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Series of Working Papers on HIV/AIDS Monitoring and Evaluation

Developing a System for Annual HIV/AIDS-related Expenditure Monitoring in the Russian Federation

Methodology, Tools, Results

This publication was made possible thanks to the comprehensive technical support, valuable input and feedback from the following experts:

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Abbreviations

ARV – Antiretroviral therapy
AIDS – Acquired Immunodeficiency Syndrome
CHI – Compulsory Health Insurance
CSW – Commercial Sex Worker
DfID – UK Department for International Development
FRIHOID – Federal Research Institute of Health Organization and IT Development of the MoHSD
FTP – Federal Targeted Program
GFATM – Global Fund for the Fight against AIDS, Tuberculosis and Malaria
GDP – Gross Domestic Product
HAART – Highly Active Antiretroviral Therapy
HIV – Human Immunodeficiency Virus
IDU – Injecting Drug User
M&E – Monitoring and Evaluation
MoHSD – Ministry of Health and Social Development of the Russian Federation
NAA – National AIDS Accounts
NASA – National AIDS Spending Assessment
NGO – Non-Governmental Organization
NHA – National Health Accounts
PLHIV – People Living With HIV
RNM – Resource Needs Model
RUR – Russian Rubles
SNA – System of National Accounts
SRI – Science and Research Institute
STI – Sexually Transmitted Infections
TPI – Treatment and Prevention Institution
UN – United Nations
UNAIDS – Joint UN Program on HIV/AIDS
UNDP – UN Development Program
UNGASS – UN General Assembly Special Session on HIV/AIDS
USD – US Dollars
VHI – Voluntary Health Insurance
WHO – World Health Organization
WB – World Bank

Foreword

The methodology for monitoring and evaluating HIV/AIDS-related expenditures presented in this document was developed under the project "Monitoring Financial Resources for Projects and Programs to Counter the HIV Epidemic in the Russian Federation". It helps to ensure effective management of expenditures for HIV/AIDS control programs and activities in Russia and is based on the principles of National Health Accounts (NHA) and on the classifications of the National AIDS Spending Assessment (NASA) developed by UNAIDS.

The project was carried out by the expert group of the Federal Research Institute of Health Organization and IT Development of the Ministry of Health and Social Development of the Russian Federation under the leadership of Y. V. Mikhailova, Director of the Institute; O. Avdeeva and A. Timoshkin, consultants of the Imperial College, London; and A. Nitzsche-Bell, Monitoring and Evaluation Advisor, UNAIDS, Moscow.

This publication also includes the results of a study on HIV/AIDS resource requirements conducted by the experts of the Center for Economics and Modeling, Constella/Futures Group, Healthy Russia 2020 and by experts from the Ivanovo, Orenburg and Irkutsk regions of Russia. The relevant article herein was prepared by experts of the Healthy Russia 2020 Project: E. Dmitrieva, S. Yusupova, Y. Kornysheva and N. Koroleva. They outline the general principles and approaches used to develop the HIV/AIDS Resource Needs Model as well as the results of adapting and implementing this model on the sub-national level in Russia.

The authors wish to express their gratitude to the Ministry of Health and Social Development (MoHSD) of the Russian Federation and especially to Deputy Minister V. I. Starodubov and to V. O. Flek, advisor to the Minister's Secretariat. The authors are also grateful to the Federal Service for the Surveillance on Consumer Rights Protection and Human Well-Being and especially to A. T. Goliusov, Head of the Department for the Organization of Surveillance on HIV/AIDS who provided significant support in coordinating the activities and involving the representatives of other ministries and institutions throughout the preparation and implementation of this project.

1. Introduction

The Russian Federation is home to the biggest AIDS epidemic in all of Europe. As of 30 June 2006, 347,222 HIV cases have been officially registered. Eighty percent of people living with HIV are aged 15–30, the most reproductive and economically productive age group.

In September 2005, the President of the Russian Federation, V. V. Putin, made health a national priority for 2006–2007. The main focus of on-going activities is placed on strengthening the health care system as a whole and on strengthening the potential for its further development. Furthermore, health promotion and disease prevention are being expanded. As part of this focus, the MoHSD announced a number of tenders for the implementation of HIV/AIDS prevention and treatment activities. With regard to HIV/AIDS, the key goal is to ensure greater impact of the federal program to control the epidemic. Up to RUR 3.1 billion (approximately USD 110 million) of additional funding from the public budget will be allocated for this program in 2006. Compared to past investments into HIV/AIDS, this constitutes a 20-fold increase of the government budget allocated to HIV/AIDS (Federal Service for the Surveillance on Consumer Rights Protection and Human Well-Being, 2006).

This significant increase in funding for HIV/AIDS programs and activities brings with it the need to develop and implement a tool that enables monitoring and evaluation of HIV/AIDS-related expenditures. This tool is intended to help identify the most effective and cost-efficient areas for public investment.

In his Decree # 201 of 15 September 2005, V. I. Starodubov, Deputy Minister of Health and Social Development, commissioned the Federal Research Institute of Health Organization and IT Development (FRIHOID) to develop a strategy for systematic monitoring of financial resources for HIV/AIDS projects and programs in the Russian Federation as well as to start linking those activities to the implementation of the National Health Accounts system in the country.

Several different approaches to monitor, evaluate and account for HIV/AIDS-related expenditures are used at the global level. They include different methods of data collection and analysis. In this document, we present the results of applying these principles of financial M&E to the analysis of HIV/AIDS-related expenditures in the Russian Federation.

In cooperation with UNAIDS, the FRIHOID developed a tool to assess HIV/AIDS-related expenditures using the National AIDS Spending Assessment (NASA) approach (UNAIDS, 2006). Under the project “Monitoring of Financial Resources for Projects and Programs to Counter the HIV Epidemic in the Russian Federation”, the FRIHOID carried out the first phase of this initiative. NASA is consistent with standardized rules of the System of National Accounts (SNA) used in different sectors of the economy (OECD, 1993) as well with the principles of the National Health Accounts (NHA) (WHO, 2003) and the National AIDS Accounts (NAA). It is used to obtain and analyze data on AIDS-related expenditures in the Russian Federation across all key categories: sources of financing; financing agents; service providers; beneficiaries; type of services and production factors. More information on the structure of NASA and its role as a tool for financial monitoring is presented later in this document.

The project team made a special effort to link the tracking of HIV/AIDS expenditures with the estimation of future HIV/AIDS resource requirements in order to ensure effective planning, allocation and distribution of resources between different activities and to allow for better coordination of efforts between different sectors and enhanced evaluation of the future impact of the level and nature of funding on containing the epidemic in the Russian Federation. The project was fortunate to collaborate on this

1. Introduction

with an expert team consisting of specialists from the Center for Economics and Modeling, Constella/Futures Group, the Healthy Russia 2020 Project and a number of experts from the Russian regions of Ivanovo, Orenburg and Irkutsk. This team developed a model to evaluate the cost of care, treatment and prevention programs and to forecast the epidemic development in the country. The project team also reviewed efforts to estimate global resource requirements for effective HIV/AIDS prevention, care and treatment conducted by UNAIDS, the Futures Group, SIDALAC and the London School of Hygiene and Tropical Medicine. (UN, 2001; Schwartlander et al., 2001; UNAIDS, 2005).

It is of paramount importance to further enhance these activities to improve data quality and to create sustainable capacity for conducting regular analysis of the resources available and needed as a way of determining existing gaps, to evaluate how the spending of available resources impacts the course of the epidemic, how to re-allocate resources to effectively curb the epidemic and mitigate its impact and to reliably assess what resources are needed for the implementation of a comprehensive National HIV/AIDS Strategy.

2. Financial Resource Tracking as an Integral Part of the Unified National System of HIV/AIDS Monitoring and Evaluation

The past several years have seen some dramatic changes in the global strategy for countering the HIV/AIDS epidemic. In the last decade, annual funding for the response to AIDS in low- and middle-income countries increased 28-fold, from USD 300 million to USD 8.3 billion (UNAIDS, 2006). These increases are impressive, but they also make more evident the need for global strategies and improved coordination to ensure proper use of funding.

On 25 April 2004, the participants of a high-level global donors meeting hosted by the World Bank achieved consensus on a unified response to HIV/AIDS and adopted the so-called "Three Ones Principles" as an overarching framework for improved coordination at the national level. These principles are (UNAIDS 2004):

- One agreed upon HIV/AIDS action framework that provides the basis for coordinating the work of all partners
- One national AIDS coordinating authority, with a broad multi-sector mandate
- One agreed upon country-level monitoring and evaluation (M&E) system

In this context, HIV/AIDS M&E is recognized as an essential management tool for government institutions charged with coordinating the national response. It enhances the capacities of national governments to provide overall coordination and tighter management and control of relevant activities carried out on the ground.

More specifically, a unified M&E system provides the following advantages:

- It permits better data correlation and sharing due to standardized indicators and sampling methodologies
- It provides reliable and useful data to many constituents (managers, researchers, donors), eliminating the need to repeat baseline surveys or evaluation studies
- It ensures that donor-funded M&E efforts address national needs, not those of specific international donors or organizations
- It encourages coordination and communication between different groups involved in the national response to HIV/AIDS

A comprehensive national HIV/AIDS M&E system consists of the following components:

1. An ***overall M&E system*** comprising a governing flowchart and database, which describes precisely how data are collected and flow;
2. ***Surveillance*** comprising epidemiological, behavioral and social impact surveillance;
3. ***Essential research*** complementing surveillance data, including epidemiological, evaluation, and behavioral and social impact research;
4. ***Program/project monitoring*** involving the regular assessment of key elements (inputs, activities, results) of individual projects and programs, as well as of the *overall* national response to HIV/AIDS; and
5. ***Financial M&E*** aimed at tracking sources and uses of funds, and the extent to which available public, donor, and private sector funding allocations are attributable to the achievement of overall programmatic goals and targets as defined in national policy and strategy documents.

2. Financial Resource Tracking as an Integral Part of the Unified National System of HIV/AIDS Monitoring and Evaluation

Table 1

Key Components of a Unified National Monitoring and Evaluation System

Component	Description
Overall System	Flowchart and database
Surveillance	Epidemiological, behavioral, social impact surveillance of STI/HIV/AIDS/TB/drug use rates and trends
Essential Research	Essential research to complement surveillance
Financial Monitoring and Evaluation	Monitoring utilization of internal and external funds
Program/Project Monitoring	Assessment of key elements of individual projects/programs as well as the overall national response to HIV/AIDS

As an integral component of a national M&E system, regular financial monitoring allows for the assessment and comparison of the financial utilization of a wide range of interventions related to HIV prevention, treatment, care and support. Monitoring and evaluation of tangible achievements of these interventions alone would only measure their effectiveness – the extent to which they attain their objectives. When M&E measures tangible achievements along with financial utilization, it measures the efficiency of interventions – how economically inputs (funds, expertise, time, etc.) are converted into results. Therefore, monitoring the financial utilization of HIV/AIDS activities helps to get an idea of their efficiency and produces an overview of tangible achievements against expenditures at the local, regional and federal levels.

Taking into consideration the fact that we can only manage what we can measure, regular financial HIV/AIDS monitoring and evaluation generates vital strategic information assisting program managers and key decision makers in the following:

- identification of priorities in allocating funding to respond to the epidemic
- optimization of the use of financial resources
- strategic planning of HIV/AIDS-related expenditures
- identification of the funding gap between available sources and those required
- evaluation of the effectiveness of HIV/AIDS programs and activities funding utilizing epidemiological M&E data
- control, regulation and coordination of the program and project activities implemented by different stakeholders

It is important to note that as public and donor HIV/AIDS-spending has significantly increased in the Russian Federation, the main goal of M&E of financial expenditures on HIV/AIDS is to provide a systematic analysis of resource allocation (monitoring) and to evaluate the capacity of existing funding and allocation patterns to contain the epidemic in the future (evaluation). Thus, regular resource tracking should be linked to systematic assessments of future resource needs and be based on comprehensive epidemiological data allowing an accurate portrayal of the epidemic and forecast of its future trends.

2. Financial Resource Tracking as an Integral Part of the Unified National System of HIV/AIDS Monitoring and Evaluation

2.1. Structure of the HIV/AIDS Financial Monitoring and Evaluation System

The system of HIV/AIDS financial monitoring and evaluation currently under development in the Russian Federation is based on the NASA methodology (UNAIDS, 2006). NASA is consistent with and based on standardized and globally recognized statistical and accounting methods, definitions and regulations such as the System of National Accounts (SNA), National Health Accounts (NHA), National AIDS Accounts (NAA) and the principles of public financing. In the Russian Federation, NASA has been adapted to the existing system of national HIV/AIDS control, to current legislation and regulations and to public statistical and accounting reporting rules and practices.

The algorithm and the informational system of financial M&E have been revised to describe financial flows and expenditures using the same categories that are globally applied to assess spending. At the same time, NASA distinguishes itself from other methodologies in terms of data collection, accounting for current and capital expenditures, classifications and definitions of functions. The system developed in the Russian Federation has been made compatible with the HIV/AIDS resource needs assessments on the global and country levels. The use of the NASA classifications allows comprehensive data collection on available and required resources for HIV/AIDS in accordance with the recommendations of the UNAIDS Global Resource Tracking Consortium to unify the variety of tools used both inside and outside the health sector.

In accordance with the NHA main framework and templates, the M&E system includes monitoring of all expenditures related to mitigating social consequences of the epidemic, education, employment and addressing legal issues as well as expenditures of other sectors listed in the document “Resource Needs for An Expanded Response to AIDS in Low and Middle Income Countries”, approved by the UNAIDS Program Coordination Board (UNAIDS, 2005).

HIV/AIDS-related expenditures are recorded, monitored and evaluated based on the following parameters: (UNAIDS, 2006):

1) financing sources;
2) financing agents;
3) types of services (functions, related to the HIV/AIDS response);
4) service providers;
5) production factors (budget lines/expenditure lines);
6) beneficiaries.

The activities and services related to the HIV/AIDS response are recorded, monitored and evaluated within the framework of the following programmatic areas (UNAIDS, 2006):

1) prevention;
2) treatment and care;
3) orphans and vulnerable children;
4) AIDS program development;
5) human resources management;
6) social mitigation;

7) community development and enhanced environment;

8) HIV/AIDS-related research.

2.1.1. NASA Categories: Financing Sources

The financing sources in the Russian Federation are characterized by the following multi-tier structure corresponding to the administrative arrangements in the country:

1. **Public level:**
   - ☐ Budget funding
     - ○ Federal budget
     - ○ Regional budget
     - ○ Territorial or municipal budget
   - ☐ Extra-budgetary funding
     - ○ Social insurance fund
     - ○ Pension fund
     - ○ Compulsory health insurance fund
2. **Non-public level:**
   - ☐ Non-governmental organizations
   - ☐ Private insurance companies
   - ☐ Private enterprises
   - ☐ International donor-organizations
3. **Out-of-pocket funds (household expenditures)**

The legislation of the Russian Federation defines financing sources for health care services provided specifically for treating the so-called socially significant diseases (e. g. tuberculosis, STIs, HIV, hepatitis, etc.). For example, Articles 41 and 42 of the Legal Framework for Public Health Protection of 22.07.1993 N 5487-1 (see version from 07.05.2005) indicate that the provision of health services and social support for those suffering from socially significant diseases are to be funded by budgets at all levels, social insurance funds and other legitimate sources in accordance with the legislation of the Russian Federation.

In accordance with current legislation that defines the formation and execution of the compulsory health insurance budget, governmental and municipal health funds could address the following HIV/AIDS-related interventions:

- activities to develop and implement targeted programs
- personnel training
- research
- developing the material and technical capacity of health facilities
- subsidizing specific areas to provide equitable levels of health care for people living with HIV

- support to medical institutions that provide services for people with socially significant diseases

People with socially significant diseases receive health care in specialized public health institutions under the State Guarantee Program that stipulates the provision of free medical assistance to Russian citizens.

The types and the volume of medical care and social support for PLHIV are stipulated by the MoHSD and other stakeholder ministries and line ministries.

In accordance with the NASA classifications, financing sources for HIV/AIDS programs and activities in the Russian Federation could be presented as follows:

- **Public funds:**
  - Federal level:
    - Ministry of Finance;
    - Federal Administration;
    - Federal Ministries and line ministries;
    - Federal Fund of Compulsory Health Insurance.
  - Regional level:
    - Ministry of Finance;
    - Regional Administration;
    - Regional ministries and line ministries;
    - Regional Social Insurance Fund;
    - Other ministries and line ministries that provide funding.
  - Municipal level:
    - Ministry of Finance;
    - Territorial Fund of Compulsory Health Insurance.
  - Social Insurance Fund;
  - Fund for Social Support;
  - Other public extra-budgetary funds.
- **Private funds:**
  - Private sector enterprises;
  - Private insurance;
  - Households;
  - Non-profit non-governmental organizations;
  - Charitable organizations;
  - Other.
- **International funds:**
  - Direct bilateral international organizations;
  - Multilateral international organizations.

2.1.2. NASA Categories: Financing Agents

Funding agents are organizations that pool the resources collected from different financial sources and distribute these resources to purchase services. The key funding agents for HIV/AIDS resources in the Russian Federation are the following:

- **Public sector:**
  - Federal level:
    - Ministry of Health and Social Development;
    - Ministry of Defense;
    - Ministry of Justice;
    - Ministry of Interior;
    - Ministry of Education;
    - Public Service for Social Protection;
    - Federal Service for the Surveillance on Consumer Rights Protection and Human Well-Being;
    - Federal Service for Control Over Drugs;
    - National HIV/AIDS Coordination Council.
  - Regional level:
    - Ministry of Health and Social Development;
    - Ministry of Education;
    - Public Service for Social Protection;
    - Regional HIV/AIDS Coordination Council;
    - Other agents of the public regional level.
  - Municipal level:
    - Ministry of Health and Social Development;
    - Ministry of Education;
    - Municipal HIV/AIDS Coordination Council;
    - Other agents of the state municipal level.
  - Ministry of Social Protection:
  - Compulsory Social, Medical and Pension Insurance Funds.
- **Private Sector:**
  - Voluntary insurance companies;
  - Households;
  - Non-profit organizations;
  - Charitable organizations.

- **International organizations:**
  - Bilateral organizations;
  - Multilateral organizations;
  - International charitable organizations;
  - International profit organizations.
- **Other financing agents.**

2.1.3. NASA Categories: Service Providers

The system of monitoring HIV/AIDS-related expenditures includes a variety of organizations involved in the national response to HIV/AIDS. The key stakeholders, whose activities are analyzed and whose expenditures are included in the system of HIV/AIDS financial monitoring, are the following:

- Organizations that finance HIV/AIDS-related activities
- Organizations that coordinate, control and support HIV/AIDS programs at all levels
- Organizations that provide services and goods targeted to control the epidemic

HIV/AIDS service providers include those both within and outside the public health system:

- The mass media;
- Educational institutions;
- Scientific and research institutions;
- Services of social protection and employment;
- Governmental Councils on HIV/AIDS (National HIV/AIDS Coordination Council);
- Financial institutions and insurance companies;
- Public non-profit organizations;
- Trade, industrial and construction organizations;
- Public health sector institutions:
  - Hospitals;
  - Out-patient clinics;
  - Prevention institutions;
  - Retail trade institutions.
- Other service providers.

2.1.4. Functions (Services) related to HIV/AIDS

In accordance with the NASA functional classification, the list of HIV/AIDS-related functions (services) is represented by the following programmatic areas:

1. **Prevention Services**
   - HIV-related information, communication and education
   - Voluntary testing and counseling
   - Prevention programs for vulnerable groups
   - Prevention programs for PLHIV
   - Condom social marketing
   - Public and commercial sector condom provision
   - STI prevention programs
   - Prevention of mother-to-child HIV transmission
   - Blood safety programs
   - Post-exposure prophylaxis
   - Universal precautions
2. **Treatment and Care Services**
   - Out-patient care
   - Antiretroviral therapy
   - Prophylaxis of opportunistic infections
   - Nutritional support related to antiretroviral therapy
   - Diagnostic studies
   - Laboratory research
   - Post HIV test counseling
   - Clinical monitoring
   - Patient transportation and ambulance services
   - Palliative care
   - In-patient care
   - Opportunistic infection treatment
3. **Social and Health Services for Orphans and Vulnerable Children**
   - Education
   - Health care support
   - Family/home support
   - Community support
   - Organization costs

4. **HIV/AIDS Administration and Program Management**
   - Program management and coordination
   - Advocacy
   - Monitoring and Evaluation
   - Training
   - Logistics and supply, including transportation
   - Epidemiological surveillance
   - ARV drug resistance surveillance
   - Capital formation for provider institutions
5. **Developing Human Capacity**
   - Monetary incentives to doctors
   - Monetary incentives to nurses
   - Monetary incentives to other staff
   - Education and training of HIV/AIDS workforce
6. **Mitigating Social Consequences**
   - Legal services
   - Monetary benefits
   - In-kind benefits
   - Social services
7. **Community Development Services to Reduce Vulnerability**
   - Institutional development
   - Community mobilization
8. **HIV/AIDS-related Research**

The analysis of funds flow for HIV/AIDS in the Russian Federation identified the following areas for resource allocation:

1. Earmarked funds.
   - Funds allocated for HIV programs and activities in the Russian Federation (targeted programs, international loans, international projects, funds of non-governmental organizations and other)
   - Funds allocated to specialized health institutions focused on HIV/AIDS treatment and prevention (AIDS-Centers)
   - Household funds for HIV/AIDS-related activities, funds of social care authorities and of non-profit organizations for support and treatment of people living with HIV
2. Non-earmarked funds.

Funds allocated to institutions and line ministries that are not earmarked for certain HIV/AIDS programs but for the whole sector (health, education, etc.)

2. Financial Resource Tracking as an Integral Part of the Unified National System of HIV/AIDS Monitoring and Evaluation

Figure 1 presents the funds flow for HIV/AIDS programs and services.

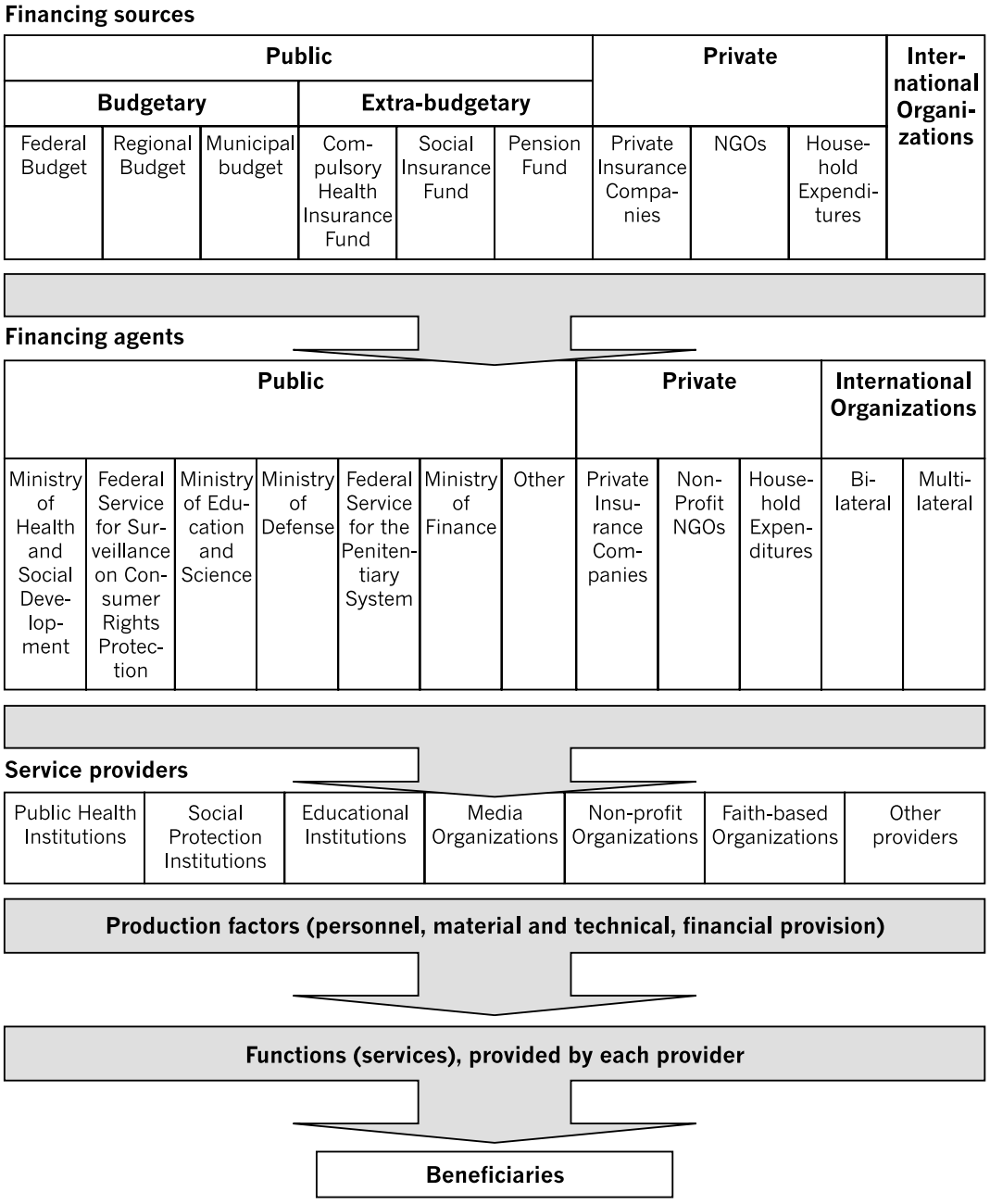

Figure 1. Funds flow for HIV/AIDS programs and services in the Russian Federation

2.2. Indicators for Financial Monitoring

A system of national accounts and a set of financial indicators reflect the key components of the national HIV/AIDS strategy, measure the outcomes of the national efforts to respond to HIV/AIDS and allow conducting a reliable analysis of statistical data. These indicators allow comparing HIV/AIDS-related funding within the country, across regions and industries as well as over the course of time. Financial indicators were selected based on data availability and the capacity to measure the expenditures of the national HIV/AIDS control program, HIV/AIDS expenditures of the health sector and other sectors involved in HIV prevention and to compare available and required resources within Russia as well as with other countries.

The framework of the National Health Accounts and NASA indicators (UNAIDS, 2006) could be used for monitoring HIV/AIDS-related expenditures in the Russian Federation. These indicators present the funds flow by main NHA dimensions – financing sources, financing agents, service providers, functions, production factors and beneficiaries. The use of these indicators allows measuring and evaluating of the national inputs to the response to the epidemic, the effectiveness of these inputs and the national commitment to funding HIV/AIDS programs in the country.

The key indicators of monitoring and evaluation of HIV/AIDS expenditures are the following:

1) HIV/AIDS expenditures as a percentage of GDP;
2) HIV/AIDS expenditures as a percentage of overall health funding;
3) Public HIV/AIDS expenditures vs. private out-of-pocket expenditures;
4) Public HIV/AIDS funds vs. HIV/AIDS donor funding;
5) Per capita expenditures on HIV/AIDS;
6) Expenditures per one person living with HIV;
7) Share of HIV/AIDS expenditures by functions;
8) Expenditures on HIV/AIDS treatment vs. HIV/AIDS prevention;
9) Public expenditures for primary care vs. hospital-based health care;
10) Share of expenditures by beneficiary groups;
11) Household HIV/AIDS expenditures as percentage of general health household expenditures.

The present list is not and should not to be considered exhaustive. Some of the indicators listed here are indispensable whereas some could be used to replace others. Which indicators are selected depends on the development priorities, the level of social and economic development and the financial structure of the state, as well as on how necessary it is to take specific decisions. Also, it is important to take into consideration that the cost of obtaining the data for each indicator decreases significantly when this work is done systematically.

3. Organizational Structure of HIV/AIDS Control in the Russian Federation

3.1. Specialized Health Care Provision System

The infrastructure of health care organizations involved in HIV/AIDS prevention, care and treatment in the Russian Federation is organized within a four-level system and several parallel programs (Figure 2).

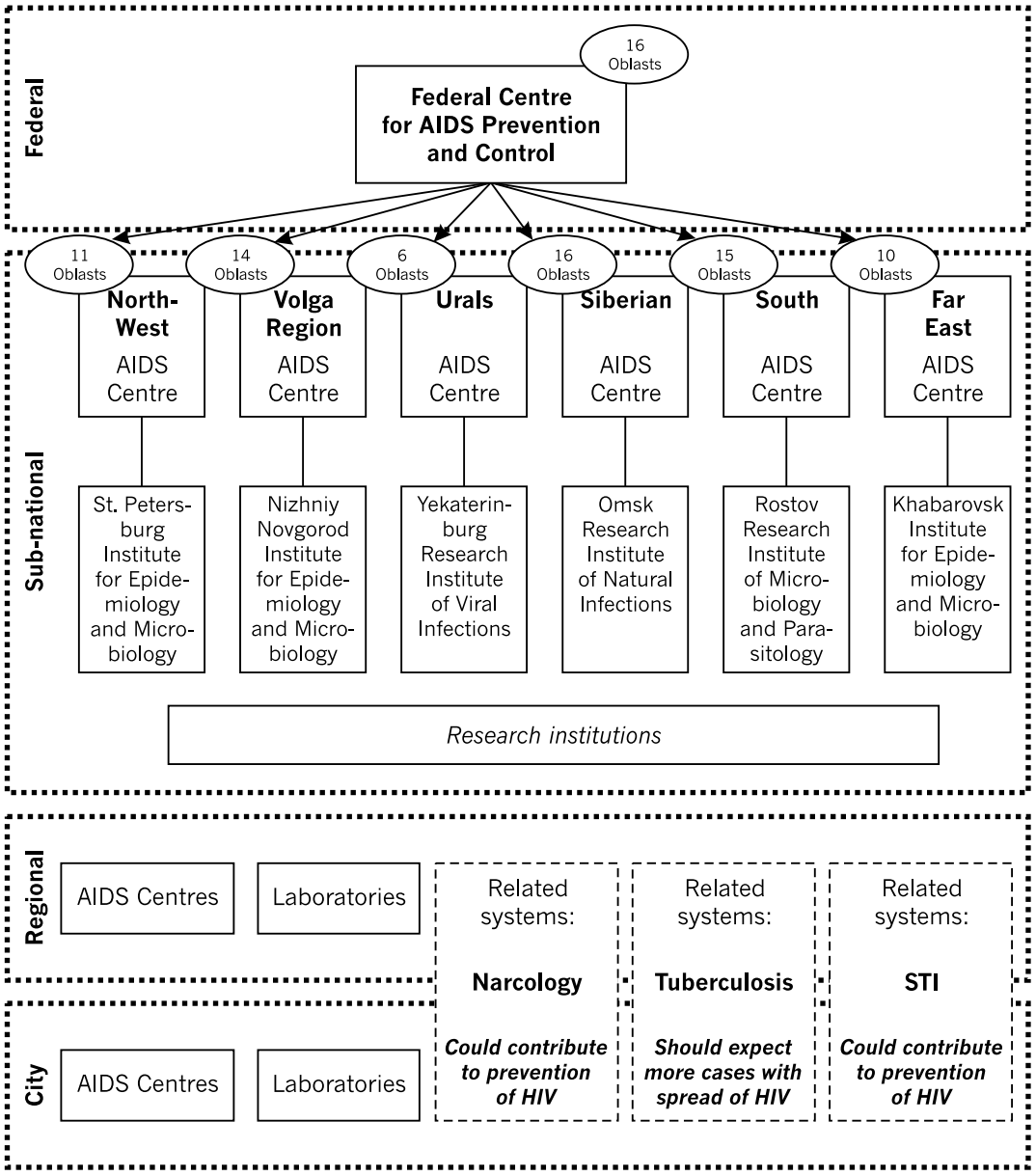

Figure 2. Organizational structure of the HIV/AIDS control system in the Russian Federation (Health System)

Source: Atun, R., Avdeeva, O., Timoshkin, A., Kulick, Y. (2005) HIV/AIDS Sub Accounts in Altay Kray and Samara Regions. Project Report, Knowledge for Action Programme. Imperial College London.

3. Organizational Structure of HIV/AIDS Control in the Russian Federation

Central Bodies:

- Seven sub-national (okrug) Centers for AIDS Prevention and Control, including the Federal Science and Research Center for AIDS Prevention and Control in Moscow;
- Research Center for HIV Prevention and Treatment in Pregnant Women and Children, Saint-Petersburg.

Regional Level Institutes and Divisions (2006):

- 108 territorial AIDS centers
- 1200 diagnostic laboratories
- 678 anonymous testing offices

The **hierarchical** structure of the AIDS control system (Figure 2) is aligned to the administrative arrangements of the Russian Federation. It is represented by the following sub-national (okrug) Centers for AIDS Prevention and Control: Federal Science and Research Methodological Center for AIDS Control and Prevention; the North-West, Volga (Privolzhski), Urals, Siberian, South and Far East Centers (see the Order of the Ministry of Health of the Russian Federation N 312 of August 7, 2000 "On Improving the Organizational Structure and the Activities of AIDS Prevention and Control Institutions").

Sub-national AIDS Centers collaborate with epidemiological research institutes:

- The North-West AIDS Center with the St. Petersburg Scientific and Research Institute for Epidemiology and Microbiology;
- The Volga (Privolzhskiy) AIDS Center with the Nizhniy Novgorod Science and Research Institute for Epidemiology and Microbiology;
- The Urals AIDS Center with the Ekaterinburg Science and Research Institute for Viral Infections;
- The Siberian AIDS Center with the Omsk Science and Research Institute for Natural Infections;
- The South Russia AIDS Center with the Rostov Science and Research Institute for Microbiology and Parasitology;
- The Far East AIDS Center with the Khabarovsk Institute for Epidemiology and Microbiology.

The sub-national centers report to the Ministry of Health and Social Development of the Russian Federation and to the Federal Science and Research Center for AIDS Control and Prevention. They are funded from the federal budget as part of the capacity formation of science and research institutes.

3.2. Specialized Health Institutions and Other Sector Stakeholders

Specialized institutions (mostly AIDS Centers of different levels) collaborate with a variety of other sector institutions and organizations to provide HIV/AIDS-related services.

The organizational structure of the HIV/AIDS prevention and control system of the Kaliningradskaya Oblast serves as a good example for the inter-sectoral networks that have been established to provide a wide range of services (Figure 3).

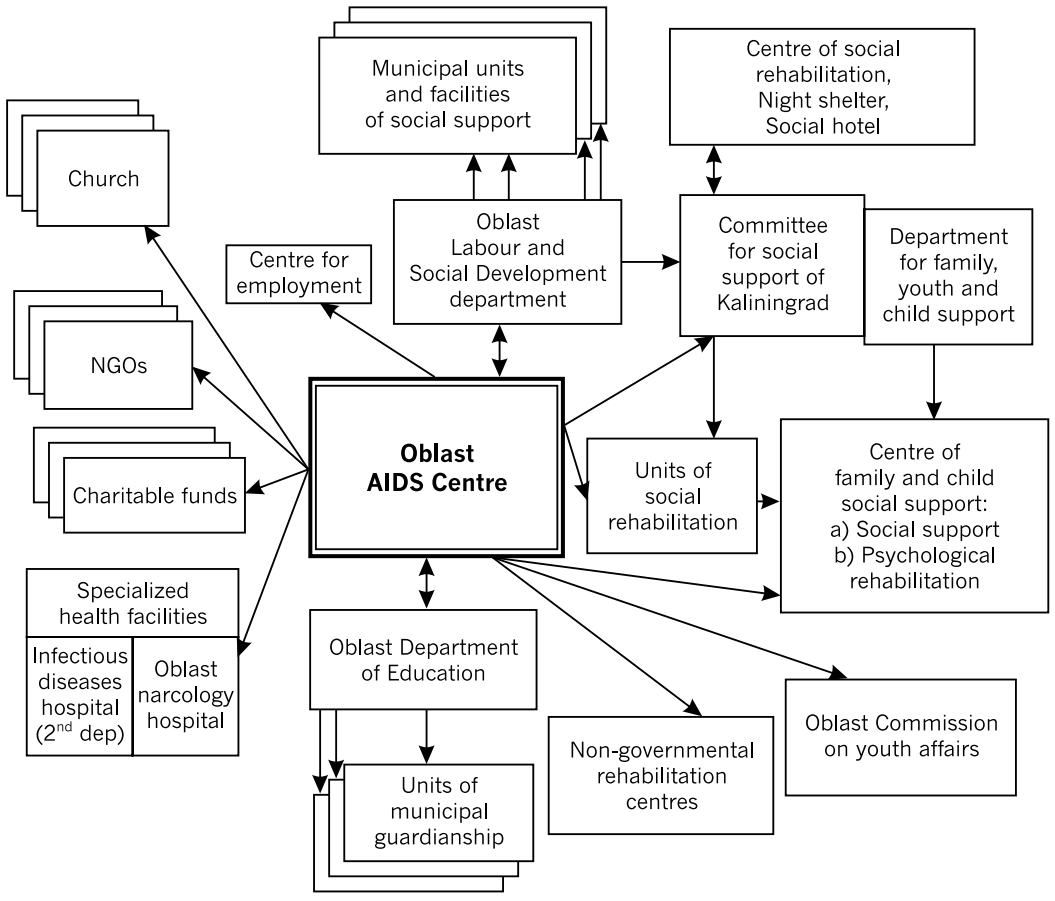

Figure 3. Interaction of AIDS Center with non-health institutions and organization involved in HIV/AIDS service provision (Kaliningrad city)

Any operations within this inter-sectoral HIV/AIDS prevention and control network are regulated by the relevant normative and legislative acts applicable to the given region. Every structural component of this scheme carries out functions in accordance with its profile.

4. Data Collection Methodology for M&E of HIV/AIDS Expenditures

One of the main challenges of monitoring HIV/AIDS expenditures is incomplete statistical reporting. The reporting system currently used in the Russian Federation differs from the NHA and NASA formats which creates difficulties in attributing expenditures to classification categories. For example, the existing system of statistical reporting does not include the functional classifications of the National Health Accounts (OECD, 2001). The development of new statistical forms to collect financial and economic data from public institutions is therefore required. However, HIV/AIDS resources, spent and planned, for budget-funded organizations within the health system can be monitored and evaluated using the existing regular reporting system capturing financial and economic data from all service providers and regular reporting on key epidemiological indicators.

A distinguishing characteristic of comprehensive resource tracking related to HIV/AIDS control is the involvement of institutions outside the health sector that provide mostly preventive services. However, as traditionally the expenditures incurred by these sectors are not directly associated with HIV/AIDS, there is currently no specific expenditures line for HIV/AIDS in the reporting system of these organizations. Therefore, attribution of expenditures in the required format should be based on certain attribution tools and judgment of experts responsible for data collection.

4.1. Primary and Secondary Data Sources

Taking into consideration the administrative arrangements of the Russian Federation and the decentralized financing system, data collection should start at the regional level and be supported by federal level data. Both primary and secondary data sources should be used. The federal legislation, normative and regulatory acts, statistical and financial reporting are the major secondary data sources for health and other sectors.

Conducting a provider survey is one way to obtain data that is lacking in the standard financial reporting and to estimate the coefficients to attribute general expenditures of the organization to HIV/AIDS and to different functions. Allocative coefficients could be used for the duration of several years which would make these studies less costly.

Allocative coefficients could be estimated just for a representative sample of regions and organizations taking into consideration the sheer size of the Russian Federation and of some of its regions. The selected sample can be studied more than once; re-sampling should take place with a certain frequency depending on the socio-economic situation and the spending patterns in the sampled regions.

4.2. Methodology to Estimate Allocative Coefficients and their Compatibility with the HIV/AIDS Financial Monitoring and Evaluation System

This methodology allows for the collection of data on HIV/AIDS expenditures for both health and other sector institutions, including public sector, private business and non-profit organizations. It allows for the disaggregation of provider expenditures by HIV/AIDS functions, financing agents, funding sources for HIV/AIDS treatment and prevention, target groups to identify the categories of beneficiaries that receive funding and the amount of financial resources provided. Within this study, an analysis of HIV/AIDS expenditures in the Russian Federation has been conducted in accordance with the NASA classification categories presented by UNAIDS in its Guidelines on National AIDS Spending Assessment (UNAIDS, 2006).

The methodology of attributing HIV/AIDS expenditures by function was developed by the experts of the Center for Health Management at the Imperial College, London (Atun et al., 2003). It is based on the UNAIDS Costing Guidelines for HIV Prevention Strategies (UNAIDS, 2000). This methodology was first piloted within the framework of the DfID-funded program "Knowledge for Action" in the Russian Federation.

The methodology explicitly allocates inputs of an individual provider by functions, main financing sources and beneficiaries to estimate allocative coefficients that allow attributing general expenditures of providers to HIV/AIDS and disaggregating provider expenditures by main classification categories at regional and federal levels. These coefficients are applied to the regional and/or federal aggregated totals. The allocative coefficients estimated for each classification category could be applied to standard financial reporting data of different sectors in each region and to organizations at the federal level. This allows presenting a comprehensive picture of national HIV/AIDS spending (Figure 4).

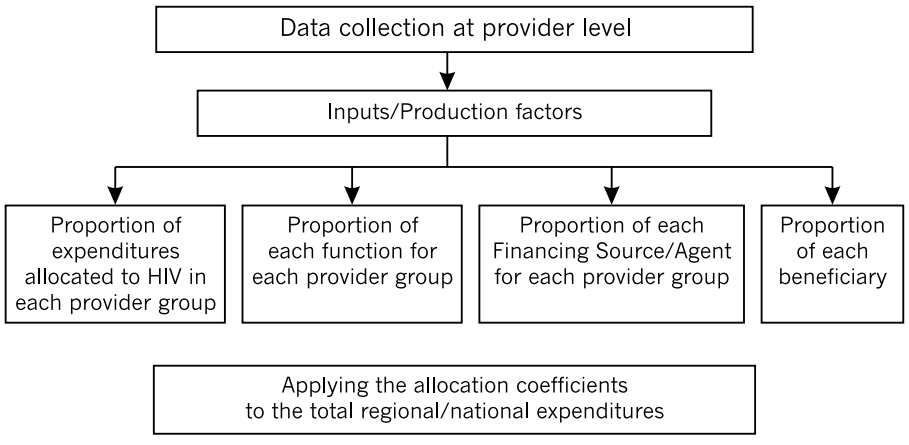

Figure 4. Disaggregating expenditures by main NASA classifications

The estimated allocative coefficients could be applied to the standard financial reporting of organizations. Computer software allows converting routine reporting data into the format required. This procedure can be applied by experts of any organization that is part of the national information system on HIV/AIDS financial monitoring. Information on those financing organizations that collect relevant data in other reporting formats can also be entered into the system.

4.3. Sampling

To obtain country and region-based estimates of totals, coefficients or weights, a representative sample is needed of regional and federal organizations representing each provider sub-category outlined in the UNAIDS Guidelines on National AIDS Spending Assessment (UNAIDS, 2006). The suggested methodology for selecting representative regions and organizations (providers) is presented later in this document. The weights obtained during the study of sample organisations are applied to all regional institutions within a given provider category and aggregated to regional totals of different sectors involved. Further, the data of representative regions are extrapolated and/or aggregated to the national level supported by HIV/AIDS-related data from federal organizations.

4.3.1. Sampling of providers

In the Russian Federation, the following approach was piloted:

For the health sector, the identification of the facility group sample was based on the weights of services volume of each facility group within out-patient or in-patient facilities. That was followed by the identification of certain sample facilities within each group based on the weights of each group within the total number of out-patient or in-patient facilities of the region.

Capacity weight of each provider group within the overall volume of health care providers in a sample region can be calculated using the following formula: If the total service volume of all providers per shift is 100% where the weight of each provider group is X%, X is the total service volume of the provider group multiplied by 100% and divided by the total capacity of all institutions (Atun, 2005).

The size weight of each provider group (X) in the total number of institutions could be calculated through the following formula: X is the number of institutions in the group multiplied by 100% and divided by the total number of institutions (Atun, 2005).

For other sectors, the sampling approach could be the same. For example, for the education sector, the sample would include educational institutions; for the penitentiary system, penal institutions. However, in practice the involvement in the resource tracking exercise significantly depends on the political will of sector leaders and their commitment to the goals of HIV/AIDS expenditures monitoring.

The methodology of determining coefficients at the regional level generated the following estimates for each provider group (Atun, 2003):

- Coefficient of HIV/AIDS-related expenditures out of total organizational expenditures
- Coefficient of each HIV/AIDS-related function within the total HIV/AIDS-related activities
- Coefficient of each financing agent is funding of HIV/AIDS-related provider sub-category and function

To monitor HIV/AIDS expenditures, the estimated coefficients are applied to each provider group and then to the regional and federal totals.

4.3.2. Sampling of regions

The suggested methodology of sampling regions is based on epidemiological patterns (number of HIV cases per 100,000 population) in the Russian Federation in 2004.

Four different HIV prevalence levels have been registered in the Russian Federation (Federal Service for Surveillance on Consumer Rights Protection and Human Well-Being, 2006):

1. Low (1–50 per 100,000 population; 39 Russian regions);
2. Medium (51–150 per 100,000 population; 25 Russian regions);
3. High (151–300 per 100,000 population; 13 Russian regions);
4. Very high (301–756 per 100,000 population; 12 Russian regions accounting for 24% of the country's population).

For statistical significance, the sample should include regions that represent each individual prevalence level. Besides, the sample should include regions that differ in terms of receiving state subsidies from the federal budget (budget deficit vs. budget surplus), thus dividing them into "donor regions" (budget surplus) and "subsidized regions" (budget deficit) to make the sample representative. Table 2 represents a potential sample for future work on HIV/AIDS resource tracking in the Russian Federation.

Table 2

Potential Sample for the Evaluation of HIV/AIDS Expenditures in the Russian Federation

Prevalence level	Budget	Region
1. Low (1–50 per 100,000)	Deficit	Alatyskiy Kray
	Surplus	Smolenskaya oblast
2. Medium (51–150 per 100,000)	Deficit	Vladimirskaya oblast
	Surplus	Nizhegorodskaya oblast
3. High (151–300 per 100,000)	Surplus	Moscow
	Deficit	Sverdlovskaya obklast
4. Very high (301–756 per 100,000)	Surplus	Irkutskaya oblast
	Surplus	Orenburgskaya oblast

To make the sample representative, 8 regions should be included in a detailed NASA in the Russian Federation. However, the number of regions could be higher depending on the availability of time and resources.

5. HIV/AIDS Resource Tracking in the Russian Federation in 2004, Implementation of NASA

The first stage of developing a financial M&E system and estimating HIV/AIDS expenditures in the Russian Federation was conducted under the project "Monitoring Financial Resources for Projects and Programs to Counter the HIV Epidemic in the Russian Federation". This project was implemented in 2005–2006 by an expert team of the Federal Research Institute of Health Organization and IT Development with the advisory support of UNAIDS and several specialists from the Imperial College, London.

The **goal** of this project was to develop a strategy for systematic monitoring of financial resources for HIV/AIDS in the Russian Federation.

The project had the following **specific objectives**:

1) To develop a strategy for the involvement of the key stakeholders of different sectors and levels into the system of HIV/AIDS expenditures monitoring;
2) To train Russian researchers from key government institutions to create capacity to collect and analyze data on HIV/AIDS prevention, care and treatment using the NASA approach;
3) To analyze relevant structures of HIV/AIDS-related services and organizations at the federal level;
4) To develop a methodology of monitoring and evaluation of HIV/AIDS expenditures in the Russian Federation;
5) To receive data on HIV/AIDS treatment and prevention expenditures from organizations providing funding and HIV/AIDS services on the federal level in 2004.

5.1. Data Collection Methodology, Data Sources

The Russian Federation is currently implementing a national sub-program on HIV/AIDS control "Emergency Measures to Prevent the Spread of the Disease Caused by the Acquired Immunodeficiency Virus (Anti-AIDS)" approved by the Government of the Russian Federation. This is a sub-program to the Federal Targeted Program "Prevention and Control of Social Diseases" (2002–2006). The Federal Targeted AIDS Control Program is the key tool to monitor activities related to communicable disease control and inter-sectoral collaboration. The Targeted AIDS Control Program was therefore considered a financing agent and its expenditures were disaggregated according to NASA's functional classifications.

The MoHSD of the Russian Federation supervises and manages the implementation of the Targeted AIDS Control Program. Figure 5 illustrates the flow of funds of the Program.

Regional and municipal Targeted AIDS Control Programs are developed based on regional needs and financial resources. Overall, the structure of the regional programs is in line with the structure of the Federal Targeted AIDS Control Program.

The Program defines the resources required for the implementation of all program activities, indicates the expenditures items (capital or current), the sources of funding and deadlines for activities.

5. HIV/AIDS Resource Tracking in the Russian Federation in 2004, Implementation of NASA

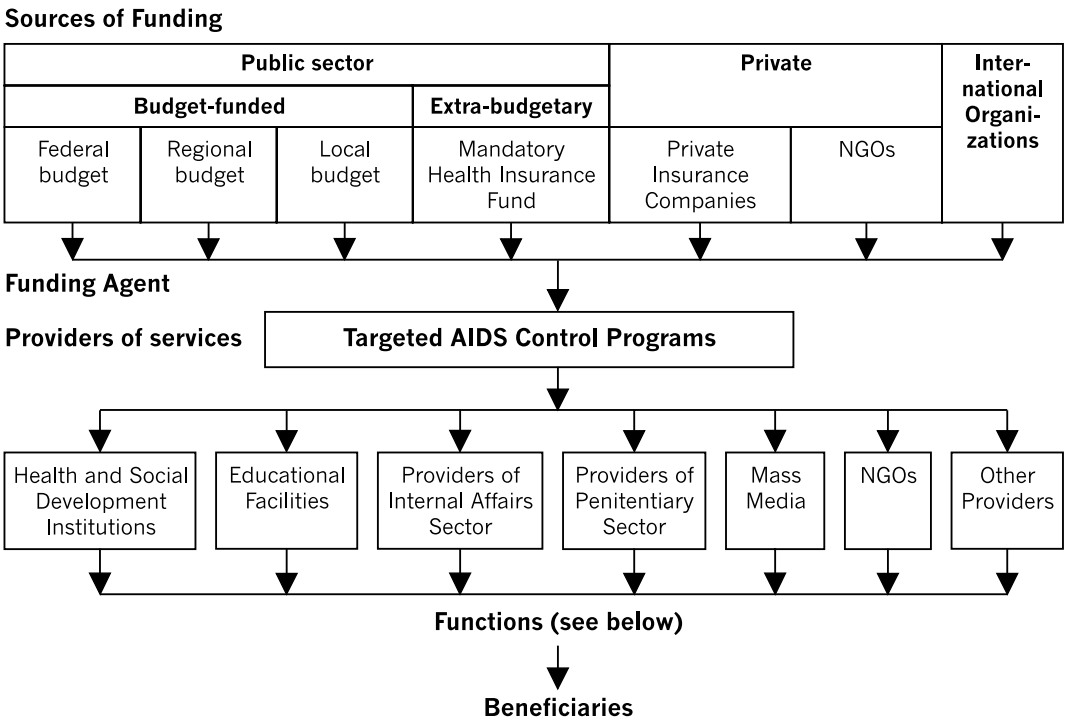

Figure 5. Funds flow of the Federal Targeted AIDS Control Program

The Targeted AIDS Control Programs comprise different sets of activities (functions) that make comparisons and further analysis difficult. Thus, a unified form was developed including all the activities funded by those programs and corresponding to the NASA functional classification (UNAIDS, 2005):

Section 1. Prevention Activities

1.1. Information for general awareness;

1.2. Prevention activities for vulnerable groups;

1.3. Voluntary counseling and testing;

1.4. Improving management of STI among vulnerable groups;

1.5. Prevention of mother-to-child transmission;

1.6. Blood safety;

1.7. Post-exposure prophylaxis;

1.8. Universal precautions.

Section 2. Improving Epidemiological Surveillance; Legal Support; Monitoring and Evaluation of HIV/AIDS Programs and Activities

2.1. Epidemiological surveillance;

2.2. Development of a unified informational system on HIV/AIDS epidemiological surveillance in the Russian Federation;

2.3. Development and dissemination of guidelines and regulations on HIV prevention, diagnostics and treatment;

2.4. Monitoring and evaluation of HIV/AIDS programs and activities.

Section 3. Treatment and Care Services

3.1. Provider initiated testing;

3.2. Antiretroviral therapy;

3.3. Prophylaxis and treatment of opportunistic infections;

3.4. Clinical laboratory;

3.5. Palliative care.

Section 4. Social Services

4.1. Human rights;

4.2. Psychological support;

4.3. Social services.

Section 5. Orphans and Vulnerable Children

5.1. Maintenance and support to children born to HIV-positive mothers, orphans, HIV-positive orphans and disabled children.

Section 6. Strengthening Financial and Technical Capacity of Provider Institutions

6.1. Capital formation for provider institutions including AIDS-Centers;

6.2. Upgrading laboratory infrastructure.

Section 7. HIV/AIDS-related research

7.1. Sociological research;

7.2. Epidemiological research;

7.3. Biomedical research;

7.4. Behavioral research;

7.5. Clinical research;

7.6. Vaccine-related research.

Eighty percent of the classifications used in this unified form correspond to those of NASA and could therefore be used for data collection. It misses information on the HIV/AIDS budget share, additional remuneration to medical personnel; social support and household expenditures. It is planned to develop a detailed methodology for obtaining these data during the forthcoming extension of the NASA project in the Russian Federation.

The report on the implementation of the Federal Targeted AIDS Control Program was used as main financial data source. It contains data on regional expenditures broken down by main financing sources: federal and regional budgets, extra-budgetary and other sources. The data is collected on a quarterly basis by the Federal Agency for Health and Social Development of the Russian Federation. This data was disaggregated by main NASA categories.

Expenditures of regional AIDS control programs were obtained from the statistical Form # 2–96 on "Development and execution of regional programs focused on improving of population well-being" of the Federal Service for the Surveillance on Consumer Rights Protection and Human Well-Being of the Russian Federation. This form contains data on expenditures of the federal, local, and extra-budgetary sources, i. e. the Compulsory Health Insurance Fund, private enterprises and other sources across the regions.

5.2. HIV/AIDS Expenditures in the Russian Federation in 2004

According to MoHSD data, in 2004, overall health-related expenditures amounted to RUR 728.9 billion (USD 25.6 billion), 2.9% of GDP. Per capita health expenditures totaled RUR 5,062 (USD 177.60). Expenditures of public sources accounted for RUR 479 billion (USD 16.8 billion).

The NASA study revealed that, in 2004, RUR 1.2 billion (USD 40.87 million) was allocated for HIV/AIDS from public sources. That accounts for about 0.2 percent of overall public health expenditures.

The analysis of secondary data sources showed that over USD 5.7 million were allocated from different extra-budgetary (private) sources in 2004. The Global Fund for the Fight against AIDS, Tuberculosis and Malaria (GFATM) allocated USD 5 million of this amount (see GFATM website). In 2004, the expenditures from non-budgetary sources accounted for USD 330,000 (data on the co-funding from the Federal Targeted Program "Prevention and Control of Socially Significant Diseases 2002–2006") including funding from WHO, the Russian Red Cross and the World Bank.

Table 3 presents the key findings on HIV/AIDS funding in the Russian Federation in 2004.

Table 3

General Statistics on National HIV/AIDS-Related Expenditures in the Russian Federation (2004)

Parameter	Number	
Estimated number of people living with HIV	300,000 people	
Estimated number of people living with HIV among adults (aged 15–49)	285,000 people	
	Russian Rubles	US Dollars
Per capita health expenditure	5,062	177.60
Total health expenditure (HIV/AIDS-related expenditures)	728.90 billion	25.58 billion
Total (HIV/AIDS-related expenditures)	1.20 billion	40.87 million
(HIV/AIDS-related expenditures) of Compulsory Health Insurance	317.12 million	11.13 million
Total donor (HIV/AIDS-related expenditures)	162.15 million	5.70 million
Federal budget (HIV/AIDS-related expenditures) allocated through the Federal AIDS Control Program	171.12 million	6.00 million
Private enterprises (HIV/AIDS-related expenditures)	49.54 million	1.74 million
Regional budget (HIV/AIDS-related expenditures) allocated through the regional AIDS control programs	463.44 million	16.30 million

Source: Report on the implementation of Public Guarantees Program (2004), Report on the implementation of the Federal Targeted AIDS Control Program; Report on the implementation of Regional AIDS Control Programs

5.2.1. HIV/AIDS Expenditures by Financing Source

In 2004, earmarked funding of HIV/AIDS services in the Russian Federation included resources of the federal, regional and local targeted AIDS control programs, operational budgets of AIDS Centers, household and donor expenditures allocated for HIV/AIDS prevention (Table 4).

Table 4

Total Expenditures on HIV/AIDS in the Russian Federation in 2004

	Public	Private*	Donor	**Total**
RUR (million)	951.7	49.54	162.45	**1163.6**
USD (million)	33.4	1.74	5.7	**40.8**

* – Private expenditures – funded by private enterprises.

In 2004, activities on HIV/AIDS control in the Russian Federation were financed from public and private sources as well as from donor funds. Public funds include the (1) federal budget, (2) regional government funding, (3) city/municipal funding, (4) social health insurance funds including federal and regional compulsory health insurance (Table 5).

Table 5

Public Expenditures on HIV/AIDS in the Russian Federation in 2004

	Public sources			**Total**
	Federal budget**	Regional budget**	Compulsory Health Insurance	
RUR (million)	171.12	463.44	317.12	**951.7**
USD (million)	6.0	16.3	11.13	**33.4**

** – Includes expenditures of the National Targeted AIDS Control Program in 2004.

5.2.2. Analysis of the Federal Targeted AIDS Control Program Expenditures in 2004

In 2004, the highest share of HIV/AIDS funding was allocated from the Federal Targeted AIDS Control Program.

Allocation of Expenditures by Source of Funding

The Program was funded by federal and regional budgets (Table 6).

5. HIV/AIDS Resource Tracking in the Russian Federation in 2004, Implementation of NASA

Table 6

Allocation of Expenditures by Funding Source

	Federal budget			Regional budget			**Total**
	Current	Capital	Total	Current	Capital	Total	
Total	**127.40**	**13.75**	**141.15**	**298.148**	**5.18**	**303.33**	**444.48**
Percent			32%			68%	**100%**

The NASA study revealed that 68 percent of National AIDS Control Program expenditures were allocated from the regional budget and 32 percent from the federal budget.

Allocation of Expenditures by Function

The National AIDS Control Program expenditures were broken down by function in accordance with the NASA functional classifications. These allocations in 2004 are presented in Figure 6.

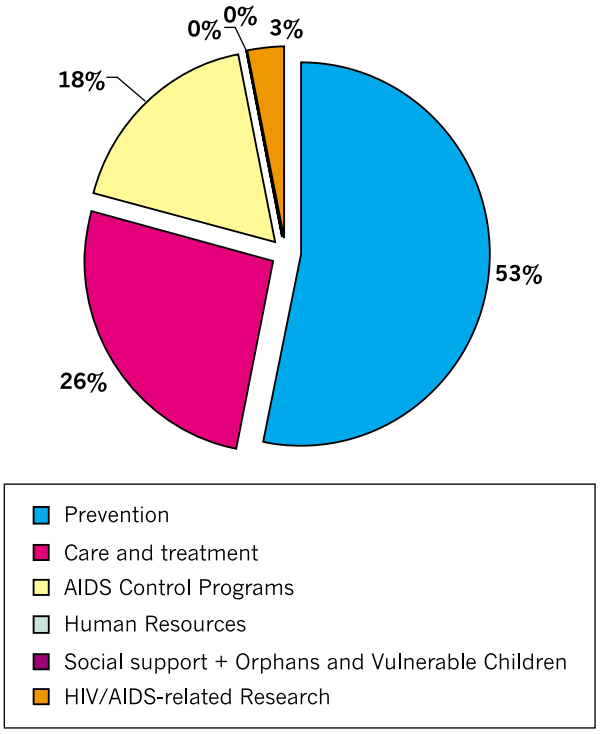

Figure 6. Allocation of Expenditures by Function

Table 7 demonstrates the allocations of the National AIDS Control Program by function in 2004.

5. HIV/AIDS Resource Tracking in the Russian Federation in 2004, Implementation of NASA

Table 7

Activities/Functions	Expenses (million) RUR/USD	Percentage of the total amount
1. Prevention including:	**81.8/2.9**	**64.21%**
– Public awareness/educational activities	26.96/0.95	32.96%
– Improving epidemiological surveillance; legal coverage of activities	16.84/0.6	20.59%
– Ensuring donor blood safety	38/1.4	46.45%
2. Treatment and care including:	**40.0/1.4**	**31.40%**
– Improving HIV diagnostics and treatment		
– Providing test-kits		
– Providing drugs for HIV treatment		
3. Orphans and vulnerable children		
Note: This activity is included in # 5 below		
4. AIDS control program costs including:	**0.8/0.03**	**0.63%**
– Educational workshops on HIV epidemiological surveillance and prevention		
– Training for experts of AIDS centers and non-governmental organizations on establishing self-help groups for people living with HIV		
5. Social support for people living with HIV including:	**0.1/0.004**	**0.08%**
– Social protection for people living with HIV and their families		
– Social protection for people at risk of infection during the execution of their professional duties		
6. Fundamental research	**4.704/0.17**	**3.68%**
Total	**127.4/4.47**	**100.0%**

In 2004, 64 percent of the total public funds for HIV/AIDS were allocated to prevention activities through the National AIDS Control Program. Applying the UNAIDS NASA functional classifications (Figure 7), it can be stated that about 33 percent of total preventive expenditures was allocated to information for general awareness, about 21 percent to improving epidemiological surveillance and more than 46 percent of total preventive expenditures was allocated to blood safety services.

An analysis of the federal allocations through the National AIDS Control Program showed that the major share of public funds (31%) went to treatment and care including upgrading diagnostic facilities, purchasing test-kits, ARVs and other drugs for HIV treatment. A significant share of public funds (29%) was allocated for blood safety services as part of preventive services. Insignificant public spending was allocated for the provision of social support for PLHIV and their families and services for orphans and vulnerable children. As a result of the increasing HIV prevalence in the Russian Federation, these services should become a priority for future country expenditures.

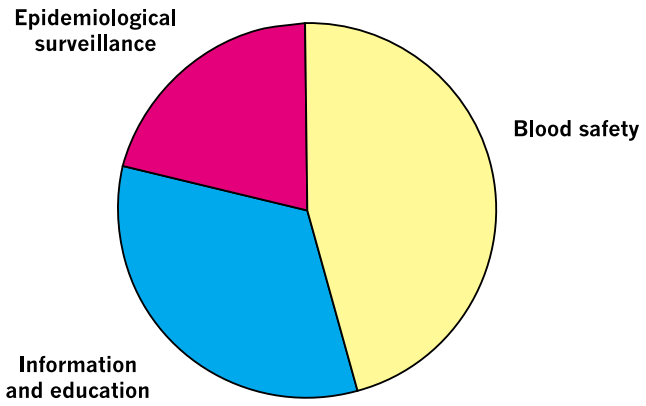

Figure 7. Allocation of expenditures for preventive services

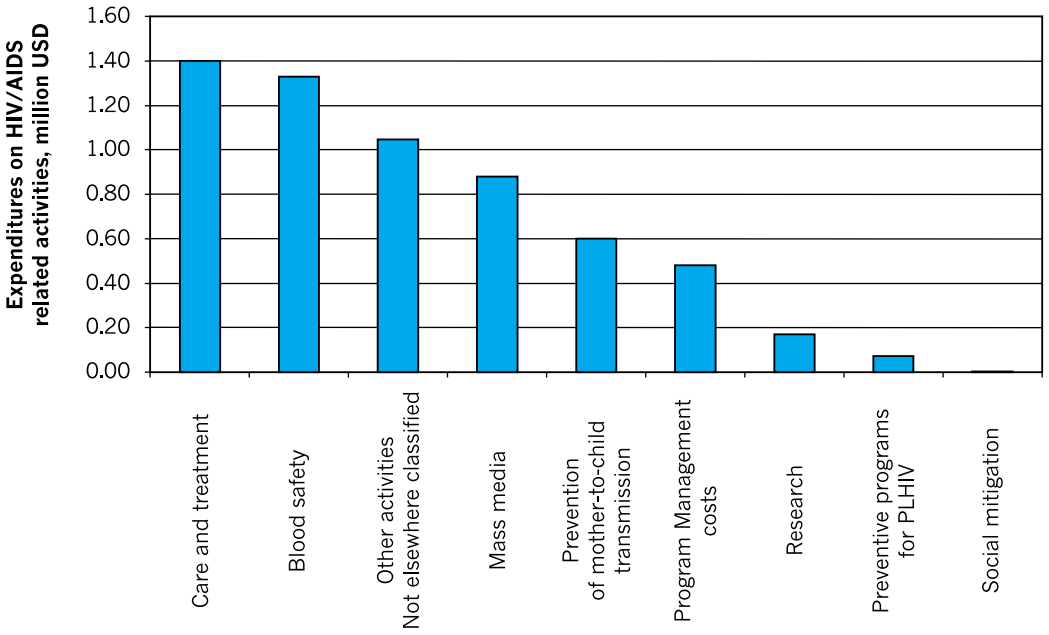

Figure 8. Allocation of the National AIDS Control Program by function in 2004

6. Estimating Regional Resource Needs for HIV/AIDS Control

This section presents the results of a study conducted by experts of the Center for Economics and Modeling, Constella/Futures Group and the Healthy Russia 2020 project. This group of experts attempted to model the resource needs for HIV/AIDS control in the following regions of the Russian Federation: Ivanovo, Orenburg and Irkutsk. For this publication, the materials produced during the modeling exercise have been summarized by E. Dmitrieva, S. Yusupova, Y. Kornysheva and N. Koroleva, experts of the Healthy Russia 2020 project.

6.1. Resource Needs Model

The Resource Needs Model (RNM) used in this study is among the first models used in Russia for economic analysis. RNM was developed by the Futures Group International Center for Economy and Modeling in cooperation with the Moscow office of the Center of Communicative Programs of Johns Hopkins University. The RNM provides preliminary estimates of resources needed for the fight against HIV/AIDS and identifies priorities for resource allocation. The RNM calculates the resources needed for a comprehensive response to HIV/AIDS and can assist national and regional level strategic planning efforts by providing a tool and methodology to examine the financial resources needed to implement a variety of prevention interventions, care and treatment programs. The model is used to estimate the costs for the health sector as well as costs occurring to the sectors of social protection, education and others involved in the response to HIV/AIDS.

The model estimates the cost of 12 prevention programs, including youth-focused interventions, interventions focused on CSWs and their clients, prevention of mother-to-child transmission (PMTCT), harm reduction programs, and others. The care and treatment sub-model estimates the cost of five care and treatment programs, including palliative care, treatment of opportunistic infections (OIs), diagnostic HIV testing, OI prophylaxis in symptomatic patients, highly active ARV therapy (HAART) and its associated laboratory support.

One goal was to estimate the resources available for HIV/AIDS and to identify the gap between required and available resources to provide a knowledge base for an effective HIV/AIDS response.

6.2. Methodology

There are three main elements in the methodology of the model: population target groups, unit costs and coverage or access targets. The target groups include youth and high-risk groups such as injecting drug users (IDUs), commercial sex workers (CSWs), prisoners as well as other groups such as orphans, migrants and long-haul truck drivers. Advocacy for social programs and targeted allocation of resources are the major application of the model.

Estimates of required resources are based on an epidemiological model of the development of the epidemic in the country as well as in each specific region. Assumptions on coverage targets for 2005–2010 had to be made due to the lack of sufficient data from behavioral studies.

A coverage target is used to estimate the population that would actually use the service. The model is based on current coverage and recent evidence of rates of growth in coverage. It gives no consideration to current limitations in financial resources and to scientifically-grounded evaluations identifying desirable coverage levels. Neither does the model consider significant infrastructure developments. In other words, the team allowed for the absence of any additional costs that are necessary for infrastructure development, albeit with two considerations. The costs of interventions related to providing school-based education mainly include the expenditures related to teacher training, and are considered an investment into human capital development. Furthermore, costs related to infrastructure streamlining and to interventions for the prevention of mother-to-child HIV transmission were considered.

The estimates for unit costs of prevention, treatment and care services were based on available cost studies and costing of specific diagnostic and treatment services. The variables of coverage rates and unit cost were adjusted for each specific region by regional analysts.

To date, no detailed analyses on actual spending on HIV/AIDS at the regional level are available in the Russian Federation. The model presents a possible financing scenario that call for balance between all sources – federal, regional and the municipal budgets, donor funding and private payments including employer funds.

6.3. Organization of Work

Since the model was developed in 2000, it has been used to evaluate resource needs across the world. The aim of the project in Russia was to adjust RNM to the Russian epidemiological and organizational context. The adjustment of the model was initiated at a workshop held at conference center outside Moscow in October 2004 with the participation of specialists from six Russian regions (Ivanovo, Irkutsk, Orenburg, Saratov, Samara and St. Petersburg). A number of Federal AIDS Center experts were involved in the work on the model as well. Utilization of the RNM was the first step to estimate the amount of funding needed for a proper response to the epidemic in each of these regions through 2010. The data for analysis was discussed with regional specialists.

Workshop participants exchanged information about on-going research in their regions. A data collection strategy for these regions was developed. The following data sources were used: statistical reporting of Health Departments, HIV/AIDS statistical indicators collected by AIDS Centers and data of previous selective studies undertaken in the participating regions. Different data sources were used to ensure data triangulation and verification. The data collection took place in 2004–2005 with the involvement of regional NGOs and HIV/AIDS advocacy networks. Both regional and federal data sources were used for an in-depth analysis of the epidemiological situation.

Data collection was further continued in the regions. The model utilizes an inter-sectoral approach as it estimates HIV/AIDS resources not only for the health sector but all regional resources addressing the epidemic at large. Experts from the following sectors were involved in the study: health authorities, such as AIDS centers; infectious disease services; gynecology and obstetrics; children's hospitals and orphanages; the Department for Social Protection; the Department of Education; narcological, dermatological, STI and TB services; the State Department for Drug Control; regional departments of the federal penal system; NGOs providing AIDS services and/or working with groups of PLHIV activists.

The project involved regions characterized by different HIV/AIDS epidemiological situations, organizational structure and donor engagement. The selection of regions was also based on the level of interest from the key figures, their motivation for collaboration and the level of development of HIV/AIDS-related NGO networks.

The results of the model were presented at a number of round tables in the regions which were attended by representatives of all sectors including deputies of regional parliaments, politicians, NGOs and other key figures. A dialogue was initiated to develop a resource mobilization strategy. It should be noted that the modeling exercise and the presentation of its results has been used successfully for advocacy to initiate high-level HIV/AIDS discussions in the regions as well as to support the development of effective inter-sectoral collaboration. Thus, this model became an important tool to promote HIV/AIDS as a priority issue at the regional level.

6.4. Results

Resources spent in 2003 and resource needs for 2004–2010 were estimated.

The analysis showed that in 2003 the overall HIV/AIDS-related expenditures in the regions accounted for a range of RUR 19 million in the Ivanovo region up to RUR 160 million in the Irkutsk region. The sums include the expenditures of the following sectors: health (including AIDS Centers, narcological and venereal services), education, penal, social and the non-governmental sector. About 80% of all funds were allocated within the health sector. The aim of our project was not aimed at producing exact estimates of all funds invested thus overall spending is likely to be underestimated. In particular, HIV testing expenditures of specific line ministries and expenditures related to universal precautions in health institutions were not included.

Data provided in this analysis showed that, in all regions, HIV/AIDS spending was insufficient and accounted only for 28–44 percent of all resources needed in 2003. Prevention interventions remained seriously underfinanced. The modeling exercise estimated the need for an annual increase of 30–36 percent for the coming 5 years and a 4–4.5-fold increase in overall resources spent on HIV/AIDS. Resources required for prevention and treatment will increase correspondingly.

However, some differences in priorities for future spending between the different regions are noteworthy. In the Ivanovo region, which still has a fairly low prevalence of HIV, required spending in the coming years must focus on prevention interventions (Figure 9). In the Irkutsk region, one of the regions with very high prevalence, the number of people seeking treatment will increase substantially every year and spending on treatment will amount to 52 percent of total HIV/AIDS resources in 2007 and 63 percent in 2009 (Figure 10).

Nevertheless, prevention programs will also require a significant increase in funding. For example, in the Orenburg region, spending on youth informational campaigns should increase by 3.9 times. HIV prevention activities among men who have sex with men will require a 12–fold increase in funding. Currently these programs are financed only through insignificant donors' allocations. These preventive interventions are quite cost-effective, curbing HIV transmission and preserving people's lives and health with only minor investment. It has proven important to include estimates for resource needs for STI prevention and treatment into the model as STI increases the risk of HIV-transmission. Thus, in 2007, Irkutsk will need to spend RUR 34 million on improving STI management programs.

6. Estimating Regional Resource Needs for HIV/AIDS Control

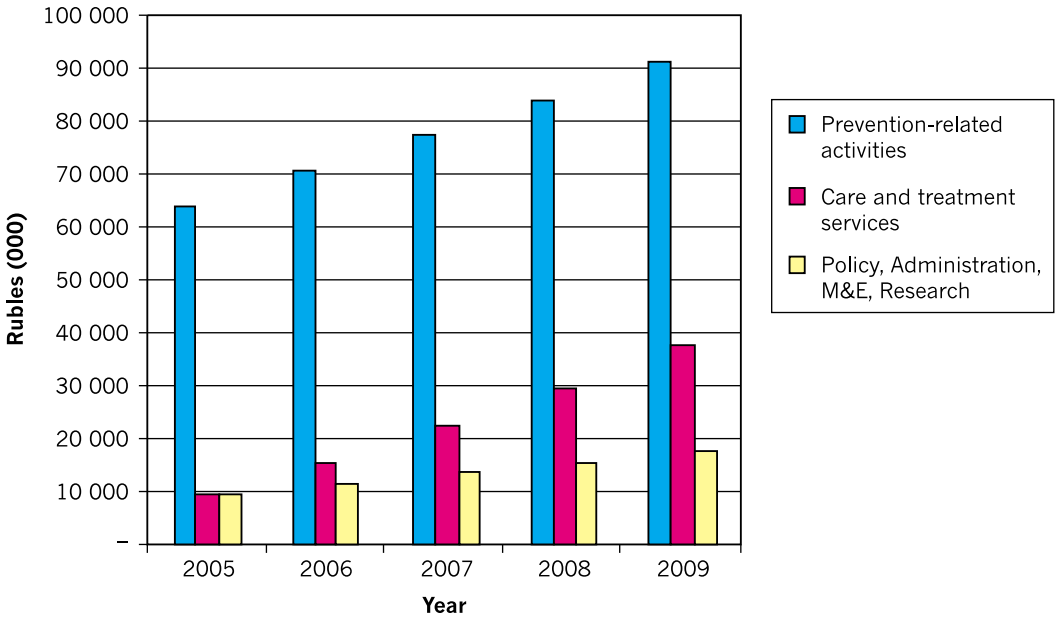

Figure 9. Required spending on HIV/AIDS interventions in Ivanovo Region, 2005–2009.

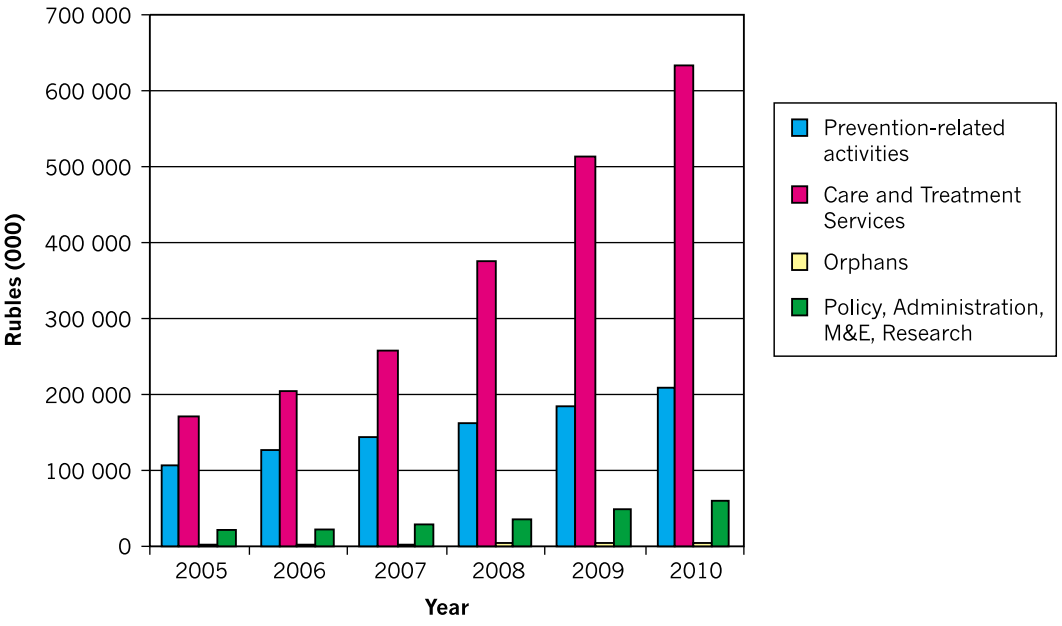

Figure 10. Required Spending on HIV/AIDS Interventions in Irkutsk Region, 2005–2010

Clinical monitoring will also require significant investments. For example, Irkutsk will be required to allocate RUR 85 million to these activities. These costs should be included into the costs of HAART which is already a costly intervention as ARV prices are still high. The treatment of opportunistic infections and TB are costly as well. The model also provides estimates for HIV/TB co-infection control, a feature which has been highly appreciated during our study.

Unfortunately, the model does not include cost estimates for ensuring adherence to treatment. Yet, these costs should be considered and planned in order to ensure proper financing.

In accordance with the model, at least 7 per cent of all resources spent should be invested into policy, administration, monitoring and evaluation and research.

6.5. Conclusions

To properly monitor HIV/AIDS resources in the Russian Federation, estimates of future funding requirements as provided by the Resource Needs Model should be taken into account. As a result of this project, the RNM has been adapted to the Russian context; however, further work is on-going.

The modeling exercise in 2003 showed a considerable lack of funds allocated for HIV/AIDS control from all sources. It also showed the need for a substantial increase in resources within the next 5 years. The work on this project also brought about important implications for advocacy to mobilize additional funds and to increase HIV/AIDS awareness of regional politicians and decision-makers. For example, in 2006, public funding for HIV/ADS in Orenburg has significantly increased and in the Ivanovo region, a new building was provided for the Regional AIDS Center. In the Irkutsk region, the parliament has started to pay more attention to HIV/AIDS after the regional mass media reported on the lack of funding.

It should be noted that the recently increased public and donor funding for HIV/AIDS control in the Russian Federation requires improved knowledge on financial management, trained personnel and even restructuring the operations of some services and line ministries. Therefore, the increase in funding should be accompanied by institutional changes, personnel training, procurement of testing equipment and general improvement of the infrastructure for services delivery in the health system to ensure better outcomes of the implemented programs.

7. Discussion and Main Conclusions

Need for a National System of Financial Monitoring and Evaluation

Monitoring of financial resources allocated for HIV/AIDS control is part of the unified system of monitoring and evaluation. The need for systematic financial monitoring outlined by the President of the Russian Federation includes developing systematic methods and procedures for the allocation of budget funds. In addition, the following contextual determinants need to be taken into account:

- the acute epidemic situation in the country
- the significant increase in funding for HIV control programs and activities from both public and donor funds
- the on-going administrative reform targeted at effective and result oriented budgeting
- the need for strategic planning and estimation of future HIV/AIDS resource needs
- the need for improved coordination of HIV/AIDS prevention and response activities as well as for strengthened efforts to mitigate the social and economic consequences of HIV/AIDS

National AIDS Spending Assessment and Estimating HIV/AIDS Resource Requirements in the Russian Federation

The analysis of resources allocated for HIV/AIDS control undertaken in 2005–2006 in the Russian Federation included tracking current expenditures and estimating future resource requirements. The UNAIDS-suggested National AIDS Spending Assessment approach was used as a basis for developing a system of annual monitoring of HIV/AIDS expenditures. Systematic monitoring and evaluation of current expenditures combined with analysis of HIV/AIDS resource requirements provide information on existing gaps in required and available resources, identify how available resources impact the development of the epidemic and determine how to effectively distribute and allocate the resources to maximize its impact.

The first NASA application for the analysis of HIV/AIDS-related expenditures in 2004 demonstrated that its structure and classification categories are compatible with international principles of tracking financial resources, with the principles of National Health Accounts, with the Russian system of accounting and statistical recording and with the Resource Needs Model. It also demonstrated that the introduction of NASA permits improving coordination between monitoring of the resources available and those needed. Both, NASA and the RNM adapted to the Russian context apply compatible definitions of functional classifications and approaches for accounting data.

Both analyses demonstrated that the allocation of HIV/AIDS resources in the previous years had been inefficient and inequity in distributing the financial burden on both the national and the regional level had persisted. The results of the analyses demonstrated insufficient funding for non-medical HIV and STI preven-

tion activities (except for funding to donor blood safety activities). They also demonstrated strong dependence on donor funding for prevention activities in vulnerable populations.

Challenges and Areas for Further Work

Ongoing efforts in the Russian Federation aimed at establishing systematic financial monitoring of HIV/AIDS expenditures have demonstrated that more efforts are needed to improve data collection tools as well as the quality of data used for the resource analysis.

The list of challenges is long:

Current analyses of expenditures and resource needs for HIV/AIDS in the country are incomplete and often utilize incompatible data collection and recording methodologies and different service definitions.

The monitoring of HIV/AIDS-related expenditures by public authorities is complicated by the absence of a systematic and centralized approach. Financial data are often treated confidentially; it is difficult to track information related to the regional and municipal budgets on decentralized levels; most ministries and organizations do not have specific HIV/AIDS budget lines, which, however, does not mean they do not spend resources on HIV/AIDS. This is especially true of prevention activities.

Systematic financial monitoring requires tools to evaluate the use of funds which were distributed at the level of service providers and beneficiaries. Although the Federal AIDS Center in Moscow receives regular reports from those institutions, it oftentimes has only a partial picture of how funds are actually used (Hoppenbrouwer et al., 2005). The lack of such information creates difficulties in monitoring the efficiency of resource utilization.

One of the key challenges of the analysis of HIV/AIDS-related expenditures is obtaining data on non-earmarked spending on construction and rent of office space and buildings, procurement and maintenance of equipment and vehicles and personnel wages. Oftentimes, these resources are allocated from other financing sources and not specifically linked to HIV/AIDS programs but to the whole sector (health, education, etc). Improved attribution of expenditures to HIV/AIDS is currently among the most important issues to tackle in the development of a financial monitoring system.

The following priority areas have been identified for future efforts to establish and implement regular and systematic monitoring and evaluation of HIV/AIDS funding in the Russian Federation:

1. To develop and implement a tool for financial and economic indicator collection on the federal and regional level;
2. To develop an informational system of financial monitoring and evaluation on the federal level;
3. To develop methods for improved attribution of indirect HIV/AIDS-related expenditures;
4. To improve the content and specification of categories for adaptation to international standards;

5. To develop a full set of tables characterizing the activities in HIV/AIDS in accordance with the system of national tracking of HIV/AIDS-related expenditures;
6. To develop a full set of indicators adequately and reliably tracking HIV/AIDS expenditures in accordance with the unified HIV/AIDS M&E System.

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ANNEX 1

Deputy Minister of Health and Social Development of the Russian Federation

Mission Order

Of September 15, 2005 №201

To:

V. A. Prokhorov,

Head of the Federal Agency for Health and Social Development

Y. V. Mikhailova,

Director of the Central Science and Research Institute for Health Administration and Informatization of the Federal Agency for Health and Social Development

Due to the need for systematic evaluations of the expenditures related to the epidemic control activities that are implemented in the Russian Federation with a view to addressing the spread of HIV/AIDS on the federal and on the regional level, as well as in order to address the issue of implementing National Health Accounts in the Russian Federation (including National AIDS Accounts), to organize the monitoring of the financial resources for HIV/AIDS epidemic control projects and programs in the Russian Federation at the Federal Public Enterprise Central Science and Research Institute for Health Administration and Informatization of the Federal Agency for Health and Social Development.

V. I. Starodubov