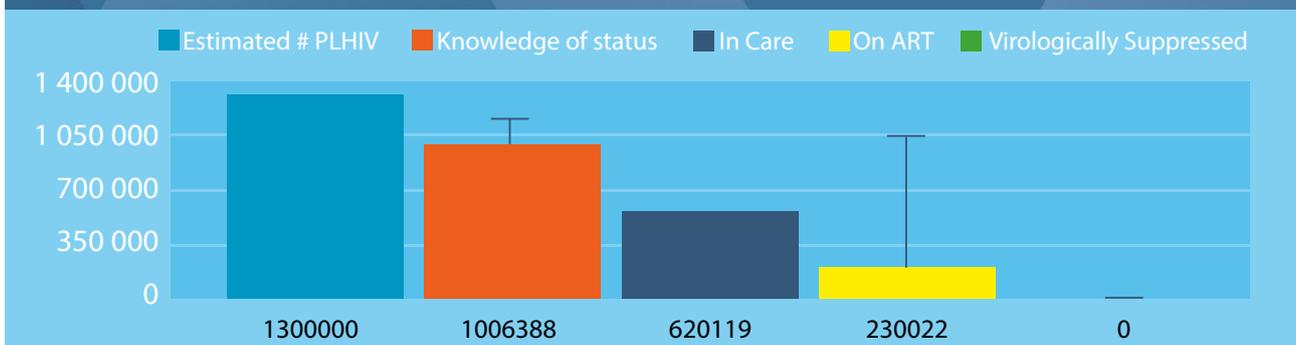


FIGURE 6.
Treatment Cascade of Russian Federation



HIV EXPENDITURES BY PROGRAM AREA

Expenditure data were only available for three of the assessed countries: Belarus, Kazakhstan, and Uzbekistan. The Kyrgyz Republic had partial data available for 2014, as reported in the 2015 GARPR, but data did not provide disaggregation by program area, sources or cost categories; and therefore, could not be used for reliable final analysis.

Proportion of total expenditures devoted to prevention varied significantly, with Uzbekistan devoting 49.3% of total HIV budget to prevention, and Belarus, 39.2%, while Kazakhstan, on the other hand, spent just 4.6%. Breakdowns of prevention expenditure by key population, as available, are presented in Table 2, below. It is important to note that the vast majority of Belarus' prevention spending does not go to programming targeted at key populations, indicating potential for optimized use of resources for higher impact.

TABLE 2.
Breakdown of prevention expenditure by target groups

Country	Expenditure as % of Total HIV Budget				
	Total Prevention	PWID Prevention	MSM Prevention	SW Prevention	Non-Key Population Prevention
Azerbaijan	13,12%	5,59%	n/d	n/d	n/d
Belarus	39,2%	6,3%	0,9%	1,5%	30,5%
Estonia	n/d	n/d	n/d	n/d	n/d
Kazakhstan	4,6%	2,7%	1,1%	1,7%	n/d
Kyrgyzstan	n/d	n/d	n/d	n/d	n/d
Russia	n/d	n/d	n/d	n/d	n/d
Uzbekistan	22,47%	8,14%	0,27%	3,1%	10,95%

In Kazakhstan expenditure for HIV testing was 7.1%, and in Uzbekistan, 2.3% - with the majority of expenses going to testing non-key populations, in line with expenditure trends for prevention. Belarus did not report expenditure data on HIV testing.

Treatment expenditures as a percentage of total budget varied significantly by country. Uzbekistan spends only 13.5% of its HIV budget on treatment costs, while Belarus spends 21.6% and Kazakhstan spends 48.6%. The breakdown of treatment expenditure by spending category, as available, is presented in Table 3, below. Though data are sparse, it is notable that spending on opportunistic infections still

outpaces spending on ART in both Belarus and Kazakhstan; at the same time, both countries fall well below meeting the ART coverage targets, as presented above in Figure 3. This disparity in expenditure indicates there are opportunities for potential cost-savings, as OI expenditures drop significantly when PLHIV are provided with effective ART⁵. This is particularly prescient for Belarus, where high spending on OIs is likely to be linked to low rates of diagnosis (44%), leading people to come late to care and need treatment for complex OIs.

In addition, the three countries had significant levels of 'Other Expenditure,' which falls outside of core expenditure on prevention, testing, and treatment. While this exercise did not allow for a detailed investigation of the components of each country's Other Expenditures, it is possible that there is opportunity for significant reprogramming of funds so that expenditure has more impact on disease outcomes.

TABLE 3.
Breakdown of treatment expenditure by program area

Country	Expenditure as % of Total HIV Budget				
	Total Treatment	ART	Opportunistic Infections	Care and Support	Other Expenditure*
Azerbaijan	n/d	n/d	n/d	n/d	n/d
Belarus	21,6%	0,88%	5,6%	0,3%	39,2%
Estonia	n/d	n/d	n/d	n/d	n/d
Kazakhstan	48,6%	0,51%	0,9%	n/d	39,7%
Kyrgyzstan	n/d	n/d	n/d	n/d	n/d
Russia	n/d	n/d	n/d	n/d	n/d
Uzbekistan	13,5%	10,3%	1,7%	2,2%	59,8%

* Other Expenditure falls outside of prevention, testing or treatment costs. Further details on what is included in this spending were not readily available.

⁵ A 2016 meta-analysis showed substantial cost-savings by reduction of OIs through introduction of ART, even in middle-income countries. (Low A et al. Incidence of Opportunistic Infections and the Impact of Antiretroviral Therapy Among HIV-Infected Adults in Low- and Middle-Income Countries: A Systematic Review and Meta-analysis. Clin Infect Dis. 2016 Jun 15;62(12):1595-603. doi: 10.1093/cid/ciw125. Epub 2016 Mar 6.)

HIV SERVICES UNIT COSTS

Because of the limited nature and detail of expenditure data, it was not possible to conduct unit cost analysis per client expenditure analysis. Therefore, existing Optima unit cost data were used where available, that is for Belarus, Kazakhstan, and the Kyrgyz Republic. For expenditure per client (top-down unit cost analysis) figures for Russia and Azerbaijan figures from Modular Template of the GF Concept Note were used. For Uzbekistan, expenditure per client calculation was based on the figures provided in the national report to UNAIDS.

TABLE 4.
Prevention Unit Costs (USD)

Country	NPS	OST	MSM prevention	SW prevention	ARV treatment
Azerbaijan*	60,99	n/a	71,39	49,10	n/a
Belarus**	101,36	645,31	39,03	88,62	576,48
Estonia	n/a	n/a	n/a	n/a	n/a
Kazakhstan**	56,43	318,17	13,46	34,13	2279
Kyrgyzstan **	116,38	509,51	449,13	103,65	861,55
Russia***	62,40**	Not implemented	53,49**	82,87**	2291,58***
Uzbekistan****	80	Not implemented	49	79	310***

* Calculations based on data provided in the Modular Template of the GF Concept Note (2015)

**Based on Optima results

*** Based on the data provided in the Modular Template of the GF Concept Note (2014)

**** Expenditure per client calculation based on the GARP reporting

ADDRESSING FUNDING GAPS

A programmatic gap analysis was conducted for countries where financial data was available, in order to contribute to a financial gap analysis. Programmatic gaps were calculated using available coverage data, and comparing to international coverage targets.

TABLE 5.
Programmatic Gaps

Country	Additional Clients in Need of Services				
	PWID Prevention (NSP)	PWID Prevention (OST)	MSM Prevention	SW Prevention	PLHIV in need of ART
Azerbaijan	38,969	10,067	3,943	11,532	7,658
Belarus	5,509	6,402	29,307	6,901	20,958
Estonia	--	1,533	5,400	1,500	7,441
Kazakhstan	16,087	38,806	10,074	--	15,333
Kyrgyzstan	644	1,766	10,997	--	5,268
Russia	1,486,803		888,002	593,000	822,978
Uzbekistan	686	28,800	294	5884	17,402

Using these programmatic gaps and unit costing data available from Optima studies, financial gaps were calculated for Belarus, Kazakhstan and the Kyrgyz Republic.

Additional investment needs for NSP vary greatly within the countries assessed, owing primarily to variation in population size. OST financial gaps also vary widely, from over \$12m in Kazakhstan to less than \$1m in the Kyrgyz Republic, but are significantly more urgent considering the low access of people who use opioids with OST. Overall, PWID programming continues to need more investment in all countries, though programmatic efficiency gains should also be considered alongside planning for scale-up of funding.

TABLE 6.
Financial Gaps for PWID Prevention

Country	NSP Program Gap	NSP Unit Cost	NSP Gap Subtotal	OST Program Gap	OST Unit Cost	OST Gap Subtotal	Total Financial Gap
Azerbaijan	38,969	60.99	2376768,10	10,067	n/a	n/a	2376768,10
Belarus	5,509	101.36	558,392.24	6,373	645.31	4,112,560.63	4,670,952.87
Estonia	0	n/a	n/a	1,533	n/a	n/a	n/a
Kazakhstan	16,087	56.43	907,789.41	38,806	318.17	12,346,905.00	13,254,694.41
Kyrgyzstan	644	116.38	74,948.72	1,766	509.51	899,794.66	974,743.38
Russia*	1,486,803	62.40	92,776,507.2		n/a	n/a	92,776,507.2
Uzbekistan*	686000	80		28800	n/a	n/a	28800

* Excludes calculations on OST, as programs are not implemented in Russia and Uzbekistan, and no unit cost data is available.

TABLE 7.
Financial Gaps for MSM Prevention

Country	MSM Program Gap	Unit Cost	Total Financial Gap
Azerbaijan	3,943	71.39	281505,05
Belarus	29,307	39.03	1,143,852.21
Estonia	5,400	n/d	n/d
Kazakhstan	10,074	13.46	135,596.04
Kyrgyzstan	4,397	449.13	1,974,824.61
Russia	888,002	53.49	47,499,226.98
Uzbekistan	294	49	14,406

For MSM programming, Kazakhstan is a clear leader in the assessed countries, with a relatively small financial gap. It may be possible to reprogram funds within the MSM program, without compromising quality, in order to reach the required number of individuals, or otherwise a shrewd argument may be made for a relatively limited additional investment which can bring the country in line with meeting one of its major targets for prevention. In a large country such as Kazakhstan, this argument may depend heavily on the geographic distribution of those currently not covered – e.g. if they are in major cities where outreach programs are active, reprogramming funds and adding efficiencies may result in more clients reached; if, however, they are in different geographic regions where no outreach programs are currently active, additional funding is likely to be required to initiate new programming.

The situation is rather more dire in Belarus and the Kyrgyz Republic, each of which require over \$1million additional investment to reach enough MSM with the current programming standards. While these countries should certainly still seek to optimize services, and realize cost-savings where possible, it is unlikely that these financial gaps will be able to made through programmatic adjustments alone; they will require additional investment from external or domestic resources.

TABLE 8.
Financial Gaps for SW Prevention

Country	SW Program Gap	Unit Cost	Total Financial Gap
Azerbaijan	11,532	49.10	566240,84
Belarus	6,901	88.62	611,566.62
Estonia	1,500	n/d	n/d
Kazakhstan	0	34.13	0
Kyrgyzstan	0	103.65	0
Russia	593,000	82.87	49,141,910.00
Uzbekistan	5884	79.00	464,836.00

While prevention programs for sex workers in Belarus have smaller gaps than programming for other key populations, there is still a sizeable gap (\$611,567) to meet full need. Given the other, competing financial priorities in Belarus' HIV response, stakeholders might seek to optimize use of current funds, if possible, to reach a greater number of clients without adding additional financial burden. Sex work programs are faring better in the Central Asian countries, with Kazakhstan and Kyrgyzstan both exceeding target coverage and not requiring any additional funds; both countries should still examine current programming to assess whether there are opportunities for service optimization or cost-savings within existing budgets, which would allow either more sex workers to receive services (or for those currently reached to receive a more complex package of services), or for funds to be re-programmed to other populations in need, as described above and below.

TABLE 9.
Financial Gaps in HIV Treatment

Country	ART Program Gap	ART Unit Cost	Total Financial Gap
Azerbaijan	7 658,00	n/d	n/d
Belarus	20 958,00	576,48	12 081 867,80
Estonia	7 441,00	n/d	n/d
Kazakhstan	15 333,00	2 279,00	34 943 907,00
Kyrgyzstan	5 268,00	861,55	4 538 645,40
Russia	822 978,00	2 291,58	1 885 919 925,24
Uzbekistan	17402	310,00	5 394 620,00

Across all areas of intervention, in all countries, financial gaps in ART were the largest, ranging from over \$4.5m in the Kyrgyz Republic to nearly \$35m in Kazakhstan. These tremendous gaps reflect two realities: coverage is still dangerously low across the region and needs to be scaled up urgently; and also, countries are sometimes paying rates for medications that are significantly out of line with prices paid by other countries⁶. In Kazakhstan, for instance, rationalizing ART prices to US\$1,000 per client or less would cut the financial gap from \$35m to a more manageable \$15m. Therefore, while countries should consider traditional cost-savings measures such as task-shifting and other improved methods of prescribing ART, an emphasis should be placed on assuring that ART purchase prices are taking full advantage of the best international prices available.

Simple calculation of unit costs by programmatic gaps does not take into account economies of scale, any programmatic efficiency gains, improved cost-effective utilization of existing capacity in the current system. Therefore, it may be expected that unit costs may decrease as more clients are covered, and result in cost savings which can be reinvested for further optimization. Therefore, these calculations should be considered indicative of additional financial need, but they should not discourage program planners from seeking further ways to optimize services and increase cost-efficiency.

Having in mind the caution on the limitations related to unit costs based calculations, an assessment of total financial gap for HIV prevention among all key populations and treatment in seven countries is made - as provided in Table 10. For countries where all unit costs data were available - Belarus, Kazakhstan and Kyrgyz republic - the increase of additional funding needed to meet international targets is huge - ranging from 65,41% to 142,15%. Additional HIV testing costs are not included here because an assumption is made that 1,6% - 12,97% of funding for testing for general population will be reallocated to cover the gap for testing for key populations.

⁶ Middle income countries around the world struggle with accessible pricing for ART, as summarized by a number of papers presented at the 21st International AIDS Conference in Durban, South Africa. (<http://i-base.info/htb/30702>)

TABLE 10.
Total annual HIV funding gap*

Country	Total annual HIV funding	Total annual HIV funding gap	% of additional funding needed	Comments
Azerbaijan	20 627 360,00	3 224 513,99	15,63 %	Total funding gap does not include OST and ART costs because no data on ART and OST unit cost are available. Unmet demand for OST is 10 067 persons and for ART is 7 658 persons, so the actual financial gap should be significantly larger.
Belarus	20 606 632,00	18 526 953,53	89,91 %	
Estonia	n/d	n/d	-	
Kazakhstan	33 995 760	48 336 375,84	142,15 %	
Kyrgyzstan	15 978 696,00	10 452 144,00	65,41 %	
Russia	n/d	2 075 337 569,42	-	Total funding gap does not include OST costs because no data on OST unit cost is available due to the state ban for OST.
Uzbekistan	27 562 950,00	5 928 742,00	21,51 %	Total funding gap does not include OST costs because no data on OST unit cost is available due to the state ban for OST.

DISCUSSION

The study has revealed serious gaps in programmatic and financial data for HIV programs availability. By 2016 sufficient data for planning of national HIV response was available only for Kazakhstan and Belarus, while other countries showed significant caveats in their public sources data, which limited stakeholders' ability to estimate how much finance was needed to reach internationally set targets and how large was the funding gap.

The main source of country-level information were national reports to UNAIDS. Being relevant source for epidemiological data, these reports provided less details with regard to the coverage of HIV programs and very little financial analysis. The data provided by countries in national reports to UNAIDS was reported against similar questions or indicators. However, most of the data was presented by countries in such a way that multi-country comparison can be significantly biased.

Another issue uncovered by the current assessment is the difference in epidemiological and service coverage data reported by UNAIDS and ECDC. PLHIV population estimates differed for Azerbaijan, Estonia, Kazakhstan and Kyrgyz republic, and for Belarus and Estonia the number of people receiving ART was also different in UNAIDS reports and ECDC data tables⁷. While data inconsistency is not so huge, this may present certain issues for regional and international advocacy.

In the majority of sentinel countries national experts participated in the research failed to obtain up-to-date financial data that would provide information for the calculation of the expenditure per person or unit costs for HIV prevention and treatment services and thus make financial projections. While a gradual transition from international to domestic funding has started in the region a while ago, Modular Templates of Concept Notes to the Global Fund and countries' reports on the progress of Global Fund projects implementation continue to be the source of the most detailed and reliable data of HIV service coverage and expenditure. Countries, which have largely or fully undergone transition to domestic funding (such as Russia and Estonia), have largest programmatic and financial data gaps. This does not mean, of course, that such data is not available at all. The problem is that financial data is not aggregated in a way to match HIV services' funding needs and openly available for stakeholders for analysis and planning.

In addition to financial data, there are limitations to the epidemiological data available, including population size estimates (PSEs). The accuracy of PSEs is critical because a PSE provides the denominator for a coverage calculation, and therefore they must be accurate in order for the underlying epidemiological assumptions about transmission mitigation to be accurate.

The last, but perhaps the most alarming finding in terms of data availability is the issue of viral load data, which is a critical step in assuring that the "third ninety" target is met (that 90% of those on treatment are achieving suppression). Only four out of seven countries have this data reported. It would be useful to have breakdown of viral load data desegregated per key population to understand, which

⁷ ECDC (2017) Thematic report: Continuum of HIV care. Monitoring implementation of the Dublin Declaration on partnership to fight HIV/AIDS in Europe and Central Asia: 2017 Progress Report

subgroups of PLHIV do not get necessary counselling and support for treatment adherence and thus plan targeted services for them. None of analyzed countries provides with such data.

In the countries where HIV program expenditure data were available, the availability of program area expenditure data indicated high levels of spending (>37%) on costs not directly related to prevention, care or treatment of HIV, indicating that administrative and management costs are either very high or being costed at an inflated rate. This is important as it presents a significant opportunity for cost savings and reprogramming of funds; specific opportunities for optimising efficiency must be assessed at the country level, on a case-by-case basis. Considering the robust financial gaps presented above, it is critical that alongside raising additional funds, countries seek to utilize the funding they have more effectively to help close the gap.

According to country reports to UNAIDS, HIV prevention gets a relatively large share of all HIV funding only in two countries – Belarus and Uzbekistan. For other countries this is information either not reported or prevention's share is under 14%. But the main concern here is that funding for targeted prevention for key populations is considerably smaller than for general, non-key populations HIV prevention activities. As for HIV testing, while all sentinel countries perform high volume of ELISA test reaching 6,88%-21,28% of the general population annually, access to testing among key population lags behind international targets. An important finding of the current report is that the gap in testing for key populations in EECA can be filled without additional funding but through reallocating 1,6%-12,97% of general population testing funding for the needs of harm reduction, MSM and sex worker services.

A systematic review of HIV treatment continuum cascades shows us that targets are not being met for anyone. Perhaps most concerning, however, is that no country assessed is reaching even the first indicator in the treatment cascade: all knowledge of status levels still falls below the 90% threshold. This has dangerous implications for downstream spending, with PLHIV coming later to care and requiring more expensive intervention – as seen in Belarus' high OI expenditures – and also potentially requiring more expensive ART regimens.

With no country in this assessment achieving more than 35% coverage of all diagnosed PLHIV with ART, it is clear that significant, urgent effort is needed to scale-up treatment program. Main barriers for such scale-up are, first of all, non-systematic referral to HIV treatment services by key populations programs and, secondly, very high ARV procurement prices and overall treatment costs.

The analysis undertaken by the study shows that in some cases countries will have to almost double their HIV expenditure. As it is discussed in detail in the Limitation section, using simplified unit cost or expenditure per client calculations does not allow having accurate projections for scale-up because it does not take into account economies of scale, programmatic efficiency gains, improved cost-effective utilization of existing capacity in the current system. Thus, the results of the current financial assessment should not be taken as an exact indication of how much money countries will need to additionally allocate for HIV programs, but rather a heads-up that HIV program managers on the country level urgently need to find ways to increase efficiencies of HIV programs and reduce ART procurement price if they are going to reach new HIV targets.

LIMITATIONS

There were several known limitations within this methodology:

- **Use of secondary data sources.** Because of limited resources available for this assessment, it sought to use only secondary data sources. Potential limitations arise from incomplete, unverified, or inconsistent data; and from variables that may have been defined or categorized differently across different existing data sources. This is particularly problematic for financial data, which may not be routinely disaggregated by service elements in existing records.
- **Lack of key population-specific data.** The lack of disaggregated HIV services data presents serious barriers to creating accurate treatment cascades to demonstrate access to services for each key population. This issue has been well-documented by other partners in the region.
- **Lack of expenditure data.** As previously noted during a similar regional analysis undertaken by the Eurasian Harm Reduction Network in neighboring countries, countries in the EECA region do not conduct routine expenditure tracking or analysis within the HIV response. As a result, it is not possible to track expenditures by category of spending, including program areas as a whole, or disaggregated by key population. For three of the seven countries included in this analysis, HIV program expenditure was completely unavailable.
- **Data insufficient for unit cost calculation:** As a result of lack of detailed expenditure data, it was not possible to calculate detailed expenditure per person (EPP), nor to assess service delivery unit costs for any of the countries in this analysis. In order to proceed with the third objective of this assessment, to calculate financial gaps, the assessment turned to existing unit cost data available from Optima studies previously done by countries. However, unit costing data were still only available for three out of the seven countries: Belarus, Kazakhstan, and the Kyrgyz Republic.
- **Financial gap analysis indicative, but not precise.** By utilizing existing unit cost data from Optima studies, the assessment was able to analyze unit costs alongside programmatic coverage gaps to calculate total financial gaps for investment in key population and PLHIV programming. However, the analysis should be considered indicative, and not precise, for two reasons:
 - While programmatic gap data came from 2014, the latest available Optima unit cost data were from 2012 and 2013, and therefore recent changes in commodity or service delivery pricing may not be reflected. To control for this, the assessment team conducted a rough calculation of EPP for 2014 and 2015 for each country (where data allowed), and judged that EPP in prevention services was similar enough to the Optima unit costs that they could be considered reliable for indicative analysis. This method of verification did not hold up for ART costs, however; it is assumed that this is because expenditure for ART may include only medication costs, and not include the higher costs associated with administration and clinical monitoring – highlighting why reliance on unit costs, even if slightly outdated, is more sound than using ART EPP based on unclear expenditure tracking method variation in each country.

- Simple calculation of unit costs by programmatic gaps does not take into account economies of scale, any programmatic efficiency gains, improved cost-effective utilization of existing capacity in the current system. Therefore, it may be expected that unit costs may decrease as more clients are covered, and result in cost savings which can be reinvested for further optimization. Therefore, these calculations should be considered indicative of additional financial need, but they should not discourage program planners from seeking further ways to optimize services and increase cost-efficiency.
- This assessment also assesses available data in terms of percentages, in order to compare country progress to international standard targets. However, all percentages presented here assume not only accuracy of the numerator (e.g. services received were adequate to meet international, evidence-based standards), but also of the denominator, which is a population size estimation. An underestimated denominator can have a significant impact on the actual coverage percentage.

CONCLUSION

The findings of the assessment reflect the overall **insufficient coverage of key populations with HIV prevention** in all sentinel countries. In 2014-2015 the best coverage rates have been reached, in general, for needle and syringe programs for PWID, and in some countries for sex workers. The largest gaps are for coverage with HIV prevention among MSM and opioid substitution programs (OST) for PWID. These gaps hinder success of HIV programs on the country level, as people who use drugs and MSM are the groups where large numbers of new HIV infections are found in EECA. Undermined role of HIV prevention among key population, reiterated by the findings of the report, decreases the efficiency of funding allocated into HIV programs.

All countries assessed show high percentage of population, which annually gets **HIV testing**. However, 'the first ninety' - the number of PWHIV who know about their status - has not been reached in any of them. A probable explanation for this is that most of these tests are performed among population groups with low or moderate risk of HIV, while annual testing rates among key populations are far from the optimal ones.

In all sentinel countries there are large gaps in 'the second ninety' - the proportion of PWHIV who receive **antiretroviral treatment**. In fact, by the beginning of 2016 enrolment and retention on ART of diagnosed PLHIV in EECA were, at best, three times lower than the international target. Linkages between testing and treatment and adherence and scarce availability of OST programs explain why such gaps take place.

The data on 'the third ninety' - the percentage of people who reached viral suppression - is largely missing. None of the countries has viral load data desegregated per key population.

Significant **additional funding** will be needed if EECA governments decide to reach international targets for HIV. As it has been shown through financial analysis in this report, reaching new international HIV treatment targets can request, at average, an 84,52% increase of overall HIV budget. In the context of gradual reduction of international funding, this can put a huge burden on domestic health budgets.

In terms of efficiencies, results of the study suggest that the following tactics can be considered by governments to reduce the financial burden:

- Reduction of national HIV programs administrative costs, which today are up to 39.2% -59.8% of the total HIV budget;
- Reduction of HIV procurement costs;
- Reduction of OST treatments costs through scaling-up treatment and reaching at least the recommended 40% of people with opioid dependency;
- Reallocation of HIV testing costs from programs for general population to key populations and having these tests conducted through harm reduction and other low-threshold services accompanied with quality counselling and linkages to care.

While the data collected as part of this assessment is valuable in getting the overall picture of programmatic coverage and financial gaps across EECA, the assessment was significantly hampered by lack of available, detailed expenditure data. This highlights the urgent need for all countries to institute expenditure tracking systems, in order to understand how and how much money is being spent on the HIV response. In addition, countries should assure regular analysis of expenditure data (at least biennially), in order to ascertain what is being bought with the money spent. These steps are absolutely critical both for programmatic transparency, and for the opportunity to identify potential efficiency gains. Without these underlying data and analyses, countries are not able to responsibly budget for the necessary increases in domestic expenditure that would be involved in scaling-up programming, nor are they able to consider the impact of decreasing international donor support for key populations across various elements of the HIV response.

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COVERAGE OF KEY POPULATION WITH HIV PREVENTION. DATA FOR 2015 (IF OTHER NOT SPECIFIED)

	Azerbaijan	Data source	Belarus	Data source	Estonia*	Data source
PWID total population estimate	71 283	4	75 000	13	9 000	20
NSP clients (actual)	3 800	5	39 491	13	5 550	18
PWID prevention % (actual)	5,33		52,65		61,67	
60% target for NSP coverage	42 770		45 000		5 400	
NSP programmatic gap	38 970		5 509		-150	
People with opioid dependency estimate	25 555	7	18 450	10	6 300	18
OST clients (actual)	155	4	978	13	987	18
40% target for OST coverage	10 222,00		7 380,00		2 520,00	
OST gap	10 067		6 402		1 533	
MSM total population estimate	6 572	4	60 000	13	9 000	19
MSM clients (actual)			6 693	13		18
MSM prevention % (actual)	0,00		11,16		0,00	
60% target for MSM coverage	3 943		36 000		5 400	
MSM prevention gap	3 943		29 307		5 400	
SW total population estimate	25 054	4	22 000	13	3 000	19
SW clients (actual)	3 500	5	6 299	13	300	18
60% target for SW coverage	15 032		13 200		1 800	
SW prevention% (actual)	13,97		28,63		10,00	
SW prevention gap	11 532		6 901		1 500	

Kazakhstan	Data source	Kyrgyzstan**	Data source	Russia	Data source	Uzbekistan	Data source
128 700	27	25 000	49	2 500 000	50	48 000	59
61 133	27	14 356	44	13 197	50	28 114	60
47,50		57,42		0,53		58,57	
77 220		15 000		1 500 000		28 800	
16 087		644		1 486 803		686	
97 746	35	7 500	42				
292		1 234	44	0		0	
39 098,40		3 000,00					
38 806		1 766					
27 890	27	22 000	48	1 500 000	50	3 000	59
6 660	27	2 203	44	11 998	50	1 506	60
23,88		10,01		0,80		50,20	
16 734		13 200		900 000		0	
10 074		10 997		888 002		-1 506	
19 050		7 100	48	1 000 000	50	28 000	59
16 995	27	4 902	44	7 000	50	10 916	60
11 430	27	4 260		600 000		16 800	
89,21		69,04		0,70		38,99	
-5 565		-642		593 000		5 884	

* Coverage numbers are less than reported in National Report (20) and are based on the communication with the NIHD (18), which provided more accurate datum

** Number of clients for 2014

COVERAGE OF KEY POPULATION WITH HIV TESTING. DATA FOR 2015 (IF OTHER NOT SPECIFIED)

	Azerbaijan	Data source	Belarus	Data source	Estonia*	Data source
PWID total population estimate	71 283	4	75 000	13	9 000	20
PWID testing (actual)	4085	8	5487	19	0	19
PWID testing % (actual)	5,73		7,32		0,00	
75% target for PWID coverage	53 462		56 250		6 750	
PWID testing gap	49 377		50 763		6 750	
MSM total population estimate	6 572	4	60 000	13	9 000	19
MSM testing (actual)	137	8	38700	9	300	19
MSM testing % (actual)	2,08		64,50		3,33	
75% target for MSM coverage	3 943		45 000		5 400	
MSM testing gap	3 806		6 300		5 100	
SW total population estimate	25 054	4	22 000	13	3 000	19
SW testing (actual)	68	8	14586	9	0	19
75% target for SW testing coverage	15 032		16 500		1 800	
SW prevention%	0,27		66,30		0,00	
SW testing gap	14 964		1 914		1 800	
General population	8172000		9513000		1312000	
All tests performed	561838	8	n/d		158577	19
General population testing coverage	6,88		n/d		12,09	

Kazakhstan	Data source	Kyrgyzstan	Data source	Russia	Data source	Uzbekistan	Data source
128 700	27	25 000	49	2 500 000	50	48 000	59
50756	32	10750	39	241547	55	7143	59
39,44		43,00		9,66		14,88	
96 525		18 750		1 875 000		36 000	
45 769		8 000		1 633 453		28 857	
27 890	27	22 000	48	1 500 000	50	3 000	59
1824	32	8800	39	2781	55	20	59
6,54		40,00		0,19		0,67	
16 734		13 200		900 000		1 800	
14 910		4 400		897 219		1 780	
19 050		7 100	48	1 000 000	50	28 000	59
18764	32	3969	39	0	55	2600	59
11 430		4 260		600 000		16 800	
98,50		55,90		0,00		9,29	
-7 334		291		600 000		14 200	
17540000		5957000		144100000		31300000	
2721269	32	436347	47	30661034	55	3098748	59
15,51		7,32		21,28		9,90	

* Testing coverage for 2014

HIV TREATMENT CASCADE. DATA FOR 2015 (IF OTHER NOT SPECIFIED)

	Azerbaijan	Data source	Belarus	Data source	Estonia*	Data source
Estimate PLHIV	11 900	2	35000	13	13500	19
Knowledge of Status	4444	2	15378	13	9263	19
% of Knowledge of Status*	37,34		43,94		68,61	
In Care	4298	2	10799	13	5626	19
% of In Care*	36,12		30,85		41,67	
On ART	3033	2	7392	13	3494	19
% of ART*	25,49		21,12		25,88	
Viral Suppression	2032	2	2757	13	no data	19
%of Viral Suppression*	17,08		7,88			

Kazakhstan	Data source	Kyrgyzstan	Data source	Russia	Data source	Uzbekistan	Data source
26690	27	9102	47	1300000	55	35000	56
17726		5059		1006388	55	30315	56
66,41		55,58		77,41		86,61	
	27		47	620119	55		56
				47,70			
6285	27	2 015	47	230022	55	10948	56
23,55		22,14		17,69		31,28	
3416	ECDC (2017)	1030	ECDC (2017)	no data		no data	
12,80		11,32					

* Of the total PLHIV

