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Partners for Health Reformplus

## **The Value of Beneficiary Analyses: Who Benefits from Funds Targeted For HIV/AIDS?**

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*January 2006*

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Prepared by:

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*Partners for Health Reformplus is USAID's flagship project for health policy and health system strengthening in developing and transitional countries. The five-year project (2000-2005) builds on the predecessor Partnerships for Health Reform Project, continuing PHR's focus on health policy, financing, and organization, with new emphasis on community participation, infectious disease surveillance, and information systems that support the management and delivery of appropriate health services. PHRplus will focus on the following results:*

- ▲ *Implementation of appropriate health system reform.*
- ▲ *Generation of new financing for health care, as well as more effective use of existing funds.*
- ▲ *Design and implementation of health information systems for disease surveillance.*
- ▲ *Delivery of quality services by health workers.*
- ▲ *Availability and appropriate use of health commodities.*

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# Abstract

The recent increase in financing for HIV/AIDS care makes it important to ensure that the monies are spent in a way that fulfills the goals of country policymakers and donors, i.e., that resources are allocated in a way that provides needed goods and services to targeted populations. In most HIV-endemic countries, stakeholders lack the data to track who is paying for HIV/AIDS care and who is benefiting from it: people living with HIV? at-risk groups? urban vs. rural? rich vs. poor? This paper discusses how beneficiary analyses of resource flows can inform policy. It describes how data can be collected, and two methodologies – National AIDS Accounts and the National Health Accounts Subanalysis for HIV/AIDS – that estimate how public, private, and donor funds for HIV/AIDS flow through the health care system. The methodologies provide information that is valuable for monitoring how current HIV/AIDS care policy goals are being met, and for informing future policy making.

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# Acronyms

<b>IP</b>	Inpatient Care
<b>MSM</b>	Men Who Have Sex with Men
<b>NAA</b>	National AIDS Accounts
<b>NHA</b>	National Health Accounts
<b>OOP</b>	Out-of-Pocket
<b>OP</b>	Outpatient care
<b>PHR<sup>plus</sup></b>	Partners for Health Reform <sup>plus</sup>
<b>PLWA</b>	People Living with AIDS
<b>PLWH</b>	People Living with HIV
<b>PLWHA</b>	People Living with HIV/AIDS
<b>PMTCT</b>	Prevention of Mother-to-Child Transmission
<b>PPP</b>	Purchasing Power Parity
<b>SIDALAC</b>	Regional AIDS Initiative for Latin America and the Caribbean
<b>STD</b>	Sexually Transmitted Disease
<b>USAID</b>	United States Agency for International Development



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# 1. Introduction

Given the recent surge in global funding for HIV/AIDS and worldwide commitment to curbing the spread of the disease, mitigating its impact, and extending treatment access, there is enormous pressure on policymakers and donors to monitor the flow of HIV/AIDS funds to ensure that care reaches targeted populations. What matters now is not only the amount that is invested to fight HIV/AIDS but **how** these funds are spent and, ultimately, whether those in need are benefiting from these investments. In most HIV endemic countries, however, stakeholders lack the data needed to monitor the disbursement of HIV resources, let alone to determine if the resources are reaching intended targets. Thus, policymakers in these countries tend to be poorly equipped to make decisions regarding the optimal allocation of resources to meet the needs of vulnerable populations. A comprehensive system to track expenditures on HIV/AIDS programs and services by and for beneficiary populations would provide critical data on the effectiveness of current resource allocation arrangements. Such information can help answer questions such as:

- ▲ What is the burden on people living with HIV/AIDS (PLWHA) of financing HIV/AIDS care and treatment? More specifically, what is the burden on:
  - △ High-risk groups for HIV transmission versus general population?
  - △ Men versus women?
  - △ Urban versus rural dwellers?
  - △ Rich versus poor?
  - △ The poor: do they spend catastrophic amounts<sup>1</sup> to finance HIV/AIDS care?
- ▲ Where are program funds currently targeted? To which population groups? How much is being spent?
- ▲ Are government and donor resources flowing to those most in need?

A ‘beneficiary analysis’ of resource flows for HIV/AIDS can inform critical policy questions. This paper describes the outputs of such analyses and the main approaches to their implementation.

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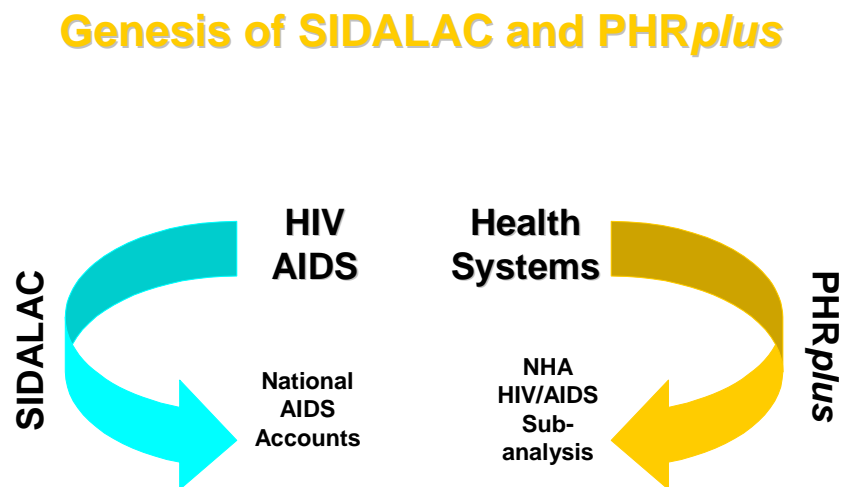
<sup>1</sup> Out-of-pocket payments for health are considered to be catastrophic when they exceed 40 percent of a household’s capacity to pay (Xu 2005).



## 2. Approaches to the Tracking of Resource Flows

There are two main approaches used in the tracking HIV/AIDS resources, one called the National Health Accounts (NHA) HIV/AIDS subanalysis<sup>2</sup> and the other National AIDS Accounts (NAA).<sup>3</sup> Though developed independently and for different purposes, the approaches have similar frameworks and yield comparable outputs (see Figure 1). Taken together, they have been implemented in more than 68 countries, predominantly in the Latin American, Caribbean, and African regions.

Figure 1: Genesis of SIDALAC and PHRplus Approaches to Tracking HIV/AIDS Resources



The NHA HIV/AIDS subanalysis and NAA address the basic policy questions of:

- ▲ Who pays for HIV/AIDS services?
- ▲ How much do they spend?

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<sup>2</sup> The subanalysis approach is adapted from the NHA framework and is described in De, Dmytraczenko, Chanfreau et al. (2004).

<sup>3</sup> The NAA approach was developed by the regional HIV/AIDS initiative for Latin America and the Caribbean (SIDALAC) and is described in SIDALAC (2001).

- ▲ Where do these funds go?
  - △ What is the distribution of spending across providers
  - △ What types of services and products are purchased?
  - △ Are the funds reaching targeted beneficiary populations?

The frameworks that these resource tracking approaches employ draw on 30 years of health accounting experience and are comprehensive in nature, tracking public, private, and donor HIV/AIDS funds through the health care system (for one-year periods). Recognizing that the continuum of care for PLWHA includes non-health activities, such as the care of orphans and vulnerable children as well as advocacy and empowerment for PLWHAs, the frameworks have been expanded to allow for tracking of non-health expenditures.

While the two approaches produce comparable estimates of national HIV/AIDS spending, they are distinct in some features. Generally speaking, an HIV/AIDS subanalysis is conducted within the context of a general NHA estimation<sup>4</sup> that targets a country's overall health care spending, i.e., spending on all health care services. The NAA approach, on the other hand, is implemented as a stand-alone study.

Another difference is that the NHA framework tracks the flow of funds through four principal dimensions, namely financing sources, financing agents, providers, and functions. NAA is similar but collapses the financing sources and financing agents into a single dimension.

A final distinction is the nomenclature used for expenditure categories. Nevertheless, while terms are not identical, they can be mapped to each other, as Table 1 illustrates.

**Table 1: Mapping of NAA to NHA HIV/AIDS Subanalysis Classifications**

<b>NAA classifications</b>	<b>Corresponding NHA HIV/AIDS subanalysis classifications</b>
PERSONAL HEALTH EXPENDITURES	= Sum of classifications listed below in this sub-section
Therapeutic services	=HC.1 Services of curative care (minus HC.1.3.5 and HC.1.3.7)+HC.3.1 +HC.3.3
Inpatient care (IP)	=HC.1.1 Inpatient curative care
Outpatient care (OP)	=HC.1.3 Outpatient curative care (minus HC.1.3.5 STI management and HC.1.3.7 ARV treatment)
Home care	=HC.3.3 Long-term nursing care: home care
Nursery long-term care	=HC.3.1 Inpatient long-term nursing care (incl. hospices)
Auxiliary services	=HC. 4.2 +HC.2+ HC.4.3
Diagnostic tests	=HC.4.2 Diagnostic imaging
Patient monitoring	=HC.2 Services of rehabilitative care
Patient transport	=HC.4.3 Patient transport and emergency rescue

<sup>4</sup> The general NHA approach is described in *Guide to producing national health accounts with special applications for low-income and middle-income countries* (WHO, World Bank, and USAID 2003)

<b>NAA classifications</b>	<b>Corresponding NHA HIV/AIDS subanalysis classifications</b>
Non-durable goods	=HC.1.3.7+HC.5.1+HC5.1.3 (minus HC.5.1.3.1)
Antiretrovirals	=HC.1.3.7 ARV treatment (issued as part of outpatient care)+HC. 5.1.1.1 ARV drugs (procured at independent pharmacies/shops)
Other medicines	=HC.5.1 'Prescribed' medicines (minus HC.5.1.1.1 ARV drugs)
Other non-durable goods	=HC.5.1.3 Other medical non-durables (minus HC.5.1.3.1 condoms procured at independent pharmacies/shops)
Orthopedic appliances and other durable goods	=HC.5.2 Therapeutic appliances and other medical durables
<b>PUBLIC HEALTH EXPENDITURES</b>	= Sum of classifications listed below in this sub-section
Public health services	=HC.6.3.8+HC.6.3.4
Epidemiological surveillance	=HC.6.3.8 Disease surveillance
Information, education and communication	=HC.6.3.4 Information, education communication programs.
Preventive programs	=HC.6.3.7+HC.5.1.3.1+HC.6.3.5+HC.1.3.5+HC.6.1.1+HC.6.3.6+HC.6.3.2
Condoms	=HC.6.3.7 Condom distribution programs+HC.5.1.3.1 Condoms
STD treatment	=HC.6.3.5 STI prevention program+HC.1.3.5 STI management
Mother-to-child transmission prevention	=HC.6.1.1 PMTCT
Syringes distribution	=HC.6.3.6 Needle Programs (for prevention or exchange)
Blood banks	=HC.6.3.2 Blood safety
<b>ADMINISTRATION</b>	=HC.7 Health administration and health insurance
<b>INVESTMENT</b>	=HCR.1 Capital formation for health care provider institutions
Infrastructure	=HCR.1 Capital formation for health care provider institutions
Equipment	=HCR.1 Capital formation for health care provider institutions
<b>NON-HEALTH EXPENDITURES</b>	=Sum of classifications listed below in this sub-section
Staff training	=HCR.2 Education and training
Research and development	=HCR.3 Education and development
Management and delivery of in-kind social services to people living with AIDS	=AD.1.1.2 In-kind benefits to PLWHAs
Management and delivery of monetary benefits to people living with AIDS	=AD.1.1.4 monetary benefits to PLWHAs
Organization and empowerment	=AD.4 Empowerment and organization (includes legal services)
Advocacy	=AD.2 Policy advocacy (includes support to national strategic plan for HIV/AIDS [lobbying])

Note: The NHA HIV/AIDS subanalysis proposes additional classifications that are listed in De, Dmytraczenko, Chanfreau, et al. (2004).

Given this understanding of the two main approaches used to track HIV/AIDS resources at the national level, the next section discusses how they can inform critical beneficiary-related policy questions such as the ones listed in the introduction.

### 3. Defining Beneficiary Groups for Analysis

To address the main policy question of “who is benefiting from current investments in HIV/AIDS care?”, investigators and policymakers first need to clearly define the populations of interest, that is to say, the different ways in which beneficiaries need to be classified for the purpose of analysis. Definitions will take into account the policy context and the epidemiological state of the HIV epidemic in the country. Some stakeholders may want to know about beneficiaries in different geographical locations: for example, do rural PLWHAs have equal financial access to HIV/AIDS services as urban PLWHAs? Other stakeholders may be concerned about the differences in regard to income: how do rich and poor shoulder the financing burden of HIV/AIDS care? Of particular relevance to an HIV/AIDS analysis are the expenditures of certain at-risk populations, such as commercial sex workers and intravenous drug users.

Some of the key categories addressed by beneficiary analyses on HIV/AIDS resource flows are:

- ▲ Populations at risk for HIV transmission
- ▲ Other populations of interest (pregnant women, orphans and vulnerable children)
- ▲ PLWHAs as defined by stage/severity of illness
- ▲ Gender (male versus female)
- ▲ Income level
- ▲ Geographic distribution (urban versus rural)

**Populations at risk for HIV transmission:** This category refers to those individuals who may or may not be positive for HIV/AIDS but exhibit behaviors or work in settings that place them at higher risk than the general population for contracting the virus. These behaviors may include – but are not limited to – commercial sex work, intravenous drug use, men having sex with men (MSM), and work in clinical settings. So the populations at risk may include prison inmates, uniformed populations, commercial sex workers, migrant workers, and medical personnel. While it may be difficult to track the out-of-pocket (OOP) HIV/AIDS expenditures of such population groups due to identification complexities and sampling issues, the NAA and NHA HIV/AIDS subanalysis allow for tracking expenditures targeted at these groups; such information can be obtained from the financial statements of government, donor, and NGO programs. For further details, please see Table 2.

**Other populations of interest:** This category refers to those populations that may be affected by the disease or are of special interest to country policymakers, including children born to HIV-positive mothers, and orphans and other vulnerable children. As with the populations-at-risk category, the NAA and NHA HIV/AIDS subanalysis allow for tracking programmatic spending on these groups. These expenditure data can help inform indicators such as prevention of mother-to-child transmission (PMTCT) expenditure per beneficiary. For further details, please see Table 2.

**Table 2: Other Target Populations/Groups**

NAA beneficiary group*	National AIDS Accounts							NHA HIV/AIDS subanalysis		
	Belize 2003	Chile 2002	Ghana 2002	Guatemala 2002	Haiti 2002	Paraguay 2002	Trinidad & Tobago 2002	Kenya 2002	Rwanda 2002	Zambia 2002
<b>Stage/severity of disease</b>	<b>38.7%</b>	<b>66.9%</b>	<b>22.5%</b>	<b>82.4%</b>	<b>28.4%</b>	<b>33.5%</b>	<b>46.0%</b>	<b>40.3%</b>	<b>37.8%</b>	<b>67.2%</b>
PLWH	1.6	19.2%	0.2%	6.8%	10.51%	4.84%	21.6%	12.0%	7.5%	24.0%
PLWA	37.1	47.7%	22.3%	75.6%	17.85%	28.62%	24.4%	28.3%	30.3%	43.2%
<b>Populations at risk</b>	<b>24.7%</b>	<b>0.6%</b>	<b>1.0%</b>	<b>4.9%</b>	<b>3.0%</b>	<b>1.7%</b>	<b>0.5%</b>	<b>0.01%</b>	<b>0.02%</b>	<b>0.00%</b>
MSM	0.0%	0.3%	0.0%	1.1%	0.35%	0.32%	0.1%	0.0%	0.0%	0.0%
M&F commercial sex workers	21.9%	0.3%	0.02%	1.6%	2.67%	1.25%	0.2%	0.0%	0.0%	0.0%
Uniformed populations	0.1%	0.0%	0.02%	0.5%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
Migrants	0.2%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Inmates	0.3%	0.0%	0.1%	0.0%	0.0%	0.04%	0.2%	0.0%	0.0%	0.0%
Health personnel	2.2%	0.0%	0.9%	0.9%	0.0%	0.0%	0.0%	0.01%	0.02%	0.0%
<b>Other populations of interest</b>	<b>9.5%</b>	<b>0.9%</b>	<b>17.6%</b>	<b>1.4%</b>	<b>12.6%</b>	<b>1.2%</b>	<b>7.9%</b>	<b>9.2%</b>	<b>6.8%</b>	<b>0.1%</b>
Pregnant women	1.7%	0.0%	6.72%	0.5%	0.0%	0.51%	0.0%	0.5%	6.8%	0.1%
PMTCT**	1.7%	0.9%	0.0%	0.7%	1.61%	0.69%	3.7%			
Vulnerable children & youth	6.0%	0.0%	0.74%	0.0%	5.44%	0.0%	1.8%	8.5%	0.0%	0.0%
School children	0.1%	0.0%	8.9%	0.0%	1.9%	0.0%	2.3%	0.2%	0.0%	0.0%
Workers	0.0%	0.0%	1.2%	0.1%	3.68%	0.0%	0.1%	0.0%	0.0%	0.0%
<b>Non-targeted***</b>	<b>27.1%</b>	<b>31.6%</b>	<b>58.9%</b>	<b>11.3%</b>	<b>56.0%</b>	<b>63.6%</b>	<b>45.6%</b>	<b>50.5%</b>	<b>55.4%</b>	<b>32.7%</b>
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

\* These NAA categories refer to programmatic spending on target population groups.

\*\* Note, this category is defined by NAA as 'Child in risk of vertical transmission'. Pregnant women and PMTCT are combined under NHA.

\*\*\* Note, this category is defined as NAA's blood bank group + NAA's non-targeted group. Under NHA, this category includes-1) other medical non-durables, 3) IEC (information, education, communication), 4) STI prevention program, 5) condom distribution programs, 6) other prevention programs that cannot be disaggregated, 7) M&E (monitoring and evaluation), 8) health admin and insurance, 9) NSK (not specified by kind), 10) capital formation, 11) research and development, 12) education and training, 13) psychosocial support

**PLWHAs as defined by stage/severity of illness:** Individuals can be classified in terms of their disease progression. The NAA approach uses the classifications of People Living with HIV (PLWH) versus People Living with AIDS (PLWA) and categorizes expenditures as such. The NHA HIV/AIDS subanalysis identifies individuals as symptomatic versus non-symptomatic, or by their clinical stage (1-4) of the disease.<sup>5</sup> In its inclusion of performance scale and symptom-based questions associated with each stage of HIV/AIDS, the NHA subanalysis can provide data on OOP spending per capita for each stage of the disease. For further details, please see Table 2.

**Gender:** Issues associated with the gender of beneficiaries are of concern to many country policymakers. In sub-Saharan Africa, for example, women are 30 percent more likely to be infected with HIV than men (UNAIDS 2004), and they often do not have equal access to care. Policymakers in the region may seek to avoid gender disparities in the burden of financing for HIV/AIDS care. Policy-relevant indicators on gender differences can be derived from household or PLWHA-targeted survey data, as compiled by the NHA HIV/AIDS subanalysis.

**Table 3: Gender: Differences in OOP Spending (in PPPs)\***

	Kenya	Rwanda	Zambia
Average male expenditure for OP per visit	\$ 10.03	\$ 26.85	\$ 19.82
Average female expenditure for OP per visit	\$ 10.14	\$ 28.24	\$ 14.39
Females spend X times more than men	1.01	1.05	0.7
Average male expenditure for IP per visit	\$ 171.22	\$ 143.15	\$ 17.25
Average female expenditure for IP per visit	\$ 192.63	\$ 71.49	\$ 13.03
Females spend X times more than men	1.13	0.50	0.8

\* Purchasing Power Parity

**Income level:** Beneficiary analyses can also examine HIV/AIDS-related spending by socioeconomic strata. This necessitates obtaining household or PLWHA-targeted survey data. Tracking spending in this way enables policymakers to assess, for example, the level of household OOP expenditures for HIV/AIDS care against overall household expenditures to determine if, at any level, HIV/AIDS spending results in catastrophic expenditures.

**Table 4: Income Level: Differences of OOP Spending on OP Care by Quintile (in PPPs)**

	Kenya	Rwanda	Zambia
Quintile I (poorest)	\$ 4.62	\$ 14.48	\$ 5.06
II	\$ 9.89	\$18.61	\$ 5.74
III	\$ 10.85	\$ 10.21	\$ 8.72
IV	\$ 10.49	\$ 42.36	\$ 14.67
Quintile V (richest)	\$ 17.41	\$ 53.98	\$ 47.13

**Geographic distribution:** This category groups PLWHAs by their place of residence or treatment according to urban or rural. By examining spending patterns in this way and mapping the results to disease prevalence rates by area, a beneficiary analysis can shed light on whether or not government and/or donor funds are reaching target areas, i.e., those in greatest need. Again, a household or PLWHA-targeted survey is critical to making this determination.

<sup>5</sup> As defined by the World Health Organization

**Table 5: Geographic Distribution: Differences in OOP Spending in Urban/Rural Areas (in PPPs)**

	<b>Kenya</b>	<b>Rwanda</b>	<b>Zambia</b>
Urban expenditure for OP per visit	\$ 9.76	\$ 70.22	\$ 20.20
Rural expenditure for OP per visit	\$ 10.40	\$ 28.31	\$ 9.13
Urban spend X times more than rural	0.94	2.48	2.21
Urban expenditure for IP per visit	\$ 138.14	\$ 167.20	\$ 18.39
Rural expenditure for IP per visit	\$ 223.64	\$ 134.98	\$ 8.62
Urban spend X times more than rural	0.62	1.24	2.13

## 4. Beneficiaries' Spending on Health: Designing the Data Collection Approach

An integral part of estimating a country's expenditures on HIV/AIDS is to track what beneficiaries pay out of pocket for their health care. This information allows policymakers to monitor whether current practices are having the desired impact of reducing the financial burden of the disease on PLWHA and their families.

The NHA approach developed to estimate OOP expenditures recognizes that data collection may need to differ by country. In countries where the epidemic is firmly established in the general population, a significant percentage of total HIV/AIDS resources come from the OOP spending of PLWHA and their families, and therefore these expenditures are an important policy indicator. In countries where the epidemic is still confined in subpopulations, OOP spending by people and households severely affected by the epidemic may remain a limited portion of overall spending on HIV/AIDS.

Because countries differ, the approach to collecting data for a beneficiary analysis may also need to differ. This is particularly true when data are being collected from PLWHA and their families. Policymakers must decide which categories of data will be collected; how frequently data will be collected; and which mix of data collection methods is most appropriate, reliable, feasible, and cost-effective to produce a comprehensive picture of a country's spending on HIV/AIDS. Data will probably be collected from the following groups:

- ▲ PLWHA
- ▲ Households of PLWHA
- ▲ Providers of HIV/AIDS services

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### 4.1 Capturing Information from PLWHAs

Capturing information on PLWHA expenditures requires surveys targeted to those individuals. Effective venues for identifying respondents and holding interviews are those where PLWHA access HIV/AIDS-related services, such as clinics that provide prevention and treatment, or centers that host support groups. In addition to collecting data on expenditures for inpatient and outpatient services, the survey can obtain other types of information such as utilization of health care, socioeconomic composition of the PLWHA's household, and mechanisms of payment.

PLWHA surveys are useful in that they collect data directly from beneficiaries of interest to policymakers. Nonetheless, bias may occur as a result of the sampling design described above, because respondents must have access to the selected points of services. Correcting for unequal probabilities of PLWHA selection can be done by applying appropriate sampling weights to the survey data during the survey analysis.

Also, though an attempt can be made to collect data on household spending during interviews with PLWHA, the unit of analysis must remain the individual. This person may or may not be the head of household and therefore may or may not be the most knowledgeable one about household expenditures. Additionally, a PLHA survey is not a nationally representative sample of households. Thus, household spending data collected through PLWHA surveys should be interpreted with caution.

The strengths and limitations of surveys targeting PLWHA to capture OOP spending are summarized in Table 6:

**Table 6: Survey Targeting PLWHA**

<b>Strengths</b>	<b>Limitations</b>
Flexible enough to target beneficiaries of interest to policymakers	Need to correct for unequal probabilities of selection of PLWHA: generally biased towards those with greater access to care and education on HIV
Data collected includes information on OOP spending, mechanisms of payment, services utilization, and, to a lesser extent, the stage of the disease of the respondent	Limitation on data potentially collected on households expenditures: not collected on the basis of a nationally representative sample of households
Focuses preferably on persons aware of their HIV status and tested prior to the interview	Captures OOP spending on HIV/AIDS at a certain point of time and may not reflect annual spending on HIV/AIDS
Respondent is the beneficiary for whom OOP expenditures will be estimated	
Cheaper to implement than household survey	

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## 4.2 Capturing Information from Households

Capturing information on expenditures by households in which PLWHA live is of interest for countries where the disease is widespread through the general population. An advantage to these random-based national surveys is that they avoid the selection biases inherent in targeted PLWHA surveys, which generally include only those who seek formal health care and who are likely to be in later stages of illness. The inclusion of HIV biomarkers in random-based national surveys offers higher accuracy of findings. Moreover, their inclusion offers an effective option for linking OOP spending of PLWHA with information on socioeconomic status, providing key data for equity analysis. A disadvantage of household surveys is that they are less targeted to beneficiaries of HIV/AIDS services – the primary interest of policymakers. Nor do household surveys capture a representative sample of PLWHA, many of whom are marginalized groups such as minorities, migrants, and those hard to reach or engaged in illegal activities such as drug users or commercial sex workers.

Implementing a stand-alone household survey with biomarkers for HIV will significantly increase the cost and complexity of the NHA subanalysis exercise. Thus, it is strongly recommended that an integrated approach to data collection on household spending for HIV/AIDS be used: In countries with ongoing surveillance surveys or nationally representative household surveys with large sample size that include HIV/AIDS biomarkers (such as HIV antibody testing on saliva), “rider” questions on HIV/AIDS-related household expenditures could be included. For example, “piggybacking” on internationally endorsed collection methods that are part of national reporting frameworks (such as a Demographic Health Survey with HIV biomarkers) has been used in NHA HIV/AIDS subanalysis estimations.

The strengths and limitations of the use of household surveys with HIV biomarkers to capture OOP spending are summarized in Table 7:

**Table 7: Household Surveys with HIV Biomarkers**

<b>Strengths</b>	<b>Limitations</b>
Standard survey methodology and procedures	Expensive and time-consuming to conduct
Captures household spending using a probable nationally representative sample of households	Inappropriate to capture representative sample of beneficiary groups that are minority, migrants, hard to reach, or engaged in illegal activities
Link information collected on expenditures with HIV status	
Link OOP expenditures with information on socioeconomic status (equity analysis)	

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### 4.3 Capturing Information from Providers of HIV/AIDS Services

Providers of HIV/AIDS services can be hospitals, clinics, offices of physicians and nurses, pharmacies, and, if applicable, traditional healers. Interviews with providers of HIV/AIDS services will allow capturing information on

- ▲ Service utilization
- ▲ Cost of services provided
- ▲ User fees
- ▲ Nature of services offered to beneficiaries

Interviews of health care providers alone do not provide as comprehensive a picture of the expenditures made by beneficiaries. Providers are not necessarily good sources of information on OOP expenditures, because, first, by definition, they do not capture beneficiaries' expenditures on the purchase of services outside the providers' points of service. Nor do they tend to capture informal payments made to health providers. Moreover, using providers as respondents implies a selection bias: for example, provider interviews tend to over-report the provider's performance and the use of services by beneficiaries.

Nevertheless, provider surveys are valuable in that they generate information that can be used to triangulate data obtained through PLWHA surveys and household surveys. Triangulating data – obtaining the same piece of information from more than one data source – increases the degree of confidence in estimated values.

The strengths and limitations of the use of provider surveys are summarized in Table 8:

**Table 8: Provider Surveys**

<b>Strengths</b>	<b>Limitations</b>
Standard survey methodology and procedures	Do not capture comprehensive picture of beneficiaries expenditures
Allow triangulation of data obtained through PLWHA and household surveys	Selection bias due the selection of respondents (health workers providing the services to beneficiaries)
Capture information on <ul style="list-style-type: none"><li>▲ Service utilization</li><li>▲ Cost of services provided</li><li>▲ Formal payments required to benefit from services</li><li>▲ Nature of services offered to beneficiaries</li></ul>	Do not capture informal payments

## 5. Summary

In a country setting where the HIV epidemic is still at a concentrated stage, collecting data on OOP expenditures by PLWHA who are engaged in high-risk behavior is particularly challenging. First, these are often marginalized groups, which are difficult to access. Second, they represent a small share of the population. For these reasons, setting up stand-alone surveys for the sole purpose of collecting expenditure data would be costly and generally not advisable. An alternative is to use an integrated approach to data collection, adding rider question to ongoing data collection efforts. The NHA HIV/AIDS subanalysis has used internationally endorsed surveys that are part of the national reporting framework of country's response to the HIV epidemic to collect data on expenditures by high-risk groups.

In countries where HIV is firmly established in the general population, PLWHA and their families may account for a significant share of total HIV/AIDS spending. OOP spending by PLWHA may be a critical policy indicator. Efforts to capture this information must be tailored to the country situation and data collectors must be mindful to minimize costs while maintaining reliability of the information generated. National stakeholders must determine the appropriate mix of data collection methods to capture OOP spending on HIV/AIDS, on what scale, and for which beneficiaries (pregnant women, vulnerable populations, or others).

Beneficiary analyses can provide immensely valuable information for policymakers by highlighting the strengths and weaknesses of current resource allocation arrangements for HIV/AIDS. Approaching such analyses requires a clear understanding of which types of beneficiary populations are of concern to HIV/AIDS policymakers. There are two principal approaches used in producing such analyses, namely NAA and the NHA HIV/AIDS subanalysis. Both produce similar and comparable results, varying mostly in terms of the level of detail provided.



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