Funding Required For The Response To HIV/AIDS In Eastern Europe and Central Asia

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1. Introduction

About one and one-quarter million adults and children in Eastern Europe and Central Asia (ECA) were living with HIV/AIDS at the end of 2002. In the region as a whole about 0.5 percent of the adult population is infected with HIV. About 25,000 people (UNAIDS, 2002) died from AIDS in 2002, a comparatively low number due to the fact that most of the growth in the epidemic has taken place in recent years. The countries with the worst epidemics today include Estonia, the Russian Federation and Ukraine where adult prevalence of HIV is around one percent. There is considerable concern that the epidemic will grow rapidly in the next decade. Rapid spread of HIV has been recorded in special populations, such as injecting drug users. If HIV spreads more widely throughout the region and becomes established in the general population, then the epidemic could become many times worse in future.

Much can be done now to control the HIV/AIDS epidemic and prevent its spread. Countries as varied as Thailand, Uganda, Senegal, Brazil and Australia have shown that the epidemic can be contained and reversed with comprehensive and effective prevention programs. Global comprehensive prevention programs could avert two-thirds of the infections expected worldwide between now and 2010 (Stover and others 2002)

Even with successful programs to prevent new infections there will be a significant increase in the needs for care and treatment as the one million people infected today in the ECA region progress to later stages of the disease that require care, support, and treatment.

2. Characteristics of the ECA Region

The population of the ECA region, 475 million, is growing at 0.1 percent per annum. The total fertility rate (TFR) of 1.6 births per woman is below the replacement level, indicating that within a decade or two, population will begin a slow decline. That decline would be quickened by future deaths from AIDS. Life expectancy at birth of just below 69 years would also be cut by further spread of HIV/AIDS.

Averaged over the region as a whole per capita income is two thousand dollars per annum expressed in nominal dollars or five thousand dollars per annum expressed in purchasing power parity (PPP) dollars that properly account for the lower cost of non-traded goods in the ECA region as compared to the more developed countries of the North Atlantic area. The gross regional product in 2001 was just under one trillion dollars (or 2.5 trillion expressed in PPP dollars).[1]

World Bank and WHO data on health expenditures in ECA countries indicate that per capita health spending in ECA countries averages US$125, or if expressed in purchasing

[1] See World Bank Indicators data for explanation and definitions of PPP dollars.

power parity (PPP) [2]dollars, US$300. Annual ECA region health spending is about sixty billion US dollars(WHO, 2002, World Bank, 2002). ECA region countries spend approximately 5.5 percent of the regional GDP on health care, three-quarters from public sources and a quarter from private funds. Both absolute amounts and shares of GDP spent on health care are lower than these averages in the low-income countries of the region; amounts and shares are higher than the regional averages in the high-countries. These figures can be compared later in this paper with prospective spending on HIV/AIDS.

3. Methodology and Approach: Estimating Regional Funding Requirements for HIV/AIDS in the ECA Region:

This paper describes the funding required to support comprehensive prevention and care programs in the twenty-nine countries of the ECA region. It builds upon earlier work undertaken to estimate global resources needs for the treatment and prevention of HIV/AIDS in low and middle-income countries. Early in 2001, UN Secretary General Kofi Annan first announced the goal of providing between US$7 billion and US$10 billion for HIV/AIDS interventions in low- and middle-income countries. At the United Nations General Assembly Special Session on HIV/AIDS in June of that year, attention focused on the more detailed estimate of US$9.2 billion in resource requirements needed for 135 countries by the year 2005 (Schwartlander 2001). UNAIDS has subsequently updated these estimates with a focus on the year 2007 resulting in a somewhat larger aggregate requirement of US$10.5 billion by that year (UNAIDS, 2002). It is the aggregate 2007 requirements that the ECA region specialists were asked to review and revise according to their more detailed knowledge of each country's requirements and in light of the evolution of the epidemic in each country.

At a joint UNAIDS-World Bank workshop in Minsk, Belarus (5-6 November 2002), these estimates were reviewed and revised. The workshop was attended by country specialists from the following Commonwealth of Independent States (CIS): Armenia, Azerbaijan, Belarus, Kazakhstan, Republic of Moldova, Russian Federation, Tajikistan and Uzbekistan (see the list of participants in Appendix A). Other countries not represented at the workshop, were contacted and invited to provide inputs for their country. These included Georgia, the Kyrgyz Republic, Turkmenistan, Ukraine from the CIS region, and the countries of Central and Eastern Europe which include: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, the former Republic of Macedonia, Poland, Romania, the Slovak Republic, Slovenia, and Turkey.

[2] Given the uneven economic picture since 1997 for the region as a whole, the level of health spending is probably comparable in 2003 to what it was in 1997.

The Resource Needs Model:

The UNGASS and UNAIDS resource needs estimates were derived by using the "Resource Needs Model (RNM)" (Bollinger, Bertozzi, Gutierrez and Stover, 2002). This model was developed by the Futures Group[3] and calculates, at the national level, the total resources needed for HIV-preventions, AIDS treatment and orphan care programs. The RNM model consists of three sub-models: (i) the prevention model which includes the costs of 12 programs,[4] (ii) the care and treatment program, and;[5] (iii) orphan care.[6] (Also see Tables 1 and 2). The three main parameters of the RNM which drive the calculations include: (i) *unit cost* estimates for each of the programs in the sub-models, (ii) *population or target groups*, (iii) *coverage or access targets*. The model includes default parameters for all three parameters. These default parameters can be adjusted based on country-specialist expert opinion and available country-specific data.[7]

The unit cost estimates for prevention, treatment and orphan care in the RNM were obtained from 125 published and unpublished studies. Most of the studies are from the Africa and Latin America regions. If the default values are used, the lower values are used for low-income countries while the values in the upper-end of the range are used for middle-income countries. The *population or target group* calculations are made differently for the prevention group and the care group. For each prevention activity, the model first estimates the population target group in need of prevention services that could potentially have access to those services given existing infrastructure. For facility-based services, such as treatment for sexually transmitted infections (STI) and voluntary testing and counseling services (VCT), access is estimated as the median of four variables: the percent of the population with access to (1) tuberculosis treatment (DOTS), (2) essential immunizations (DPT), (3) attended births and (4) ante-natal care.

The population target groups for other interventions consist of the relevant population sub-group; for example, the population target group for school-based programs are those enrolled in school. The population needing care in a particular year is assumed to be

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[3] The Futures Group based the RNM on previous work done by Lilani Kumaranayake and Charlotte Watts, staff members of the London School of Hygiene and Tropical Medicine, and meta-analyses of cost-effectiveness studies managed by Dr. Bernhard Schwartlander, formerly manager of Strategic Information, UNAIDS, and more recently, Director, HIV/AIDS Programs, World Health Organization.

[4] The twelve programs include: youth focused interventions, interventions focused on sex workers and their clients, condom social marketing, public and commercial sector condom provision, improving STI management, voluntary Counseling and Testing , workplace programs, blood safety, prevention of mother-to-child transmission, mass media, harm reduction programs, interventions focused on men who have sex with men

[5] Palliative care, treatment of opportunistic infections (OIs), diagnostic HIV testing, OI prophylaxis in symptomatic patients, highly active antiretroviral therapy (HAART) and its associated laboratory support

[6] Orphanage care, community assistance, subsidies for school expenses

[7] In its initial 2001 formulation, the model added a flat ten percent of prevention costs to cover administrative, research, monitoring, and evaluation costs. In the revised version used for the ECA region, the model adds five percent of total direct prevention, care, and treatment costs to cover these costs, as noted in the text below.

equal to the number of people living with HIV who are newly symptomatic during that year. This population is estimated as equal to the number of people who would be expected to die of AIDS, in absence of treatment, two years hence. People needing ongoing treatment (HAART and OI prophylaxis) include those who are newly symptomatic and those who were receiving treatment the previous year. Newly symptomatic people initiating OI prophylaxis without HAART are assumed to live on average two years, using a Poisson distribution to determine the probability of death in a given year. *Coverage targets* for prevention programs are calculated on the basis of a number of different factors such as the needed coverage for program effectiveness (e.g. condom use), HIV prevalence rates and the levels of economic development. In low-income countries, coverage is naturally expected to be less than in middle-income countries with good health infrastructure. Coverage targets for treatment are calculated on the basis of available studies. It is also assumed that coverage rates are higher for less sophisticated services. For example, more people would have access to palliative care than they would to OI treatment or HAART.

Caveats about the model should be noted. First, the model estimates feasible coverage targets assuming an ambitious expansion of current coverage unfettered by current financial resource constraints but without significant development in infrastructure. That is, there are no additional expenditures provided for infrastructure development, with two exceptions. The expenditures in-school education interventions consist mainly of teacher training, and as such represent investment in human infrastructure. In addition, there is a cost built in for strengthening the infrastructure system to deliver interventions to prevent mother-to-child transmission. Second, the issue of sources of funding is not addressed in this model; instead, activities covered by all sources of funding are included. Also, the costs do not include those related to capital and recurrent costs for surveillance activities.

Table 1. Prevention activities, target populations, default coverage rates and unit costs

Category	Activity	Target population	Default Coverage (Varies by severity of epidemic or level of economic development)	Default Unit Costs US$ at 2000 prices (May vary by region)
Youth-focused interventions -In-school youth -Out-of-school youth	-Teacher training, peer education -Peer education	-Primary and secondary students -Out-of-school youth ages 6-11 and 12-15	-10-33% of primary teachers -2-12% of secondary teachers -10-50% of out-of-school youth	-$26-84 per primary teacher trained -$15-50 per secondary teacher trained -$8 per out-of-school youth reached
Commercial sex workers (CSW) and their clients	Male and female condoms	Commercial sex workers	-60% of CSWs reached -60-80% condom use by those reached -5% are female condoms	-$15.83 per CSW reached -$0.10 per male condom distributed -$1.00 per female condom distributed
Public and commercial sector condoms	Condom promotion	Single and married men with casual partners	-20-60% of casual sex acts use condoms -10-30% of married couples with casual partners use condoms in marital sex -70-80% of condoms distributed by public and commercial sector	-$0.15 per male condom distributed
Condom social marketing	Condom promotion	Single and married men with casual partners	-10-20% of condoms distributed through CSM -10% of condoms are female condoms	-$0.12-0.25 per male condom distributed -$1 per female condom distributed
Sexually transmitted infections (STIs)	Treatment of STIs	Men and women with symptomatic STIs with access to health system services	-60-100% of symptomatic STI cases with access to health facilities -60-100% of pregnant women with syphilis attending ante-natal clinics	-$8.34-9.26 per STI case treated -$0.91 per woman screened for syphilis at ante-natal clinics -$8.34-9.26 per syphilis case treated at ante-natal clinics
Voluntary counseling and testing (VCT)	Testing and counseling	Those desiring to be tested	Estimated as twice the number of people infected with HIV, with access to health facilities, tested every five years	$10.60 per person counseled and tested

Category	**Activity**	**Target population**	**Default Coverage (Varies by severity of epidemic or level of economic development)**	**Default Unit Costs US$ at 2000 prices (May vary by region)**
Workplace prevention	-Condom promotion -Treatment of STIs	-Men employed in the formal sector with casual partners -Men and women employed in the formal sector with symptomatic STIs	-3-50% for peer counseling -70% of employees with symptomatic STIs treated -10% of all condoms distributed through workplace programs	-$3.36 per employee reached with peer education -$8.34-9.26 per STI case treated -$0.10 per male condom distributed
Blood safety	Screening blood for transfusions	Units of blood required for transfusion	100% of blood tested	$4.88-15.00 per safe blood unit available
Prevention of mother-to-child transmission of HIV (MTCT)	-Testing -Short course anti-retroviral treatment, replacement feeding	-Pregnant women attending ante-natal clinics -HIV+ pregnant women attending ante-natal clinics	-10-50% of women attending ante-natal clinics tested -90% of those found to be HIV+ accept treatment -50% of those found to be HIV+ use replacement feeding	-$3.80 per woman screened -$18.70 per woman receiving ARV regimen (includes drugs and service strengthening) -$50 per women receiving formula
Mass media	Mass media campaigns	Country	2-6 campaigns per country per year	$490,000 per campaign
Harm reduction	Harm reduction programs	Intravenous drug users (IDUs)	25-75% of IDUs	$3.21-12.50 per person reached
Men who have sex with men (MSM)	Peer counseling	Men who have sex with men	-60% of MSMs reached by peer counseling -60-80% condom use among those reached	-$15.83 per person reached -$0.10 per male condom distributed

Table 2: Default care and treatment activities and unit costs

Category	Activities	Annual costs US$ 2000 per person
Palliative care	Symptomatic care and support provided to those people nearing death	75+
OI treatment	Medications and medical care for the common opportunistic infections associated with HIV	300+
Diagnostic HIV testing	Testing of symptomatic patients prior to the provision of prophylaxis for the prevention of opportunistic infections or HAART	5
OI prophylaxis	Isoniazid – to prevent reactivation of latent TB and cotrimoxazole – to protect against the pathogens responsible for pneumonia and diarrhea	32
HAART	Treatment with three antiretroviral drugs	350-2900, depending on country wealth
	Laboratory testing to enable monitoring of HAART treatment	140
+ Lifetime costs		

Estimating HIV/AIDS Resource Needs for ECA Countries

Participants at the Minsk workshop and experts from the other ECA countries were asked to review the 2002 UNAIDS estimates derived from the Resource Needs Model. At the Minsk workshop, participants developed initial estimates and reviewed those estimates in more detail on their return to their home countries. Several countries that did not attend the workshop assigned specialists to review the recommended unit costs, coverage levels and populations size estimates in light of their country-specific knowledge. Responses were received from all but seven of the 29 countries of the ECA region.[8]

These country specialist estimates illustrate the level of funding required for a comprehensive response to the epidemic. They are conservative in that they do not assume rapid expansion of the infrastructure that might be needed to provide services to all. They are optimistic in the sense that they assume that by 2007 essential services, such as voluntary counseling and testing and anti-retroviral therapy, will be available to all those who need them and have access to appropriate health facilities.

These are estimates of funding required from all sources, including national governments, international donors, foundations, the commercial sector and private out-of-pocket expenditures. These estimates are intended to serve as the basis for planning an expanded and effective response to the AIDS epidemic in this region.

[8] No new data reviews had been received by April 2003 from Georgia, Hungary, Kyrgyzstan, Poland, Slovenia, TFYR Macedonia, or Turkmenistan. Data from the original UNAIDS analyses are being adjusted for these countries to make them comparable to the mean of adjustments provided by the other countries of the region that did provide new country specialist estimates.

4. Results

Effective scaling up of essential programs for HIV/AIDS prevention, care and treatment programs will require funding from all sources to increase from about US$300 million in 2001 to US$1.5 billion by 2007. Needs by country will vary according to the size of the population, the severity of the epidemic and the unit costs of the prevention and care activities (see Annex Figure 1 and Annex Table 1). Of the total US$1.5 billion required in 2007, three-fifths will be needed in the three largest countries by population, namely, the Russian Federation, Kazakhstan, and Ukraine.

Distribution between prevention and care

In 2007, 40 percent of total funding will be needed for prevention, 55 percent for care and treatment and 5 percent for policy, administration, research and evaluation (Figures 1 and 2 and Table 1). The provision of ARV treatment for HIV+ patients, including laboratory monitoring costs, requires the largest percentage of funds at 45 percent. Funding for ARV treatment will need to increase from about US$60 million in 2002 to over US$600million by 2007. Three other important interventions would together claim one-quarter of all funding requirements. These include treatment and prophylaxis for opportunistic infections, which would require nine percent of total spending. Workplace programs will need seven percent, condom promotion and distribution programs will require 6.3 percent of total funding by 2007.

The workshop in Minsk and the country review did result in significant changes to the estimated resource requirements. The estimate of funding required for all interventions in 2007 rose by 9 percent. Prevention needs were 38 percent higher and care needs were 4 percent lower. There were large increases in the estimated costs of youth-focused programs (largely due to higher teacher training costs) and higher costs for management of sexually transmitted infections and for voluntary counseling and testing (VCT) services. Estimated needs for workplace programs and mass media were significantly lower. The estimates of costs for laboratory monitory of HIV were somewhat lower in 2007.

Relative emphasis on selected interventions

Annex Table 1 describes the breakdown in resource needs for prevention and care programs. Some observers noted that despite concentration of the epidemic among intravenous drug users (IDUs), resources focused on that group were less than those aimed at sex workers and men who have sex with men (MSMs). These estimates reflect not just the scale and unit costs but also what is considered *feasible* by country officials in terms of *expanding* the scale of their HIV/AIDS programs. The numbers reflect a certain degree of "resignation" by country participants: they cannot tackle the problem effectively if they don't have money, but they cannot use more money if the social and judicial constraints on harm reduction (for example) are not alleviated. Since many country participants are so used to these constraints, they probably assumed that the

constraints would remain unresolved, hence lowering their expectation of what could be done on some interventions by 2007. A key challenge is to alleviate non-financial constraints (such as judicial constraint on the expansion of harm reduction programs). This would result in a shift in the relative allocation of resources. This resource estimation exercise needs to be updated periodically to take account of changes in the operating environment and the scale of the epidemic.

The figures in Annex Table 1 indicate that between 2001-07, the resource needs for some prevention interventions (e.g. public and commercial sector condom distribution, treatment of STIs, interventions for CSWs and their clients) increase quite rapidly, while for other (youth-focused interventions), the resource needs grow only marginally. These differences are mostly related to the changes in coverage targets between 2001-07. Under the Resource Needs Model, it is assumed that coverage will increase over time. These changes in coverage in the model are based on several assumptions, including current HIV prevalence rates as well as the economic classification of the country (low, middle, high income). The current HIV prevalence rates determine coverage rates since in low prevalence countries, in order to effectively prevent new HIV infections, only a certain percentage of the population needs to adopt a certain behavior (e.g. condom use) while in high prevalence countries, these rates are higher. In addition, during the country consultations, coverage levels were refined taking into account non-financial constraints for specific prevention interventions.

Future Costs of Highly Active Anti-Retroviral Therapy (HAART)

Country specialists made their best estimates of likely unit costs, coverage, and total expenditure on anti-retroviral therapy in the year 2007. They expect the ECA region as a whole to spend more than six hundred million US dollars on this therapy, consuming forty percent of the total HIV/AIDS budget. The country specialist estimates of unit costs five years from now varied from a low of US$200 per person per annum to US$3,600 per person per annum, with an unweighted average of US$1,600 per person per year. The specialists were asked to estimate prices and coverage for each year from 2001 through 2007. In general, they estimated that coverage would increase and unit prices, especially for pharmaceuticals, would decrease for low-income countries of Central Asia but increase or remain the same for most others, e.g., Armenia, Kazakhstan, Russian Federation, and Ukraine.

Making predictions as far into the future as 2007 obviously requires considerable guesswork. The per person cost of this therapy in Mexico declined by about ninety percent between 1998 and 2002, due largely to the ability of the Mexican social security system to negotiate a lower price for drugs from pharmaceutical companies. In early 2002, a Thai pharmaceutical firm announced that it had succeeded in producing a single triple therapy pill to be taken daily, and that the firm would expect to sell it for fifty US cents per dose, that is, at a cost for the pills alone of about US$185 per annum

The TRIPS agreement remains a point of contention in international negotiations in the Doha round affecting world trade. Pharmaceutical companies may have an interest in a

high degree of price discrimination, often referred to as Ramsay pricing, maximizing their profits by selling at high prices in high-income countries, and at lower prices in middle- and low-income countries (Scherer and Watal 2002).

These conditions affecting price and availability of HAART drugs make it difficult to predict future unit costs for this therapy. Moreover, if prices are lower, then coverage can be increased at the same total expenditure level.

Sources of funding for HIV/AIDS interventions, 2007

There have as yet been no detailed analyses of what sources may be tapped to finance the necessary level of spending on HIV/AIDS care and support in the ECA region in the year 2007. The Global Fund to Fight AIDS, TB, and Malaria (GFATM) will focus some of its resources on assuring effective M&E activities in the countries that receive its grants. Ten ECA region countries received GFATM grants in Rounds one and two of the proposal review process. Amounts granted for years 1 and 2 total US$67.8 million. This success on the part of ECA region countries may signal both the effectiveness of national strategic planning and the urgency of taking steps to address the epidemic (see Table 3).

Table 3. GFATM grants to ECA Region Countries (US$millions)

Recipient Country	Years 1& 2	Total, Years 1 – 5
Armenia	3.2	7.2
Bulgaria	6.9	15.7
Croatia	3.3	4.9
Estonia	3.9	10.2
Georgia	4.0	12.1
Kazakhstan	6.5	22.4
Kyrgyz Republic	5.0	17.1
Moldova (Round 1)	1.7	11.7
Romania	21.8	28.1
Tajikistan	1.4[9]	2.4
Ukraine (Round 1)	9.0	92.2
Yugoslavia (Serbia) (Round 1, deferred funding)	1.1	3.6
TOTAL	67.8	227.6

Source: GFATM and Global Fund Observer. Seven countries applied but did not receive grants. Nine countries did not submit an application to GFATM.

If annual disbursements reach a level of about US$40 million for the region as a whole, then GFATM grant support would be covering about three percent of estimated total requirements in the year 2007. Proposals submitted to GFATM are now available for viewing at www.aidspan.org/globalfund/grants website. Other donor assistance, as from the World Bank and selected bilateral donors, could amount to considerably more. Such

[9] The Tajik proposal is for 3 years only.

assistance may focus on prevention activities that must be scaled up in the framework of sustainable national programs, based on ownership and leadership from national and local governments.

The most important source of finance is likely to be national and local governments. They will have functions to support poverty groups via subsidized health care provision as well as to finance a large part of all prevention services. Governments may prove to be the entities best able to negotiate for lower prices for HAART pharmaceuticals. During the 1990s, the countries of the ECA Region spent between US$49 – 65 billion per year on health care services. A similar or larger amount is likely to be spent on health care in 2007. Spending requirements for HIV/AIDS prevention and care, at US$1.5 billion in 2007, would constitute between two percent and 3 percentof total health expenditures in the Region in that year.[10]

Nevertheless, aggregate figures mask the huge disparities in per capita health expenditures across the countries of the ECA Region. For example, data for the period 1990 – 98 indicates that Slovenia spent per annum US$ 746 per capita while Central Asian countries such as the Kyrgyz Republic and Tajikistan spent about US$13 (World Bank, 2002). Some of the most economically challenged countries of the ECA Region (Caucasus and Central Asian countries and the Republic of Moldova) are faced with a growing problem of HIV/AIDS. In these countries, careful attention will have to be paid to the mobilization of domestic and international resources for comprehensive HIV/AIDS prevention and treatment programs. Limited data on public expenditures for countries of the ECA region show that public resources are largely channeled at maintaining an expensive network of hospitals at the expense of preventive and primary health care services. In mobilizing resources for HIV/AIDS, careful attention needs to be paid to domestic resource mobilization in light of the fact that prevention of HIV/AIDS is a public good that generates large positive externalities.

In addition to calculating aggregate resource needs for HIV/AIDS prevention and care programs for each country, systematic analysis of available domestic resources is needed in order to estimate the financing gap. This approach will ensure that international resources do not crowd out domestic public spending on HIV/AIDS. National health accounts (NHA) that include a specific focus on HIV/AIDS (HIV/AIDS accounts) could help in this process.

[10] Twenty countries of the Latin America and Caribbean region spent a similar share of health expenditures on HIV/AIDS in the year 2000. The LAC region countries have prevalence levels for HIV/AIDS similar to those of ECA; both are considerably lower than sub-Saharan Africa, but both face the threat of a substantial expansion of the epidemic. These levels of spending would appear to be feasible when financed by a combination of government revenues, private spending, and donor assistance.

5. Summary

Data provided in this analysis show the need for a substantial increase in resources to be made available in the fight against HIV/AIDS in the ECA region countries. Funds need to increase from around US$300 million in 2001 to about US$1.5 billion in 2007. That increase in resources requires that expenditures rise at a cumulative annual rate of 30 percent. This substantial rate of increase must be accompanied by staff training, introduction of testing equipment, increased skills in policy and advocacy for behavioral changes, and a host of related infrastructure improvements for the health sector as a whole Increased funding can enable an effective response, but many organizational and operational changes must also take place to assure effective implementation.

Second, and in a more optimistic vein, note that even a full scaling up of the required program for HIV/AIDS care and support will require expenditure of no more than two - three percent of the total likely level of health care spending in the ECA region by the year 2007. This share suggests that resource mobilization is feasible.

Finally, failure to mobilize resources and to implement the care and support programs outlined here, can only lead to further exacerbation of the problems emanating from the HIV/AIDS epidemic. The likely future costs will be all the greater the greater are delays in implementing these essential interventions.

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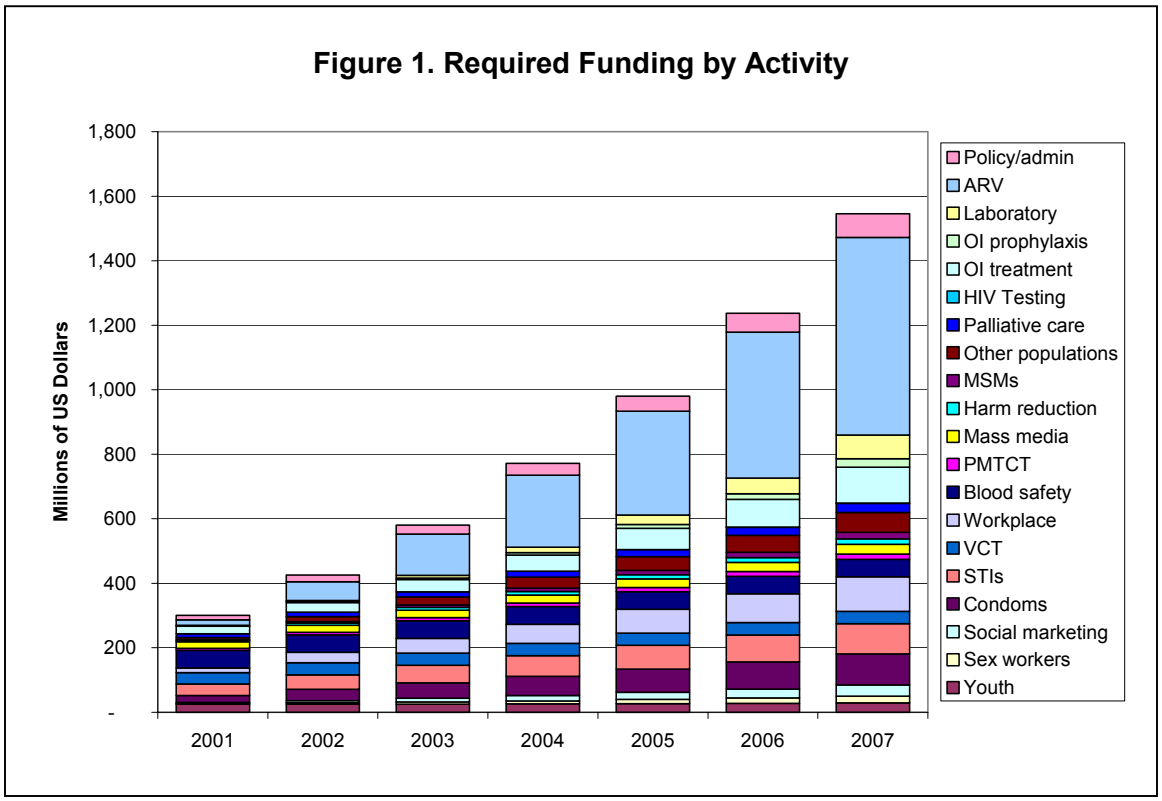
Annex Table and Figures.

Annex Figure 1. Country specialist aggregated estimates of resources required in the response to HIV/AIDS for the ECA region, by intervention, 2007



Annex Table 1. Estimated Resources Required by Activity in HIV/AIDS Programs (Thousands of US Dollars)

	2001	2002	2003	2004	2005	2006	2007
Prevention-related activities	**231,454**	**296,514**	**357,374**	**419,018**	**483,124**	**548,869**	**619,705**
Youth focused interventions	25,261	25,506	25,685	25,874	26,861	27,832	28,908
Interventions focused on CSWs and their clients	1,648	3,848	6,444	9,496	12,949	16,890	21,373
Condom social marketing	3,691	7,200	11,691	16,422	21,791	27,366	34,572
Public and commercial sector condom provision	21,299	34,836	47,551	59,748	72,411	84,063	96,045
Improving STI management	35,924	45,048	54,450	64,058	73,816	83,680	93,618
VCT	34,824	37,532	37,621	37,738	37,823	38,203	38,327
Workplace	14,906	31,747	45,797	59,801	73,789	89,082	106,783
Blood safety	54,422	54,469	54,587	54,642	54,701	54,765	54,833
PMTCT	6,613	7,939	9,362	10,893	12,535	14,299	16,193
Mass media	19,646	21,443	23,319	25,195	26,972	28,669	30,445
Harm reduction programs	4,687	6,729	8,734	10,754	12,743	14,717	16,675
Interventions focused on MSMs	2,382	4,829	7,466	10,303	13,334	16,551	19,935
Other vulnerable groups	6,150	15,388	24,669	34,093	43,397	52,752	61,996
Care and treatment services	**55,187**	**108,434**	**194,963**	**316,045**	**450,384**	**629,670**	**852,348**
Palliative care	11,855	13,705	15,801	18,322	21,222	24,570	28,305
Testing	43	79	133	213	323	467	642
OI treatment	23,744	29,885	38,289	49,998	65,603	85,996	111,516
OI prophylaxis	1,590	2,803	4,687	7,593	11,821	17,721	25,526
Lab HAART	1,057	3,655	8,559	16,810	29,665	48,419	74,270
ARV	16,898	58,307	127,494	223,110	321,751	452,498	612,089
Policy, advocacy, administration and research	**14,332**	**20,247**	**27,617**	**36,753**	**46,675**	**58,927**	**73,603**
TOTAL	**295,548**	**418,037**	**570,557**	**760,002**	**965,873**	**1,220,994**	**1,527,212**

Annex Table 2 - List of Participants
HIV/AIDS Resource Needs Workshop for CIS Countries
Minsk, Belarus. November 5-7, 2003

Country	Name	Title	E-mail Address
Belarus	Dr Meleshko, Lilia Dr Brutskaya, Svetlana	Chief Doctor, AIDS Center Head of Department, AIDS Center	belaids@mail.ru Veska_@tut.by, belaids@mail.ru
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Moldova	Dr Gheorghita, Stefan Ms Botnaru, Diana Mr Stosiuc, Victor	Center AIDS Prophelactic and Control Assistant Project Officer, HIV/AIDS, UNICEF Head, Department of Finance, MoH, Moldova	nadde@mednet.md dbotnaru@unicef.org
Azerbaijan	Dr Aliyev, Galib Mr Mejidli, Vugac	Director, National Center in Response to AIDS Chief of Division, Ministry of Finance	sos@aidscenter.bonu.az vugacm@knowhow.bonu.az
Tajikistan	Ms Sharipova, Bunysrat Dr Taraculov, Ismail	Head of Economics, Financial Planning Department, MOH Epidemiologist, Republican AIDS Center	boki@tajikistan
Uzbekistan	Mr Kuzbanov, Sabizjon Dr Anazkylova, Oysaza	Head of Department of Financial Analysis Director of National AIDS Center	Tel: 8 (371) 144-1581 76-3649, 76-2608
Kazakhstan	Dr Erasilova, Issidora	Director, Republican AIDS Center	317492
	Mr Bolatbaeva, Saule	Director, Planning and Monitoring state Budgetary Programs, MOH	50-9262, 42-0636
CIS	Dr Narushkerich, Gyorgy	Advisor	
Facilitators			
World Bank	Adeyi, Olusoji	Lead Health Specialist	
World Bank	Chakraborty, Sarbani	Health Economist	
UNAIDS	Ghys, Peter	Manager, Epidemic and Impact Monitoring	
Futures Group	Stover, John	Vice President, Research	
Futures Group	McGreevey, William	Director, Development Economics	