

DESCRIBES THE COMPOSITION OF
MAJOR INVESTMENTS IN THE
NATIONAL AIDS RESPONSE

BELARUS

NATIONAL AIDS SPENDING ASSESSMENT 2008-2011

Anna Yakusik

Acknowledgements

This report presents the findings of Belarus HIV/AIDS resource tracking exercise for the financial years 2008-2011. The report is a product of a continuous collaborative effort of the Ministry of Health, UNAIDS and UNDP country offices in Belarus in HIV resource tracking. The report aims to encourage discussions around HIV resources allocation and provides evidence for national policymakers and donors to guide their strategic planning in HIV/AIDS.

The study was conducted by multidisciplinary national working team, including experts and specialists of the Ministry of Health; National and Regional Centers for Hygiene, Epidemiology and Public Health; the Project of the UNDP and the Ministry of Health "Prevention and Treatment of HIV/AIDS in the Republic of Belarus", funded by the Global Fund to Fight AIDS, Tuberculosis and Malaria; UNAIDS and civil society organizations. The data were collected from government ministries, public health care organizations, donors, nongovernmental organizations and aid funds. We would like to thank health care organizations, institutions, HIV/AIDS departments on all regions of the country for their effort and commitment in providing information for conducting National AIDS Spending Assessment in Belarus. Without their contribution this report would not have been possible.

National working team appreciates the technical support provided by UNAIDS and UNDP, and would like to acknowledge and commend Carlos Avila Figueroa, Christian Arán Fernández, UNAIDS/Switzerland; Alena I. Tkachova, Ministry of Health/Belarus; Volha Kuzmianok, Olga Atroshchanka, Oleg Dubovik, UNDP/Belarus; Eleanora Gvozdeva, Ilona Urbanovich-Sauka, UNAIDS/Belarus; whose expertise contributed to the initial introduction and further support of HIV resource tracking in Belarus.

Anna Yakusik, Health Financing Consultant, contributed into design, conception and analysis of the study, and drafted the National AIDS Spending Assessment report.

This study was funded by UNAIDS and the Project of the UNDP and the Ministry of Health "Prevention and Treatment of HIV/AIDS in the Republic of Belarus".

BELARUS

National AIDS Spending Assessment 2008-2011

MINISTRY OF HEALTH

NATIONAL CENTRE FOR HYGIENE, EPIDEMIOLOGY AND PUBLIC HEALTH

UNDP IN BELARUS

UNAIDS IN BELARUS

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ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
ART	antiretroviral therapy
ARVs	antiretrovirals
ASC	AIDS spending category
BP	beneficiary population
BYR	Belarusian Ruble
FA	financing agents
FS	financing sources
GDP	Gross Domestic Product
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
HIV	Human Immunodeficiency Virus
IDUs	injecting drug users
MARPs	most-at-risk populations
M&E	monitoring and evaluation
NASA	National AIDS Spending Assessment
NHA	National Health Accounts
n.e.c.	not elsewhere classified
OIs	opportunistic infections
OVC	orphans and vulnerable children
PLHIV	people living with HIV
PMTCT	prevention of mother-to-child transmission
PS	providers of services
STIs	sexually transmitted infections
CSWs	commercial sex workers
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV and AIDS
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
US\$	United States Dollar
VCT	voluntary counseling and testing
WHO	World Health Organization

Key NASA findings, Belarus 2008 - 2011

Table 1: Summary table of **key NASA findings** in Belarus between 2008 and 2011¹

	2008	2009	2010	2011
Total estimated HIV expenditure				
Public & international funding	BYR 39,768 m	BYR 46,525 m	BYR 59,045 m	BYR 111,357 m
Total estimated HIV expenditure				
Public & international funding	US\$ 18.6 m	US\$ 16.7 m	US\$ 19.7 m	US\$ 19.9 m
Total estimated HIV expenditure per capita				
Public & international funding	US\$ 1.9	US\$ 1.8	US\$ 2.1	US\$ 2.1
Financing sources distribution as a % of total estimated HIV expenditure				
Public	72.72%	68.14%	67.16%	48.67%
International	27.28%	31.86%	32.84%	51.33%
Financing agents distribution as a % of total estimated HIV expenditure				
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Providers of services distribution as a % of total estimated HIV expenditure				
Public	88.60%	80.00%	77.33%	63.95%
Private – NGOs	6.80%	10.00%	11.00%	13.65%
International – Multilateral agencies	4.60%	10.00%	11.67%	22.40%
Key intervention areas as a % of total estimated HIV expenditure				
Prevention	66.42%	60.36%	66.88%	54.53%
Care & treatment	13.85%	17.14%	14.30%	18.27%
Orphans and vulnerable children	0.50%	0.60%	0.00%	0.00%
Program management	10.80%	14.22%	8.86%	18.86%
Human resources	3.48%	4.42%	7.34%	4.86%
Social protection and social services	1.75%	1.69%	0.99%	1.03%
Enabling environment	0.98%	1.53%	1.56%	2.24%
HIV-related research	2.21%	0.03%	0.07%	0.23%

¹ Note, that national AIDS spending assessment doesn't include overall spending of public health care setting institutions on "Safe medical injections" and "Universal precautions", which accounted up to around US\$ 15 million in 2008. It is very likely that these results for these types of expenditure still hold true.

EXECUTIVE SUMMARY

Towards a comprehensive estimate of national spending on AIDS in Belarus

Background

Comprehensive information about national spending on AIDS response is crucial for health policy development and evaluation. This study provides an overview of the overall level and composition of major investments in national AIDS response in Belarus for the period between 2008 and 2011 introducing National AIDS Spending Assessment (NASA) as a method for the purpose. The overall objective behind performing National AIDS Spending Assessment in Belarus was to better understand spending patterns on national AIDS response and analyze HIV spending priorities.

Methods

National spending on AIDS in Belarus was examined by major funding sources with the use of national statistics, sector reports, and data reported by public health service institutions for the years between 2008 and 2011. Standard accountancy estimation methods were used to generate a complete dataset of national spending on AIDS. Costs were broken down by financing sources, agents, service providers, AIDS spending categories, and beneficiary populations using functional NASA classifications and definitions. Data collection covered spending on AIDS response funded from domestic public and international funding sources.

Results

Belarus has been putting substantial efforts towards meeting the national targets of universal access to treatment, care and support to people living with HIV. NASA findings suggest that total annual investments in national AIDS response from both public and international funding sources in Belarus has remained relatively stable and accounted for about US\$ 20 million annually. Estimated HIV expenditure per capita from public and international funding sources remained flat and accounted for about US\$ 1.9 in 2008; US\$ 1.8 in 2009; US\$ 2.1 in 2010 and 2011. The biggest share of AIDS investments between 2008 and 2010 was supported by the public budget (73% in 2008; 68% in 2009; 67% in 2010), although declined and accounted for about 49% in 2011 due to economic crisis influence and national currency devaluation. Charts below represent national AIDS investments in Belarus by funding source presented in national currency and in US dollars for the period of four years between 2008 and 2011.

In 2008-2011, the most significant share of funding was channeled on preventive activities - more than half of total investments annually. In 2011, expenditure on prevention from domestic public sources of funding declined by about 30% causing significant decline in total domestic public

investments in national AIDS response - about 26% decrease from 2010. Expenditure on care & treatment remained stable with slight increase from both domestic public and international funding sources between 2008 and 2011.

Among the most funded HIV-related interventions from domestic public sources were the following: voluntary, provider-initiated, and mandatory counseling & testing; prevention, diagnosis, and treatment of sexually transmitted infections (STIs), targeting general population; prevention of mother-to-child transmission (PMTCT), including counseling & testing of pregnant women, and delivery practices; blood safety to ensure a safe supply of blood and blood products; outpatient and inpatient opportunistic infections (OIs) prophylaxis and treatment. Spending patterns show that overall in the period between 2008 and 2011 major domestic public investments were channeled on secondary preventive activities, as well as on care & treatment rather than primary prevention. Domestic public spending was also channeled on covering current costs of health care provider institutions (current running costs).

Matching epidemiological context, international funding priorities in the period between 2008 and 2011 were more concentrated on preventive activities for key vulnerable (prisoners) and most-at-risk populations (IDUs, SW, MSM); full supply of antiretroviral medicines (pharmaceuticals); on providing supplementary drugs for opportunistic infections (OIs) prophylaxis and treatment; providing tests for specific HIV-related laboratory monitoring; on upgrading infrastructure and providing of new equipment for service provider institutions.

While expenditure on priority areas – preventive programs for most-at-risk populations (IDUs, SW, MSM), PMTCT, and ART – increased gradually between 2008 and 2011, its share in total national HIV investments didn't exceed 25% annually. Total amount spent on priority interventions have been increasing rapidly and accounted for about US\$ 5 million in 2011 (US\$ 4.3 million in 2010).

Conclusions

The implementation of NASA in Belarus showed its applicability for conducting HIV expenditure reviews in national context, and proved to be a useful tool to understand national AIDS response from financial aspect, and to assess the extent to which investment pattern matches epidemic pattern. The data and experience obtained will help build capacity for future resource tracking activities in Belarus. Prevention programmes for vulnerable (prisoners), high risk groups (IDUs, SW, MSM), prevention of HIV transmission aimed at PLHIV, psychological treatment and support services for PLHIV, ART (pharmaceuticals) are the key areas which are considerably dependent on international aid. Besides, civil society organizations working with high risk groups, key vulnerable populations and PLHIV are entirely supported by international aid. This fact draws attention in terms of development of future strategy on funding mechanism and quality assurance mechanism to sustain primary and effective preventive programmes in Belarus. Funding security of national AIDS response faces risks with withdrawal of international aid in future years and a pressing need appears for greater innovation in sourcing sustainable funding of national AIDS response. Efficient allocation and reallocation of AIDS resources in Belarus could be further addressed with cost-effectiveness evaluations, applying dynamic modeling based on relevant behavioral and epidemiological pattern.

INTRODUCTION

Belarus is situated in Eastern Europe and covers approximately 207,595 square kilometers. Belarus is sharing borders with Poland, Ukraine, Lithuania, Latvia and the Russian Federation. The population of Belarus was 9.5 million by the end of 2011.

Until recently, intravenous drug use was the leading route of HIV transmission in Belarus. HIV continues to spread among IDUs in Belarus however the HIV transmission mode has been changing gradually from intravenous drug use to sexual transmission, which is increasing rapidly.

Overall, HIV epidemic in Belarus is characterized by being divided into two stages. The first stage (1987-1996) was characterized by low prevalence and incidence of HIV. The total number of HIV-infected individuals in this period was 117, of whom 43 were foreigners who have arrived for study or work to Belarus. Since July 1996, the epidemiological situation in Belarus has changed. An HIV outbreak in two towns, Svetlogorsk and Zhlobin, in 1996-1997 has caused 1,021 new HIV infections within a six-month period. This first stage of the HIV epidemic in Belarus was characterized by the following:

- Young men being mainly affected, with more than 60% of new infections being registered among individuals of 14-24 years old;
- Parenteral route of infection among injecting drug users (IDUs) - 92% of all transmissions;
- Epidemiological process being largely limited to the cities of Svetlogorsk and Zhlobin.

Currently, by the end of 2011, HIV epidemic in Belarus remains low prevalence in general population (0.38%) with high infection among specific sub-populations. According to the national sentinel surveillance, 12,955 cumulative HIV cases were registered by the end of 2011. Estimated HIV prevalence rate in Belarus among adult population (age 15 - 49) was 0.38% [0.28%-0.48%]. HIV incidence has clearly been on the rise during the recent years with 10.2 new HIV registered cases per 100 thousand of the population in 2007, and up to 12.6 new HIV registered cases per 100 thousand of the population in 2011.

The number of people who were infected sexually has increased over the recent years in Belarus. According to the national sentinel surveillance, about 75.1% of new HIV cases in 2010, and 76.1% of new HIV cases in 2011 were related to sexual transmission (heterosexual and homosexual). Overall, sexual transmission accounts up to 50.3% of total HIV cumulative cases. Since 1997, parenteral route of transmission through intravenous drug use also remains one of the key in the country and according to the national sentinel surveillance, by January 2012, accounts up to 47.2% of total HIV cumulative cases. Estimated HIV prevalence among IDUs accounts up to 13.3%. Female commercial sex workers (CSWs) and men who have sex with men (MSM) another key most affected groups in Belarus with high HIV prevalence of 2.4% among CSWs, 2.8% among MSM.

In 2010 and 2011, the country faces a rising number of AIDS cases (from 317 in 2007 to 590 in 2011), and growing mortality from AIDS (from 1.6 deaths per 100 thousand in 2007 to 3.0 deaths per 100 thousand in 2011).

The current stage of HIV epidemic in Belarus is characterized by the following:

- Heterosexual route of transmission becoming dominant: 77.6% of new HIV infections in 2009; 75.1% of new HIV infections in 2010; 76.1% of new HIV infections in 2011;
- The HIV epidemic still affecting young population: individuals of 15-29 years old, representing up to 61.6% the total HIV cumulative cases;
- Parenteral route of transmission among IDUs is one of the main routes of transmission although is not dominant according to the recent national sentinel surveillance data: 19.8% of new HIV infections in 2009; 20.9% of new HIV infections in 2010; 21.2% of new HIV infections in 2011;
- Geographical expansion: HIV cases have been recorded in all regions of Belarus. Country's most high-burden regions are the following: Gomel, Minsk region and Minsk city.

The local and national government have put substantial effort into tackling AIDS epidemic in Belarus. The guiding principles of public policies and the national response to the HIV epidemic are presented in the fourth National HIV Prevention Program for the period of 2011 - 2015. The National HIV Prevention Program reaffirms Belarus' commitment to the Millennium Declaration (2000), Declaration of Commitment on HIV and AIDS (2001), Dublin Declaration on Partnership to fight HIV/AIDS in Europe and Central Asia (2004), and the recent Political Declaration on HIV/AIDS (2011).

In order to limit transmission of HIV to a minimum, a number of targeted intervention services including prevention activities among most-at-risk populations (IDUs, CSWs, MSM), methadone substitution and needle and syringe exchange program, universal access to HIV voluntary counseling and testing, antiretroviral therapy, prevention of mother-to-child transmission and educational information have been introduced. Civil society organizations work with most-at-risk populations providing HIV prevention activities. Very few children acquire HIV infection, since the country has integrated HIV prevention services for pregnant women across health care institutions. Intensive education for youth within schools, youth-friendly health centers and mass-media programs aimed at the general population have been undertaken. National policies on HIV prevention are being implemented in equal partnership with the civil society and with technical and financial support from the donors.

Getting to the point of health care services delivery, it is crucial to consider the fact, that Belarusian health system aims to provide the entire population with universal access to care, which is free at the point of use. The legal basis for the recognition, protection and promotion of patients' rights in Belarus has been established by the Constitution (adopted in 1994, amended in 1996 and 2004): "Citizens of the Republic of Belarus shall be guaranteed the right to health care, including free treatment at state health-care establishments. The State shall make health care facilities accessible to all of its citizens." [Section II, Article 45].

The concern of the government about financing and delivery of health services in Belarus is rising over the recent years due to decreases and foreseen shortfalls in government revenues. The country is also specifically forced to consider the composition of current spending on AIDS response due substantial reliance of main HIV/AIDS programs on international aid. Particularly the concern around sustainability of AIDS response is related to the Global Fund to Fight AIDS, Tuberculosis and

Malaria (GFATM) grants withdrawal by the end of 2015, which supported substantially key prevention, as well as care and treatment programs. At the same time, Belarusian economy was hit by economic crisis in the recent years, which reduced government revenues and put largely social and health care programs under risk of underfinancing. As a result of economic crisis, the Belarusian ruble suffered a three-fold devaluation. Inflation measured by the consumer price index accounted for about 53.2% in 2011 (7.7% in 2010).² Although the GDP has been increasing between 2008 and 2011, the gross domestic debt increased at the same time and accounted for about US\$ 34.28 billion by January, 2012 (US\$ 5.63 billion increase in 2011), which was about 62.3% of GDP in 2011 (51.6% of GDP in 2010). The per capita GDP accounted for US\$ 5,820 in 2011 (US\$ 5,819 in 2010), which classified Belarus as an upper middle income country. At the same time gross domestic debt per capita accounted for US\$ 3,595 by the end of 2011 (US\$ 2,995 by the end of 2010)³, which shows instability of country's economy, and therefore causes instability of future social programs financing.

Comprehensive information about current national spending on AIDS response provides the basis for health policy planning, development and evaluation. In this study, we aimed to develop a comprehensive overview of the overall level and composition of major investments in national AIDS response in Belarus for the period between 2008 and 2011, using National AIDS Spending Assessment (NASA) as a method for the purpose; as well as to establish the link between HIV targets set and HIV priority funding allocations to ensure that allocation for HIV prevention, treatment, care and support matches epidemiological patterns. National AIDS Spending Assessment supports the discussion around future resource mobilization strategy development with the vast vision to maintain sustained commitment to national AIDS response in Belarus in the years to come and implement the national targets set aligned with the global targets.

² Source: The World Bank

³ Source: The National Bank of the Republic of Belarus

METHODS

The conceptual framework for this assessment is an analysis of funding flows and resource allocation patterns which were established due to development of National AIDS Spending Assessment (NASA). NASA as a tool which is being used for conducting HIV/AIDS expenditure reviews was developed by the Joint United Nations Programme on HIV/AIDS (UNAIDS) approved by the UNAIDS Global Consortium of Resource Tracking in 2006 and has been used to report progress on the 2001 Declaration of Commitment from the UN General Assembly Special Session on HIV/AIDS (UNGASS) and the recent Political Declaration on HIV/AIDS (2011).

NASA provides the basis for countries in structural and comprehensive monitoring and planning of their national AIDS responses. NASA uses existing standard accounting approaches for HIV/AIDS expenditure tracking and is based on National Health Accounts framework, which is internationally recognized as a tool for tracking financial flows on healthcare. NASA allows tracking resources from financing sources to financing agents, down to service providers, identifying HIV services and activities in relation with various groups of beneficiary populations.

NASA in Belarus was undertaken for the period of four years between 2008 and 2011 and was aimed on evaluating and analyzing the overall level and composition of major investments in the national AIDS response. National spending on AIDS in Belarus was examined by major funding sources with the use of national statistics, sector reports, and data reported by public health service institutions. Standard accountancy estimation methods were used to generate a complete dataset of national spending on AIDS. Costs were broken down by financing sources, agents, service providers, AIDS spending categories, and beneficiary populations using functional NASA classifications and definitions.

As a part of its methodology, NASA employs double-entry tables or matrices to represent the origin and destination of resources. The set of core tables in NASA addresses three basic questions:

- Where does the money come from? (sources of funding);
- Where does the money go to? (financing agents and providers of health care services);
- What kind of functionally-defined services are performed?
- Who are the beneficiaries of HIV/AIDS related services?

NASA framework has been designed to include the following dimensions of expenditure classifications:

- Financing sources are institutions that provide funds used by financing agents;
- Financing agents are institutions that receive funds from financing sources and have programmatic control over their use;
- Providers of services are entities that receive funds and/or goods from financing agents and deliver health care services. Providers of services play the role of the final users of funds;
- Functions or AIDS Spending Categories (ASC) are actual goods and services provided using the funds (wide range of care and treatment activities, prevention activities, education, etc.);

- Beneficiary populations or target groups of specific activities (men who have sex with men, injecting drug users, female sex workers and their clients, prisoners, migrants, youth, etc.).

The boundaries of functionally defined health care system delimit the subject area of NASA. The approach is 'functional' in that it refers to the goals or purposes of health care such as disease prevention, health promotion, treatment, rehabilitation and long-term care. Overall, NASA in Belarus has been structured around core set of functions:

- Prevention, including communication for social and behavior change, voluntary counseling and testing, condom provision and other programs targeting specific sub-groups of population, including preventive activities for high risk groups, key vulnerable, "accessible", as well as targeting general population;
- Care & treatment – outpatient and inpatient, including provider initiated testing and counseling (PITC), antiretroviral treatment, prevention and treatment of OI, laboratory monitoring of HIV-positive patients, psychological support, and other care and treatment activities;
- Various interventions targeting orphans and vulnerable children;
- Program management & administration, including planning and coordination of HIV programmes, monitoring and evaluation, upgrading and construction of infrastructure, programs supporting national system of sentinel surveillance;
- Human resources, including training and rewarding of the personnel working in HIV field (apart from remuneration of personnel);
- Social protection activities as a support for PLHIV;
- Enabling environment, including national and regional advocacy interventions, activities aimed on stigma reduction, supporting human rights programs;
- HIV-related research.

Health expenditure reviews require significant collaboration among government agencies and international organizations. Commitment of national and international partners in Belarus made it possible to conduct national AIDS spending assessment. Quantitative data presented in the assessment were collected through routine financial reporting of all public organizations and institutions, working in HIV field in Belarus. In most cases, we employed a bottom-up approach.

In 2008, NASA was institutionalized in Belarus as a method of conducting HIV expenditure reviews on an annual basis. Country specific listings of health care institutions were the starting point of NASA survey with subsequent cross-classification to the NASA health care service provider institutions, as well as defining specific goods and services and mapping financial flows in HIV field cross-classifying goods and services and the institutions involved.

All results in the report are presented in current US dollars, using official average exchange rates. For 2008 and 2009, official exchange rates of the National Bank of the Republic of Belarus were used for presenting the NASA outputs in US dollars along with the outputs in the national currency. For 2010 and 2011, official weighted average exchange rates of the National Bank of the Republic of Belarus were used along with the outputs in the national currency due to the high inflation rates in recent years it appeared to be more accurate to use weighted average exchange rates.

Note, that national AIDS spending assessment doesn't include overall spending of public health care setting institutions on "Safe medical injections" and "Universal precautions", which accounted up to around US\$ 15 million in 2008⁴. It is very likely that these results for these types of expenditure still hold true. Total estimated expenditure on AIDS also do not include private households' out-of-pocket expenditure. Data collection was focused on public domestic and external investments on AIDS.

Table 2: Sources of data for national HIV spending assessments, Belarus NASA 2008-2011

Sources of funding	Data collection
Public sources of funding	Reporting form developed and approved on the national level for conducting NASA to be filled in by each public service provider institution on the basis of actual spending from the republican and local budgets. Data reconsidered and transformed according to HIV classifications. Costing techniques used for the number of activities.
International or external sources of funding	Reporting form developed for conducting NASA to be filled in by international partners on the basis of actual spending. Data reconsidered and transformed according to NASA classifications. Costing techniques used for the number of activities.

Data was verified to avoid defects of data sources, reduce the risk of incorrect interpretation and ensure the reliability of conclusions.

In order to fully seek opinions of stakeholders on the draft version of National AIDS Spending Assessment, NASA technical working group convened consultation meetings with the representatives from National Center for Hygiene, Epidemiology and Public Health, National and regional HIV Prevention Centers, as well as with the experts from UNAIDS and UNDP country offices in Belarus to share their views on findings. After the meeting, technical working group brought together the various opinions, carried out analysis, and incorporated the opinions and recommendations into this report.

Main outputs, challenges, and recommendations on next steps from NASA exercise in Belarus are presented in further section of this report.

⁴Source: Belarus NASA 2008:
http://www.unaids.org/en/media/unaids/contentassets/dataimport/pub/report/2008/nasa_belarus_2008_en.pdf

RESULTS

Table 3: Summary table of **key NASA findings** in Belarus between 2008 and 2011⁵

	2008	2009	2010	2011
Total estimated HIV expenditure				
Public & international funding	BYR 39,768 m	BYR 46,525 m	BYR 59,045 m	BYR 111,357 m
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Social protection and social services	1.75%	1.69%	0.99%	1.03%
Enabling environment	0.98%	1.53%	1.56%	2.24%
HIV-related research	2.21%	0.03%	0.07%	0.23%

⁵ Note, that national AIDS spending assessment doesn't include overall spending of public health care setting institutions on "Safe medical injections" and "Universal precautions", which accounted up to around US\$ 15 million in 2008. It is very likely that these results for these types of expenditure still hold true.

Financing sources - Who invests in national AIDS response?

Activities related to HIV/AIDS in Belarus are funded from the national and local budgets, as well as supported by international development partners.

Health system institutions and entities are the key actors of the national AIDS response in Belarus. The national health system is hierarchical and its organization is based on territorial administrative division. The health care system in Belarus was organized around the guiding principle of universal access to health care, free at the point of use.

While the central Government sets national health priorities, regional and district administrations oversee the organization and funding of primary and secondary care at the local level. The Ministry of Health has overall responsibility for the system, but it directly funds only highly specialized tertiary services. Social health insurance has not been introduced in Belarus, and the national health system is mainly funded by the state through general taxation and some out-of-pocket payments, which are usually made in order to purchase pharmaceuticals and for limited private services.

As funding for health care comes from general taxation, the Ministry of Finance is responsible for collecting financial resources for health care, but there are no earmarked taxes or other contributions specifically for health funding. The Ministry of Finance is less influential in deciding the proportion of budgetary expenditure that is to be devoted to health care than the President and Parliament. When the annual budget is being decided, the Ministry of Health and the Ministry of Finance settle their positions and present an agreed budget to the Government. The delivery and planning of health care is the responsibility of the Ministry of Health.

There is a number of international aid projects (UNDP, WHO, UNAIDS, and other) assisting in the prevention of HIV infection that are carried out in cooperation with the Ministry of Health and nongovernmental organizations.

In the national HIV field there is substantial influence from international organizations, such as the Global Fund to Fight AIDS, Tuberculosis and Malaria and its principal recipient the UNDP; as well as WHO, UNAIDS, and other development partners. Nevertheless, key policies are developed centrally.

The chart below presents financing and consumption flows of the national AIDS response from sources of funding to the beneficiary populations in Belarus between 2008 and 2011.

Belarus has been putting substantial efforts towards meeting the national targets of universal access to treatment, care and support to people living with HIV. NASA findings suggest that total annual investments in national AIDS response from both public and international funding sources in Belarus has remained relatively stable and accounted for about US\$ 20 million annually. Estimated HIV expenditure per capita from public and international funding sources remained flat and accounted for about US\$ 1.9 in 2008; US\$ 1.8 in 2009; US\$ 2.1 in 2010 and 2011. The biggest share of AIDS investments between 2008 and 2010 was supported by the public budget (73% in 2008; 68% in 2009; 67% in 2010), although declined and accounted for about 49% in 2011 due to economic crisis influence and national currency devaluation. Charts below represent national AIDS investments in Belarus by funding source presented in national currency and in US dollars for the period of four years between 2008 and 2011.

Figure 1: Financing flows of national AIDS response in Belarus between 2008 and 2011

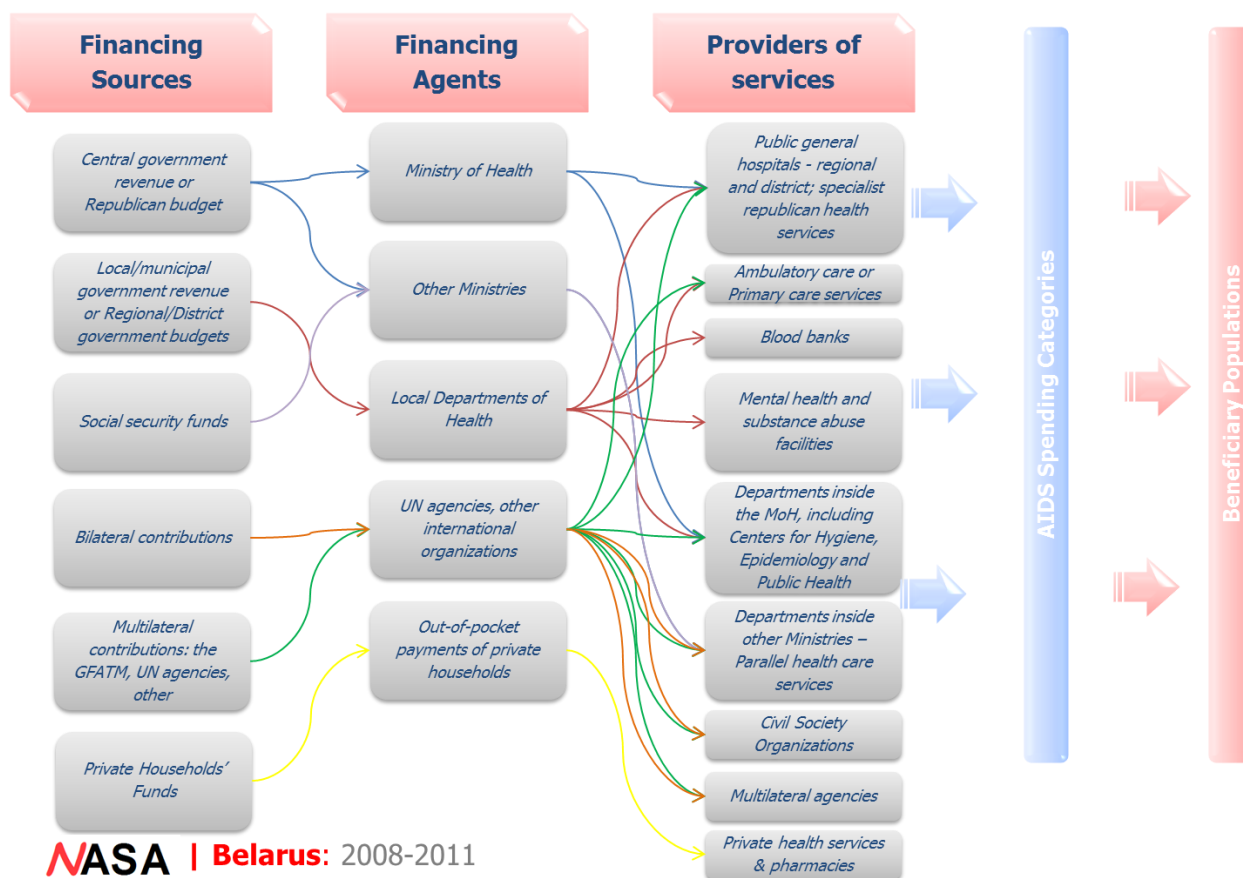


Figure 2: AIDS investments in Belarus versus sources of funding in between 2008 and 2011 (BYR million), Belarus NASA

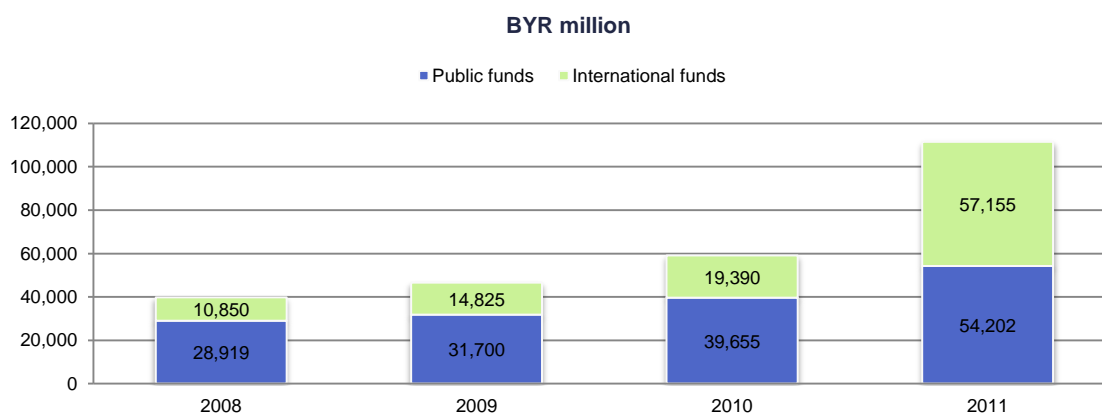


Figure 3: Trends in AIDS investments in Belarus versus sources of funding in between 2008 and 2011 (US\$), Belarus NASA

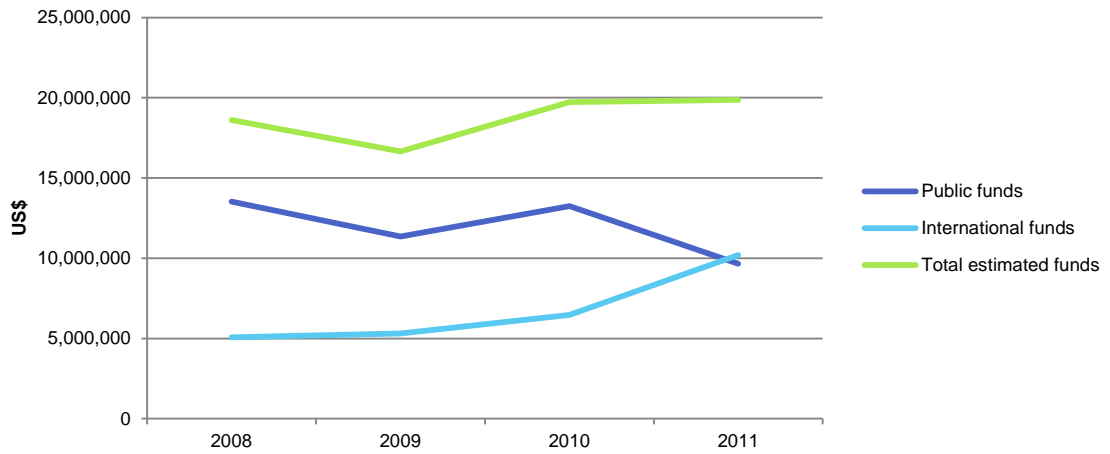


Figure 4: AIDS investments in Belarus versus sources of funding between 2008 and 2011 (US\$), Belarus NASA

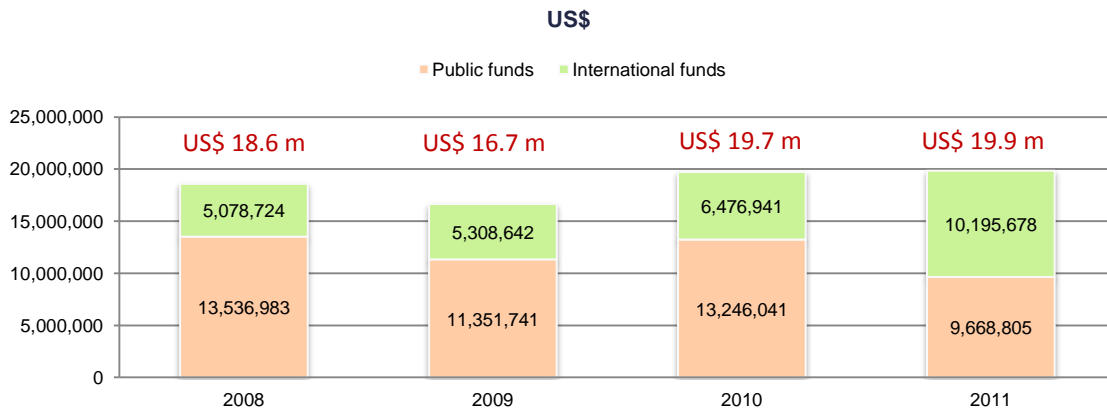
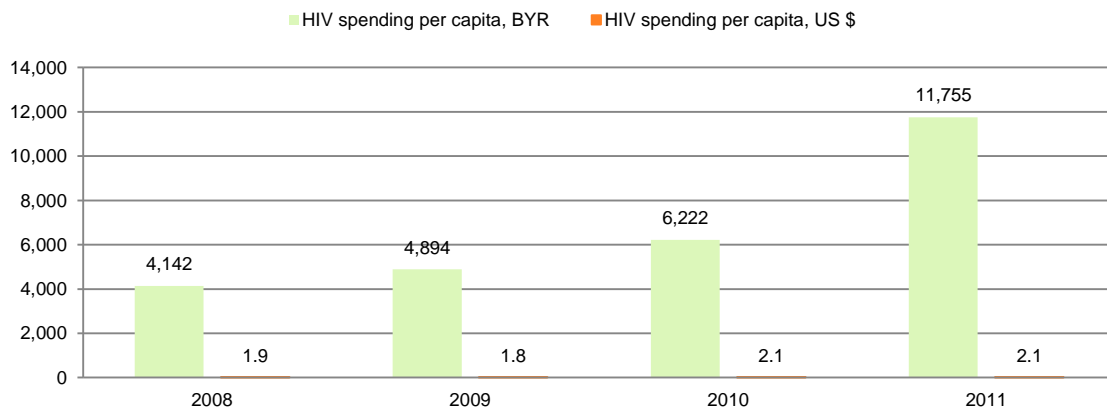


Figure 5: AIDS investments in Belarus per capita (BYR, US\$) in between 2008 and 2011, Belarus NASA



In 2011, overall sustainability of national AIDS response was related to external support provided mainly by the GFATM, which enabled major gains in access to HIV prevention, treatment, care and support. The share of the GFATM in total annual HIV funding sources increased by 49% in 2011 and accounted for 96% of total international funding sources. In 2011, the GFATM share was equal to the public funds share in funding national AIDS response.

Figure 6: AIDS investments in Belarus versus sources of funding in between 2008 and 2011 (%), Belarus NASA

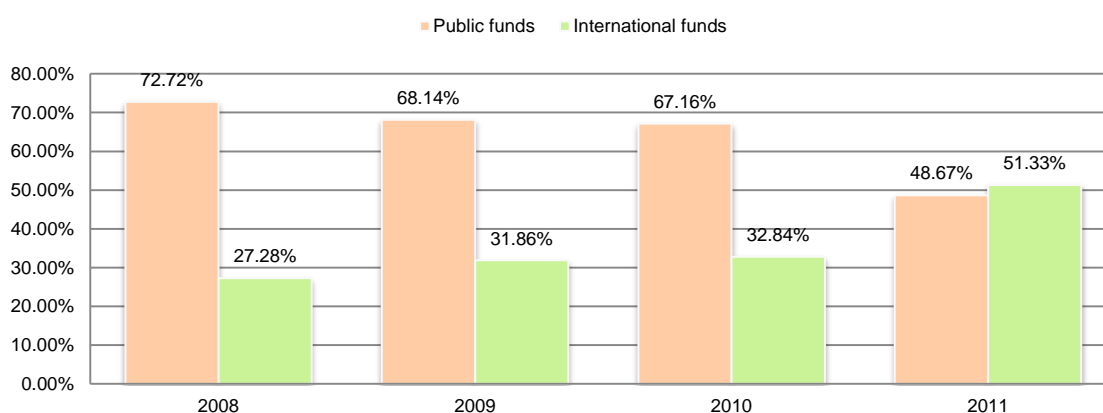


Table 4: The GFATM share in AIDS investments in Belarus (%) in between 2008 and 2011, Belarus NASA

Indicators	2008	2009	2010	2011
GFATM share in total AIDS investments	19%	25%	30%	49%
GFATM share in total international investments	71%	78%	92%	96%

Financing agents – Who decide how to spend the money on AIDS?

Financing agents are the ministries and/or international organizations' agencies, private health facilities that manage funds allocated by financing sources (public, international and private) and use these funds for payment or purchase of health services, medical supplies and other HIV and AIDS related activities. While sources of finance decide to allocate resources to the national HIV response, financing agents have the ability to decide the type of activity or product to fund or purchase.

The Ministry of Health is the key institution in the organization of the Belarusian health system. Different departments within the Ministry of Health undertake planning in all aspects of human and physical resources, decide on the financing of services and administer the system. The central government and the Ministry of Finance, in conjunction with the Ministry of Health, make decisions on the future of health care services and define the reform agenda. The Parliament and the

President must also approve the budget, which should be in line with their strategic vision for the development of health care services. The Ministry of Health and the AIDS prevention departments of the National Centre for Hygiene, Epidemiology and Public Health and the six regional centers for hygiene, epidemiology and public health provide leadership in delivering HIV/AIDS prevention, care and treatment services. Various international and national nongovernmental organizations and development partners support efforts to scale up HIV/AIDS prevention, care and treatment in Belarus. These include the Open Society Institute, the Belarusian branch of the International Red Cross and local nongovernmental organizations such as the Belarusian Positive Movement and other youth support organizations.

Although regional and district health authorities are deemed to be important stakeholders due to their responsibility for local health care financing, their decision-making capacity is limited. In Belarus, purchaser and provider functions are integrated and different levels of government purchase various kinds of care and cover the costs of public health facilities. The national health system is a single-payer system. Local authorities and central government act as third-party payers⁶ for health care services and personnel.

Some line ministries (and large enterprises) have their own parallel health systems, which provide services to their current and retired employees. These occupational health care facilities include both inpatient and outpatient services and funding for these services comes from the budgets of the responsible line ministry or enterprise, rather than the general health budget. As a rule, the occupational service facilities at the big enterprises consist of a polyclinic with the principal specialists, diagnostic facilities and occupational therapists available. The patients enrolled with the parallel health care services can always access the main health care system according to their place of residence.

International organizations are influential in national AIDS response. United Nations agencies such as UNDP, WHO, United Nations Population Fund (UNFPA), UNICEF and other international organizations and foundations have been very active in working with national partners on HIV-related projects. The UNDP is the principal recipient and financial agent of the Global Fund to Fight AIDS, Tuberculosis and Malaria grants in Belarus.

At the regional and district levels, local governments can choose to allocate more resources to health than is required according to national norms, but that is not the general practice. There is a system of local budget revenue equalization, using a formula which includes norms for per capita budget expenditure on health services, but these norms are not risk adjusted. The per capita norms are based on the mid-year population figures for the regions and the city of Minsk, as estimated by the Ministry of Statistics. Allocations to hospitals are made on the basis of prospective funding, based on expected future expenditure and using fixed budgets. These budgets are calculated annually, using a combination of historical precedent and political negotiation at the district, regional and national levels. The continued use of line-item budgeting, as well as centralized purchasing of, for example, medical equipment and most pharmaceuticals means that providers are not really in a position to deviate from the agreed plans. Budgets are also “soft”, that is, if there is a

⁶ An organization other than the patient (first party) or health care provider (second party) involved in the financing of personal health services

shortfall and local authorities are not able to cover provider costs, they can usually come to a suitable arrangement.

Funding for parallel services is allocated by the relevant ministry from their budgetary allocation and as such these services are not paid for from the general health budget.

Health care services are paid for prospectively, using global budgets based on the population covered for primary care and on line-item budgets in turn based on historical incrementalism in secondary and tertiary care. For example, the number of diagnostic imaging procedures and clinical laboratory services are estimated and funded on the basis of the actual expenditure of the previous year, with some adjustments. Funds are earmarked for different uses and cannot readily be reallocated. Outsourcing is not a feature of the health system in Belarus.

In order to improve efficiency in resource allocation, the purchasing of health is based on capitation funding. Capitation funding is achieved through the setting of social standards for the volume of medical care that should be provided as a minimum, with prices based on historical incrementalism, rather than full costing.

Standard accountancy estimation methods were used to generate a complete dataset of national spending on AIDS. Costs were broken down by financing sources, agents, service providers, AIDS spending categories, and beneficiary populations using functional NASA classifications and definitions.

Table 5: Total estimated HIV and AIDS spending by financing agent, Belarus NASA 2008-2011

Financing agents distribution as a % of total estimated HIV expenditure				
Year	2008	2009	2010	2011
Public	72.72%	68.14%	67.16%	48.67%
International	27.28%	31.86%	32.84%	51.33%

The results of NASA for the period of 2008-2011 show the same trend in managing funds: external funding on HIV has been managed entirely by international organizations (International Financing Agents), whereas, public funds - by central and local health authorities (Public Financial Agents).

Therefore, the shares of funding flows managed by public sector organizations and international organizations reflects the same distribution of funds, as it goes for public and external sources of funding.

NASA represents increasing influence of international organizations as financial agents in HIV field over the last four years: 27% in 2008; 32% in 2009; 33% in 2010; 51% in 2011.

UNDP country office is a principal recipient of the GFATM grants and by the end of 2011 became a key financing agent in AIDS response in Belarus with the biggest amount of funds being managed. As a financing agent UNDP cooperates with the relevant governmental and civil society organizations in provision of prevention, care, treatment and support programs, as well as responsible for procurement of goods, and administration of the funds provided by the GFATM.

Providers of services - Who delivers HIV-related services?

The system of public health and communicable disease control (CDC), including HIV control, is integrated into the main levels of the Government, from the district level up. The District Sanitary-Epidemiological Centers are the cornerstones of the public health system within the districts and they fulfill a broad range of functions on the prevention of communicable diseases. The District Sanitary-Epidemiological Centers are supervised by the district authorities and the Regional Sanitary-Epidemiological Centers. The Regional Sanitary-Epidemiological Centers are supervised by the regional authorities, the Ministry of Health and the Office of the State Chief Doctor for Sanitary Medicine of the country, who is also the Deputy Minister of Health on epidemiological and public health issues. The National Centre for Hygiene, Epidemiology and Public Health coordinates the prevention of HIV and the promotion of healthy lifestyle issues.

There is an extensive primary health care (PHC) network of providers throughout Belarus. All PHC facilities are owned by the state. The PHC network has two forms of service provision: traditional polyclinics in the cities and outpatient clinics and feldsher-midwife (akusher) points (FAPs) in the rural areas. In some of the outpatient clinics general practice is emerging. Primary care in the capital, Minsk, and five other regional centers is provided through the network of adult and pediatric polyclinics, where a number of prevention, diagnostic, consultation and referral services are offered.

At the secondary level of care there are district and regional hospitals. While district hospitals provide general secondary care services, regional hospitals deal with more complex cases and offer a wider choice of care. At the same time, each district and region has an outpatient polyclinic, which delivers specialized secondary care for the patients in the community.

There are few development partners and key NGOs active in the HIV field in Belarus. Most are active in supporting people most-at-risk towards HIV and collaborate closely with international aid organizations and NGOs.

According to NASA classification, HIV service providers are the entities that are directly engaged in the production, provision and delivery of services to the population and also include non-targeted service provision (Sections 'Programme management and administration', 'Human resources', 'HIV-related research'). Service providers consist of governmental and other public organizations, private for-profit and private non-profit organizations, bilateral and multilateral international entities.

For NASA in Belarus three major blocks of service providers in HIV service delivery were captured: public sector providers (Ministry of Health organizations and entities, other Ministries and state organizations and entities), civil society organizations (non-profit non faith-based) and multilateral agencies (international aids organizations).

The results of the study show that public sector organizations – mainly health care provider institutions – are one of the key HIV-related service providers. Although with decline of funds channeled through public sector providers (mainly due to national currency devaluation; and at the same time due to increase in amounts of international grants available) the role of public providers has been declining gradually over the recent years.

Table 6: Total estimated HIV and AIDS spending by provider of services, Belarus NASA 2008-2011

Providers of services distribution as a % of total estimated HIV expenditure				
Year	2008	2009	2010	2011
Public	88.60%	80.00%	77.33%	63.95%
Private – NGOs	6.80%	10.00%	11.00%	13.65%
International – Multilateral agencies	4.60%	10.00%	11.67%	22.40%

Key NASA findings and AIDS spending categories – What services were delivered? What are the sources of funding for specific HIV-related services?

In average, Belarus invested about US\$ 20 million annually in national AIDS response from public and international funding sources between 2008 and 2011.

International investments in national AIDS response have largely been stable and gradually increasing between 2008 and 2011. In 2011, international investments have surpassed public investments reaching more than US\$ 10 million – two times increase from 2008 – and contributed more than a half of all spending on AIDS in Belarus in 2011 (about 51% of national AIDS response in 2011).⁷

Domestic public investments in the period of study have been relatively stable and exceeded international investments between 2008 and 2011 (about 70% of national AIDS response annually). Although, in 2011, domestic public investments has declined substantially – about 26% decrease from 2010 - and contributed a smaller than international funding share in total HIV expenditure (about 49% of national AIDS response).

>67% of national AIDS investments were public in between 2008 and 2010. In 2011, <50% of national AIDS investments were public.

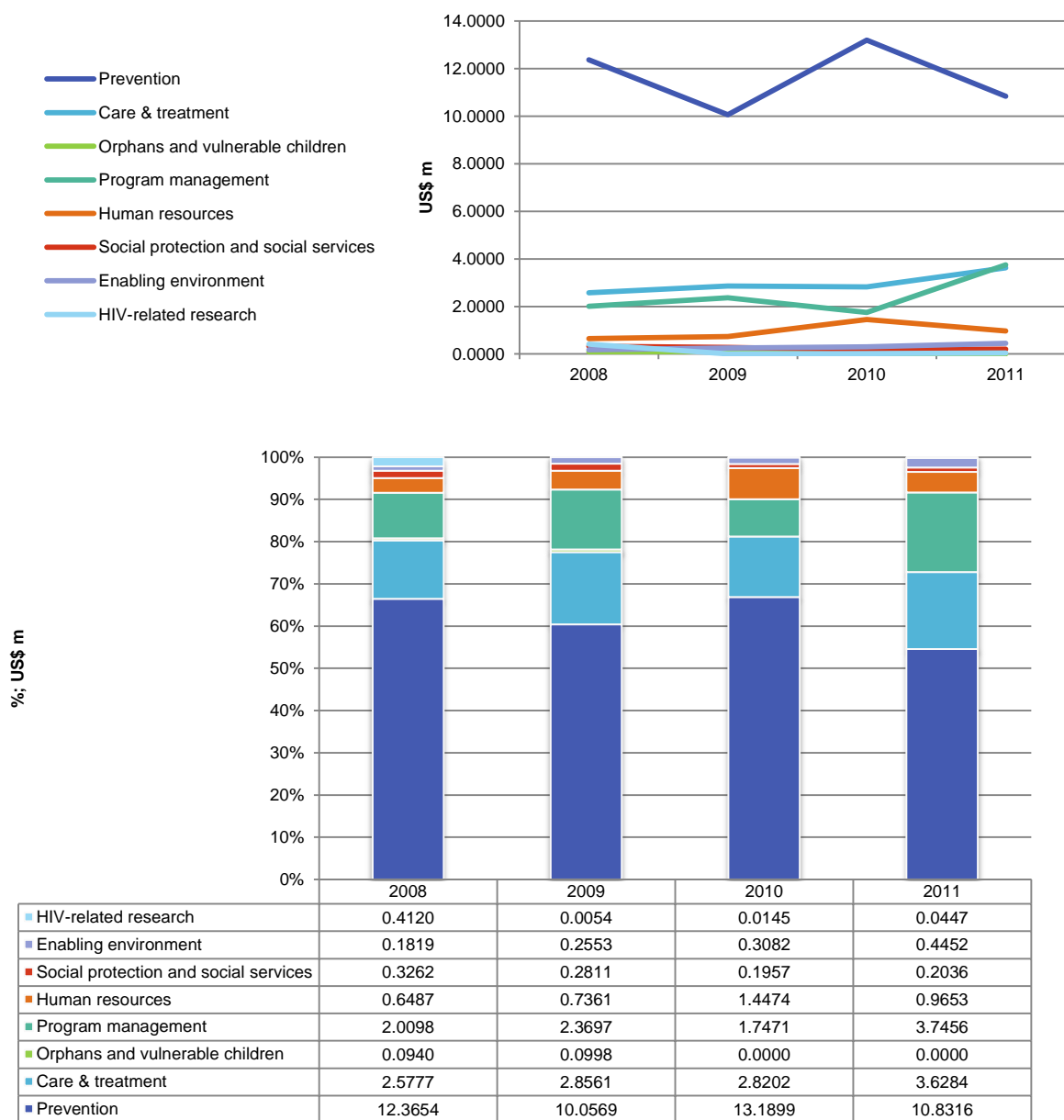
The Global Fund to Fight AIDS, Tuberculosis and Malaria was a major external donor in national AIDS response between 2008 and 2011. Its share increased and accounted for about 96% of the US\$ 10 million of donor funding in 2011 (49% of total national AIDS response).

While domestic public and international investments' trends in Belarus underwent changes between 2008 and 2011, the per capita spending from both public and international funding sources remained relatively flat – about US\$ 2 per capita spending annually.

⁷ Note, that current assessment for the period between 2008 and 2011 don't include spending on "Safe medical injections" and "Universal precautions", which accounted up to US\$ 15 million from domestic public funding sources in 2008 (Source: Belarus NASA 2008). It is very likely that these results still hold true.

WHERE DOES THE MONEY GO?

Figure 7: Composition of total AIDS investments in Belarus versus key programmatic area in between 2008 and 2011 (US\$ million, %), Belarus NASA

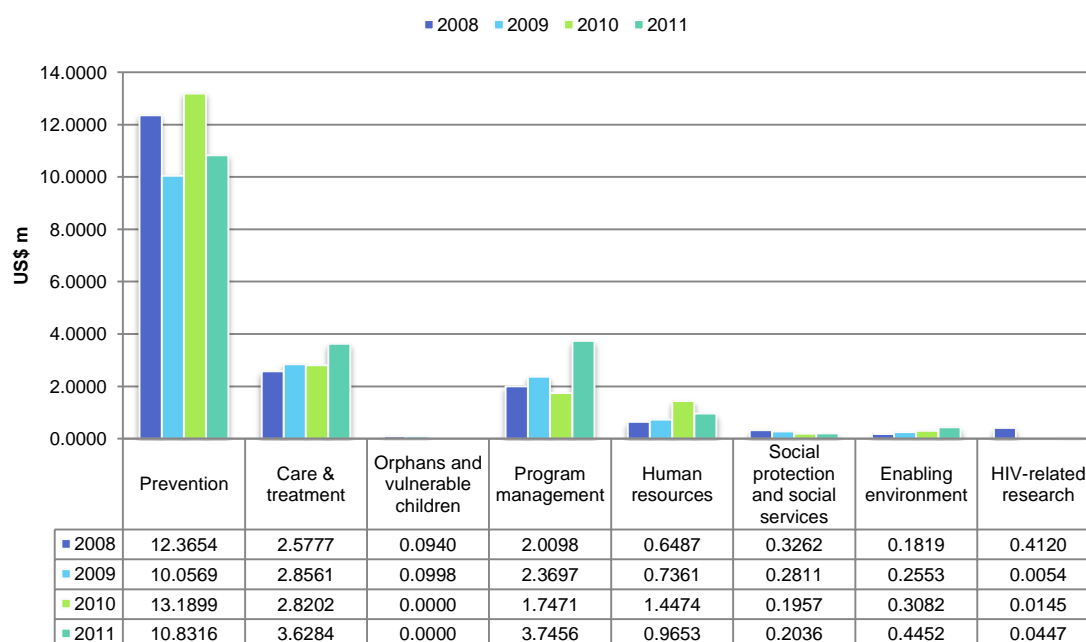


Between 2008 and 2011 the distribution of investments in national AIDS response hasn't changed between different programmatic interventions substantially. Most significant share of funding was channeled on prevention activities (more than half of total investments in AIDS response), care and treatment (reaching 18% in 2011), program management and administration (including program management and administration, upgrading and construction of infrastructure – reaching 19% in 2011), and on training and monetary incentives for human resources 4-7% of total annual expenditure on AIDS).

Table 7: Key intervention areas as a share of total estimated HIV expenditure, Belarus NASA 2008-2011

Key intervention areas as a % of total estimated HIV expenditure				
Prevention	66.42%	60.36%	66.88%	54.53%
Care & treatment	13.85%	17.14%	14.30%	18.27%
Orphans and vulnerable children	0.50%	0.60%	0.00%	0.00%
Program management	10.80%	14.22%	8.86%	18.86%
Human resources	3.48%	4.42%	7.34%	4.86%
Social protection and social services	1.75%	1.69%	0.99%	1.03%
Enabling environment	0.98%	1.53%	1.56%	2.24%
HIV-related research	2.21%	0.03%	0.07%	0.23%

Figure 8: AIDS investments versus key intervention area (US\$ million), NASA 2008-2011



In 2011, expenditure on prevention from domestic public sources of funding declined by about 30% causing significant decline in total domestic public investments in national AIDS response - about 26% decrease from 2010 (due to currency devaluation and budget cuts). However, expenditure on care & treatment remained stable with slight increase from both public and international funding sources between 2008 and 2011.

Figure 9: Prevention versus sources of funding (US\$ million), NASA 2008-2011

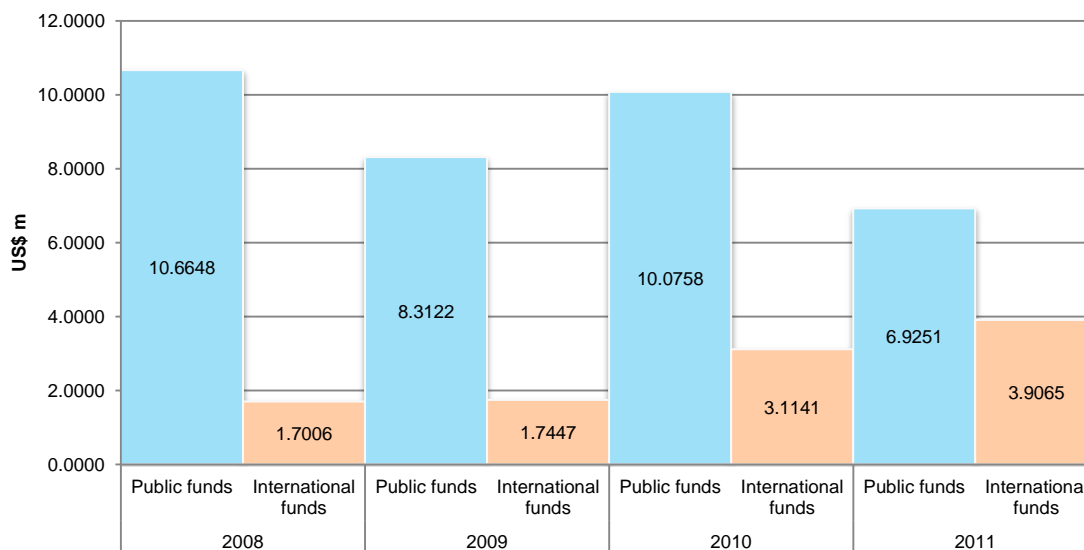


Figure 10: Care & treatment versus sources of funding (US\$ million)

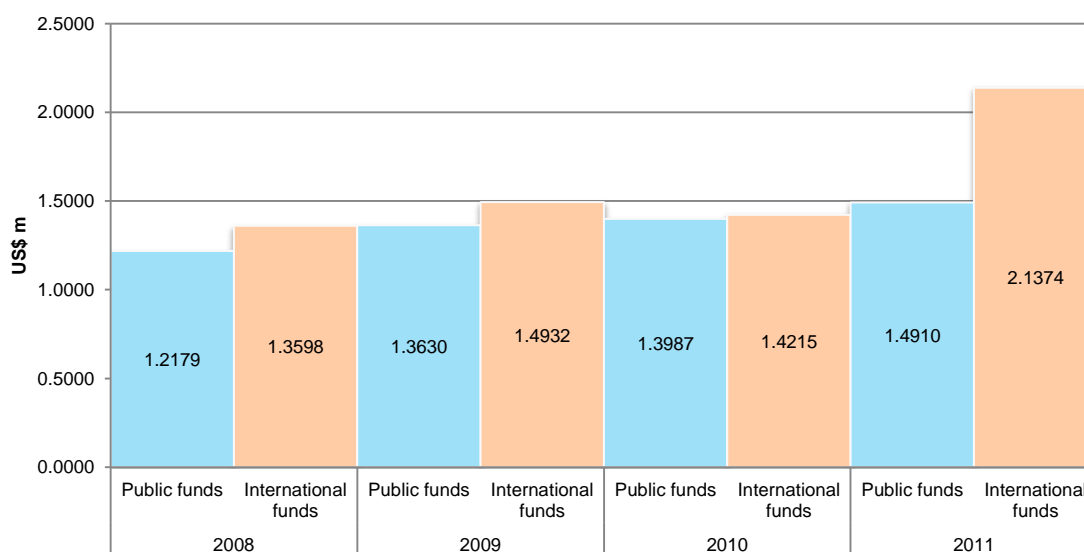


Figure 11: Program management versus sources of funding (US\$ million)

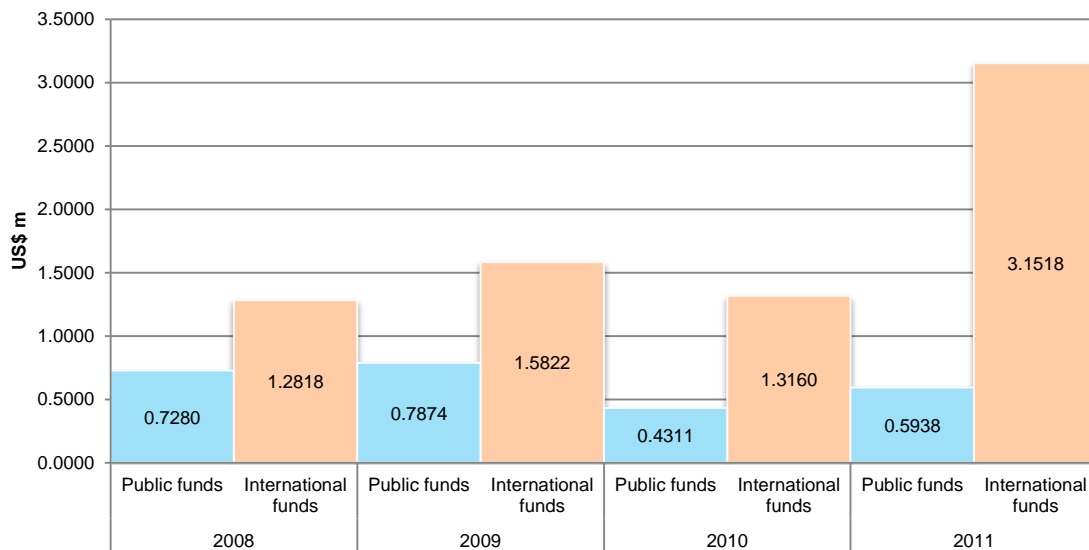
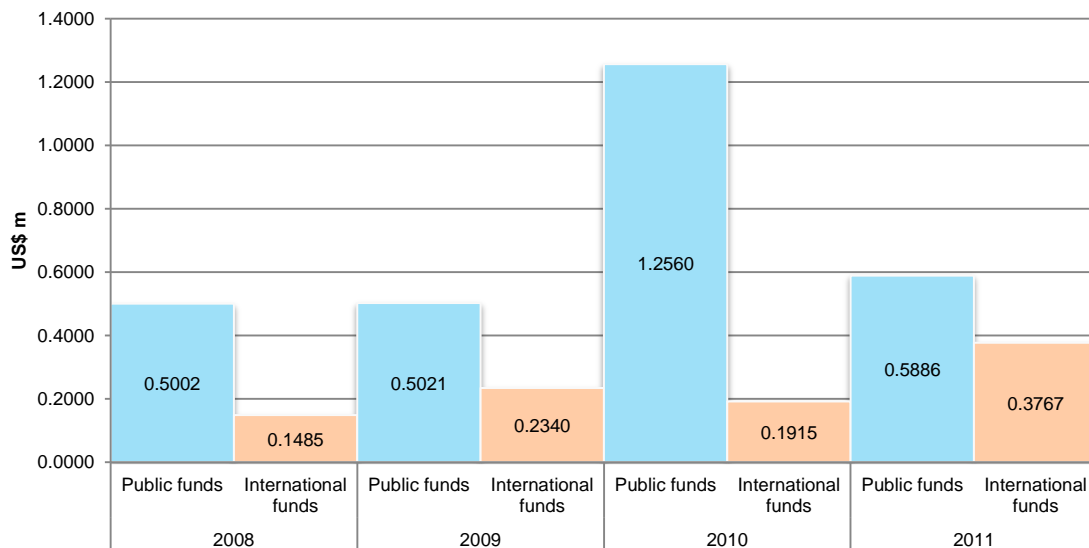
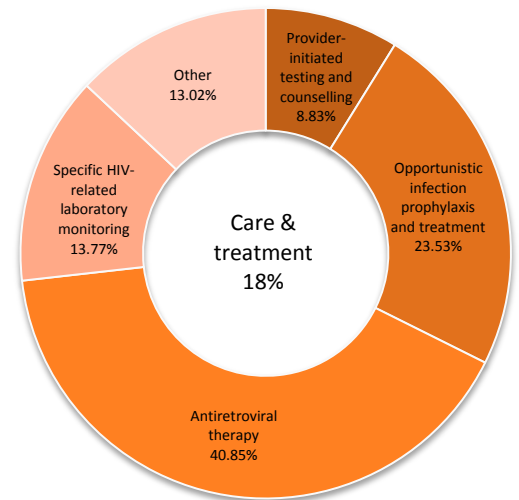
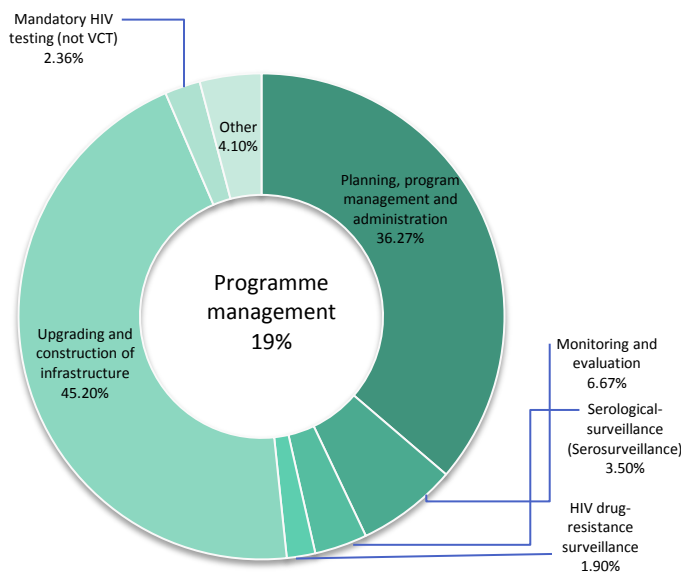
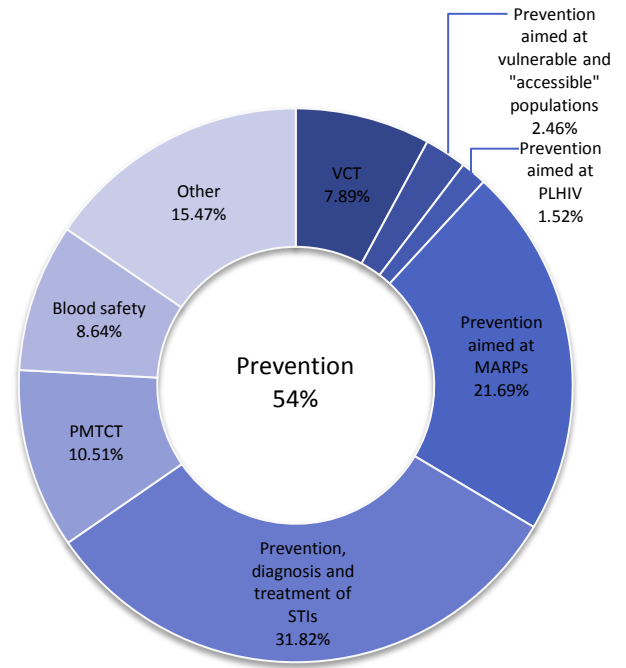
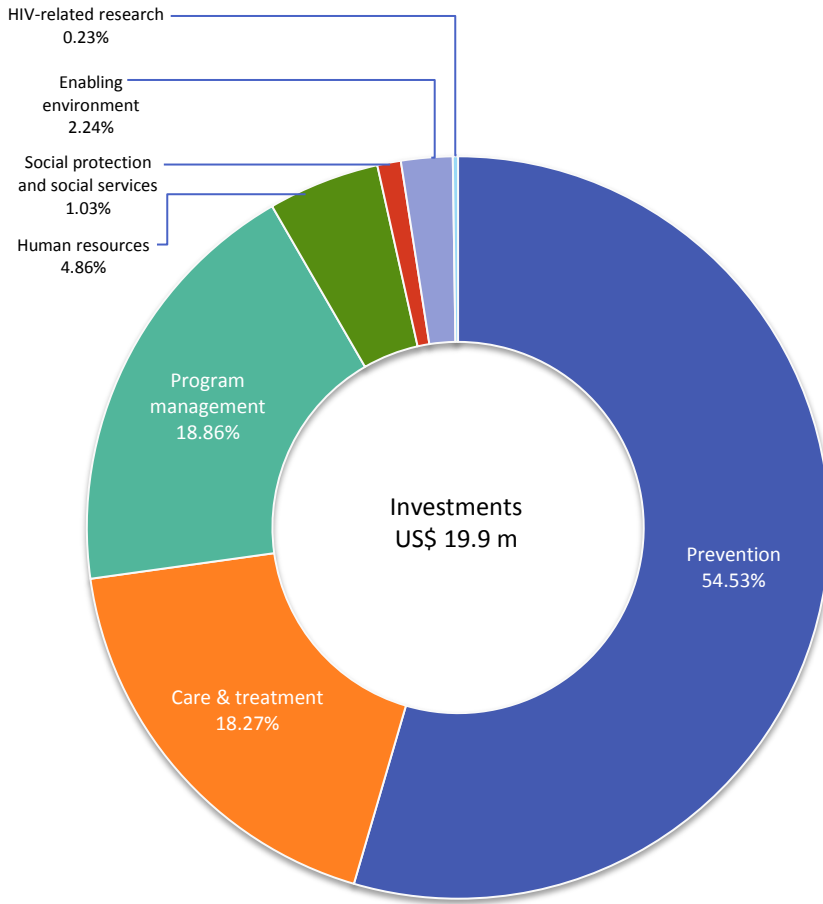


Figure 12: Human resources incentives versus sources of funding (US\$ million)

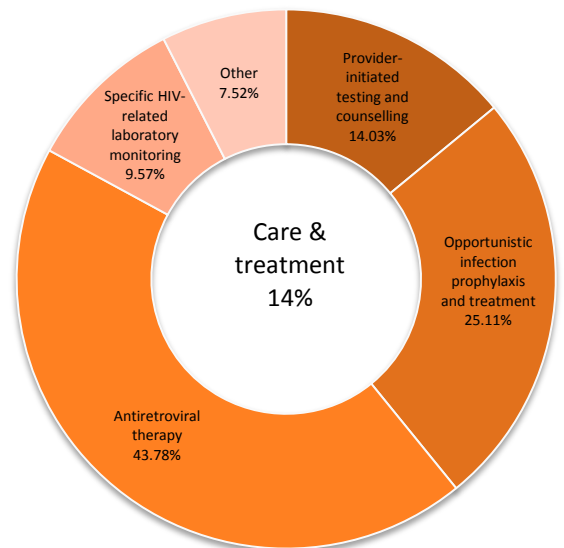
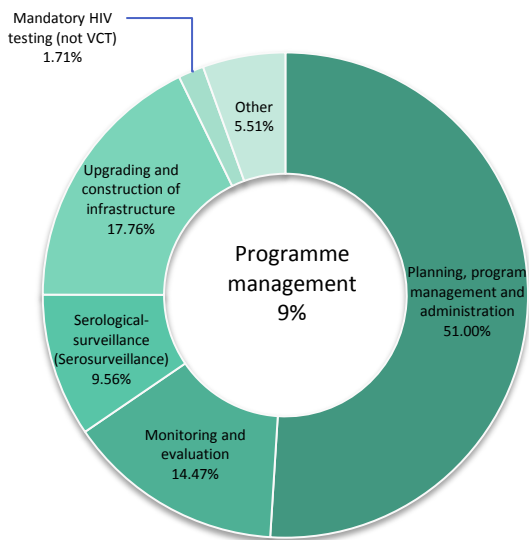
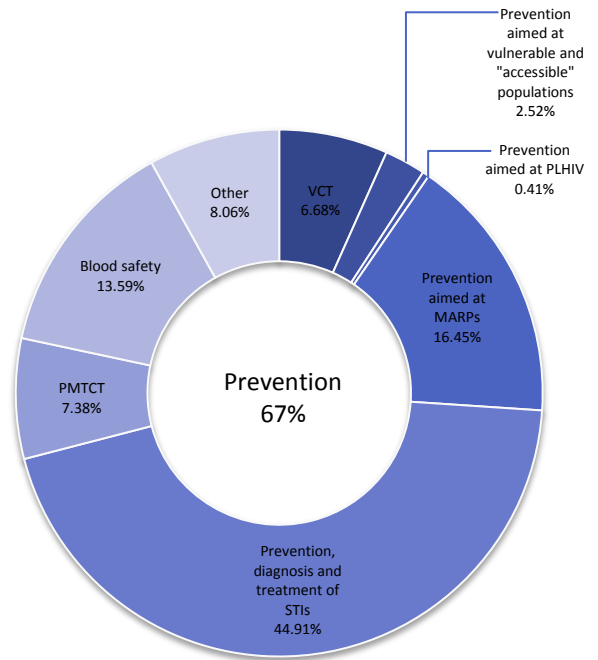
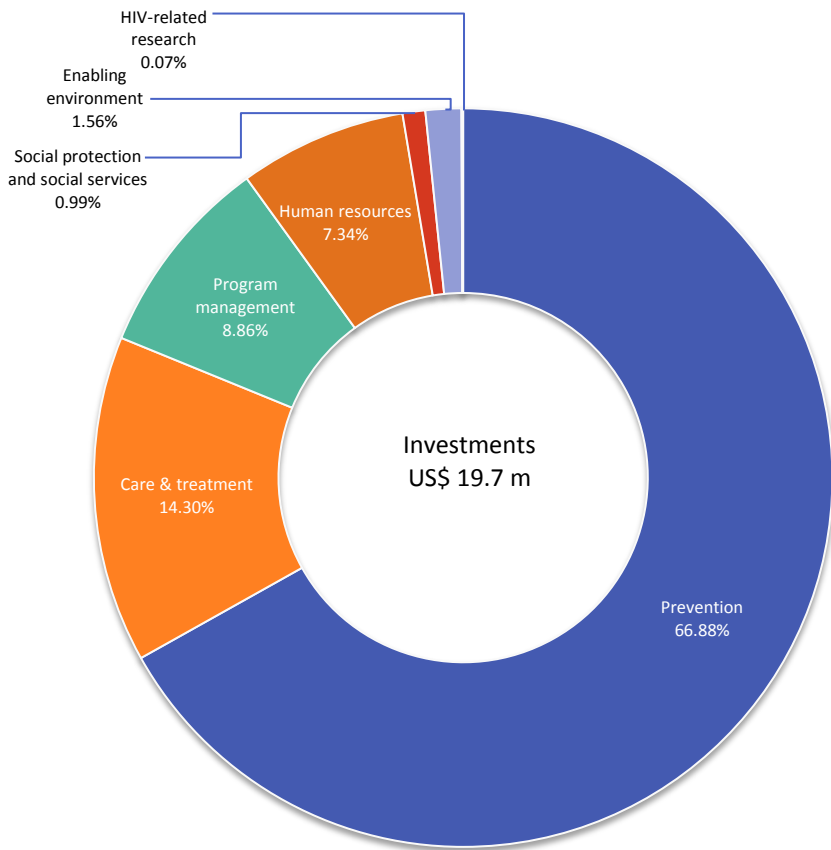


The charts below present snapshots of AIDS investments distributions by key programmatic areas and key programmatic activities, and overall provide a comprehensive overview of AIDS investment framework annually between 2008 and 2011. For more detailed information see funding matrixes for each year between 2008 and 2011 in Supplementary Material to the report.

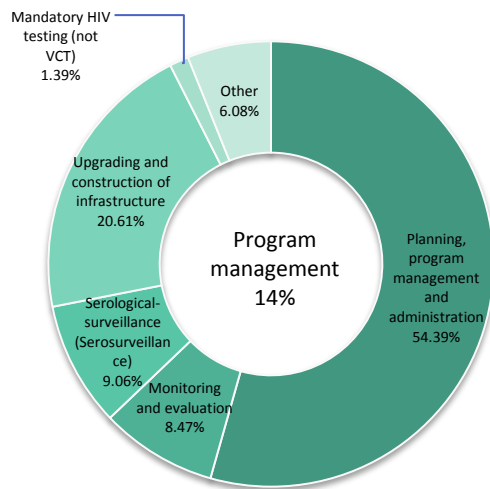
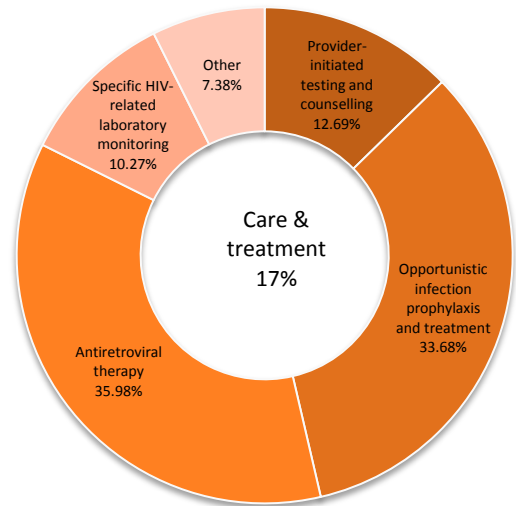
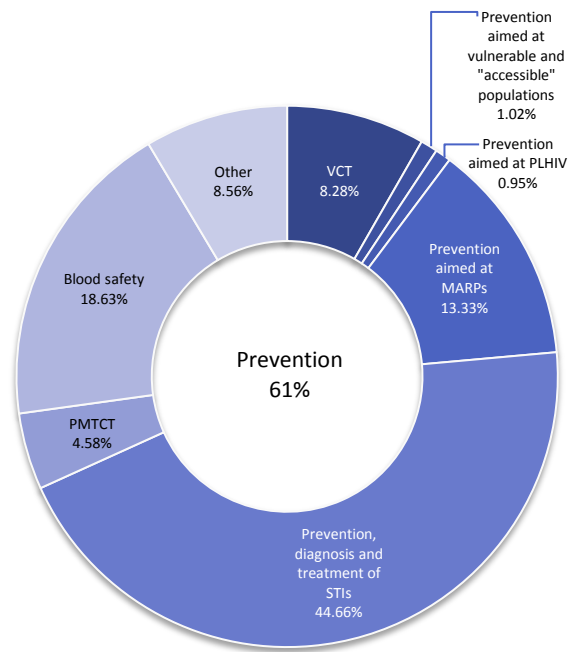
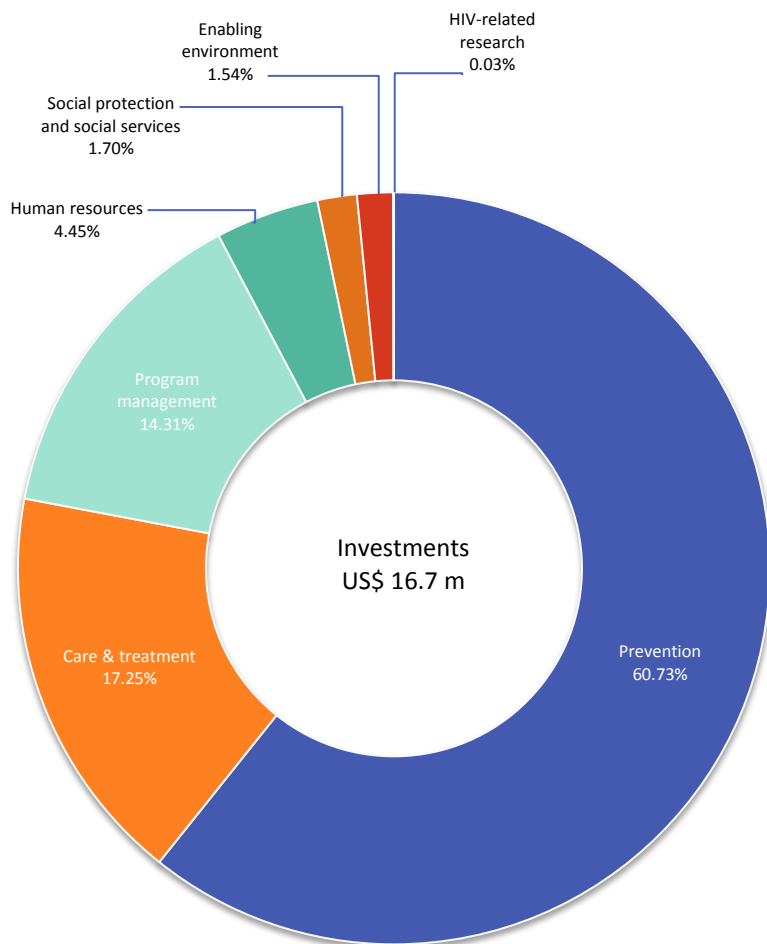
TOTAL AIDS INVESTMENTS 2011



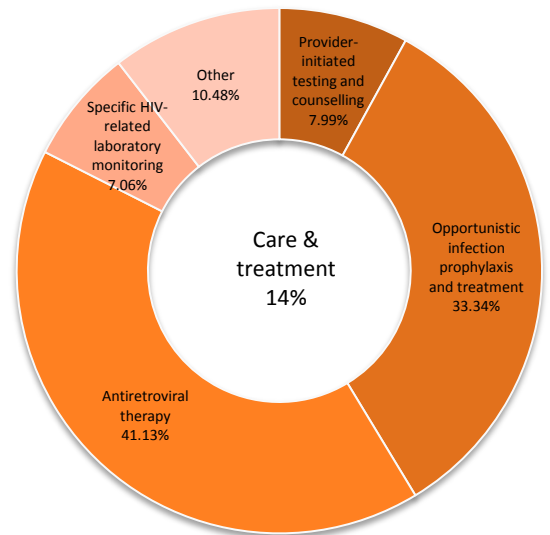
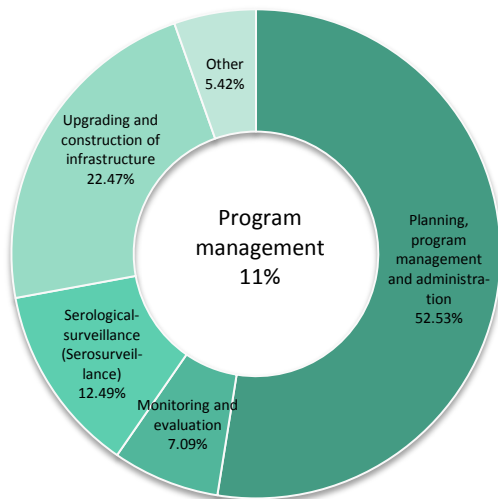
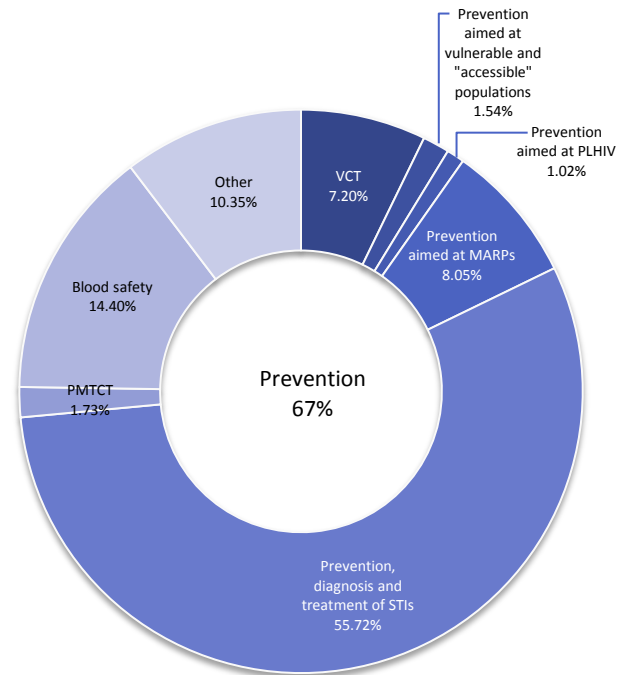
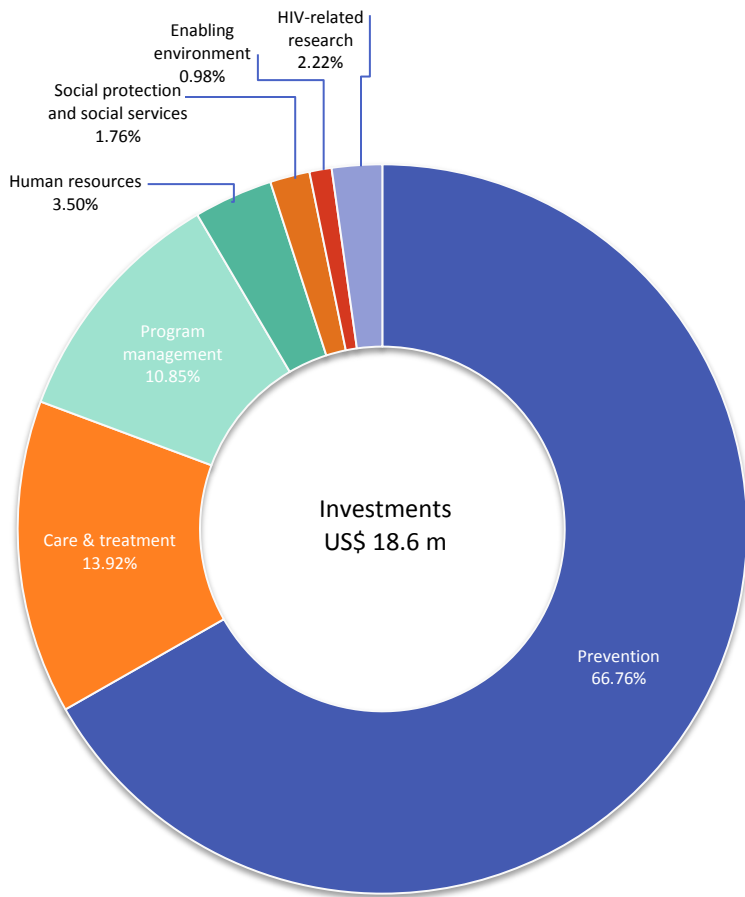
TOTAL AIDS INVESTMENTS 2010



TOTAL AIDS INVESTMENTS 2009



TOTAL AIDS INVESTMENTS 2008



Among the most funded HIV-related interventions from domestic public sources were the following: voluntary, provider-initiated, and mandatory counseling & testing providing universal access to HIV screening; prevention, diagnosis, and treatment of sexually transmitted infections (STIs), targeting general population; prevention of mother-to-child transmission (PMTCT), including counseling & testing of pregnant women, and delivery practices; blood safety to ensure a safe supply of blood and blood products; outpatient and inpatient opportunistic infections (OIs) prophylaxis and treatment.

Being adjusted to the national epidemiological context, international funding priorities in the period between 2008 and 2011 were focused more on preventive activities for vulnerable (prisoners) and most-at-risk populations (IDUs, SW, MSM); on supply of antiretroviral drugs providing universal access to treatment; as well as on upgrading infrastructure and providing of new equipment for service provider institutions.

In 2008-2011, HIV care and treatment expenditure patterns both from international and public sources of funding have not changed considerably in Belarus. NASA findings suggest that, about 70% of funding on care & treatment was related to outpatient care services, mainly due the fact that ART and HIV-specific laboratory monitoring are attributed to outpatient care (see NASA classifications and definitions). Palliative care services in Belarus are quite limited, which might be considered as a way to improve care and treatment services in Belarus in further cycle of strategic planning.

HIV screening was free of charge between 2008 and 2011 and more than thousand facilities across the country provided HIV testing and counseling. According to national Pre-educational testing was systematically carried out, as were tests in relation to pregnancy, adoptions, imprisonment, marriage, invasive medical treatment, employment and education (mandatory and provider-initiated testing and counseling). HIV testing in Belarus was systematically performed for blood donors, people who inject drugs, long-term visa and residence seeking people, refugees and nationals returning home from long-term residency abroad.

HIV spending priorities versus sources of funding

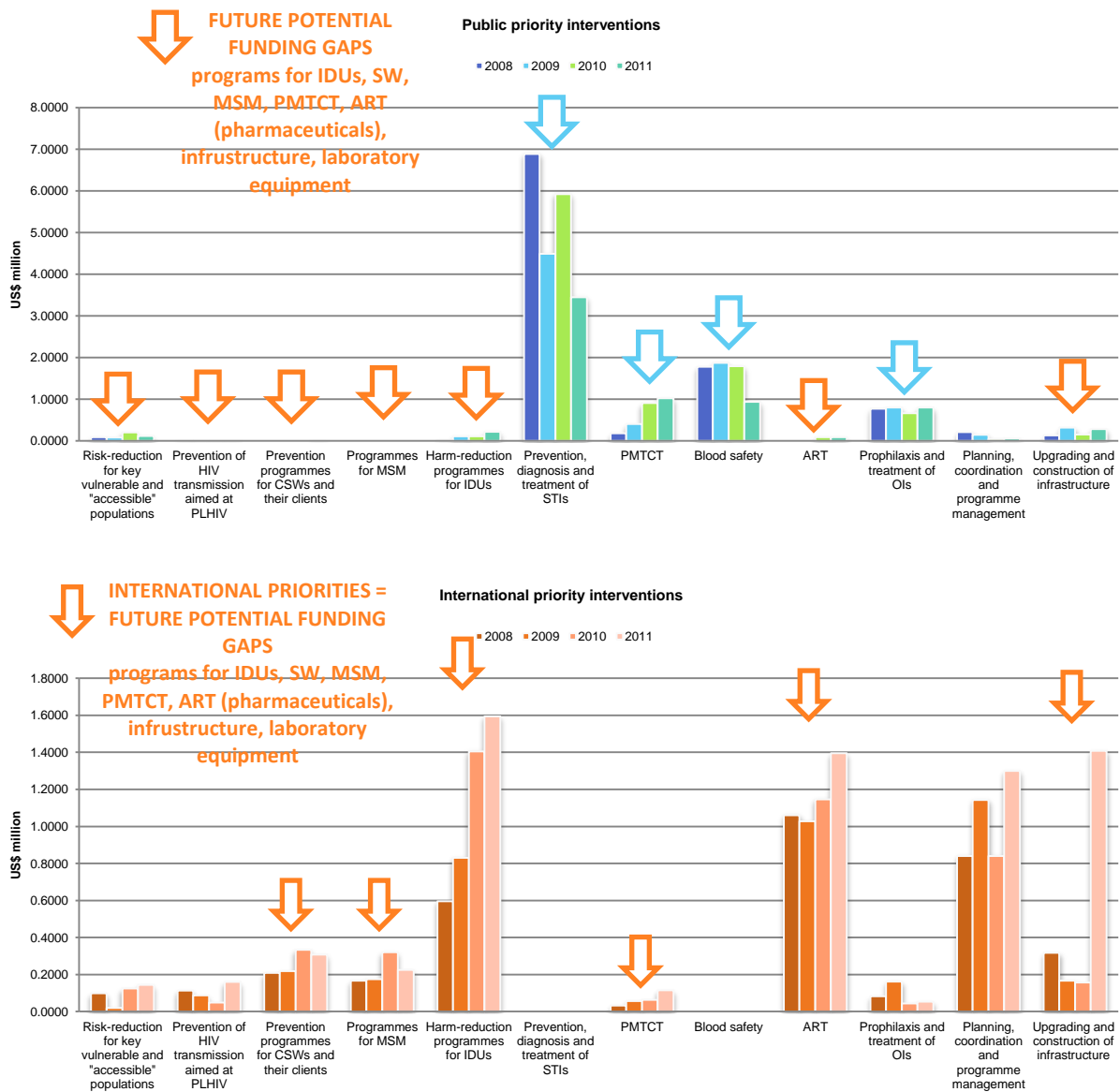
In 2008-2011, the most significant share of funding was channeled on preventive activities - more than half of total investments annually. In 2011, expenditure on prevention from domestic public sources of funding declined by about 30% causing significant decline in total domestic public investments in national AIDS response - about 26% decrease from 2010.

Expenditure on care & treatment remained stable with slight increase from both domestic public and international funding sources between 2008 and 2011.

Among the most funded HIV-related interventions from domestic public sources were the following: voluntary, provider-initiated, and mandatory counseling & testing; prevention, diagnosis, and treatment of sexually transmitted infections (STIs), targeting general population; prevention of mother-to-child transmission (PMTCT), including counseling & testing of pregnant women, and delivery practices; blood safety to ensure a safe supply of blood and blood products; outpatient and inpatient opportunistic infections (OIs) prophylaxis and treatment.

Spending patterns show that overall in the period between 2008 and 2011 major domestic public investments were channeled on secondary preventive activities, as well as on care & treatment rather than primary prevention. Domestic public spending was also channeled on covering current costs of health care provider institutions (current running costs).

Figure 13: International funding priority interventions (US\$ million), Belarus NASA 2008-2011



Matching epidemiological context, international funding priorities in the period between 2008 and 2011 were more concentrated on preventive activities for key vulnerable (prisoners) and most-at-risk populations (IDUs, SW, MSM); full supply of antiretroviral medicines (pharmaceuticals); on providing supplementary drugs for opportunistic infections (OIs) prophylaxis and treatment; providing tests for specific HIV-related laboratory monitoring; on upgrading infrastructure and providing of new equipment for service provider institutions.

Figure 14: Trends in total investments on key priority interventions (US\$ million), Belarus NASA 2008-2011

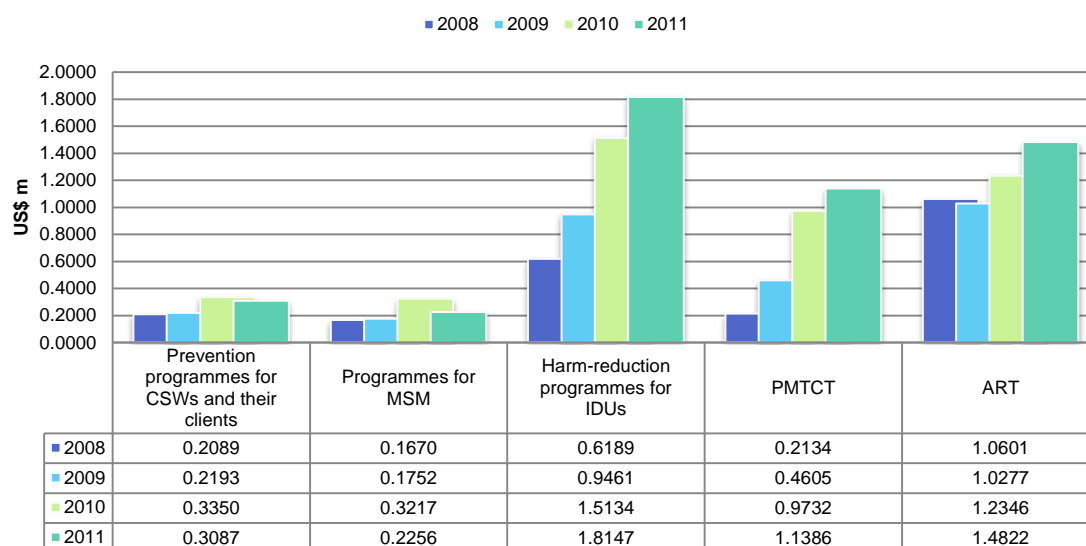


Table 8: Summary costs on prevention, care and treatment programs from all sources, Belarus NASA 2008-2011

Notes / References	Spending item		Amount spent in US\$ million			
	Abbreviation	HIV spending TOTAL overall	2008	2009	2010	2011
1.01-1.06; 1.11; 1.12	GP/VAP/YIS/YOS	Programs for general populations (GP), vulnerable and accessible populations (VAP), youth-in-school (YIS), youth-out-of-school (YOS)	2.1604	1.4788	2.2674	2.7824
1.10	IDUs	Harm-reduction programmes for injecting drug users, including needle and syringe exchange programs and methadone maintenance therapy	0.6189	0.9461	1.5134	1.8147
1.09	MSM	Programs targeting MSM	0.1670	0.1752	0.3217	0.2256
1.08	FSW/Clients	Programs targeting sex workers and their clients	0.2089	0.2193	0.3350	0.3087
1.17	PMTCT	PMTCT	0.2135	0.4605	0.9732	1.1386
1.07	PLHIV	Prevention of HIV transmission PLHIV	0.1261	0.0951	0.0539	0.1645
1.15; 1.16; 1.19; 1.22; 1.98; 1.99	Other prevention	Other prevention activities *	8.8706	6.6818	7.7254	4.3970
1		Total estimated annual expenditure on 'Prevention'	12.3654	10.0568	13.1900	10.8316
2.01.03	ART	Antiretrovirals (pharmaceuticals)	1.0601	1.0277	1.1472	1.3950
2.01.05	CD4, VL tests	Specific HIV-related laboratory monitoring	0.1819	0.2934	0.2698	0.4995
2.02.01	OI	Inpatient treatment of opportunistic infections (OI)	0.8523	0.9126	0.6496	0.6885
ASC related to 'Care & Treatment', except 2.01.03 and 2.01.05	Other care & treatment	Other outpatient and inpatient care services	0.4834	0.6224	0.7536	1.0454
2		Total estimated annual expenditure on 'Care & Treatment'	2.5777	2.8561	2.8202	3.6284

Figure 15: Key priority interventions versus sources of funding (US\$ million), Belarus NASA 2008-2011

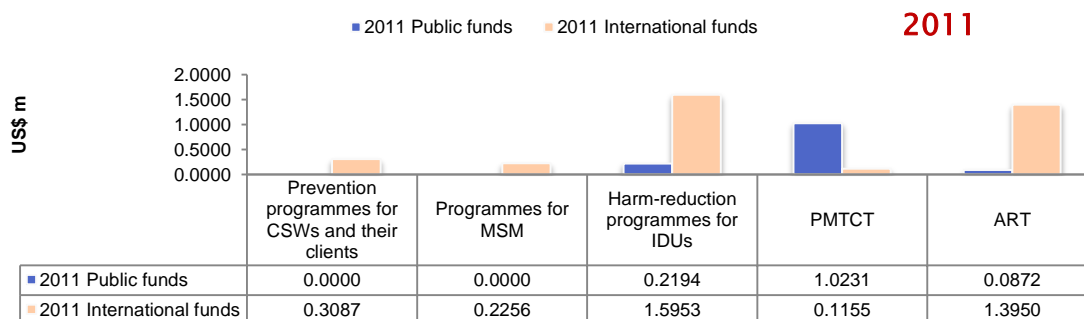
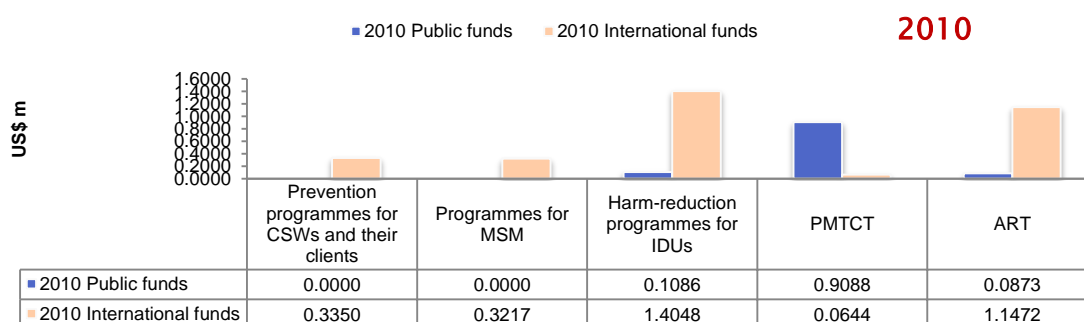
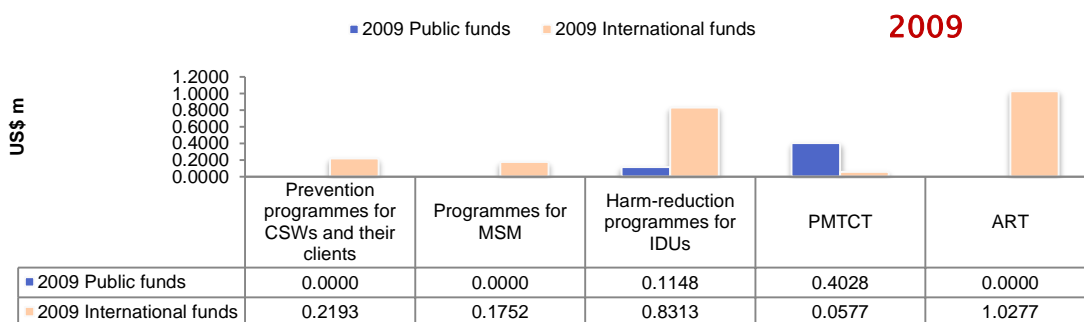
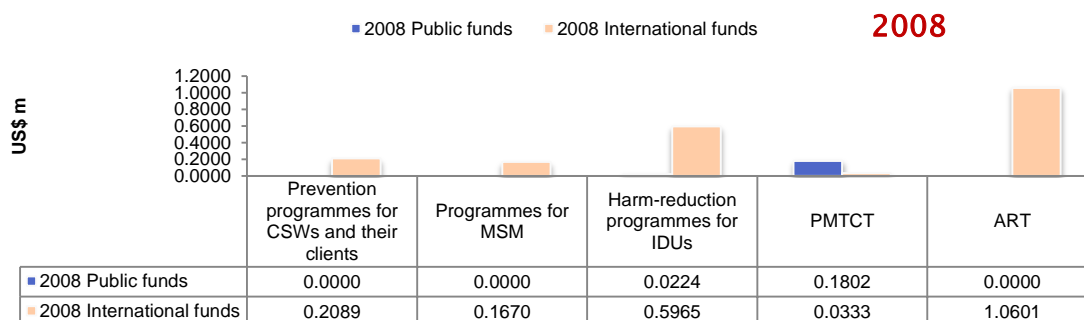
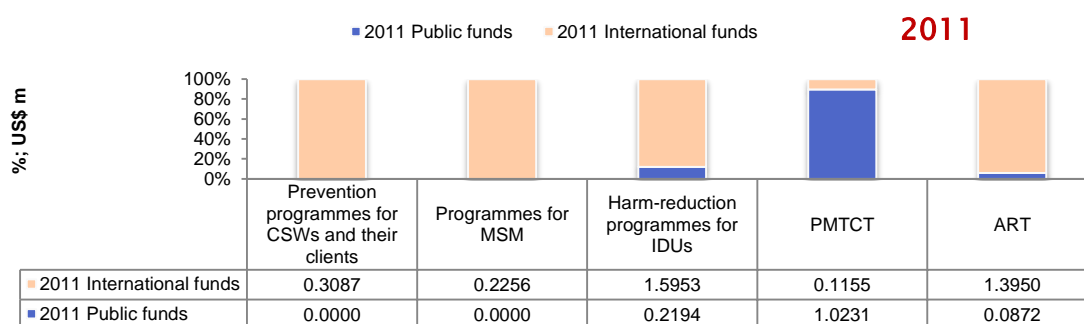
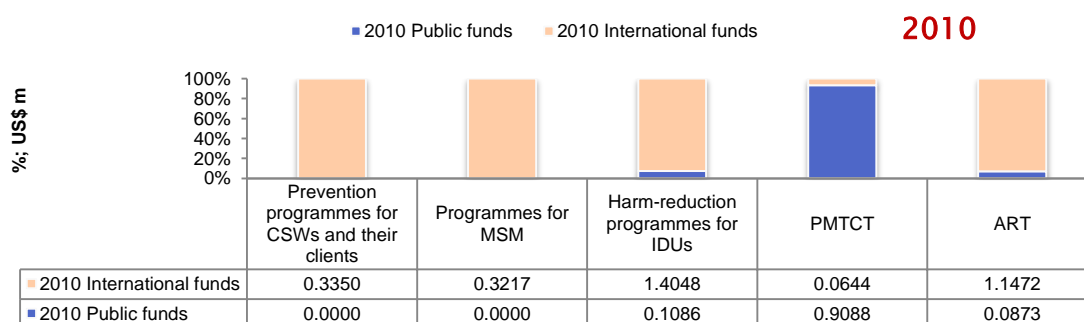
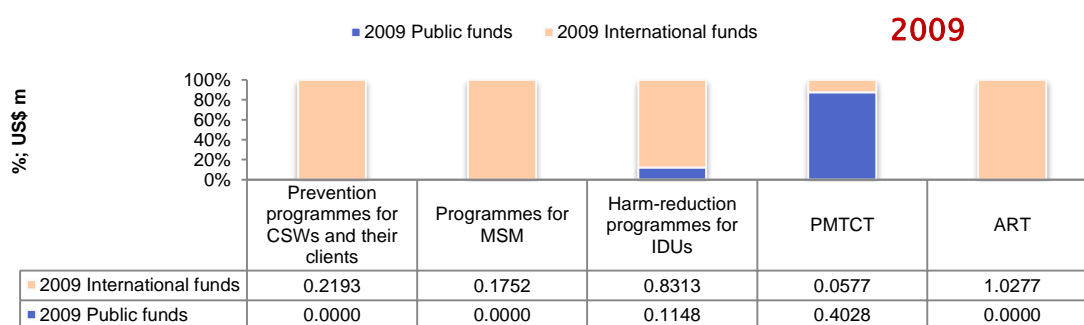
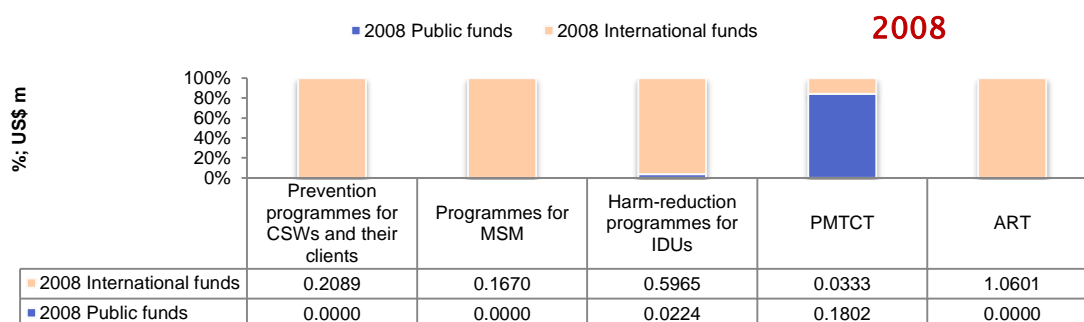
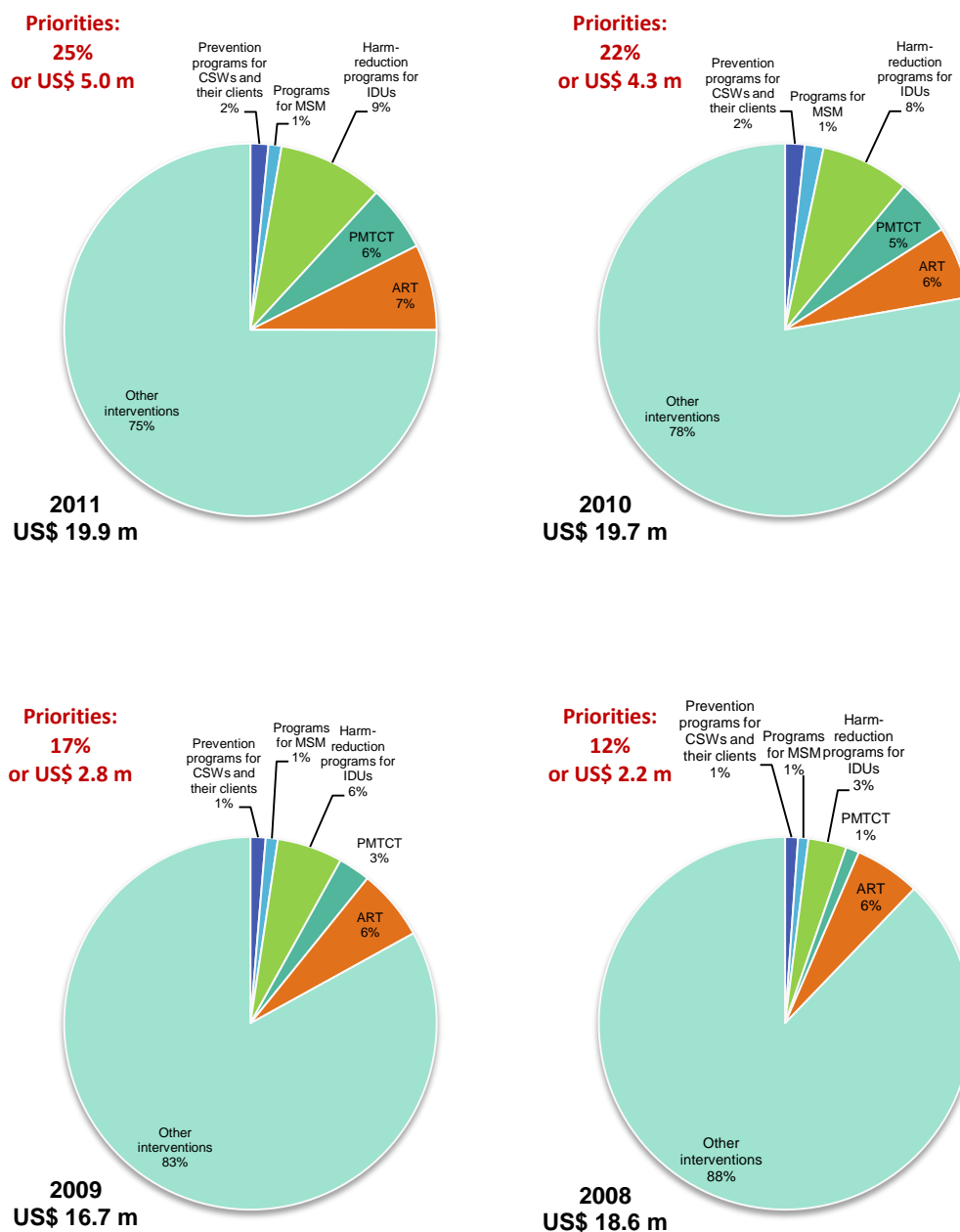


Figure 16: Key priority interventions versus sources of funding (% , US\$ million), Belarus NASA 2008-2011



While expenditure on priority areas – preventive programs for most-at-risk populations (IDUs, SW, MSM), PMTCT, and ART – increased gradually between 2008 and 2011, its share in total national HIV investments didn't exceed 25% annually. Total amount spent on priority interventions have been increasing rapidly and accounted for about US\$ 5 million in 2011 (US\$ 4.3 million in 2010).

Figure 17: Priority interventions' share in total AIDS investments (%), Belarus NASA 2008-2011



Prevention programs for key vulnerable (prisoners), most-at-risk populations (IDUs, SW, MSM), and ART (pharmaceuticals) are substantially dependent on international aid and the GFATM grants, and clearly are the areas of greatest risk with respect to potential future funding shortfalls.

Table 9: The GFATM share in total international spending on MARPs, PMTCT and ARVs between 2008 and 2011, Belarus NASA

GFATM share in total international spending on:	2008	2009	2010	2011
SW	89.0%	100%	100%	100%
MSM	99.6%	100%	100%	100%
IDUs	98.6%	100%	100%	100%
PMTCT	96.6%	43%	100%	100%
ARVs (pharmaceuticals)	100%	100%	100%	100%

DISCUSSIONS

While other upper-middle income countries excluding the BRICS countries (Brazil, Russian Federation, India, China and South Africa) increased domestic investments with the lowest growth at around 60% and surpassed international investments over the recent years⁸, domestic public investments in Belarus with the influence of economic crisis has declined substantially in 2011 and contributed a smaller than international funding share in total HIV expenditure - about 49% of national AIDS response. International assistance still remains critical and indispensable in the short and medium term in Belarus, requiring sustained and predictable international assistance.

Spending patterns show that overall in the period between 2008 and 2011 major domestic public investments were channeled on secondary preventive activities, as well as on care & treatment rather than primary prevention. Domestic public spending was also channeled on covering current costs of health care provider institutions. Within the statutory system, the main health care providers are polyclinics, outpatient clinics and FAPs at the primary care level, as well as hospitals at the secondary and tertiary care levels. These providers are all in the public sector and are managed on a hierarchical basis according to an integrated "command-and-control"-type health system. Individual hospitals, polyclinics, outpatient clinics and FAPs have no meaningful decision-making powers over capital, staffing levels or payment, or the types of services offered. Decisions about capital and staffing levels are made by the regional or district health care departments, staffing payment levels are agreed centrally and the types of services offered are determined according to norms and standards issued by the relevant specialist branches in the Ministry of Health.

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http://www.unaids.org/en/media/unaids/contentassets/documents/epidemiology/2012/20120718_investmentchallengesu pplement_en.pdf

Prevention programs for vulnerable (prisoners) and most-at-risk populations (IDUs, SW, MSM) and ART (pharmaceuticals) were covered by international investments and are clearly the areas of greatest risk with respect to potential future funding shortfalls.

Total cost of harm reduction programs reached US\$ 1.8 million in 2011 (US\$ 1.5 million in 2010). Total amount spent on programs, targeting SW accounted for about US\$ 0.3 million in 2011 and the same amount in 2010, whereas total amount spent on sustaining prevention programs for MSM accounted for about US\$ 0.2 million in 2011 and US\$ 0.3 million in 2010.

Civil society organizations providing the most of preventive activities for vulnerable and most-at-risk populations were entirely supported by international funding sources in Belarus and require the future funding strategy.

PMTCT was mainly supported by public sources, except for a number of granted programs covered by the GFATM - ART pharmaceuticals provided for pregnant women and new born children in need, as well as free milk formulas for new born children as a substitution of breast milk.

Access to antiretroviral therapy, and specifically antiretrovirals, has been stable and scaled up in recent years with increase in people in need of ART and eligible for treatment. By the end of 2011, 3,223 patients were on ART in Belarus (2,614 patients – in 2010; 1,776 patients – in 2009; and 1,249 patients – in 2008). Within the study period full supply of ART was provided due to financial support of the GFATM, and accounted for about US\$ 1.4 million in 2011 (about 1.1 million in 2010). Costing exercise conducted in Belarus, suggests that in 2011 average weighted cost of ARVs was US\$ 234 of the first line regimen, and US\$ 1,305 of the second line regimen (in 2010, US\$ 229 of the first line regimen, and US\$ 1,270 of the second line regimen. Due to decrease in prices for a number of basic ARVs the overall increase in ART expenditure in 2011 was not as high as increase in coverage. The Belarusian government aims to expand access to ART in future as documented in the National HIV Prevention Program through the provision of universal access to ART for all in need. By 2015, the government will have to gradually take over the full financing of ART.

<25% of total AIDS investments have been channeled on MARPs, PMTCT and ART, most of which were covered from international aid

While expenditure on priority areas – preventive programs for most-at-risk populations (IDUs, SW, MSM), PMTCT, and ART – increased gradually between 2008 and 2011, its share in total national HIV investments didn't exceed 25% annually. Total amount spent on priority interventions have been increasing rapidly and accounted for about US\$ 5 million in 2011 (US\$ 4.3 million in 2010; US\$ 2.8 million in 2009 and US\$ 2.2 million in 2008).

While the secondary prevention approach has been realized through a broad range of voluntary, provider initiated and mandatory screening initiatives, there is a potential risk of ignoring primarily prevention activities in terms of promoting healthier lifestyles and safe behavior after the external grants withdrawal. There is a possibility that the health system might concentrate its efforts on secondary prevention activities and treatment, rather than on the primary prevention of HIV.

The newly developed national AIDS response strategy was established for the period of 2011-2015. It has an estimated resource mix from domestic and international funding sources. In fact, domestic investments on AIDS cannot be guaranteed to be implemented according to the national strategy financial plan, as long as National HIV Prevention Program is not directly funded from the state budget, and financial plan of the National HIV Prevention Program has more referential, rather than administrative features, although indeed some minor expenditure on AIDS are being allocated in state budget. The investment decisions toward domestic expenditure on AIDS are not transparent and obvious as long as financing system is aimed on supporting health care provider institutions according to the budgets based on line-item economic classifications, rather than functional. Tracking actual expenditure on AIDS and HIV-related spending requires additional effort to assess. Under the pressure of economic crisis effecting government revenues the sustainability of the AIDS response programs covered by state budget is questioned. At the same time, ideally the pace of HIV prevention, care and treatment services scale-up should not depend on the volatility of markets and economic changes. NASA findings suggest that in 2011 most of the resources for AIDS (51%) came from international funding sources, with one donor – the GFATM – supporting more than 90% of all international assistance. The GFATM commitment guarantees the access to external support by 2015. The sustainability of international investments in AIDS response after 2015 is questioned. In 2011, due to economic crisis influence and national currency devaluation, the share of AIDS response covered by public sources of funding was about 49% of the AIDS investments. In 2008 public investments' share reached the biggest point in four years - 73%. With both public and international sources instability, the AIDS response in Belarus should be definitely put under the spot light.

There is a pressing need for greater innovation in sourcing sustainable funding of AIDS response, and the need for development of financial sustainability plan, using diversified financing models, as well as the need to mobilize leadership for its implementation. Many countries are finding other innovative ways to raise resources, imposing a levy on the use of mobile phones to fund health programs, other countries are investigating an airtime levy specifically for AIDS financing. Innovation is required in mobilizing resources and adopting innovative funding models to develop context-specific, outcome-driven, country-owned investment package for the years to come to meet the targets set.

CONCLUSIONS

This report incorporates the findings of National AIDS Spending Assessment undertaken in Belarus for the period of four years between 2008 and 2011. Pilot implementation of NASA in Belarus in 2008 showed its applicability for conducting HIV expenditure reviews in national context, and proved to be a useful tool in understanding the national AIDS response from financial aspect, and to assess the extent to which investment pattern matches epidemic pattern.

Current NASA findings indicate significant injection of government funding and demonstrated important commitment in tackling HIV response in Belarus. Although domestic public funding

sources surplus international in recent years, prevention programmes for high risk groups (IDUs, SW, MSM), and key vulnerable populations (prisoners), prevention of HIV transmission aimed at PLHIV, psychological treatment and support services for PLHIV, ART (pharmaceuticals) are the key areas which are considerably dependent on international aid.

The following actions should be considered further for implementation:

- Develop financial sustainability plan with clear targets.
- Maximize opportunities to diversify funding sources and increase domestic resource allocation. Funding security of national AIDS response faces risks with withdrawal of international aid in future years and a pressing need appears for greater innovation in sourcing sustainable funding of national AIDS response. Many countries are finding other innovative ways to raise resources. Zimbabwe's AIDS levy has generated more than US\$ 26 million in 2011. Similar steps are being considered in Kenya and Zambia. Several countries impose a levy on the use of mobile phones to fund health programmes. These include Rwanda and Uganda. Several countries including Botswana, Burkina Faso, Cameroon, Gabon and Malawi are investigating an airtime levy specifically for AIDS financing.⁹ Every dollar spent on AIDS is an investment not expenditure. Investment delivers returns. Returns multiply over time. A people-centered investment approach will save lives, reduce costs and make the most out of the resources invested. To achieve the 2015 global AIDS targets and go beyond to reach zero new HIV infections, zero discrimination and zero AIDS-related deaths - country must be able to mobilize and use resources effectively and efficiently. Efficient allocation and reallocation of AIDS resources should be further addressed with cost-effectiveness evaluations, applying dynamic modeling based on relevant behavioral and epidemiological pattern. Additionally, this paper argues that to achieve better results in tackling AIDS epidemics in Belarus, attention must be drawn to scale up the coverage of the populations at highest risk of HIV transmission.
- Use strategic investment approaches for scale-up of basic programs. Provide access to treatment. With significant numbers of individuals infected and in need of treatment, further increase in investments for care and treatment is expected in future years. With substantial amounts spent and foreseen future increase in funding needed for care & treatment it appears reasonable to put this area under the spot light, and to take a critical look at optimizing care & treatment programmes, including application of the principles of Treatment 2.0¹⁰ which seek to simplify the way HIV treatment is currently provided and scale up access, i.e. optimize drug regimens, provide access to point-of-care and other simplified platforms for diagnosis and monitoring, reduce costs, adapt delivery systems, mobilize communities. This will enable obtaining sufficient evidence on programmes effectiveness in terms of the returns on the investment made to achieve the objectives of universal access and decrease morbidity and mortality. Efficiency improvements can yield

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http://www.unaids.org/en/media/unaids/contentassets/documents/epidemiology/2012/20120718_investmentchallengesu pplement_en.pdf

http://www.unaids.org/en/media/unaids/contentassets/documents/unaidspublication/2011/20110824_JC2208_outlook_tr eatment2.0_en.pdf

considerable savings of resources and expansion of services. Retrospective analysis shows that prevention programmes for high risk groups (IDUs, SW, MSM), key vulnerable populations (prisoners), prevention of HIV transmission aimed at PLHIV, psychological treatment and support services for PLHIV, ART (pharmaceuticals) are the key areas which are considerably dependent on international aid.

- Support communities to claim their rights and participate in governance of the responses. Civil society organizations working with high risk groups, key vulnerable populations and PLHIV in Belarus are entirely supported by international aid. This fact draws attention in terms of development of future strategy on funding mechanism and quality assurance mechanism to sustain primary and effective preventive programmes in Belarus.
- Mobilize leadership at all levels.
- HIV expenditure tracking and reporting are needed to be improved and carried out annually as a part of the national routine program monitoring, providing evidence on the use of investments, and providing evidence for investment choices adjustment to changing program and epidemic context. Analysis of trends and conducting systematic comparisons of NASA findings is meaningful in terms of evidence in measuring equity in providing HIV services and revealing potential funding gaps. The data and experience obtained in conducting NASA in Belarus between 2008 and 2011 will help build capacity for future HIV resource tracking activities, even though, further efforts will still be needed to strengthen the capacity of national experts.

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SUPPLEMENTARY MATERIAL

Table 10: Key economic indicators & NASA estimates summary table, Belarus NASA 2008-2011

INDICATORS (Part 1)	2008	2009	2010	2011	Data source
Population	9.602 m	9.507 m	9.490 m	9.473 m	<i>World Bank Data</i>
GDP (current US\$)	US\$ 60,763 m	US\$ 49,271 m	US\$ 55,220 m	US\$ 55,136 m	<i>World Bank Data</i>
GDP per capita (current US\$)	US\$ 6,328	US\$ 5,183	US\$ 5,819	US\$ 5,820	<i>World Bank Data</i>
Total health expenditure, total (% of GDP)	5.9%	6.1%	5.6%	N/A	<i>World Bank Data</i>
Total health expenditure per capita (current US\$)	US\$ 373	US\$ 311	US\$ 320	N/A	<i>World Bank Data</i>
Inflation, GDP deflator (annual %)	21.2%	5.7%	11.1%	58.4%	<i>World Bank Data</i>
Official average exchange rates of the Belarusian Ruble versus US Dollar	BYR 2,136.29	BYR 2,792.54	BYR 2,993.74	BYR 5,605.84	<i>National Bank of the Republic of Belarus</i>
Total estimated HIV expenditure ¹¹ (Public and International Funds), BYR million	BYR 39,768 m	BYR 46,525 m	BYR 59,045 m	BYR 111,357 m	<i>NASA: Total estimated HIV spending (Public and International)</i>

¹¹ Total estimated expenditure on HIV excludes overall spending of public health care settings on “Safe medical injections” and “Universal precautions”, which accounted up to around US\$ 15 m in 2008 (Source: Belarus NASA 2008). Total estimated expenditure on HIV also excludes private households’ out-of-pocket expenditure.

INDICATORS (Part 2)	2008	2009	2010	2011	Data source: NASA
Total estimated HIV expenditure (Public and International Funding), US\$ million	US\$ 18.6 m	US\$ 16.7 m	US\$ 19.7 m	US\$ 19.9 m	Total estimated HIV spending (Public and International)
Total estimated HIV expenditure per capita (Public and International Funding), US\$	US\$ 1.9	US\$ 1.8	US\$ 2.1	US\$ 2.1	Total estimated HIV spending (Public and International) / Population
Public expenditure on HIV as a % of total estimated HIV expenditure	72.72%	68.14%	67.16%	48.67%	Total (Public) / Total (Public + International)*100%
International expenditure on HIV as a % of total estimated HIV expenditure	27.28%	31.86%	32.84%	51.33%	Total (International) / Total (Public + International)*100%
Prevention as a % of total estimated HIV expenditure	66.42%	60.36%	66.88%	54.53%	ASC.1 Prevention (Public + International) / Total (Public + International) *100%
Care and treatment as a % of total estimated HIV expenditure	13.85%	17.14%	14.30%	18.27%	ASC.2 Care and Treatment (Public + International) / Total (Public + International) *100%
Management as a % of total estimated HIV expenditure	10.80%	14.22%	8.86%	18.86%	ASC.4 Management (Public + International) / Total (Public + International) *100%
Total estimated expenditure on most-at-risk populations (MARPs), US\$ million	US\$ 1.0 m	US\$ 1.3 m	US\$ 2.2 m	US\$ 2.3 m	ASC.1.08 CSWs + ASC.1.09 MSM + ASC.1.10 IDUs (Public + International)
Total estimated expenditure on most-at-risk populations (MARPs) as a % of total expenditure on prevention	8.05%	13.33%	16.45%	21.69%	ASC.1.08 CSW + ASC.1.09 MSM + ASC.1.10 IDU (Public + International) / ASC.01 Prevention (Public + International) *100%
Total estimated expenditure on prevention of mother-to-child transmission (PMTCT), US\$ million	US\$ 0.2 m	US\$ 0.5 m	US\$ 1.0 m	US\$ 1.1 m	ASC.1.17 PMTCT (Public + International)

INDICATORS (Part 3)	2008	2009	2010	2011	Data source: NASA
Total estimated expenditure on prevention of mother-to-child transmission (PMTCT) as a % of total expenditure on prevention	1.73%	4.58%	7.38%	10.51%	<i>ASC.1.17 PMTCT (Public + International) / ASC.1 Prevention (Public + International) *100%</i>
Total estimated expenditure on antiretroviral therapy (ART) ¹² , US\$ million	US\$ 1.1 m	US\$ 1.0 m	US\$ 1.2 m	US\$ 1.5 m	<i>ASC.2.01.03 Antiretroviral therapy (Public + International)</i>
Total estimated expenditure on antiretroviral therapy (ART) as a % of total expenditure on care and treatment	41.13%	35.98%	43.78%	40.85%	<i>ASC.2.01.03 Antiretroviral therapy (Public + International) / ASC.2 Care and Treatment (Public + International) *100%</i>

¹² In 2008 – 2011, ARVs were solely funded by the GFATM in Belarus. In 2010 and 2011, along with expenditure on ARVs, other costs related to provision of ART were assessed, such as medical staff remuneration, overheads, and other costs related to ART (Note: in 2008 and 2009 only costs of ARVs were assessed).

Table 11: Key intervention area versus sources of funding (US\$ million), Belarus NASA 2008-2011

Intervention areas	2008		2009		2010		2011	
	Public funds	International funds	Public funds	International funds	Public funds	International funds	Public funds	International funds
Prevention	10.6648	1.7006	8.3122	1.7447	10.0758	3.1141	6.9251	3.9065
Care & treatment	1.2179	1.3598	1.3630	1.4932	1.3987	1.4215	1.4910	2.1374
Orphans and vulnerable children	0.0940	0.0000	0.0998	0.0000	0.0000	0.0000	0.0000	0.0000
Program management	0.7280	1.2818	0.7874	1.5822	0.4311	1.3160	0.5938	3.1518
Human resources	0.5002	0.1485	0.5021	0.2340	1.2560	0.1915	0.5886	0.3767
Social protection and social services	0.3262	0.0000	0.2811	0.0000	0.0813	0.1143	0.0688	0.1348
Enabling environment	0.0059	0.1760	0.0062	0.2492	0.0029	0.3053	0.0013	0.4439
HIV-related research	0.0000	0.4120	0.0000	0.0054	0.0002	0.0142	0.0001	0.0446
Total, US\$ million	13.5370	5.0787	11.3517	5.3086	13.2460	6.4769	9.6688	10.1957