National AIDS Spending Assessment (NASA IV) in Cambodia

Years of assessment: 2011 and 2012

NCHADS / NAA / UNAIDS

April 8, 2013
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Acronyms and abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ART / ARV	Anti-retroviral Therapy
ASC	AIDS Spending Category
BP	Beneficiary Population
C & T	Care and Treatment
CDC	Center for Disease Control and Prevention
CHAI	Clinton Health Access Initiative
CEA	Cost-effectiveness analysis
EE	Enabling environment
EW / FSW	Entertainment Worker / Female Sex Workers
FA	Financing Agent
FS	Financing Source
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
HIV	Human Immunodeficiency Virus
iBBS	Integrated behavioral and serological survey
M & E	Monitoring and Evaluation
MARPs / KAP	Most-At-Risk Populations / Key affected populations
MSM	Men who have Sex with Men
NAA	National AIDS Authority
NASA	National AIDS Spending Assessment
NCHADS	National Center for HIV/AIDS Dermatology and STDs
NGOs	Non-Governmental Organizations
OVC	Orphans and Vulnerable Children
PF	Production Factors
PLHIV	People Living with HIV
PMTCT	Prevention of Mother-to-Child Transmission
PS	Provider of Services

PWID	People Who Inject Drugs
PWUD / IDU	People Who Use Drugs / Injecting Drug User
RGC	Royal Government of Cambodia
SSF	Single Stream of Funding
STI	Sexually Transmitted Infection
TA	Technical assistance
UN	United Nations
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNICEF	United Nations Children's Fund
VCCT / VCT	Voluntary Confidential Counseling and Testing

NASA IV: PROCESS AND METHODOLOGICAL BACKGROUND

This round of the National AIDS Spending Assessment (NASA IV) follows the same methodological approach which has been applied in the NASA III and described in the NASA III report.

NASA IV team

A NASA team constituted of 8 people: 1 staff of NAA, 3 national consultants, 3 UNAIDS staff members and 1 international consultant (team leader).

NASA IV schedule

Duration of the assessment: 2.5 months – from 28 January 2013 till 12 April 2013 (not including preparation of the report).

28 January – 1 February 2013 – selection of the team, developing schedule of the assessment, meetings with key technical partners at UNAIDS, NAA and NCHADS

4 - 7 February 2013 – training for the selected NASA team and key informants at NCHADS and NAA; updating data collection and data processing tools

8 February 2013 – NASA IV Launch meeting

11 February – 30 March 2013 – data collection, interviews, data processing

1 – 8 April 2013 – in-house validation meetings with UNAIDS, NAA, NCHADS and key stakeholders

8 – 12 April 2013 – updating NASA results based on the validation meeting recommendations

NASA IV dataset and analysis

NASA IV processed data is a MS Excel file compiled in the dataset for the pivot table. It can be easily used to produce tables and charts for the NASA analysis.

NASA Definitions and Classification

Two last NASA rounds (NASA III for the years 2009 and 2010, and NASA IV for the years 2011 and 2012) conducted in Cambodia used internationally agreed definitions and classifications based on standard concepts and terms in order to assess how interventions are financed, how much is spent and on what, and who benefits from the spending.

Financial resource flows and expenditures are structured around three main dimensions:

Financing Dimension

Financing Sources (FS) are entities that allocate funding to HIV in general and provide money to financing agents.

Financing Agents (FA) are those entities which mobilize and transfer funds to the implementing level. They are considered the managers of the funds with programmatic decision making power over how the funds are used and by whom.

Provision of HIV Services Dimension

Service Providers (PS) are entities that engage in the production, provision, and delivery of HIV services.
Production Factors (PF) are inputs (i.e., labour, capital, natural resources, “know how”, and entrepreneurial resources).

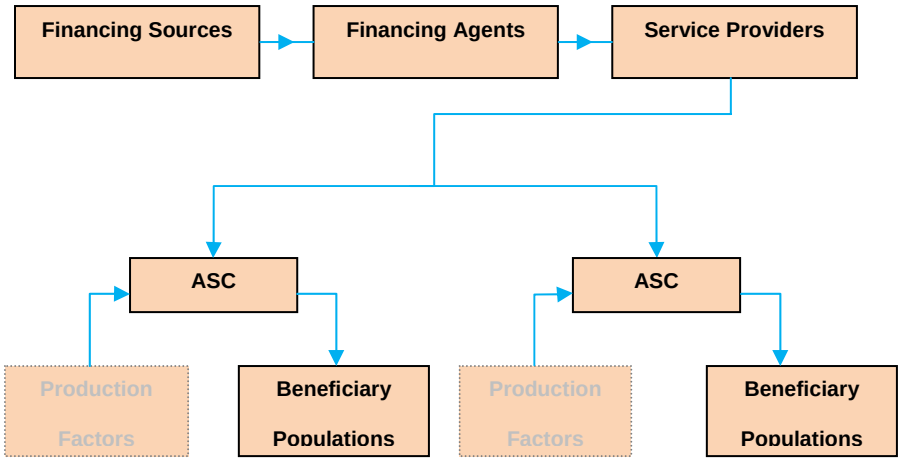
During the preparatory stage of NASA III, it was decided that the assessment would not include production factors due to a lack of time and resources. This dimension will be tackled in the next round of NASA in 2013. At that time it is hoped stakeholders will have become familiar with the improved NASA methodology and tools which help to gather more reliable results.

Use/Consumption Dimension

AIDS Spending Categories (ASCs) are HIV-related interventions and activities.
Beneficiary Populations (BP) (e.g., PLHIV, MSM, IDUs, FSWs, OVC, general population).

The different dimensions applied in NASA III are illustrated as a financing flow scheme in Figure 1.

Figure 1: Financial flow scheme



NASA IV: KEY ASSUMPTIONS

The NASA IV team applied the same techniques to collect, process and present the data related to consumption and spending.

The guidebook NASA Classification and Definitions (available at www.unaids.com) was used to assign particular codes to the organizations, beneficiary populations and the activities implemented. Although the generic description of the content of the activities and interventions exists in the abovementioned publication, the country-specific application of some of the codes and calculation strategies is presented in this chapter.

The problem of double counting of spending and its solution in NASA IV

NASA team always aims to collect expenditure data from all actors of the response. These organizations – actors of the HIV response – are playing different roles in different transactions, either financial or in-kind. The organization acts as a Financing Source when it makes money available for the country's HIV response. It transfers funds to the other organizations who decide what should be implemented and who will be implementing. This role is a role of a Financing agent. It selects the service provider and transfers funds for the implementation of the services.

Ideally, the data on the expenditures comes from all the levels of the transaction: from the Financing source, Financing Agent and a Provider of Services. They report on the same resource flow separately, so the team can clearly see whom did they get the money from and whom these money were transferred. This helps to avoid including the amounts of the same transaction twice.

The NASA team verifies with the organizations, usually a Provider of Services how much money have actually turned into services provided to the beneficiary population. This is considered the actual expenditure in NASA. The rest of the data (from the Financing Source and Financing Agent of this particular transaction) is used to check the accuracy of the financial tracking, and is used only when the expenditure report from the Provider of Services is not available.

Here is the example of how the team avoids double counting of expenditures:

- USAID reported the total amount transferred to FHI360 during 2011 calendar year. This data is only used for cross-checks, not in the dataset because:
- FHI reported USAID-originated spending in 2011: spent by FHI360 and transferred to other NGOs. If the sub-recipients (grantees) of FHI360 also reported on their spending originated from FHI360/USAID, then FHI360 data is only used for cross-checks. If the sub-recipients (grantees) of FHI didn't report their FHI360-originated spending, then the FHI360 data is used in NASA to describe the expenditure of the missing NGO as a service provider.
- NGO Bandanh ChakTomuk (BC), a sub-recipient (grantee) of FHI360, submitted data collection form and among other reported spending originated in USAID-FHI.

- BC spending processed from BC data collection form. Since BC has provided its FHI360-originated spending, this transaction is excluded from the FHI-submitted data.
- FHI360 spending is processed in FHI data and excluded from USAID data processing.

Assigning the role of a Financing Agent in a transaction

NASA recognizes three roles in the transaction: Financing source, Financing agent and a Provider of services. If there were more than three organizations in the same transaction, the NASA team assigns the role of the Financing agent to the organization who has transferred money or in-kind resources to a final service provider.

The example below represents the resource flow which consists of four organizations.

GFATM R5 ► PR MoH ► **KHANA** ► CPR

The NASA team has used the data of the CPR data to capture actual spending, and assigned KHANA as a Financing agent in this transaction because KHANA (1) prepares the budgets and defines the services to be provided; and, (2) selects / manages the actual service provider who implements these services.

Policy development and coordination versus Administration and grant management

Development of the policy documents, revision of the legislation, strategic information and coordination meetings, conferences and experience sharing were coded under ASC.04.01 Planning, coordination and programme management.

Spending on the accounting specialists, bank charges, audits, grant managers, HR specialists, as well as office expenditures of the in-country offices (fully or partially) of the Financing sources/Financing agents are coded under ASC.04.02 Administration and transaction costs associated with managing and disbursing funds.

Overheads

Overheads for the overseas office are not included in NASA since the HIV response in Cambodia does not benefit from these expenditures.

Administration cost of the local offices which act as financing sources or/and financing agents is allocated in the ASC.04.02 and as much as possible is separated from the ASC.04.01 which represents policy development and coordination activities of these organizations.

Administration cost of the actual service providers is a part of the services provided by the organization. This follows the logic of the costing strategies, where the overhead expenses of the provider is a part of the unit cost.

International staff salaries are excluded from NASA IV, unless they are paid by the national program (e.g. international TA in the GFATM project), or from the nationally allocated funds (e.g. international positions in PSI and FHI360 etc)

National staff of the USAID and CDC-based HIV programs are included in NASA. Their salaries are coded according to their functions: M&E or grant management or policy development and coordination.

The salaries of the international staff of the UN agencies, not paid by the country office but originate at the agency's headquarters, are not included in NASA.

Trainings

In most of the cases training expenses were coded under ASC.05.03 Training. These expenditures relate to a pre-service or refresher training which requires a separate facility, facilitators, travel and accommodation cost etc.

NASA doesn't disaggregate training expenses by the topics of the training. If the national stakeholders would like to do such analysis, the NASA team should be informed in advance. Secondary analysis of the training data is possible, but it requires an additional effort from the NASA team. The workload will depend on the scale of the training activities in the country and the accuracy of the reports.

When the training expenses represent the in-service training they are coded as a part of the respective ASC, e.g. PMTCT on-site training and supervision is coded as ASC.01.17.98 PMTCT not broken down by type.

Training for teachers for the Youth in School programs is coded as a part of the ASC.01.05 Prevention – youth in school.

Training for peers (e.g. peer educators among youth) is as part of the respective activity, e.g. Community mobilization or BCC among general population.

Training for the family members or the community teams on the home-based care – as a part of ASC.02.01.09 Home-based care.

Beneficiary populations: PWID and PWUD

Injecting and non-injecting drug users (PWID and PWUD): even though the HIV prevention services have a very different impact on these two beneficiary populations, they come together in the budgets and workplans of the service providing organizations. It results in the fact that the financial reports also combine the related expenses targeting mentioned at-risk populations.

Where possible, the NASA team applied additional effort to separate the expenditure targeting PWID from the one targeting PWUD. The beneficiary population for the spending on the harm reduction interventions targeting PWID in NASA classification is BP.02.01 Injecting drug users. For the non-injecting drug-users the NASA team has assigned the code BP.03.99 Other key affected populations not elsewhere classified. This code includes only PWUD-related spending in NASA IV dataset.

However, some the organizations were unable to separate their spending in these two lines. In that case the cost of the services for these two populations was tracked under BP.02.01 Injecting drug users.

Calculation strategy of the spending on ARVs

Spending on the antiretroviral drugs was calculated based on the actual consumption of various drugs and their prices. The data were provided by NCHADS and verified with CHAI, who provides technical assistance to NCHADS on drug supply systems, procurement and consumption tracking.

Calculations were made based on the number of people on each ART scheme separately for the adult and pediatric regimens, each disaggregated into first- and second-line.

The consumption of drugs (number of packages/pills of each of the drug) was adjusted by 5% wastage rate.

Calculation strategy of the spending on CD4 and Viral load tests

The number of performed viral load and CD4 tests was obtained from NCHADS together with the prices of the consumed reagents for each of the years of assessment. Number of the consumed tests and reagents was multiplied by the price of these commodities.

NASA IV FINDINGS

Total spending

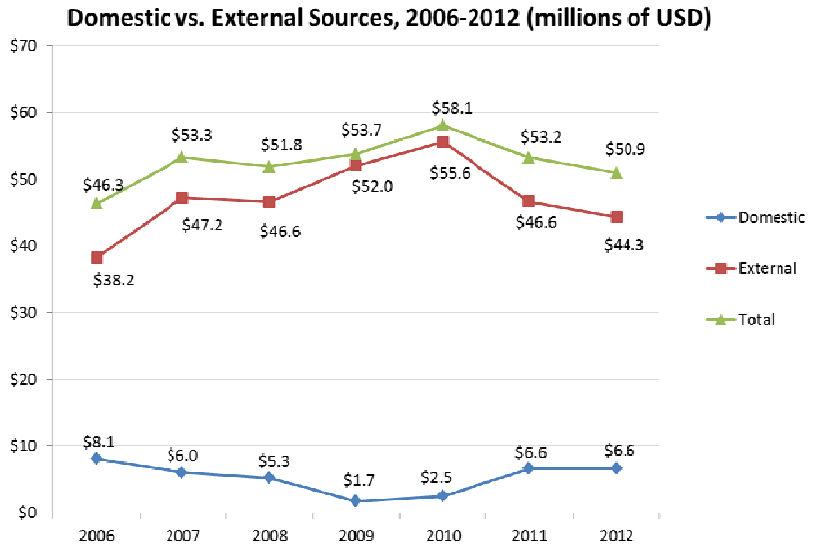
HIV and AIDS spending in Cambodia evolved throughout the years of assessment, both as a total and as per capita. It was on its pick in 2010, amounting to over $58 million in total, $4.1 per capita and $764 per person living with HIV.

Figure 2

	2009	2010	2011	2012
Total HIV/AIDS expenditure ($US)	$53,735,198	$58,059,469	$53,218,646	$50,927,401
Total population of Cambodia[1]	14,138,000	14,138,000	14,138,000	14,138,000
Expenditure per capita ($US)	$3.8	$4.1	$3.76	$3.6
Estimated number of PLHIV (Spectrum 2012)	77,049	76,042	75,344	74,572
Expenditure per PLHIV ($US)	$697	$764	$706	$683

Since 2010 HIV spending has declined from over $58 million in 2010 to $50.9 million in 2012. Although the national HIV expenditures declined in the absolute figures, they remain among the highest values as per capita and as per PLHIV in the region.

Figure 3



[1] Presented data reflect population size for the year 2010, Constant fertility variant. Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, *World Population Prospects: The 2010 Revision*, http://esa.un.org/unpd/wpp/index.htm
National Bureau of Statistics, 2008 data has been used in NASA III to estimate per capita spending. In NASA IV the source of data has been changed which caused changes also in the per capita estimates.

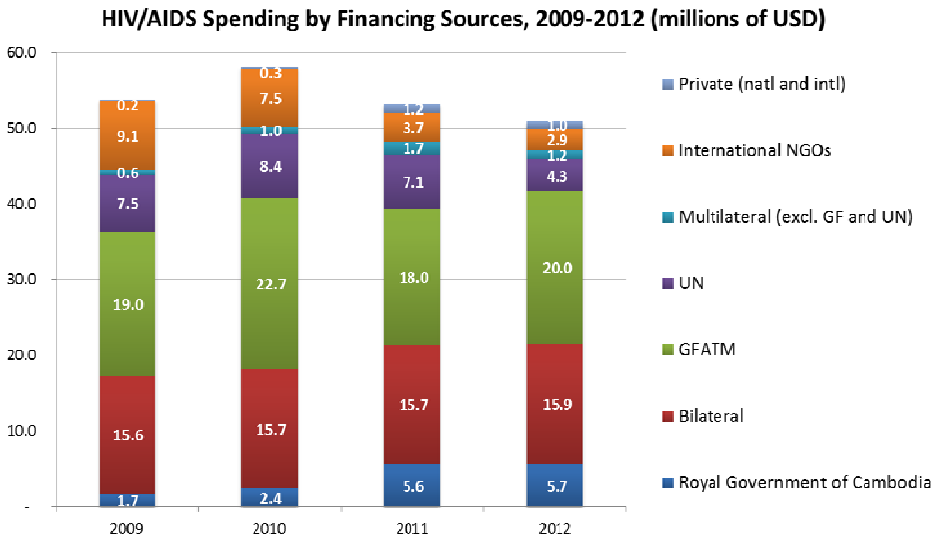
Financing sources of the HIV response

The overall decrease of the HIV-related spending in Cambodia has largely happened due to the decreasing external contributions as shown in Figure 4.

UN and International NGOs started to provide less funding to HIV in Cambodia. The assessment of the future contributions of the key external donors of the financial and technical assistance in the country revealed that their contributions will continue decreasing in the coming years.

Due to savings and operational bottlenecks in the Global Fund single-stream funding Phase I implementation the country didn't spend all the money that was anticipated for 2011 and 2012 in the grant workplan and budget. The country has recently submitted the reprogrammed workplan and budget for 2013 for the approval of the Global Fund, and applied for the continued funding of the ongoing grant. If it is approved, there might be an increase in the Global Fund-originated spending in 2013 and 2014.

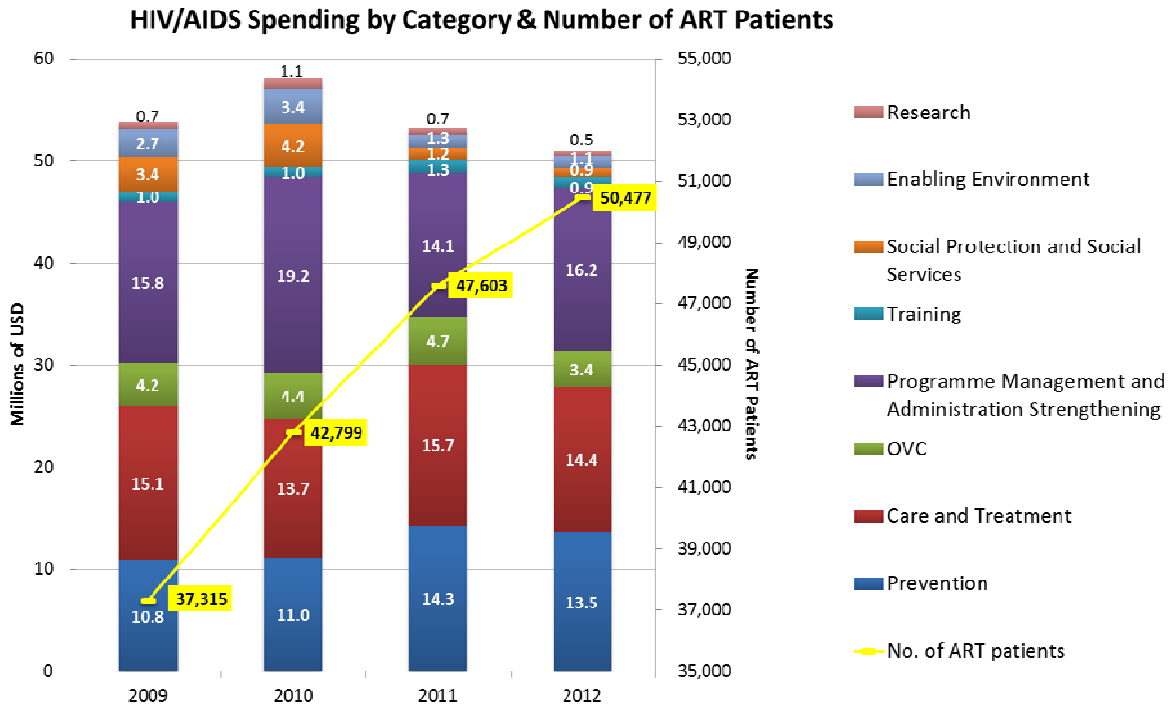
Figure 4



	2009		2010		2011		2012	
Royal Government of Cambodia	$1,703,403	3%	$2,436,832	4%	$5,644,947	11%	$5,671,862	11%
Private	$36,955	<1%	$51,540	<1%	$963,952	<2%	$956,837	<2%
Bilateral organizations	$15,565,137	29%	$15,662,527	27%	$15,713,795	29%	$15,872,474	31%
International NGOs	$9,119,295	17%	$7,516,331	13%	$3,736,224	7%	$2,855,882	6%
GFATM	$19,023,377	35%	$22,711,245	39%	$18,030,595	34%	$20,027,132	39%
United Nations agencies	$7,547,437	14%	$8,382,652	14%	$7,128,857	13%	$4,320,352	8%
Other Multilateral organizations (excluding GFATM and UN)	$612,307	1%	$1,043,168	2%	$1,745,621	3%	$1,165,243	2%
International Rest of the World	$127,286	<1%	$255,175	<1%	$254,654	<1%	$57,619	<1%

At the same time the national HIV response in Cambodia performed better even considering the declining funding. Nearly 7,000 PLHIV were engaged in the ART program from 2010 to 2012. By the end of 2012 there were 50,477 people receiving antiretroviral treatment in Cambodia. Meanwhile, the overall treatment and care spending remained at the level of approximately $14 million annually in the last 3 years of assessment.

Figure 5



Financing agents of the HIV response

Royal Government of Cambodia remains the largest fund manager (Financing Agent - in NASA): in 2011 and 2012 it was responsible for the decision-making for up to 50% of all HIV spending in the country.

Figure 6

FINANCING AGENTS	2009		2010		2011		2012	
Public sector organizations	$22,366,790	42%	$25,740,278	44%	$24,609,667	46%	$26,373,149	51%
Bilateral	$1,948,145	4%	$1,121,900	2%	$1,636,289	3%	$1,763,109	3%
International NGOs	$15,642,457	29%	$16,501,376	28%	$15,145,798	28%	$13,205,583	25%
UN	$7,277,948	14%	$7,288,577	13%	$6,040,515	11%	$4,450,995	8%
National NGOs	$6,499,858	12%	$7,407,339	13%	$5,786,377	10%	$5,134,565	10%

The analysis of the spending against beneficiary populations revealed that PLHIV consumed 32% of the overall spending in 2011 and 30% in 2012. MARPs benefited from 18% (in 2011) and 15% (in 2012) of the national HIV-related spending in Cambodia. Non-targeted interventions (policy and management, research etc.) remain large: 31% of total HIV expenditure in in 2011 and 35% in 2012.

Figure 7

	2009		2010		2011		2012	
BP.01 People living with HIV	$19,362,361	36%	$18,579,570	32%	$17,055,836	32%	$15,436,939	30%
BP.02 Most-at-risk populations	$5,018,419	9%	$5,945,850	10%	$9,461,270	18%	$7,788,469	15%
BP.03.01 Orphans and Vulnerable children	$4,073,178	8%	$4,425,541	8%	$4,720,584	9%	$3,350,943	7%
BP.03 and BP.04 (combined) Other key and accessible populations (excl. OVC)	$2,181,406	4%	$2,598,743	5%	$3,931,790	7%	$4,683,911	9%
BP. 05 General population	$3,450,029	6%	$2,552,841	4%	$1,724,611	3%	$1,957,406	4%
BP.06 Non-targeted interventions	$19,649,805	37%	$23,956,924	41%	$16,324,555	31%	$17,709,733	35%

Government spending on HIV

Government spending didn't increase in 2011-2012 compared to 2009-2010 as it may appear on the graph (Figure 3, 4). This happened due to the fact that information on the Government-paid salaries on the staff at the central level and on the provincial/district level was only partially collected in NASA III, while in NASA IV the data on this expenditure were available in full.

According to the NASA IV findings the Royal Government of Cambodia financed the salaries of the health care workers (45% of all Government HIV spending), PMTCT or Linked Response (17% of the overall Government HIV spending) and Policy development and coordination activities (10% of the overall Government spending on HIV).

Since it was not possible to collect and properly analyze the data on the Government-paid cost of the maintenance of the health care facilities[2] in Cambodia, this remains a gap in NASA IV as well as in NASA III. If this cost is added up to the Government contribution to the HIV response financing, the share of the RGC-originated expenditure will increase.

HIV Spending broken down by the AIDS Spending categories

Information table in the Figure 8 represents a breakdown of the key eight AIDS Spending Categories – as an absolute figure and as a percentage of the total spending.

Almost 90% of the total HIV spending goes to Prevention, Care and Treatment, and Program management activities.

[2] We assume that the health care facilities' maintenance cost may be rather large, especially for the settings with laboratories, drug inventories etc.

Figure 8

	2009		2010		2011		2012	
ASC.01 Prevention	$10,806,903	20%	$11,048,070	19%	$14,272,159	27%	$13,533,253	27%
ASC.02 Care and Treatment	$15,128,794	28%	$13,653,403	24%	$15,716,094	30%	$14,355,571	28%
ASC.03 Orphans and Vulnerable Children	$4,185,535	8%	$4,418,420	8%	$4,666,336	9%	$3,350,943	7%
ASC.04 Program management and Administration Strengthening	$15,841,868	30%	$19,211,252	33%	$14,100,083	26%	$16,172,444	32%
ASC.05.03Training	$955,575	2%	$999,166	2%	$1,345,227	3%	$932,088	2%
ASC.06 Social protection and social services (excl. OVC)	$3,434,866	6%	$4,212,826	7%	$1,183,583	2%	$898,745	2%
ASC.07 Enabling environment	$2,708,324	5%	$3,410,437	6%	$1,273,239	2%	$1,140,106	2%
ASC.08 HIV-related research	$673,333	1%	$1,105,895	2%	$661,926	<2%	$544,250	<2%
Total	**$53,735,198**	**100%**	**$58,059,469**	**100%**	**$53,218,646**	**100%**	**$50,927,401**	**100%**

According to NASA classification, each of the categories above is broken down into more specific interventions, containing three or four digit level of details. NASA team always aims to access more details regarding the spending information it receives from the organizations, in order to achieve better level of details.

In NASA IV nearly $8,1 million in 2011 and $7,3 million in 2012 remained not broken down into specific interventions inside the abovementioned 8 ASCs[3]. Over 50% of a not disaggregated spending is found in the treatment and care.

In NASA III over $7,5 million in 2011 and over $9,7 million were not broken down into more specific interventions.

Prevention

Prevention spending increased both in the absolute values and as a share of the total – from 19% in 2010 (NASA III) to 27% in 2012 (from $11 million in 2010 to over $13,5 million in 2012). However, within two assessed year in NASA IV, the prevention funding dropped by almost $1 million from 2011 to 2012.

The largest financing source for prevention spending was bilateral funds (44% of total expenditure), most of which came from the US Government.

The majority of prevention spending from the Royal Government of Cambodia supported VCCT for general population, blood safety, PMTCT, and social mobilization (see details in the Figure 9 below).

[3] The NASA codes which were summed up to calculate the spending which is not broken down into more than one digit: ASC.01.98 Prevention not broken down by type, ASC.02.01.98 Outpatient treatment and care not broken down by type, ASC.02.02.98 Inpatient treatment and care not broken down by type, ASC.02.98 Treatment and care not broken down by type, ASC.03.98 OVC interventions not broken down by type, ASC.04.98 Programme management and administration strengthening not broken down by type, ASC.06.98 Social protection and social services not broken down by type, ASC.07.98 Enabling environment not broken down by type, ASC.08.98 HIV-related research not broken down by type

Figure 9

	2011		2012	
	$US	%	$US	%
Behavior Change Communication (BCC) in general population	$694,454	4.9%	$261,842	1.9%
Social mobilization	$379,609	2.7%	$1,381,841	10.2%
Voluntary counseling and testing (VCT) in general population	$349,177	2.5%	$335,676	2.5%
STI treatment (in the health settings)	$86,373	0.6%	$142,944	1.1%
Blood safety	$438,750	3.1%	$635,090	4.7%
Condoms and social marketing[4]	$724,088	5.1%	$562,764	4.2%
Harm reduction among IDUs	$749,458	5.3%	$626,843	4.6%
Prevention among MSM	$2,925,520	20.5%	$2,047,558	15.1%
Prevention among sex workers and their clients	$4,642,173	32.5%	$4,025,227	29.7%
PMTCT	$1,923,397	13.5%	$2,438,163	18%
Positive prevention	$30,750	0.2%	$42,371	0.3%
Prevention among key populations:	$576,542	4%	$278,795	2%
MARPs not broken down by type -	*$66,897*	-	-	-
Migrants/mobile populations -	-	-	*$53,329*	-
Military -	*$286,220*	-	-	-
Other key populations -	*$1,207*	-	*$1,268*	-
Police -	*$73,062*	-	*$73,571*	-
Prisoners -	*$25,309*	-	*$38,109*	-
PWUD -	*$80,995*	-	*$112,342*	-
Street children -	*$42,852*	-	-	-
Youth in school	$379,046	2.7%	$461,055	3.4%
Youth out of school	$61,470	0.4%	$33,475	0.3%
Universal precautions	$1,960	<0.1%	$2,933	<0.1%
Workplace prevention	$74,054	0.5%	$62,689	0.5%
Prevention not broken down by intervention	$235,338	1.7%	$193,988	1.4%
Total	**$14,272,159**	**100%**	**$13,533,253**	**100%**

62% of prevention spending was targeted at MARPs - with the breakdown being: 33% for EW's, 18% for MSM, 5% for IDU's, and 6% for MARP's not disaggregated. NASA III revealed that in the years 2009-2010 MARPs benefited only from 50% of the prevention spending.

[4] Ideally this section should only include the distribution of free or subsidized condoms to general population, since all other condoms distributed to most-at-risk populations or PLHIV should be captured under the respective codes inside prevention packages for these populations. However, due to the lack of the disaggregated data on the targeted (beneficiary) populations, a large portion of spending on condoms for not broken down most-at-risk populations is captured in this line.

Breakdown of the HIV prevention spending by beneficiary population is presented in the Figure 10 below.

Figure 10

Prevention among most-at-risk populations	2009		2010		2011		2012	
Female sex workers	1,076,937	22%	1,665,126	28%	$4,900,885	52%	$4,346,616	56%
Injecting drug users	815,806	16%	1,022,461	17%	$759,529	8%	$636,913	8%
Men who have sex with other men	655,722	13%	911,700	15%	$2,940,347	31%	$2,055,414	26%
MARPs not broken down by type	2,404,778	49%	2,308,806	39%	$860,510	9%	$749,525	10%

Additionally the quality of the disaggregated data has been improved since NASA III, showing that only 6% of the prevention spending targeting MARPs remains not disaggregated by the specific MRP group in NASA IV compared to 22% in NASA III.

Brief analysis of the NASA-based unit prevention costs in comparison with the unit costs estimated using other calculation approach will be presented in the final NASA IV report. It requires an updated national coverage data for EW, PWID and MSM populations in 2011 and 2012. However, preliminary review has shown that the cost of prevention interventions per one EW in 2011 was only slightly higher than was estimated in 2011 as a cost of an effective package (detailed description is in the CEA publication). At the same time, NASA IV nationwide cost of reaching 1 MSM and 1 PWID per year, was significantly higher than CEA costing estimate.

Care and Treatment

Care and Treatment remain the largest service delivery area in Cambodia accounting for 30% of the total HIV expenditure. In NASA, beneficiary population for all treatment and care activities are PLHIV. In case when ARV was provided to HIV-infected MARPs, this spending was assigned to care and treatment. The person who is considered MARP and who receives ART at the same time is recognized as a person living with HIV by the NASA classification guide.

The biggest source of care and treatment funding is the Global Fund, which accounted for 55% of the total HIV/AIDS expenditure in 2011/2012. It is expected that the Global Fund share will increase over time as the GFATM grant will take over many prevention interventions previously funded by US Government.

The Royal Government of Cambodia provided 17% of the funds for care and treatment, including the salaries of hospital and health center staff which implements care and treatment activities. Getting more details about the exact functional disaggregation of the health care staff in various health care facilities requires more efforts from the NASA team together with the data from the available costing studies.

The largest component of the Care and Treatment remains the same over the years: ART provision (36% of all treatment and care activities in 2011 and 2012). The detailed breakdown of the specific care and treatment sub-categories is shown in the Figure 11 below.

Figure 11

	2011		2012	
	$US	%	$US	%
Provider-initiated counseling and testing (PICT)	$688,622	4.4%	$222,396	6.1%
ARV therapy (Outpatient)	$5,519,182	35.1%	$5,391,586	37.6%
ARV Laboratory monitoring (Outpatient)	$646,370	4.1%	$763,348	5.3%
Nutritional support (Outpatient)	$27,256	0.2%	$30,000	0.2%
Palliative care (Outpatient)	$163,791	1%	$117,721	0.8%
Home-based care (Outpatient)	$2,171,622	13.8%	$1,829,048	12.7%
Psychological support (Outpatient)	$436,568	2.8%	$222,396	1.6%
Treatment of opportunistic infections (Outpatient)	$729,592	4.6%	-	-
Outpatient care not broken down by type	$682,254	4.3%	$426,961	3%
Treatment of opportunistic infections (Inpatient)	$5,762	<0.1%	$4,367	<0.1%
Palliative care (Inpatient)	$522,232	3.3%	$325,239	2.3%
Inpatient care not broken down by type	$15,662	0.1%	$16,207	0.1%
Patient transportation	$65,159	0.4%	$50,298	0.4%
Care and Treatment not broken down by type	$4,042,020	25.7%	$4,307,428	30%
Total	$15,716,094	100%	$14,355,571	100%

The proportion of the outpatient expenses in the treatment and care category is significantly larger than the inpatient. It is generally assumed that most of the HIV-related treatment and care services are provided on the outpatient basis. However, for the accurate distribution of expenses more efforts should be put in the facility-based costing of the various treatment and care services.

Orphans and Vulnerable Children

This category includes such components as OVC education, basic health care, family/home support, community support, institutional care and administrative support to OVC households. Spending benefiting orphans and vulnerable children remains stable at the level of 8% as a share of the overall HIV expenditure in Cambodia. At the same time in the absolute terms this category dropped from $4.7 million in 2011 to $3.4 million in 2012.

Programme Management and Administration Strengthening

The largest sub-categories of programme management and administration expense in NASA IV were for “Planning, coordination, and programme management” (44%) and “Administration

and transaction costs associated with managing and disbursing funds" – overheads and cost of grant management (24%).

Figure 12

	2011		2012	
	$US	%	$US	%
Policy development and coordination	$6,324,560	44.85%	$7,700,718	47.62%
Administration and grant management	$3,559,626	25.25%	$2,946,686	18.22%
Monitoring and evaluation	$939,474	6.66%	$2,333,167	14.43%
Drug supply system	$723,962	5.13%	$825,000	5.10%
HIV drug-resistance surveillance	$1,030	0.01%	$5,292	0.03%
Information technology	$125,402	0.89%	$266,407	1.65%
Infrastructure (including laboratory upgrade and new health centers)	$1,577,250	11.19%	41,112,865	6.88%
Serological surveillance	$10,908	0.08%	$11,414	0.07%
Operational research	$356,805	2.53%	$350,400	2.17%
Patient tracking	$409,609	2.91%	$475,605	2.94%
Programme management and administration strengthening not broken down by type	$71,456	0.51%	$144,889	0.90%
Total	$14,100,083	100%	$14,355,571	100%

In NASA, these activities of the response are classified as non-targeted interventions, since all the actual service delivery to all the beneficiary populations potentially benefit from them. This block of programmatic actions can be compared with a fuel for the vehicle, allowing the response to keep being implemented and improved over time. It is not advised to neglect investing in improving the efficiency of the HIV interventions however the cost can and should be optimized according to the national targets and the volume of work.

Social Protection and Social Services

Spending on social protection and social services decreased from NASA III to NASA IV both in terms of the absolute dollar amount and the percentage of total expenditure. This requires further analysis, although one of the assumptions is that poor PLHIV households are being covered by broader social protection schemes like IDPoor or Health Equity Fund.

Enabling Environment

Spending on enabling environment decreased from NASA III to NASA IV both in terms of the absolute dollar amount and the percentage of total expenditure: from $6.1 million in 2009-2010 to $2.4 million in 2011-2012. Furthermore, the Royal Government of Cambodia which contributed 24% in 2009-2010 (captured in NASA III) has decreased its share in supporting the

EE activities to the level of 1% of the total spending on the enabling environment in 2011-2012 (captured in NASA IV).

However, it is important to note that the definition of "enabling environment" used in NASA may differ from what are considered enabling environment activities to national stakeholders. For example, some activities which could be considered to fall under enabling environment may be coded within NASA under other categories such as policy development or prevention for MARPs. The definition of the enabling environment used to classify the expenditure in the NASA III was kept in NASA IV, meaning that the spending trend is comparable across all four years of the analysis.

According to the collected data, in the years 2011-2012 sixteen percent (16% or $0.4 million) of the spending on the enabling environment ($2.4 million is taken as 100%) went to Advocacy, over 4% - to Human rights programs, 46% or $1.1 million of the EE funds was supporting institutional capacity building in the HIV sector. Over 21% of the 2011-2012 expenditure on the enabling environment activities (or $0.5 million) was spent on the implementation of the programs related t the Gender based violence. Spending on the enabling environment not broken down by type of the intervention amounted to almost 12%.

HIV-related research

Only $0.7 million was assigned to HIV-related research spending category in 2011, followed by $0.5 million in 2012. Although it is 40% lower than what was tracked in NASA III for 2009 and 2010, it reflects a current research plan with costly studies like iBBS happening once in 2-3 years, not on the annual basis.

Gender disaggregation of the HIV spending

In the last four years of the assessment only 8,7% of all the reported spending was broken down by gender. According to the NASA III results, only 3,7% of the HIV spending in 2009 and 4% in 2010 had gender details in it. In NASA IV the results improved: 15% and 13% of the HIV spending in 2011 and 2012 was disaggregated by gender.

Gender breakdown of the general population was higher in NASA III-assessed 2009-2010 compared to 2011-2012 in NASA IV. Ten percent (10%) of the general population in 2009 and 15% in 2010 of the general population was gender specific, while in 2011 less than 4% (and 7% in 2012) of all spending targeting general population was broken down by gender.

Less than 1% of the HIV spending targeting PLHIV had a gender breakdown across all four compared years.

Since the spending data describing most-at-risk population is mainly gender-specific in itself (with an exception of IDUs) the percent of the data with such a breakdown is higher than in other beneficiary population categories. In 2011 and 2012 81% of the spending targeting MARPs was disaggregated by gender.

Disaggregation of the spending by age and gender remain a major challenge in NASA. There are two main reasons for it.

First, NASA classification of the beneficiary populations is only gender sensitive to the general population, people living with HIV and most-at-risk populations with an exception of people who inject drugs. The rest of the codes, such as school or university students, STI patients, OVC are not broken down by gender. However, if the country (majority of the stakeholders) requires such analysis, the data collection forms can be changed to capture such details. For example, the classification code BP.03.01 Orphans and vulnerable children can be extended to BP.03.01.01 Female OVC, BP.03.01.02 Male OVC and BP.03.0.98 OVC not broken down by gender.

The second reason is the actual availability of the gender-specific data which must correspond with the financial reports provided. In short, all the expenditure lines reported to the NASA team should be broken down by gender. This is a much harder challenge to overcome. There were around 60 organizations which reported its spending for the NASA IV analysis. A lot of them (like NCHADS or KHANA) have also reported the data on behalf of many other organizations which didn't submit their own expenditure reports or the NASA data collection forms completed. Ideally, all that data should be disaggregated by gender. In reality, very few organizations (even if they keep such gender tracking of their clients for the M&E purposes) keep their spending records in correspondence with the gender of their clients.

Discussion over the cost of the services

Over the recent years Cambodia has accumulated a lot of data on the actual cost of the services implemented in the country. Costing exercises that took place in 2012, 2013 and in the earlier years provided a good benchmark for comparing the unit costs developed for the resource needs estimation purposes[5] to the actual price paid by the country to reach the known number of clients by these services.

There are three sources of the unit cost data available for the comparison:

1. Vonthanak S. et al. The Long Run Costs and Financing of HIV/AIDS in Cambodia. NCHADS 2010. Phnom Penh, Cambodia. AIDS2031
2. Costs and cost-effectiveness of HIV prevention and impact mitigation interventions in Cambodia (CEA). NAA 2012. Phnom Penh, Cambodia
3. And, the NASA IV results, presented in this report.

During the secondary analysis of the NASA IV results it was discovered that the cost of reaching 1 entertainment worker (EW) in 2011 (using spending from all sources which finances FSW interventions) was relatively higher ($177 per 1 EW reached per year across all programs) than the estimated effective package produced for the resource needs projections and the cost-effectiveness analysis – CEA - ($145 per 1 EW reached per year). If we consider only those EWs, reached by the USAID-funded SmartGirl program in 2012 (assuming that 18,000 EWs were

[5] Source: Costs and cost-effectiveness of HIV prevention and impact mitigation interventions in Cambodia (CEA). May 2012, Phnom Penh, Cambodia, NAA

reached), the unit cost is $165 per EW per year which is lower than the national average but still higher than the costed effective package of services for this population. At the same time the unit cost for reaching female sex workers, used for the AIDS 2031 resource estimates (The Long Run Costs publication) is only $22.4 per person reached per year.

In a similar way the unit cost of reaching one MSM in 2011 was estimated by dividing the total MSM-targeting prevention expenditure by the number of MSM reached in 2011. The actual national unit cost calculated based on the NASA IV data for 2011 appears to be significantly higher ($474 per one MSM reached in 2011) than the estimates done in late 2011 for the CEA ($142 per one MSM reached per year). Similarly to the FSW case, the unit cost used in The Long Run Costs publication is much lower ($22.4 for visible MSM and $50 – for hidden MSM) than the more recent estimates.

As concluded in the CEA publication and based on the cost comparison presented above, a relatively large share of interventions falls outside of the recommended MARPs-targeted intervention packages as defined by the Commission on AIDS in Asia. This is why Cambodia has much higher unit cost compared to those of other countries in the region. More efforts should be applied to improve the efficiency and effectiveness of the services which should better avert new HIV infections and reduce the unnecessary spending.

ANNEX 1. Description of the indicators in the NASA IV dataset

The NASA data analysis is possible across the following indicators:

1. By year: 2011, 2012
2. By the type of Financing Source:
    a. Government,
    b. External,
    c. Private
3. By the detailed type of Financing Sources:
    a. RGC
    b. External bilateral
    c. External UN
    d. External GFATM
    e. External multilateral (excluding GFATM and UN)
    f. External international NGOs and foundations
    g. Private
4. By the name of the Financing Source (e.g. UNICEF, UNAIDS, GFATM, World Vision etc)
5. By the type of Financing Agent:
    a. Government,
    b. External,
    c. Private
6. By the detailed type of Financing Agent:
    a. Government: RGC
    b. External: bilateral
    c. External: UN
    d. External: GFATM
    e. External: multilateral (excluding GFATM and UN)
    f. External: international NGOs and foundations
    g. Private: national NGOs
7. By the name of the Financing Agent (e.g. UNICEF, UNAIDS, GFATM, World Vision etc)
8. By the type of the Provider of Services:
    a. Public
    b. Private (including NGOs)
    c. Bi- and multilateral in-country offices
    d. Rest of the World (providers outside of the country)
9. By the AIDS Spending Category (broader)
    a. Prevention
    b. Treatment and Care

c. OVC
d. Programme management and Administration Strengthening
e. Training
f. Social Protection and Social Services
g. Enabling Environment
h. HIV-related research

10. By the AIDS Spending Category (detailed) – see the NASA classification of the ASCs
11. By the Beneficiary population:
    a. PLHIV
    b. MARPs:
        i. IDUs
        ii. FSWs and their clients
        iii. MSM
    c. Other key populations:
        i. OVC
        ii. Children born or to be born from the HIV+ mothers
        iii. Migrant
        iv. Prisoners
        v. PWUD
        vi. Others
    d. Specific "accessible" populations:
        i. People attending STI clinics
        ii. School/University students
        iii. Health care workers
        iv. Uniformed services
        v. Factory employees
        vi. Others
    e. General population