

## REPUBLIC OF SERBIA:

Benchmarking sustainability  
of the HIV Response among  
Key Populations in the Context  
of Transition from Global  
Fund's support to domestic  
funding

Maja Stosic, MD, PhD

# Country overview

<b>Table 1</b>	<b>2020</b>
Population, million	6.9
GDP, current US\$ billion	53.0
GDP per capita, current US\$	7673.3
Upper middle-income poverty rate (\$5.5) <sup>a</sup>	19.8
Gini index <sup>a</sup>	37.2
School enrollment, primary (% gross) <sup>b</sup>	99.6
Life expectancy at birth, years <sup>b</sup>	75.9

Source: WDI, Macro Poverty Outlook, and official data.

Notes:

(a) Most recent value (2017), 2011 PPPs.

(b) WDI for school enrollment (2019); life expectancy (2018).



- Average life expectancy is lower than the average life expectancy found across countries of the European Union (EU).
- Positive trends can be seen in the reduced incidence of tuberculosis (TB) as well as of HIV, and in infant and maternal mortality, respectively.
- Cancer incidence rates are increasing, making it one of the main causes of death, along with ischemic coronary diseases and cerebrovascular diseases.
- Tobacco consumption remains high with 30.5% of the population being daily smokers in 2019.
- Obesity rate among adults (20.0%) is slightly below the EU average of 22.5%

# Health system overview

- ▶ Serbia spends a considerable amount of its resources on health care.
- ▶ In 2017, total health expenditure accounted for 8.8% of GDP.
- ▶ Public sources of health funding decreased over the last two decades from 79.2% in 1995 to 57.6% in 2017, while private expenditure on health is a significant source of financing, amounting to 42.4% of total health expenditure in 2017.
- ▶ Most health facilities are publicly owned.
- ▶ The main purchaser of publicly funded health services is the National Health Insurance Fund (NHIF).
- ▶ Serbian citizens, as well as people with permanent or temporary residence, have the right to access publicly funded health services.
- ▶ Almost the entire population (94%) is covered by health insurance, and out of those insurance contributions for 20% of the population is financed from the central state budget.
- ▶ Although the country has a comprehensive universal health system with free access to health care, there are inequities in the utilization of health services with limited access to health care for vulnerable groups.
- ▶ Out-of-pocket (OOP) payments by patients, in the form of co-payments and direct payments, make up most of this private spending (around 96% of it) while voluntary health insurance (VHI) makes up less than 1% of total health spending.
- ▶ Publicly owned health institutions comprise a wide network at the primary, secondary and tertiary level and are overseen by the Ministry of Health. As of 2019, this network comprised 350 health institutions with a total of 100,880 employees in the publicly owned health sector.
- ▶ National legislation has allowed private health care services to operate since 2005, but their operation is poorly regulated.

# HIV/AIDS situation in the country

- ▶ Cumulatively, 4,066 people were living with HIV from 1984 to the end of 2019. Of them, 2,036 people suffered from AIDS (50% of all registered persons with HIV).
- ▶ A total of 210 new HIV cases were registered in 2019 (making an incidence rate of 3.01 per 100,000 inhabitants).
- ▶ At the end of 2019, there were 2,780 persons diagnosed with HIV in the country.
- ▶ Homosexual contact is the main mode of transmission. 80% of all new cases (169) in 2019 were registered among MSM.
- ▶ The second most frequent mode of HIV transmission is through unprotected heterosexual contact (21 persons, 10% of all registered cases in 2019). HIV incidence among people who inject drugs (PWID) continues to decrease (two persons, or 1%, in 2019 compared to 8% in 2009 and 70% in 1991, respectively) .

# HIV/AIDS situation in the country/2

- ▶ According to UNAIDS, there were an estimated 3,200 people living with HIV in Serbia in 2019, with 2,800 people aware of their HIV status (87.5%).
- ▶ Of these, 2,100 people were on antiretroviral therapy (ART) (75%) and, of those, 1,900 have achieved viral suppression (90.5%) , which is 59.4% of the total estimated number of PLHIV.
- ▶ The prevalence of HIV in the general population is low and, according to UNAIDS estimates, is less than 0.1% .
- ▶ According to available data, **late diagnosis** of HIV is an issue in Serbia. Thus, in 2019, HIV was diagnosed at a late stage, i.e. when the initial CD4 cell count is below 350/mm , in 60.0% of individuals and in an advanced stage, when the initial CD4 cell count is below 200/mm , in 38% of individuals for whom CD4 count data were available at the time of diagnosis.
- ▶ Late diagnosis of HIV results in a poorer response to ART and death. Hence, it is extremely important to diagnose HIV as early as possible.

# HIV/AIDS prevention and control

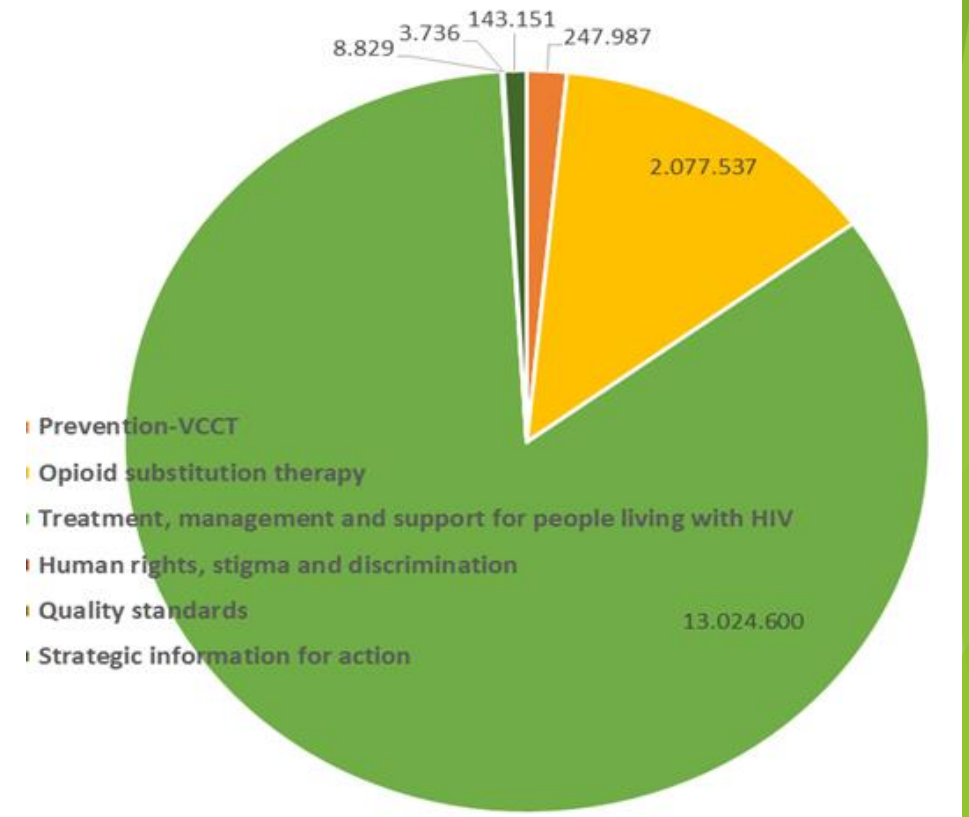
- ▶ It has been implemented within the National Program for Health Protection of the Population from Infectious Diseases based on the National Strategy for HIV Prevention and Control, 2018-2025, and the related Action Plan for 2018-2021.
- ▶ The program is performed by health institutions and other forms of health service, state administration and civil society organizations.
- ▶ Support from the Global Fund from 2006 to 2014 was fundamental in defining national policy for the HIV response (development of National HIV Strategy and National Transitional Plan)
- ▶ According to Institute of Public Health of Serbia report, coverage of HIV prevented programs dropped sharply after the termination of the Ministry of Health programme financed by the Global Fund in 2014. From October 2019, these programmes have been supported by Ministry of Health through co-financing from the Global Fund.

**Table 3. Global Fund allocations for HIV to Serbia for HIV, 2003-2019**

Principal Recipient	Grant number	Grant start date	Grant end date	Budget
Ministry of Health	SRB-H-MOH	2019-07-01	2022-06-30	USD1,474,640
Ministry of Health	SER-809-G04-H	2009-07-01	2014-09-30	USD6,183,547
Youth of JAZAS	SER-809-G05-H	2009-07-01	2014-06-30	USD3,451,968
Ministry of Health	SRB-607-G03-H	2007-06-01	2012-05-31	USD12,460,312
Economic Institute, Belgrade	SRB-102-G01-H-00	2003-11-01	2007-01-31	USD3,575,210

# HIV/AIDS prevention and control

- ▶ Total budget allocated for HIV/AIDS prevention and control in 2019 was 1.727.428.408 RSD (16,054,167 USD), while funds allocated by the Ministry of Health (MoH) and National Health Insurance Fund (NHIF) for 2019 was 1.668.428.408 RSD (15,505,840 USD).
- ▶ The majority of MoH and NHIF budget (84%) is allocated for HIV/AIDS treatment, management and support, while only 1.6% for prevention (voluntary confidential HIV counseling and testing).



# The aim of the analysis

- ▶ To assess the fulfilment of HIV-related sustainability commitments given by the Government of Serbia in the context of the transition from Global Fund support to national funding.





# Assessment process in Serbia

Identification of key public commitments related to the HIV response through a desk review of available documents.

The commitments were derived from:

- Strategic documents endorsed by the Government of Serbia, including the National Strategy for HIV Prevention and Control 2018-2025, with an Action Plan for the period 2018-2021; Regulation of the Programme of Health Protection of the Population from Infectious Diseases, the Drug Abuse Prevention Strategy and the National Youth Strategy.
- Documents submitted by the Government within the funding request to the Global Fund: Letter of Commitment of the Ministry of Health to the Global Fund signed 27 April 2018
- Documents developed within the Regional Global Fund project implemented by the consortium of organisations from the Eastern Europe and Central Asia (EECA) region- the National Transition Plan from Global Fund support to national funding;

# Assessment process in Serbia/2

Prioritisation of commitments were performed based on the guidelines according to the National Reference Group assessment of relevance to the programme, relevance in terms of sustainability, implementation status so far and availability of data.

The National Reference Group was composed of 8 representatives of different governmental and non-governmental sectors involved in HIV programme planning and implementation.

Data collection and data analysis were based on the TMT. As the part of the analysis, transitional scores were calculated for each commitment by health system domains and by programmatic area.

The scoring has been conducted in accordance with the Legend, with description of scoring definitions as shown below, as specified in the Transitional Monitoring Tool.

# Assessment process in Serbia/3

A comprehensive review and analysis of available documents and reports was performed, including a review of the Global Fund grant documents and reports on HIV and AIDS prevention and control programme implementation in Serbia. Since the National HIV/AIDS Prevention and Control Strategy was developed in 2018 and endorsed in late 2018, targets for the period 2019-2021 were used in the analysis.

In the absence of data for 2020 or 2021, data from 2019 was used.

Publicly available data from the Institute of Public Health of Serbia "Dr Milan Jovanović Batut were used, program and financial data obtained from CSO's, laws and bylaws of the Republic of Serbia, national strategies, programs in the field of prevention and control of HIV and AIDS, health care published data of the Chamber of Health Workers, the Chamber of Social Workers, and others.

# Limitations

First, monitoring and evaluation plans for some of the health policy documents used in the analysis (National Youth Strategy and Drug Abuse Prevention Strategy) were not developed and there were no targets for the period covered by this analysis.

In such cases, the targets were set as simple mean values between baseline and final targets.

In addition, in some cases, the calculations for indicators have been performed based on achievement of one year, since the process of data collection for 2020 was not finalized by the time this report went to press.

Finally, the public health threat of international concern caused by the new coronavirus (SARS CoV-2) has significantly contributed to the difficult circumstances of collecting and processing relevant data.

Despite these limitations, this analysis provides important information for health policy and planning and for future improvements of HIV prevention and control in Serbia.

# Results of the assessment



- ▶ An increasing trend of newly diagnosed HIV cases has been apparent in Serbia over the last ten years, from 149 diagnosed in 2010 to 210 in 2019.
- ▶ In addition, there has been a decreasing trend of AIDS mortality, with 26 people in 2010, making a mortality rate of 0.31 per 100,000, while 21 died in 2019 with a corresponding mortality rate of 0.26 per 100.000.
- ▶ Coverage with HIV prevention programs implemented by CSOs has slightly increased among the MSM population, from 2% in 2015 to 6.5% in 2019 of the estimated size of the MSM population in Serbia. Coverage VCCT among CSW's decreased from 5% in 2015 to 2.5% in 2019. Coverage with prevention programs for PWUD continues to be low, with HIV testing coverage ranging from 1% in 2015 to 2% in 2019, and coverage with needles and syringes exchange programs from 2% in 2015 to 2.5 % in 2019.
- ▶ In addition, the percentage of PWID living with HIV has increased. An increasing trend was also noticed related to enrolment of PLHIV in treatment and the level of viral suppression of PLHIV on treatment.

# Transition and impact on the epidemic

Table 7. The impact and outcome indicators of the HIV epidemic in Serbia<sup>43,44</sup>

Indicator	Baseline	(Baseline year)	Target 2019	Target 2020	Target 2021	Data 2019
Number of new HIV infections	180	2018	150	100	50	210
Number of deaths due to AIDS per 100,000 population	0.34	2018	0.28	0.22	0.14	0.26
Increase in coverage of HIV testing of key populations	0.02	2018	0.11	0.16	0.24	0.05
Share of PWID among PLHIV	0.02	2018	0.02	0.02	0.01	0.03
Increase in coverage of PLHIV with treatment	0.28	2018	0.3	0.36	0.42	0.66
Increased share of PLHIV who are virally suppressed	0.57	2018	0.59	0.61	0.65	0.60

The background features a series of overlapping, semi-transparent green geometric shapes, primarily triangles and trapezoids, that create a sense of depth and movement. The colors range from a light, pale green to a vibrant, saturated lime green. The shapes are layered, with some appearing to be in front of others, creating a dynamic, modern aesthetic. The overall composition is clean and professional, suitable for a corporate or academic presentation.

Achievement  
by health  
system domains

# Financing

No.	Health System Domain	Programmatic Area	Analysis	Average Performance by Area	Evaluation	Final evaluation
<b>D 1</b>	<b>Financing</b>			<b>87%</b>	<b>Substantial progress</b>	<b>Moderate progress</b>
D.1.1.	Increasing funding of HIV prevention programmes for key populations at risk	HIV Prevention	173%			Despite the fact that overinvestment in the first commitment has led to substantial progress for the health financing domain, the government has failed to make any investment in its second commitment, hence the overall progress was downgraded to 'Moderate'.
D.1.2.	Ensure financing of PEP and PrEP by the National Health Insurance Fund	HIV Prevention	0%			



# Drugs, supplies and equipment

No.	Health System Domain	Programmatic Area	Analysis	Performance by Area	Evaluation	Final evaluation
<b>D 2</b>	<b>Drugs, supplies and equipment</b>			<b>68%</b>	<b>Average progress</b>	<b>Average progress</b>
D.2.1.	Ensure access to new registered ARV drugs	HIV Treatment	140%			The Government has been successful in allocating funds for procurement earlier than the date committed. However, a particular concern are stock-outs reported each year.
D.2.2.	Ensure regular procurement of quality assured needles and syringes	HIV Prevention	100%			
D.2.3.	Ensure prevention of stock-outs of needles and syringes	HIV Prevention	0%			
D.2.4.	Ensure regular procurement of quality assured condoms and lubricants	HIV Prevention	100%			
D.2.5.	Ensure prevention of stock-outs of condoms and lubricants	HIV Prevention	0%			

# Service Provision

No.	Health System Domains	Programmatic Area	Analysis	Average Performance by Area	Evaluation	Final evaluation
<b>D 3</b>	<b>Service Provision</b>			<b>127%</b>	<b>Significant Progress</b>	<b>Significant Progress</b>
D 3.1.	Provide VCT for HIV, other STIs and hepatitis for key populations at risk	HIV Prevention	230%			Significant progress has been observed in all areas of service provision except of PrEP.
D 3.2.	Provide support programs to PLHIV	HIV Prevention	120%			
D 3.3.	Improved existing and created new prevention programs for key populations at risk	HIV Prevention	128%			
D 3.4.	Ensure access to PrEP to key populations at risk	HIV Prevention	0%			
D 3.5.	Improved availability of programs for the prevention of sexually transmitted infections, HIV / AIDS and the preservation of reproductive health in youth population	HIV Prevention	133%			
D 3.6.	Improved availability of youth prevention programs	HIV Prevention	151%			

# Governance

No.	Health System Domains	Programmatic Area	Analysis	Average Performance by Area	Evaluation	Final evaluation
<b>D 4</b>	<b>Governance</b>			<b>61%</b>	<b>Average progress</b>	<b>Fairly low</b>
D 4.1.	Prepare national treatment protocol for HIV/AIDS	HIV Treatment	0%			Despite the average progress rating, this is driven by progress in two areas only, while in 4 out of 6 areas, no progress has been observed. Therefore, achievement is assessed as fairly low.
D 4.2.	Development of protocol for PrEP	HIV Prevention	0%			
D 4.3.	Develop standards for providing HIV preventive services in community for key populations at risk	HIV Prevention	100%			
D 4.4.	Certification of preventive service providers in in line with the developed standards	HIV Prevention	0%			
D 4.5.	Revision of existing regulations in order to implement innovative prevention and support services with respect for human rights related to HIV	Human Rights	267%			
D 4.6	Develop new guidelines for testing on HIV, STIs and hepatitis	HIV Prevention	0%			

# Data and Information

No.	Health System Domains	Programmatic Area	Analysis	Average Performance by Area	Evaluation	Final evaluation
<b>D 5</b>	<b>Data and Information</b>			<b>58%</b>	<b>Average progress</b>	<b>Average progress</b>
D 5.1.	Development and Adoption of National M&E Plan for HIV/AIDS	HIV Prevention	80%			
D 5.2.	Ensure implementation of periodic IBBS survey among key populations	HIV Prevention	100%			
D 5.3.	Ensure implementation of periodic impact and outcome HIV program evaluation	HIV Prevention	50%			
D 5.4.	Optimization and digitalization of CSO reporting documentation	HIV Prevention	0%			

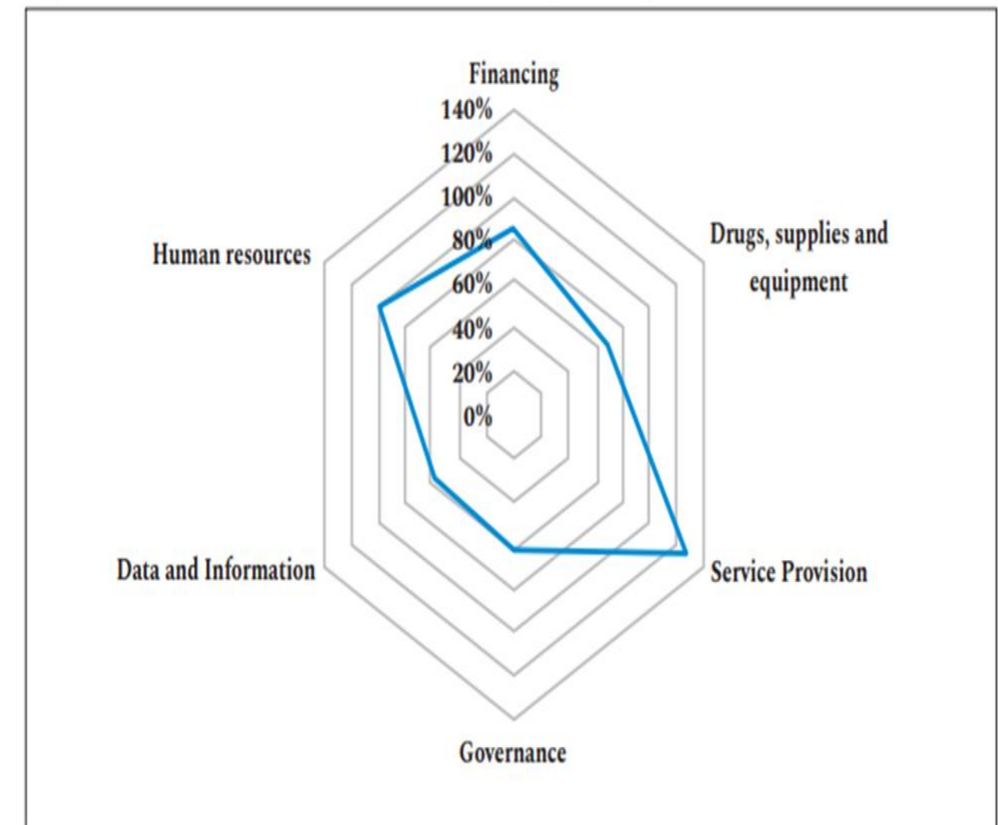
# Human resources

No.	Health System Domains	Programmatic Area	Analysis	Average Performance by Area	Evaluation	Final evaluation
D 6	Human resources			100%	Significant progress	Significant Progress
D 6.1.	Trainings of HCW and civil society organization on HIV programmatic issues	HIV prevention	100%			Given the data for 2020 and 2021 are not available now and the achievement made in 2019 is rated as significant progress, it is suggested as the domain final rating.

# Overall achievement by health system domains

Significant progress was achieved in service delivery and human resources, average progress in drugs, supplies and equipment as well as with data and information, while moderate progress has been achieved in health financing and fairly low progress in governance.

No.	Health System Domain	Average performance by domain (%)	Final evaluation
1	Financing	87%	Moderate progress
2	Drugs, supplies and equipment	68%	Average progress
3	Service provision	127%	Significant progress
4	Governance	61%	Fairly low progress
5	Data and information	58%	Average progress
6	Human resources	100%	Significant progress





# Achievements by programmatic areas

No	Commitment	Health System Domain	Final evaluation
1	Increasing funding HIV prevention programs in key populations at risk	Financing	Significant progress
2	Ensure financing of PEP and PrEP by the National Health Insurance Fund	Financing	Low progress
3	Ensure regular procurements of quality assured needles and syringes	Drugs, supplies and equipment	Significant progress
4	Ensure prevention of stock outs of needles and syringes	Drugs, supplies and equipment	Low progress
5	Ensure regular procurements of quality assured condoms and lubricants	Drugs, supplies and equipment	Significant progress
6	Ensure prevention of stock outs of condoms and lubricants	Drugs, supplies and equipment	Low progress
7	Provide VCT for HIV, other STIs and hepatitis for key populations at risk	Service Provision	Significant progress
8	Provide support programs to PLHIV	Service Provision	Significant progress
9	Improved existing and created new prevention programs for key populations at risk	Service Provision	Significant progress
10	Ensure access to PrEP to key populations at risk	Service Provision	Low progress
11	Improved availability of programs for the prevention of sexually transmitted infections, HIV / AIDS and the preservation of reproductive health in youth population	Service Provision	Significant progress
12	Improved availability of youth prevention programs	Service Provision	Significant progress
13	Development of protocol for PrEP	Governance	Low progress
14	Develop standards for providing HIV preventive services in community for key populations at risk	Governance	Significant progress
15	Certification of preventive service providers in in line with the developed standards	Governance	Low progress
16	Develop new guidelines for testing on HIV, STIs and hepatitis	Governance	Low progress
17	Development and Adoption of National M&E Plan for HIV/AIDS	Data and information	Substantial progress
18	Ensure implementation of periodic IBBS survey among key populations	Data and information	Significant progress
19	Ensure implementation of periodic impact and outcome HIV program evaluation	Data and information	Average progress
20	Optimization and digitalization of CSO reporting documentation	Data and information	Low progress
21	Trainings of HCW and civil society organisation on HIV programmatic issues	Human resources	Significant progress

## HIV prevention among key populations



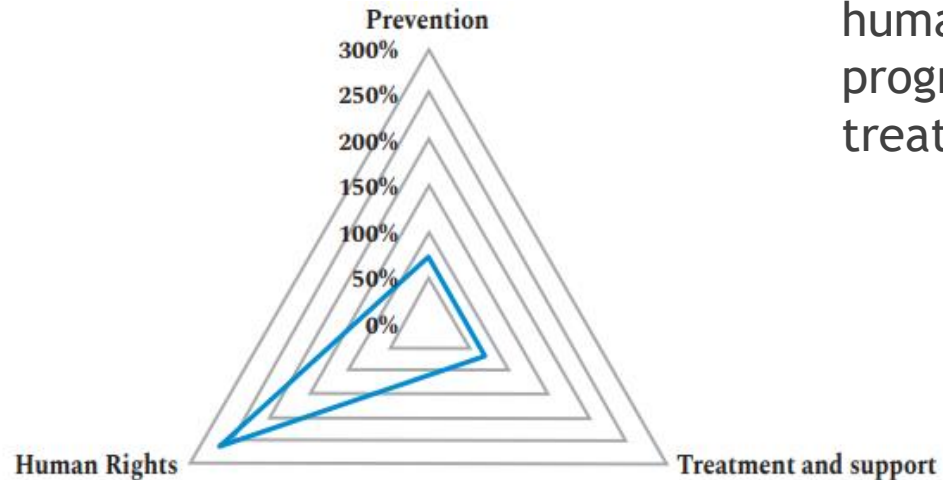
# Treatment and Support

No	Commitment	Health System Domain	Final Evaluation
1	Ensure access to newly registered ARV drugs	Drugs, supplies and equipment	Significant progress
2	Prepare national treatment protocol for HIV/AIDS	Governance	Low progress

# Human Rights

No	Commitment	Health System Domain	Final Evaluation
1	Revision of existing regulations in order to implement innovative prevention and support services with respect for human rights related to HIV	Governance	Significant Progress

# Overall achievement by programmatic areas



Significant progress has been made in respect of human rights, while there has been substantial progress in the commitments related to prevention, treatment and support.

No.	Programmatic Area	Achievement performance by programmatic area (%)	Final evaluation
1.	Prevention	75%	Substantial progress
2.	Treatment and support	70%	Substantial progress
3.	Human Rights	267%	Significant progress

# Recommendations:

In the forthcoming period, it is recommended that:

- ✓ Public Health Institutes and CSOs increase HIV testing coverage, linkage to care, as well as support to treatment adherence by PLHIV;
- ✓ the Ministry of Health maintain sustainable governmental funding of the HIV prevention programme after the completion of the Global Fund grant, including funding for the procurement of quality assured commodities, such as needles, syringes, condoms and lubricants by CSOs under government supervision and to ensure supply without stock-outs;
- ✓ the functionality of the CCM be established by the Ministry of Health by the end of 2021;
- ✓ the National M&E Plan for HIV/AIDS be adopted;
- ✓ the Government Committee for HIV/AIDS and tuberculosis adopt the Transition Plan from Global Fund support to national funding for the period 2020-2022;
- ✓ collaboration between HIV experts, community organisations and networks, implementers, researchers, and partners from the country be facilitated under the umbrella of the CCM (National Committee for HIV/AIDS and tuberculosis) to develop PrEP guidelines, criteria for offering PrEP and to make a proposal to the National Health Insurance Fund to allocate funds and expand the indications of the already registered ARV drugs to be used for PrEP;
- ✓ public health experts and clinicians develop new guidelines for testing of HIV, STIs and hepatitis, and a treatment protocol for HIV/AIDS, by the end of 2021;

- ✓ a governmental certification body be established to perform certification of CSOs who provide HIV preventive services outside of the health care system, in line with the developed standards of preventive services;
- ✓ awareness of PLHIV be increased related to anti-discriminatory laws and modalities for human rights protection and to sensitise professionals from the health care, social welfare, labour and employment, and education sectors to work with PLHIV and to create a supportive, non-discriminatory, environment for them;
- ✓ funding be provided for, and periodic studies be implemented at least every three years, which allow for the monitoring and evaluation of the HIV situation in the country, namely, an IBBS among key populations, and evaluation of the impact and outcomes of the HIV programme;
- ✓ optimisation and improvement of programmatic reporting by CSOs to the Public Health Institute of Serbia be ensured through consensus between CSOs and the Public Health Institute.
- ✓ implementation of continuous education of governmental and CSO programme implementers be ensured regarding all programmatic issues;
- ✓ CSOs and communities should monitor and follow the extent to which the government's commitments are fulfilled for priority areas in the HIV response, based on the methodology used in this assessment;
- ✓ commitments related to community system strengthening and advocacy be included in the next assessment.

This assessment report should be used to assist CSOs, key population groups, government and other stakeholders to stay more informed and engaged in the monitoring of the transition process from donor to domestic funding and to thereby advocate for the implementation of activities that will lead to a sustainable national HIV response.



Thank you for  
your  
attention