National AIDS Spending Assessment 2013-2015

An Expenditure Analysis of HIV in Jamaica for the Fiscal Period 2013-2015

9/1/2016 HIV/STI/TB Unit, Ministry of Health & UNAIDS Prepared by Renée Johnson

Contents

Acknowledgements	4
Acronyms	5
Background	7
Fact Sheet	9
Introduction	12
Work Approach	13
Data Preparation	14
Data Collection	14
Data Entry	15
Data Validation	16
Data Analysis	16
Challenges	17
Limitations	17
Assumptions	19
Results	21
Expenditure by Funding Sources	22
Financing Agents	24
Provider of Services	25
AIDS Spending Categories ASC	34
ASC by Provider of Services	39
Beneficiary Populations	42
Resource Cost	44
Human Resource Expenditure	46
Discussion and Recommendations	48
Considerations for future NASA Exercise	48
Considerations for Jamaica's HIV Planning	50
Key Messages	51
Conclusion	51
Bibliography	53
Appendix I	54
Appendix 11- Letters to stakeholders	56

General Stakeholders	56
Private Doctors	57
Laboratories	58
Figure 1 Real versus Nominal Expenditure on HIV 2009-2015 Fiscal Years (JMD)	21
Figure 2 Total Expenditure by Funding Sources	
Figure 3 Percentage Expended by Each Type Service Provider based on Type of Fund	
Figure 4 Percentage Expended by Each Type Service Provider based on Type of Fund	ing Source 2014/15
	29
Figure 5 % Share Expenditure by Select Service Providers 2013/14	31
Figure 6 % Share Expenditure by Select Service Providers 2014/15	32
Figure 7 % Expenditure by each RHA	
Figure 8 ASC Expenditure by Funding Source Contribution 2013/14	
Figure 9 ASC Expenditure by Funding Source Contribution 2013/14	
Figure 10 Percentage Expenditure of Services Providers on ASC	
Figure 11 Percentage Expenditure of BP 2013/14	
Figure 12 Expenditure on Resource Cost	45
Table 1 Expenditure by Funding Source	
Table 2 Expenditure by Financing Agent	
Table 3 Expenditure by Financing Agent with breakout of International Partners Table 4 Expenditure by AIDS Spending Category	
Table 5 Expenditure by Provider of Service	
Table 6 Expenditure by Beneficiary Populations	
Table 7 Expenditure by Resource Cost Category	
Table 8 Response rate of stakeholders by various sectors	
Table 9 Total Expenditure by Selected Funding Source 2013-2015 Fiscal Years	
Table 10 Expenditure by Funding Source Categories by Fiscal Year	
Table 11 Expenditure by Type of Financing Agencies Type (USD)	
Table 12 Expenditure of Selected Financing Agents	
Table 13 Service Provider Expenditure of Funds by Categories	
Table 14 Financing Source by Provider of Service 2013/2014	
Table 15 Financing Source by Provider of Service 2014/2015	
Table 16 Expenditure by Selected Service Providers	
Table 17 Expenditure by Regional Health Authorities	
Table 18 Percentage of Expenditure by each ASC	34
Table 19 Financing Sources by ASC 2013/14	35

Table 20 Financing Sources by ASC 2014/15	38
Table 21 AIDS spending category by Service Providers 2013/14	39
Table 22 AIDS Spending Categories by Service Providers 2014/15	40
Table 23 Expenditure of ASC broken down by subcategories 2013/14	41
Table 24 Expenditure on Beneficiary Population	42
Table 25 Human Resource Cost by AIDS Spending Categories	46
Table 26 Human Resource Cost vs Other Expenditure by Funding Source 2013/14	47
Table 27 Matrices of Funding Agency x Beneficiary Population 2013/14	54
Table 28 Matrices of Funding Sources by Beneficiary Population	54

Acknowledgements

The report could not have been completed without the guidance of the Steering Committee and the Ministry of Health, as well as technical support from the UNAIDS regional office in Panama. The valuable input from all stakeholders to inform the 2013-2015 NASA exercise must be commended.

Steering Committee Members

- 1. Zahra Miller Ministry of Health
- 2. Sasha Martin Ministry of Health
- 3. Erva Jean Stevens UNAIDS
- 4. Sannia Sutherland Ministry of Health
- 5. Ivan Cruickshank Caribbean Vulnerable Communities/Jamaica Country Coordinating Mechanism
- 6. Toni Shae Freckleton Planning Institute of Jamaica
- 7. Joseph Reynolds National Family Planning Board
- 8. Renée Johnson Lead Consultant
- 9. Charlton McFarlane Consultant/Health Economist

Technical support was also received from Christian Aran and Anna Yakusik at UNAIDS in Panama.

Acronyms

AIDS Acquired Immune Deficiency Syndrome

CARPHA Caribbean Public Health Agency

CDC Centre for Disease Control

CF Children First

CHAI Clinton Health Access Initiative

CHARES Centre HIV/AIDS Research Education & Services

COF Children of Faith

CSO Civil Society

CVC Caribbean Vulnerable Communities

EFL Eve for Life

GF Global Fund against AIDS, Tuberculosis and Malaria

GOJ Government of Jamaica

HIV Human Immuno-deficiency Virus

HH Household

HPP Health Policy Project

ILO International Labour Organization

JAPPAIDS Jamaica Paediatric, Perinatal and Adolescents HIV/AIDS Programme

JASL Jamaica AIDS Support for Life

JCW+ Jamaica Community of Positive Women

JEF Jamaica Employers' Federation

JFJ Jamaicans for Justice

JFLAG Jamaica Forum for Lesbian All Sexual & Gay

JN+ Jamaica Network of Seropositives

JYAN Jamaica Youth Advocacy Network

MOE Ministry of Education

MOH Ministry of Health

MOLSS Ministry of Labour & Social Security

MSM Men who have sex with men

NASA National AIDS Spending Assessment

NERHA North East Regional Health Authority

NFPB National Family Planning Board

NGO Non-Governmental Organization

PEPFAR Presidents Emergency Plan for AIDS Relief

PCU Project Coordinating Unit

PSI Population Services International

SERHA South East Regional Health Authority

SRHA Southern Regional Health Authority

SW Sex Worker

SWAJ Sex Worker Association of Jamaica

UHWI University Hospital of the West Indies

UNAIDS United Nations

UNDP United Nations Development Programme

UNICEF United Nations Children Fund

UNFPA United Nations Population Fund

UNESCO United Nations Education, Science and Cultural Organization

UNTF United Nations Trust Fund

USG United States Government

UWI University of the West Indies

Background

Jamaica is the third largest island and the largest Anglophonic island in the Caribbean Sea, occupying 10,991km². The population is approximately 2.7 million. In 2013, Jamaica was classified as an Upper Middle Income country as its GDP per capita stood at approximately 5200USD (1) (2). As a result of this status, Jamaica's eligibility for international funding has decreased; however, the country's socioeconomic environment still suffers from the effects of several major challenges including a high crime rate and low productivity.

Since 2013, Jamaica has been under an IMF agreement. As part of the Extended Fund Facility under this agreement, public sector expenditure had to be curtailed. Consequently a wage freeze was imposed for the 2012-2015 fiscal years (2) (3). This affected expenditure for public sector workers, including the health care system and health care workers. A Human Resource Analysis by CHAI in 2014 noted that Jamaica was only operating at 62% of its full time equivalent optimum for staffing in the HIV health sector (4). This, coupled with the no user fee policy, has affected the provision of adequate health care, including in the area of HIV.

Data from the Ministry of Health indicates that in 2014, Jamaica only spent 5.4% of its GDP on health, down from a twenty-year high of 5.9% in 2013 (5). The majority of total health expenditure (THE) of 2014 was supported by the Government of Jamaica (GOJ) with 52.4% expenditure, while private sector expenditure on THE was 47.6%. This expenditure by the government represents 8.1% of total general government expenditure. The majority of private sector expenditure was out-of-pocket expenditure with 58.4% of funds expended. Private insurance only accounted for 38% of private expenditure. (5)

Government, although operating under a tight fiscal space, continues to increase its expenditure on HIV and AIDS. The National AIDS Spending Assessment of 2011-2013 indicated that \$20.3 million USD was expended on HIV, with 18.67% coming from the government coffers in the fiscal year 2012-2013. Most of this was spent on human resource costs (6). Expenditure on human resources is imperative if gains in HIV and or any area of health are to be maintained.

HIV Overview

Jamaica is characterized by both a general and a concentrated HIV epidemic. Approximately 29,690 persons were estimated to be living with HIV in Jamaica at the end of 2014. It is estimated that 19% of persons are unaware of their status (7). The prevalence rate is currently 1.6%, while the rate among men who have sex with men (MSM) is approximately 33%. AIDS-related deaths have decreased with the introduction of universal access to ARVs. The AIDS mortality rate has reduced from 25/100,000 in 2004 to approximately 8/100,000 in 2014. There has been a 67% decrease since the implementation of universal access to ARVs. (7)

Concerns also exist around interventions with youth. UNICEF/UNAIDS ALL IN data indicates that HIV prevalence among young adolescent girls and boys aged 10-14 is equal, and is estimated to be 0.1% due mainly to PMTCT. (7) There is an estimated increase in HIV prevalence, consistent with the onset of

sexual behavior, in adolescents 15-19. A further increase in prevalence is noted in the 20-24 age group to 1% and 1.4% respectively for males and females. In contrast to the estimated HIV prevalence of 0.4% and 0.5% reported in adolescent girls and boys aged 15–19 at the national level, the HIV prevalence among gay and bisexual adolescent boys is estimated to be 14%. HIV prevalence in transgender adolescents is estimated to be 27% (7). This underlines the vulnerability of this group and the fact that a sustained HIV prevention, treatment, care and support response for these adolescents is extremely imperative.

While the Ministry of Education has a Health and Family Life Education (HFLE) programme, it mainly focuses on in-school youth and youth as a general population. Over the years the focus on youth by major HIV/AID funders such as the Global Fund has decreased, however several NGOs still continue to address the needs of youth, albeit funding for specific interventions has decreased for this population. However the statistics among transgender and general adolescents indicate that gains made in the previous decade stand the chance of being reversed if interventions among this group are not stepped up. Underlining this point are the aforementioned statistics in the previous paragraph, as well as data in the 2015 Concept Note Submission by Jamaica to the Global Fund, which indicated an HIV prevalence of 45% among transgender women, and 54% among those who identified as transgender female sex workers (8). It went further to say that globally there is a 19% HIV prevalence among transgender women.

The prevalence rate at the end of 2014 for women visiting public antenatal sites was 8/1000. The mother- to-child transition rate was less than 1% for 2013 and 2014. Consequently, Jamaica is in the process of applying for elimination of mother-to-child transmission. Additionally, paediatric deaths have decreased by 76% with 34 paediatric deaths in 2004 to 8 in 2014.

Also of importance, as Jamaica transitions and maintains its gains made in HIV, is the linkage and retention in care of those living with HIV. Retention and linkage to care are dependent on several factors, including socio-economic factors, staff capacity and capability and drug accessibility. The data indicates that at the end of 2013, 25% of the PLHIV diagnosed had not been linked to care and 43% of those who had been linked to care had not been retained in care. The concept note to the GF for the current funding period of 2016-2018 indicate that funds have been allocated to address this issue, with both governmental and civil society organizations facilitating the treatment cascade (7).

HIV planning and management by the MOH as well as civil society stakeholders is imperative especially at this important juncture of transition preparedness. To this end, the resource tracking done through the NASA methodology assists HIV practitioners in effectively and efficiently implementing a response which can maintain previous gains and create new ones.

Fact Sheet

Table 1 Expenditure by Funding Source

Category	2013/14 USD	%	2014/15	%
Public	4221876	33.3	4093248	27.2
Private	1490363	11.8	1645020	10.9
International	6913285	54.7	9335457	61.9
Total	12641382	100	15073726	100

Table 2 Expenditure by Financing Agent

Sector	2013/14 (USD)	%	2014/15(USD)	%
Public	7.1M	56	11.1M	74
Private	2.5M	20	2.3M	15
International Donors	3.0M	24	1.6M	11
Total	12.6M	100	15M	100

Table 3 Expenditure by Financing Agent with breakout of International Partners

Sector	2013/14 (USD)	2014/15 (USD)
Public	7074028	11078605
Private	2540643	2310198
International Donors		
- Bilaterals	507491	87387
- Multilateral	1096532	802705
- International NGO	1409643	700830
- Total International		
	6929004	1590922

Table 4 Expenditure by AIDS Spending Category

			2013/14		2014/15	
			Ехр.	%	Ехр.	%
PREVENTION			5102575	40.4	5749382	38.1
Treatment & Ca	are		2182764	17.3	2575778	17.1
PLANNING, PROGRAMME I	COORDINATTION MANAGEMENT	AND	4419034	35	5488822	36.4
TRAINING			180158.1	1.4	436267.8	2.9
SOCIAL PROTEC	TION		9804.09	0.08	7992.81	0.05
ADVOCACY			745664.2	5.9	780104.4	5.2
RESEARCH			1383.52	0.01	35378.75	0.2
Total			12641382	100	15073726	100

Table 5 Expenditure by Provider of Service

	2013/14		2014/15	
	Expenditure (USD)	%	Expenditure (USD)	%
Public	6.25 M	49.4	9.20M	61.1
Not for Profit	2.92M	23.1	2.40M	15.9
Private for Profit	1.46M	11.7	1.56M	10.4
International donors	1.99M	15.8	1.90M	12.6
Total	12.64M	100	15.1M	100

Table 6 Expenditure by Beneficiary Populations

	2013/14		2014/15	
	Expenditure	%	Expenditure	%
PLHIV	2909678	23	4003482	26.6
CSW	112866	0.89	349729.1	2.3
MSM	467075	3.7	591752.8	3.9
KEYPOP	1139204	9	2624236	17.4
PRISON	22852	0.18	54333.57	0.4
Marginalized/At Risk Youth	360819	2.85	419587.4	2.8
In School	151847	1.2	433780.7	2.9
Women			420732.2	2.8
Other	7477042	59.1	6176092	40.9%
TOTAL	12641382	100	15073726	100

Table 7 Expenditure by Resource Cost Category

	2013/14		2014/15	
	Ехр.	%tage	Exp.	%tage
WAGES	6374738	50.	7618808	50
ARV	44996	0.35	139006.89	1
Transport	101351	0.80	93370.59	0.6
Logistics	1216521	10	1202702.2	8
Condoms	1380164	11	1585166.69	11
Food/nutrients	10032	0.08	76827.04	0.51
Other	3513577	27	4357844.24	29
Total	12641382	100	15073725.83	100

Introduction

Resource tracking is an important method of transparency and monitoring to help ensure that resources are spent in priority areas and among those most in need. National AIDS Spending Assessment (NASA) is one such tool which tracks the flow of resources from their source to the point of expenditure. (9) (10)

This is the third NASA exercise that Jamaica has undertaken. Over the years NASA has proven to be instrumental in planning the HIV budget and proposals. The 2011-2013 NASA report was pivotal in the development of the Global Fund Concept Note which was submitted in January 2015.

It is therefore imperative that the NASA exercise be as accurate as possible, as international donors use this as a proxy for budget and priority needs for the country. The country can also use NASA to evaluate its investments and resultant benefits. This therefore requires participation from all stakeholders, including those who are not funded from external sources.

This is even more important as the country becomes transition ready; as donor funds decrease and the government is expected to increase its funding responsibility for the HIV response. The GOJ's expenditure in prevention, treatment and care and on key populations such as MSMs, and by extension the transgender community, is critical.

Since the last NASA exercise, further integration of the National Family Planning Board and the National HIV Unit has taken place. The true benefit of this integration is not yet known and analysis of this expenditure can assist in informing this process.

The NASA methodology is a standardized approach which uses a pre-existing tool with its own coding and definitions; and by its nature is inherently retrospective. Culturally contextualizing the coding of NASA as it recreates the expenditure on HIV/AIDS across Jamaica is imperative in order to assist in creating an accurate picture of the national response (11).

NASA Design and Methodology

NASA is based on standardized methods, definitions and accounting rules of the globally available and internationally accepted System for National Accounts (SNA), National Health Accounts (NHA) and National AIDS Accounts (NAA). NASA follows the basic framework and templates of the National Health Accounts, but is not limited to health expenditure. It embraces other expenditure to track the multisectoral response to HIV and AIDS (12).

The NASA methodology seeks to provide answers to six key questions:

- 1. Who finances the AIDS response?
- 2. Who manages the funds?
- 3. Who provides the services?
- 4. Which intervention was provided?
- 5. Who benefits from the funds?
- 6. What was bought to realize the intervention?

To answer these questions, the NASA methodology reconstructs all the financial transactions related to the national response to the HIV and AIDS epidemic. The financial transactions are reconstructed by identifying three dimensions: financing, provision and use. Each dimension incorporates two vectors (12).

Each of the six vectors answers the above questions:

- 1. The **Financing Sources (FS)** are entities that make available the funds to finance the HIV and AIDS services (e.g. PEPFAR, the Global Fund, public sources, out-of-pocket expenditure).
- 2. The **Financing Agents (FA)** are entities that mobilize the resources to finance specific programmes and take the decisions on how they should be spent while acting as managers for funding sources.
- 3. The **Providers of Services (PS)** are entities that engage in the delivery of HIV and AIDS services. They represent a mix of government, non-government and private sector organizations.
- 4. The **Production Factors (PF)** are the resources bought to produce the interventions (e.g.wages, services, ARVs).
- 5. The AIDS Spending Categories (ASC) are the activities and services provided as the multi-sectoral response to HIV and AIDS (e.g. prevention, care and treatment, OVC, social protection, enabling environment and research).
- 6. The Beneficiary Populations (BP) are the intended part of the population benefiting from a specific intervention (e.g. PLHIV, MSM, SW, general population, key populations)

Work Approach

The NASA 2013-2015 exercise had several phases, including:

- 1. Data Collection
- 2. Data Entry
- 3. Data Validation
- 4. Data Analysis
- 5. Data Reporting

In addition, a NASA Steering committee was convened to act as an advisory board to the consultancy and where necessary use its influence to facilitate data collection and stakeholder participation. The composition was multi-sectoral representing government, civil society and IDPs.

Data Preparation

The consultant compiled a list of stakeholders, which was reviewed by the Steering Committee for approval. The list represented several sectors including government, civil society, international partners and the private sector.

Data Collection

This stage included sensitizing stakeholders to the current NASA exercise. Eighty-four stakeholders were contacted with letters sent via email from the National HIV/STI/TB Unit (Appendix II). This included representatives from government, NGOs, private sector and academia. This initial email also included a data collection tool (Appendix III), which stakeholders were invited to complete and return. Stakeholders from civil society were chosen from organizations which have contributed to the response over the years and/or have been sub-recipients of the Ministry of Health. In the case of private entities, these were determined by those who have reporting relationships as it relates to notifying HIV to the MOH as well as those with a procurement relationship as it relates to ARVs and condoms.

The consultant conducted follow-up via telephone and/or email with stakeholders, with assistance from an intern. . Six weeks were slated for data collection. However all data was not received within the six-week period, resulting in data collection continuing for another six to eight weeks.

The majority of stakeholders returned data via email, however whenever needed the consultant visited stakeholders in person to collect data. Seventy-eight percent of the 84 organizations responded, including government, civil society, IDPs, private organizations such as laboratories, pharmacies and insurance companies, as well as six private doctors. The doctors were chosen from a list of private treaters which the HIV/STI/TB unit in the Ministry of Health had compiled.

Table 8 Response rate of stakeholders by various sectors

Sector	Number targeted	Number of Responses	Response Rate
Government	19	15	80%
Civil Society	20	16	80%
International	16	13	81%
Development Partners			
Private Sector	23	18	78%
(Insurance Agency,			
Labs)			
Private Doctors	6	4	67%
Total	84	66	79%

Some organizations, while responding, noted that they were unable to provide expenditure data for varying reasons, such as the absence of expenditure during the specified period. Other organizations submitted only partial data. See Annex II

Data was considered received from an organization even if it was not submitted firsthand. Information and data collected from a general source, such as reports from HIV/STI/TB Unit or from other financing agents and funding sources which included these stakeholders, were considered for entry; this however affected the disaggregation as it relates to resource costs.

It should be noted that the private doctors and labs were not given the same data collection tool. They were asked a series of questions in the letter sent to them or in the body of an email. The majority of lab data was gleaned from reports sent to the National HIV/STI/TB Unit, while the private doctors had responded via telephone interviews or email.

The HIV/STI/TB unit submitted their expenditure via general ledger. In the case of several NGOs a more detailed description of work implemented was to be found in their audited financial reports. In cases where fiscal year data was not submitted, stakeholders submitted calendar year financial statements. In many cases, this information was more detailed than the fiscal year data which was submitted.

The average response rate of 80% provides a fairly accurate picture of HIV expenditure in Jamaica, as most of the partners in the response submitted data. The private sector response rate of 60% indicates that more data can be collected from this sector, and there is possibly an underestimation of expenditure in this area especially as it relates to treatment and care.

Data Entry

Data entry was done by two data entry clerks from the Monitoring and Evaluation section of the MoH. The data clerks worked twice a week under the supervision of the consultant. The intern hired by the consultant also assisted with data entry. All three were trained by the consultant in NASA coding and terminology.

For accuracy and consistency, the consultant checked all the entries made by the clerks to ensure correct classifications and to prevent double entry and missing figures. This was done by reviewing all source data, as well as contacting or re-contacting stakeholders if further clarification on activities was needed. In the case of the data received from the National HIV/STI/TB unit, the consultant received assistance in cross-referencing the general ledger information and that which was entered into the database as well as data collection tools from stakeholders. This process took approximately two to three weeks.

When data was received from funding source/financing agents as well as provider of services, the expenditure from the provider of services was entered in order to prevent any double counting as well as to ensure a greater degree of accuracy as it relates to ASCs, BPs and resource costs.

Data Validation

There were several approaches to data validation, which included semi-structured interviews via telephone, clarification emails validation meetings and site visits. The process included the following actions:

- 1. As noted in the previous section, when data was received by the consultant it was reviewed either via telephone and/or email with the stakeholder before entry to the database.
- 2. The consultant checked the data entered by data entry clerks against source data received from stakeholders to ensure correct coding of spending categories and beneficiary populations. If more clarity was needed, stakeholders would be contacted via telephone or email.
- 3. The consultant visited three RHAs, one CSO and sent an email with the database to one CSO. Note: All four RHAs and the four largest sub-recipients with respect to expenditure and scope of work should have received site visits, however only three RHAs and one CSO responded to accept site visit dates, while one CSO chose to peruse information via soft copy.
- 4. Two validation meetings were held one with the MoH and its agencies such as the RHAs and NFPB, and another with stakeholders such as CSOs.
- 5. Amendments to the coding were made according to feedback from the meetings and/or any additional information garnered from regions and CSOs in the follow-up validation meetings.

Data Analysis

Data analysis was done in Excel using pivot tables to create matrices which analyzed the expenditure on the six NASA vectors. In addition, tables and charts were created based on matrices with two variables.

A detailed analysis was done on the resource cost of wages as a variable of the vectors, funding source, provider of services and beneficiary populations.

The matrices analyzed were:

- 1. Funding Source
- 2. Financing Agent
- 3. Provider of Service
- 4. AIDS Spending Categories
- 5. AIDS Spending Categories by Funding Agencies
- 6. Beneficiary Populations
- 7. Provider Service by Beneficiary Populations
- 8. Resource Cost
- 9. Human Resource Cost by Funding Source
- 10. Human Resource Cost by AIDS Spending Categories

A trend analysis comparing the last six years of data was also done. This analysis sought to assess the approximate real versus nominal changes. This was done by retrieving consumer price indices from STATIN (13). It was also done for the Government of Jamaica as a funding source. This was deemed

important as the country continues to implement measures to increase domestic funding for the AIDS response, as it prepares to transition from donor funding.

Human resources as a resource cost was also analysed. This is due to the fact that the majority of resource costs is focused on wages and as Jamaica becomes transition ready the cost of staffing is imperative to ensure adequate planning for smooth and continuous implementation. This is even more important as the GoJ operates under a tight fiscal space with an IMF agreement which seeks to reduce the government's expenditure and wage bill.

Challenges

- Competing priorities such as audits by NHP affected the data collection process. This made it difficult for sub-recipients both in government and non-government organizations to submit data in the requested time, and to provide disaggregation of details of the data requested and in the validation process.
- Limited human resources affected the submission of data. Personnel in some entities were responsible for both on-the-ground implementation as well as in-office coordination, making it difficult to submit data in the given timeline.
- There was loss of institutional memory, and by extension NASA competency, in some organizations such as the Regional Health Authorities.
- In several NGOs, new staff members who were not familiar with the NASA process and methodology were responsible for data preparation. This affected the level of disaggregation of the data as required by the NASA tool and process.
- While there was improvement in the area of data entry assistance, at least one member of the data entry team should be from the Project Coordinating Unit (PCU), with experience particularly in finance, and/or have institutional memory regarding activities which were implemented. This is especially so if NASA is to be institutionalized.
- Merging various files in which data was entered resulted in delays in completing the database as some data was lost. Data therefore had to be re-entered.
- Private sector laboratories had challenges with sending information on HIV-related tests due to record management issues.

Limitations

- The data received from some stakeholders was not disaggregated to give the level of effort of interventions as it relates to target populations or AIDS spending categories. This likely reduced the accuracy of estimated expenditure in some ASCs or among some BPs.
- The closure of projects such as Population Service International (PSI) and World Learning and Clinton Health Access Initiative (CHAI) affected to some extent the detailed disaggregation of data as most of the financial reports now reside in other countries and are a part of cumulative reports. Therefore, information from these sources may not be coded to reflect the detail of work conducted by these organizations.
- ERTU, an integral partner in healthcare worker capacity building, was unable to provide information as the project is now closed and personnel were unable to access information for the project; therefore affecting the depiction of expenditure on training activities as it relates to health care workers.
- There were difficulties in accounting for true GoJ expenditure, especially as related to treatment and care. Due to lack of health information and health records it was a challenge for RHAs to provide information on expenditure regarding outpatient and inpatient staffing as it relates to HIV. Assumptions were based on information at the national level and in cases where regions were able to provide some data. (See Assumptions)
- There was limited information on private healthcare expenditure, both from clinical provision and laboratory provision. Any expenditure received on private healthcare was based on information submitted by four private doctors in Kingston. This is not representative of island wide expenditure. However, it does provide a baseline for this category and can be expanded in future NASA exercises.
- There was limited information on HIV-related laboratory testing, for both the public and private sectors.
- The retrospective nature of the study affects the accuracy of data collected, due to several factors such as challenges with records management, lack of institutionalization of NASA, as well as several new staff in stakeholder organizations.
- In scenarios where stakeholders who were sub-recipients and did not submit data for one reason or another, information from the financing agent's source of information was used. This impacted the coding of ASCs as well as that of the beneficiary populations. Additionally, there was limited or no disaggregation of resource costs.
- There was limited or no information on expenditure on opportunistic infections and/or comorbidities.
- There was limited or no information on OVC expenditure because no stakeholders focused on this spending category and/or did not provide data on this area. There was also limited information on social protection activities. Organizations which serve OVCs did not respond.

Additionally, other government organizations need to be targeted in the follow-up NASA exercises.

- There was difficulty in disaggregating indirect expenditure on PMTCT activities especially programmes by NGOs. Some NGOs focus on empowerment of women and girls affected by HIV. Ultimate outcomes in these programmes reduce pregnancy and improved infant health and maternal health, thus impacting PMTCT.
- There was no disaggregation of expenditure based on the usage of ARVs. Therefore ARV usage for PMTCT, whether during actual pregnancy or as part of safe delivery mechanisms if the mother was not part of PMTCT antenatal care, is not recorded. This is also true for ARV as well as prophylaxis. It should be noted that approximately .05% of persons on ARVs are PMTCT clients.
- Limited private sector expenditure, such as expenditure by insurance agencies through claims for healthcare and social corporate responsibility. Information collected from the private sector focused on private doctors and labs as it relates to treatment and care as well as to condom purchases.
- No responses were received from FBOs, therefore care and support expenditure by these organizations are not captured.
- While transportation cost for PLHIV to access treatment facilities was part of both Global Fund and USAID projects, and is captured in this report, there is no information on transportation expenditure for PLHIV who are not recipients of these stipends for both public and private sector. Less is even known about PLHIV who access care in the private sector. However, anecdotal information indicates that HIV patients will leave their geographical area (local and international) to access healthcare from private physicians and this transportation expenditure have not been accounted for.

Assumptions

- Household expenditure was assumed to be monies spent by individuals to purchase private healthcare from doctors, or laboratory tests and condom purchases and ARVs outside of the public sector.
- Condom expenditure was based on information provided by the leading condom distribution company CARIMED. The sales on condoms for the years in question were requested. The sales by type of retailer were submitted as well as the average mark up by retailer type. The sales figures by each type of retailer were multiplied by the average mark up by each retailer type, which ranged from 10-100% and then summed. The higher end of each retailer type markup was used in the calculation. The percentage of persons indicating dual method use of condoms

from 2008 Reproductive Health Survey (RHS) of 72% was then applied to get approximate expenditure on condoms as it relates to HIV. It was also assumed that all condoms sold to retailers were consumed in that period. The equation utilized:

{(sales of wholesale x 1.15) + ((sales of pharmacy + sales of gas station) x2) + (sales of supermarket x 1.25)} x 72%

- Expenditure on private physician care was taken as an average of each of the four private physicians who reported and multiplied by two (the number of visits each patient makes a year to the private physician). This figure was multiplied by the total number of patients reported by each of the physicians.
- Salaries for in-patient staffing for the island are based on expert knowledge by RHAs on staffing in the general medicine ward where most HIV patients are admitted, apart from Gynaecology and Obstetrics. The salaries of these staff were taken at the highest end of their scale and prorated against the admission records of HIV patients. WRHA was the only region who submitted admission rates for their two treatment hospitals, one of which is a type A and the other a type B hospital. This was used as an approximation for the other type B and type A hospitals across the island, which were pro-rated as a percentage of the WRHA rate based on the most recent HIV epidemiological report.
- Salaries for health care workers in public outpatient clinics were pro-rated based on the level of effort-based time spent each week in HIV clinics for one health region, (SERHA) and the approximate number of patients as a percentage of patients seen of the total number of patients. HCW in the NERHA region were ascertained from HR files and attributed as solely to HIV as they are considered HIV specialists for the region.
- The exchange rate used was an average of BoJ rates for the fiscal periods. The rate for 2013-2014 was 1USD: 100.6JMD, while the rate used for 2014-2015 was 1USD:111.22JMD (14)
- The term "key populations" was used when unable to disaggregate beneficiary populations. Key populations include
 - MSM
 - CSW
 - OSY
 - Parents of OSY
 - Drug users
- Specific populations not elsewhere classified were usually staff members at the planning and coordination level who were involved in capacity building or educational activities.
- Specific accessible populations included work place staff as well as persons who participated in enabling environment interventions such as the judiciary and legal fraternity.

• Expenditure for the GoJ on in-patient length of stay was based on average length of stay reported to MoH by RHAs in monthly reports. A prevalence rate among hospital admissions was received from the WRHA of 3.2%. This prevalence rate was adjusted for the other regions based on prevalence rates in the 2014 Epidemiology Report from MoH. This result was then multiplied by the abolished user fees from 2007.

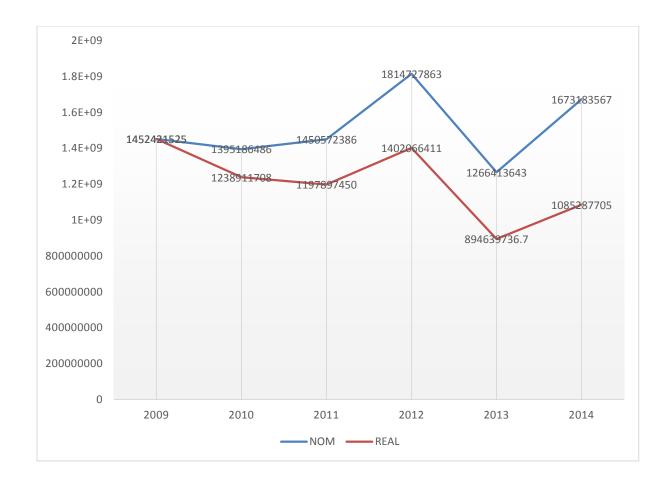
Results

The total expenditure for the fiscal years 2013-2014 and 2014-2015 were \$1,271,929,217JMD and \$1,676,499,797 JMD respectively. This is equivalent to \$12,643,431.58USD and \$15,073,726USD respectively. The decrease in expenditure for the 2013/2014 period compared to the 2012/2013 period, which was approximately 20millionUSD, can be attributed to the winding down of the Global Fund Round 7 Grant which came to an end June 2013 and the employment of the Transitional Funds from the GF which began in August 2013.

Analysis was done on the NASA expenditure totals for the fiscal years 2009-2015, with 2009 as the base year. Overall, the 2013/2014 represents a 38% decrease in real expenditure at \$894,639,736.7 JMD while the 2014-2015 expenditure in real terms is 22% at \$1,085,287,705JMD less than the base year value of \$1,452,421,525JMD. The 2014-2015 expenditure represents a 21% increase of the 2013-2014 expenditure in real terms.

The graph below highlights the difference between real versus nominal over the last six fiscal years.

Figure 1 Real versus Nominal Expenditure on HIV 2009-2015 Fiscal Years (JMD)



The decrease in the real value of expenditure indicates that the purchasing power has declined. Therefore it can be argued that the response is getting less goods and services for its expenditure compared to previous years.

Expenditure by Funding Sources

The main funding sources for the two fiscal periods were the Global Fund (GF), Government of Jamaica (GoJ), and Government of the United States, through PEPFAR and Household Funds (HH), and the UN response.

In 2013/2014, the GoJ was the main funding source with approximately \$4.2milUSD expenditure on the HIV response, with PEPFAR being the second largest funding source. Due to the expiration of the Global Fund Grant 7 cycle, the expenditure by the GF in 2013/2014 was less than both GoJ and PEPFAR with only \$1.7milUSD being expended. However this changed in 2014/2015 with the GF increasing its expenditure by 280%, thus contributing \$4.8milUSD or 31% to the response as opposed to 13% in the previous fiscal year.

The UN agencies combined funded 7.5% and 13.2% for 2013/2014 and 2014/2015, respectively, of the HIV response in Jamaica, with UNAIDS and UNICEF contributing the majority of the funds. Although

there was a decrease in percentage expenditure there was a marginal dollar value increase in expenditure between the two years.

Household (HH) funds which were mainly spent on condoms and private treatment and care activities accounted for approximately 10.8% of the 2013/2014 expenditure and 9.7%% in 2014/2015. There was a percentage decrease in expenditure; however, there was approximately \$100,000USD value increase in expenditure between the two years.

Other funding sources included MACAIDS, AMfAR, KfW, the British High Commission and the Elton John Foundation, as well as private insurance companies. This category of funding was the only source which recorded a decrease in expenditure between 2013/2014 and 2014/2015. They accounted for 14% of expenditure in 2013/2014 and 2% in 2014/2015.

Table 9 Total Expenditure by Selected Funding Source 2013-2015 Fiscal Years

	2013/14		2014/15	
	Expenditure USD	%	Expenditure USD	%
GOJ	4221876	33.2	4093248	27.2
USG	2585154	20.4	2404866	16
HHFUNDS	1372407	10.9	1475623	9.8
GF	1748361	13.8	4807317	31.9
UN Response	955730.1	7.6	1988898	13.2
OTHER	1788267	14.1	303773.3	2.0
TOTAL	12641382	100	15073726	100

An aggregation of expenditure indicates that the GoJ expended 33% and 27% of funds respectively for the 2013/14 and 2014/15 fiscal years. Private sector expenditure, which includes household expenditure and that of insurance companies, represents 11.8% for the 2013/14 fiscal year and 10.9% in 2014/15. International donor expenditure, which includes multilateral and bilateral agencies and international foundations, represented the bulk of expenditure with approximately 54% in the 2013/14 fiscal year and 61.9% in 2014/15. This expenditure in international funds can once again be attributed to the increase in expenditure by the GF after the lull in expenditure in 2013/14 due to the closing out of the Round 7 Grant.

Table 10 Expenditure by Funding Source Categories by Fiscal Year

Category	2013/14 USD	%	2014/15	%
Public	4221876	33.3	4093248	27.2
Private	1490363	11.8	1645020	10.9
International	6913285	54.7	9335457	61.9
Total	12641382	100	15073726	100

Expenditure by Select Funding Sources for the Fiscal Years 2013/14& 2015/16 6000000 5000000 4000000 3000000 2000000 1000000 0 UN GOJ USG **HHFUNDS** GF **OTHER** Response **2013/14** 4221876 2585154 1372407 1748361 955730.1 1788267 **2014/15** 4093248 2404866 1475623 4807317 1988898 303773.3 **Funding Sources**

Figure 2 Total Expenditure by Funding Sources

Financing Agents

Financing agents are those who manage the expenditure of the funds received from the funding source or donor agency. Financing agencies have the scope to determine change in budget expenditure and possible target populations. In the case of Jamaica a large proportion of funds was managed by the HIV/STI/TB unit of MoH. These include both international donor funds such as the GF and PEPFAR, and those received from central government.

Table 11 Expenditure by Type of Financing Agencies Type (USD)

Sector	2013/14 (USD)	%	2014/15(USD)	%
Public	7.1M	56	11.1M	74
Private	2.5M	20	2.3M	15
International Donors	3.0M	24	1.6M	11
Total	12.6M	100	15M	100

Public sector, which includes the MoH and the MoE acting as financial agents represented 56% of the expenditure in 2013/14 and 74% in the 2014/15 period. Private sector, which includes NGOs as financial

agents as well as private households, expended 20% of the funds in 2013/14 and 15% in 2014/15. The remaining 24% of 2013/14 funds and 11% of 2014/15 funds was managed by international agencies including UN agencies and international NGOs such as World Learning, CHAI and HPP.

An analysis of the top 5 financing agents was conducted. It highlights that in both years, the MoH was the financing agent with the single most expenditure, with 34% in 2013/14 and 67% in 2014/15. This increase can be attributed to the increase in GF monies. Approximately \$1.27M USD or 72% of monies from the GF were managed by the MoH in 2013/2014 while in 2014/2015 \$4.56M USD or 94% of monies from the GF was managed by the MoH. The remaining funds each year were managed by PANCAP through its sub-recipient CVC.

The second highest financing agent in both years was private HH with a total spend of \$1.37M US and \$1.47M US respectively for 2013/2014 and 2014/2015 representing approximately 10.8% and 9.7% for each respective year under review. The Clinton Foundation managed the third most expended funds in 2013/2014, with a total spend \$848,388.26USD. However, there was a considerable decline in expenditure for the year 2014/2015 to \$388,580USD. This can possibly be attributed to the closing out of the project in Jamaica.

Table 12 Expenditure of Selected Financing Agents

	2013/14		2014/15	
	Expenditure (USD)	%	Expenditure(USD)	%
МОН	4381968	34.7	10100101	67
Clinton	848388	6.7	388580	2.6
Pvt. HH	1372407	10.9	1475623	9.8
USG	454785	3.6	79758	0.53
UN Response	801955	6.4	897704	6
Other	4781876	37.8	2131958	14.1
Total	12641381.9	100	15073726	100

The UN response was the third highest as seen above with a total spend of \$897,704USD in 2014/2015, an 11% increase from 2013/2014 with expenditure of \$801,955USD. In 2013/14, the UN agencies managed 83% of their source funds. This share in percentage was reduced by approximately 50% in 2014/2015, when they only managed 45% of their source funds.

Provider of Services

These organizations are the ones which implement the activities for the prevention and treatment of HIV/AIDS. They range from government institutions such as Regional Health Authorities, Ministry of Education, NGOs and hospitals. Service providers influence the resources expended as they have intimate knowledge and understanding of beneficiary populations and the interventions needed to mitigate the impact of HIV and AIDS.

Analysis of the data shows that most of the funds expended for services provided were done by the public sector, which includes the RHAs and other Ministries such as the Ministry of Education. '

The service providers listed below represent a mixture of government and civil society and are considered to serve key populations in the response. These providers were highlighted for several reasons which include:

- 1. Larger service providers in public and private sector by expenditure
- 2. Integral in accessing key and at-risk populations such as PLHIV, MSM and youth
- 3. In the case of JASL, ASHE, CF, NFB and RHAs, these are subrecipients under the new GF Grant with JASL having several SSR.
- 4. In the case of EFL, JCW and JN+, these are all SSR of JASL under the new GF Grant.
- 5. JCW+ and JN+ are the only PLHIV networks in the island.
- 6. The MoE is the second largest GoJ implementer of activities for the prevention and treatment of HIV outside of the MoH and its related agencies such as the RHAs and NFPB.
- 7. JAPPAIDS is the main implementer of activities for PMTCT/EMTCT.

Table 16 Expenditure by Selected Service Providers' below shows a break out of some of the providers in Jamaica's national response. The public sector expended 49% of total expenditure in 2013/14 and 61% for the 2014/15 period. This increase can be attributed to the increase of GF expenditure.

Non-profit organizations or civil society organizations provided services to the tune of approximately \$2.92M USD and \$2.40M USD for 2013/14 and 2014/15 respectively. This represents 23% and 15.9% respectively of expenditure for 2013/14 and 2014/15. Private for-profit provided services represented approximately 11% and 10% of expenditure respectively for 2013/14 and 2014/15. The services provided were mainly focused on the provision of condoms and treatment and care services.

Table 13 Service Provider Expenditure of Funds by Categories

	2013/14		2014/15	
	Expenditure (USD)	%	Expenditure (USD)	%
Public	6.25 M	49.4	9.20M	61.1
Not for Profit	2.92M	23.1	2.40M	15.9
Private for Profit	1.46M	11.7	1.56M	10.4
International donors	1.99M	15.8	1.90M	12.6
Total	12.64M	100	15.1M	100

In 2013/14 only governmental or parastatal organizations provided services with funds from the public purse of the GoJ. These service providers were predominantly Ministries such as the MoH, MoE and MoLSS, and accounted for 55% of government expenditure. The parastatal agencies, which are government agencies, were for the most part the RHAs, which represented 45% of expenditure by public funds. Moreover, 35% of the \$1.2MUSD spent by the GoJ as a service provider was from international donors and 30% of parastatal or \$77,500USD expenditure as a service provider was from international donors. '

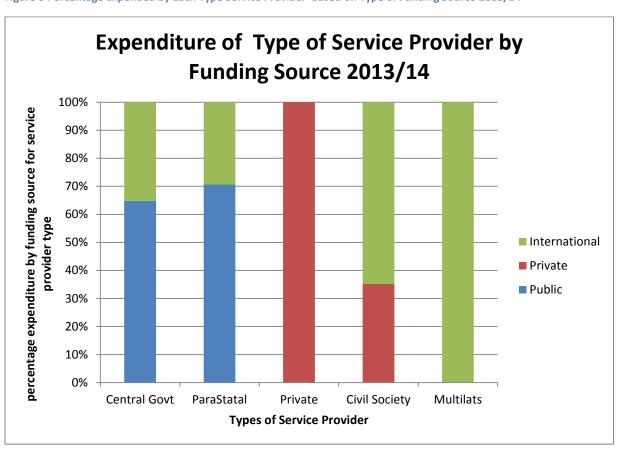
Figure 3 Percentage Expended by Each Type Service Provider based on Type of Funding Source 2013/14and 'Figure 4 Percentage Expended by Each Type Service Provider based on Type of Funding Source 2014/15' highlight the percentage share of source funding for each provider of service.

Table 14 Financing Source by Provider of Service 2013/2014

Expenditure (USD)							
2013/14	Central Government	ParaStatal	Private	Civil Society	Multilaterals	Total	
Public	2326113	1865348	0	0	0		
Private	0	0	1451233	15096130	0		
International	1261700	774439	0	2777826	477038		

Sixty-five per cent of the \$4.2MUSD expended by civil society service providers in 2013/14 had its source in international funds. One hundred per cent of the source funds for multilaterals as service providers were international funds, as most of these multilateral service providers are UN agencies.

Figure 3 Percentage Expended by Each Type Service Provider based on Type of Funding Source 2013/14



In 2014/15 the trend continued with public funds being expended by only central government or parastatal organization service providers. Seventy per cent of this expenditure was by central

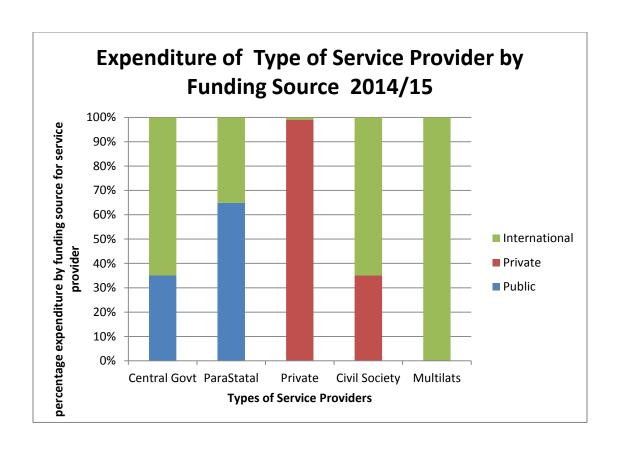
government while the remainder was by parastatal organizations. International funds in 2014 accounted for the majority of central government expenditure as a service provider with \$5.3MUSD or 53% of funds expended by this category of service provider. International donors were the sole source of funds for multilaterals who provided services for the 2014/15 period. This is expected as multilateral donors included the UN agencies which also provide services. Civil society service providers received most of their funds, 64%, from international donors.

Private service providers had most of their \$1.6MUSD worth of expenditure from private sources. This accounted for 98% of expenditure in the private service provider category. Private sources of funds included household funds or out-of-pocket expenditure, a local non-profit NGO and funds expended by an insurance company.

Table 15 Financing Source by Provider of Service 2014/2015

	Expenditure Service Provider Types				
Types of Sources	Central Government	ParaStatal	Private	Civil Society	Multilateral
Public	2867746	1225502	0	0	0
Private	0	0	1570362	997525.9	0
International	5314645	664082	16462.11	1851619.6	454272.6

Figure 4 Percentage Expended by Each Type Service Provider based on Type of Funding Source 2014/15



The service providers listed below represent a mixture of government and civil society and are considered to serve key populations in the response. These providers were highlighted for several reasons which include:

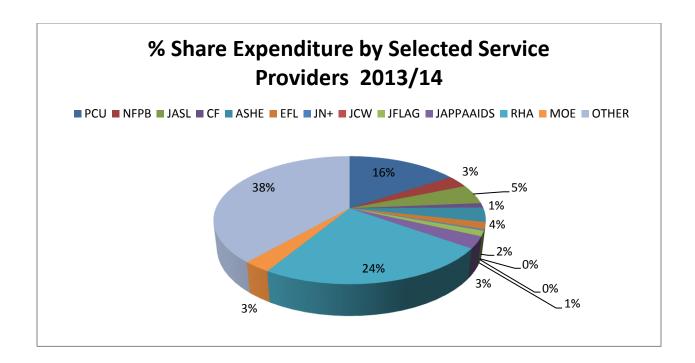
- 8. Larger service providers in public and private sector by expenditure
- 9. Integral in accessing key and at-risk populations such as PLHIV, MSM and youth
- 10. In the case of JASL, ASHE, CF, NFB and RHAs, these are subrecipients under the new GF Grant with JASL having several SSR.
- 11. In the case of EFL, JCW and JN+, these are all SSR of JASL under the new GF Grant.
- 12. JCW+ and JN+ are the only PLHIV networks in the island.
- 13. The MoE is the second largest GoJ implementer of activities for the prevention and treatment of HIV outside of the MoH and its related agencies such as the RHAs and NFPB.
- 14. JAPPAIDS is the main implementer of activities for PMTCT/EMTCT.

Table 16 Expenditure by Selected Service Providers

2013/14		2014/15
Expenditure	%	Expenditure %
USD		USD

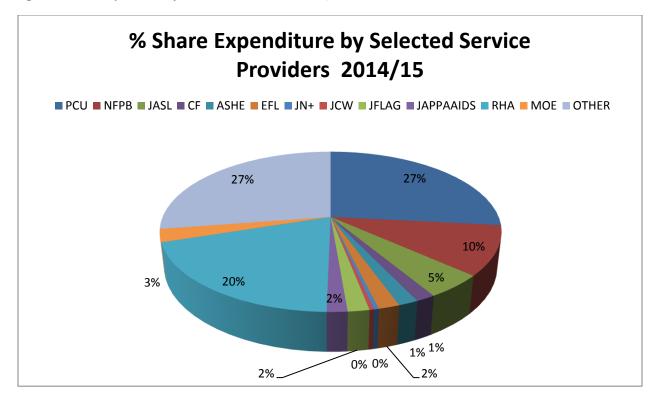
The selected service providers accounted for approximately 60% of expenditure in 2013/14 and approximately 67% of the total expenditure in 2014/15. The PCU had the single highest expenditure as a service provider with a total of \$4MUS in 2014/15, expending 27% of the total funds during that period and trading places with the RHAs from the previous period. The RHAs as a service provider had the second highest expenditure total of those assessed, at \$2.96MUSD in 2014/15. This represented 19.6% of AIDS expenditure for that period, a six point percentage decrease from the previous year of 23.7%. The PCU recorded greater expenditure levels in 2014/15 while RHAs recorded a small dollar value decrease. The NFPB increased its expenditure in the 2014/15 financial year to 9.9% from 3.1% of total expenditure as a provider service. This increase is in line with the NFPB becoming integrated with the National HIV Programme and taking the lead in the prevention and enabling environment.

Figure 5 % Share Expenditure by Select Service Providers 2013/14



The Ministry of Education was the next government provider, outside of the Ministry of Health and its agencies, with 2.8% and 2.5% of expenditure in 2013/14 and 2014/15, respectively. Other public sector and/or parastatal entities involved in service provision include the JAPPAIDS with 2.9% and 1.6% of expenditure in 2013/14 and 2014/15 respectively, representing both a dollar value and percentage decrease.

Figure 6 % Share Expenditure by Select Service Providers 2014/15



The selected NGOs combined had a total expenditure amount of \$1,664,333 in 2013/14 and in 2014/15 a total of \$1,816,763USD. Within this sub-category of selected civil society/NGO partners, JASL accounted for the greatest expenditure with4.9% and 4.7% expenditure respectively for 2013/14 and 2014/15 funds. Although there was a percentage decrease in the 2014/15 period, there was an increase in the dollar value expended. In 2013, ASHE had approximately 3.6% of expenditure in this category. However, in 2014/15 most of the selected NGOs, with the exception of JCW+ and JN+, each provided services which represented 1.5-1.7% of total HIV/AIDS expenditure.

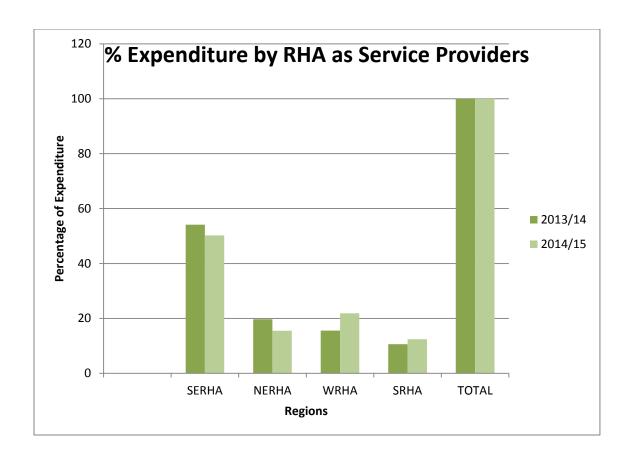
It should be noted that the other service providers included private sector providers such as insurance companies, labs, government laboratories and several other NGOs.

	2013/14	2014/15		
	Expenditure(USD)	%	Expenditure (USD)	%
SERHA	1,626,265	54.1	1,489,630	50.2
NERHA	592,122	19.7	459,793	15.5
WRHA	466,965	15.5	647,608	21.8
SRHA	319,228	10.6	368,293	12.4
TOTAL	3,004,581	100	2,965,325	100

The RHAs expenditure when broken out reveals that SERHA accounts for 50% of total RHA expenditure for the 2014/15 period, a decline from 54% from the previous year. WRHA accounts for the second largest share, with approximately 21% of total expenditure within the region's sub-category, up from the 15.5% recorded in 2013/14. NERHA and SERHA as service providers recorded a slight decrease in expenditure.

Interestingly, JASL, as an individual NGO, expended more funds than three of the RHAs in both periods being assessed. Only SERHA, the region with the greatest population and the second highest HIV rate, was outspent by JASL. JASL has offices in three of the four health regions and conducts interventions in all four health regions. JASL and the RHAs all received funds from the GF and PEPFAR. However JASL also received funds from other donors, while the only other source of funds for RHAs is the GoJ.

Figure 7 % Expenditure by each RHA



Funding for service providers came from government, international donors and a small amount from private for-profit companies.

AIDS Spending Categories ASC

NASA has eight AIDS Spending Categories. This NASA exercise has revealed that expenditure took place in only seven of the eight ASCs. The largest expenditure in both years was in the Prevention category, accounting for 40% of expenditure in the 2013/14 fiscal year and 38.1% in the 2014/15 fiscal year. This was followed by Project Coordination and Programme Management which accounted for 35% and 36.4% respectively. Treatment and Care accounted for 17% of expenditure for each of the two years, although there was an increase in the nominal figure by almost \$400,000USD in the 2014/15 fiscal period.

Table 18 Percentage of Expenditure by each ASC

AIDS Spending Category	2013/14		2014/15	
	Exp.	%	Exp.	%
PREVENTION	5102575	40.4	5749382	38.1
TREATMENT AND CARE	2182764	17.3	2575778	17.1
PLANNING, COORDINATTION AND	4419034	35	5488822	36.4

PROGRAMME MANAGEMENT				
TRAINING	180158.1	1.4	436267.8	2.9
SOCIAL PROTECTION	9804.09	0.08	7992.81	0.05
ADVOCACY	745664.2	5.9	780104.4	5.2
RESEARCH	1383.52	0.01	35378.75	0.2
Total	12641382	100	15073726	100

Analysis of funding sources by AIDS spending categories highlights the expenditure undertaken by highlighted funding sources such as the GoJ, USG and the GF. These five funding sources highlight the main funding sources of the HIV response in Jamaica. Table 19 Financing Sources by ASC 2013/14 and Table 20 Financing Sources by ASC 2014/15 focus on the expenditure of each funding agency on the respective ASC for the two fiscal years under review.

Table 19 Financing Sources by ASC 2013/14

	Expenditure (JSD)					
2013/14	Prevention	Treatment &Care	PCPM	Training	SP	Advocacy	Research
GOJ	1,093,109	1,272,853	1,737,237	66,496	0	0	0
USG	1,325,779	97,056	817,552	108,087	0	309,227	0
HHFUNDS	1,341,825	30,581	0	0	0	0	0
Global Fund	468,177	455,691	793,627	0	7808	77,541	0
UN Response	30,6376	2941	467,164	0	0	179,248	0
OTHER	567,305	323,640	603,453	5574	0	179,647	1383
Total	5.1M	2.2M	4.4M	180,157	7808	745,663	1383

In the 2013/14 fiscal period 42% of the GoJ expenditure of \$4.2MUSD was spent on planning, coordination and programme management, accounting for the single largest spending category for the GoJ. Treatment and Care accounted for 31% of GoJ resources for the 2013/14, while Prevention accounted for 26% of GoJ expenditure. The GoJ was the main contributor to PCPM and T&C expenditure for the 2013/14 fiscal period. Forty per cent of expenditure in the PCPM category was funded by the GoJ and 58% of treatment activities were funded by the GoJ.

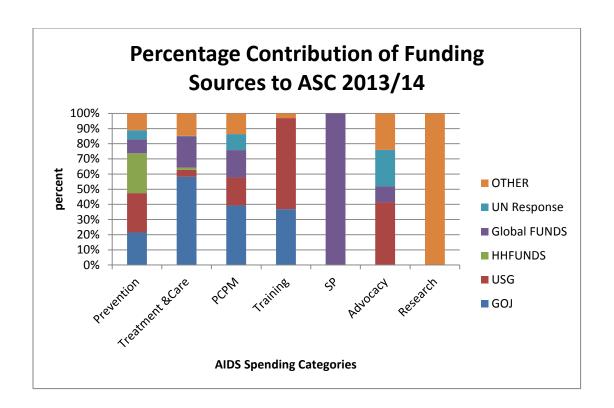
The USG expended funds across five ASCs through PEPFAR in both fiscal years under review. The greatest share of USG funds in 2013/14 was spent on Prevention. Fifty per cent of the total \$2.7MUSD expended by USG was spent on this activity. The remaining 50% was split between PCPM, Advocacy, Training, and Treatment and Care with approximately 30%, 11%, 4% and 3% respectively. The USG was the single greatest contributor to Advocacy, accounting for 41% of funds expended in this activity category.

In 2013/14 tmost of GF contributions was expended on PCPM. This represented 44% of GF expenditure for the fiscal period under review. Treatment and Care and Prevention each accounted for approximately 25% of GF expenditure in the 2013/2014 period. In fact, GF was the second largest contributor to the Treatment and Care category, accounting for 20% of funds expended under this category and the only contributor to Social Protection.

The UN agencies expended funds in four ASCs, with the largest expenditure of funds under PCPM. PCPM accounted for 48% of the UN response. The least amount of the UN response funds, \$2,941 USD, was spent on treatment; this also represented the least amount of money expended on treatment contributing only 0.1%.

The other category which included international donors such as MACAIDS, Elton John Foundation, KfW and the European Commission combined were the second largest contributor to the Advocacy category in 2013/14, accounting for 24% of the expenditure in this category. The other group accounted for 11% of Prevention activities and 14% of Treatment and Care activities.

Figure 8 ASC Expenditure by Funding Source Contribution 2013/14



In 2014/15, as reported above, the main funding source with approximately \$4.8MUSD was the GF. Thirty-six per cent of GF funding was expended on Prevention, while 31% was expended on Treatment and Care activities. PCPM accounted for approximately 29% of GF expenditure. GF was one of the two contributors to the Research category, accounting for only 8% of expenditure in this category. Their contribution to Prevention represented 30% of expenditure in this spending category, making it the single largest contributor to the prevention response. The GF was also the single largest contributor to Treatment and Care in the 2014/15 period, funding 58% of treatment expenditure.

2014/15 saw the majority of GoJ funds being expended on PCPM, which was similar to the 2013/14 period. Fifty-nine per cent of GoJ funds were expended on PCPM, which accounted for approximately 44% of all funds expended on PCPM. Twenty-three per cent and 16% of GoJ funds was spent on Prevention and Treatment and Care respectively.

The USG was the third largest funder of prevention n 2014/15, accounting for 19% of expenditure in this category. The USG was the single largest contributor to both the Advocacy and Training categories with 46% and 64% expenditure respectively for the fiscal period 2014/15. The USG also contributed to the PCPM as well as Treatment and Care categories, contributing 11% and 3% expenditure respectively. It was the main contributor to the Social Protection category with \$7,295USD or 91% of that category's expenditure for 2014/15.

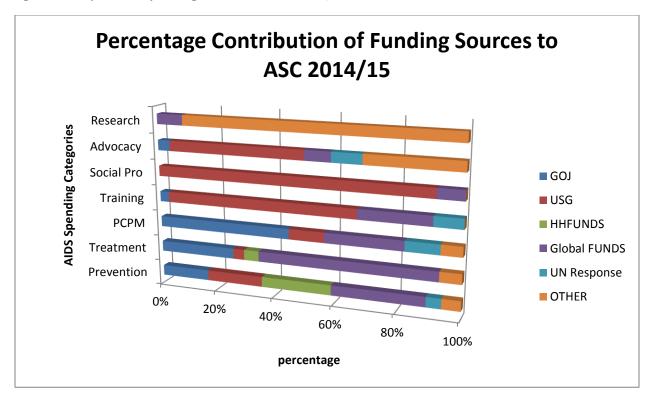
Table 20 Financing Sources by ASC 2014/15

	Expenditure (USD)								
2014/15	Prevention	Treatment	PCPM	Training	Social Pro	Advocacy	Research		
GOJ	947891	662191	2469021	13486	0	32409	0		
USG	1096825	98569	643312	279745	7295	358875	0		
HH Fund	1345919	129703	0	0	0	0	0		
Global Fund	1733537.	1504628	1395767	102018	697	67484	3182		
UN	275684	0	602513	41016	0	77040	0		
Response									
OTHER	349523.77	180684	378208.1	0	0	244293	32195		
Total	5749380	2575778	5488822	436267	7992.81	780104	35378		

Household funds were the main contributor or funding for Prevention in 2013/2014 with 26% of funds expended under Prevention activities. In 2014/15 it was the second greatest contributor after the GF, accounting for 23% of Prevention expenditure. One hundred per cent of this expenditure for both years was on the purchase of condoms by individuals. Ninety-seven per cent of HH funds in 2013 were directed towards Prevention and the remaining 3% directed towards Treatment and Care. In 2014/15 the expenditure on Treatment and Care through household funds increased by almost 200%; therefore only 91% of HH funds in 2014/15 was expended on Prevention and 9% on Treatment and Care. This was due mainly to data showing the purchase of ARVs in the private sector.

Research received the least support. The total spend on research was supported by other financing sources, namely the Canadian Institute for Health Research, for both periods and by the GF in 2014/15.

Figure 9 ASC Expenditure by Funding Source Contribution 2013/14



ASC by Provider of Services

Table 21 AIDS spending category by Service Providers 2013/14

	Expenditure (USD)								
2013/14	PREVENTION	Treatment	PCPM	TRAINING	SOCIAL PRO	ADVOCACY	RESEARCH		
CENTRAL GOV	956698	892707	1122545	170068.	4447	135647	0		
Parastatal	831234	544206	1713699	661	3970	10850	0		
PVT	1445009	30582	298.2107	0	0	0	0		
Civil Soc.	1865167	713623	1169350	5574	1386	591446	1383		
Multi	4467	0	460995	3855	0	7721	0		

Figure 10 Percentage Expenditure of Services Providers on ASC

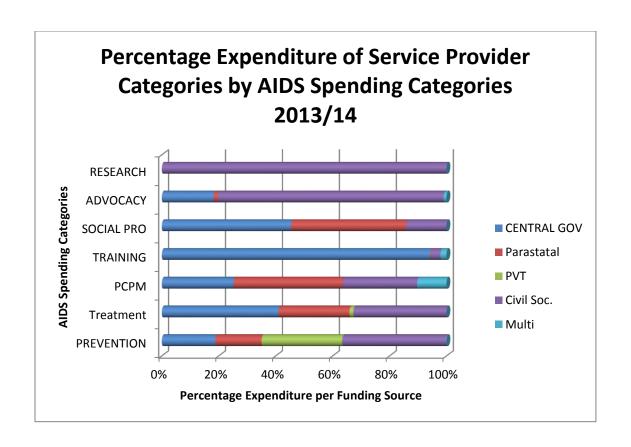


Table 22 AIDS Spending Categories by Service Providers 2014/15

		Expenditure (USD)								
	PREVENTION	OPC	PCPM	TRAINING	SOCIAL PRO	ADVOCACY	RESEARCH			
Central Gov	2,249,884	1,782,248	3,556,856	388,049	539	201,631	3182			
Parastatal	799,730	448,173	601,909	32475	7295	0	0			
Private	14,351	147,458	4046	0	158	0	0			
Civil Soc.	698,462	197,898	883,830	15,744	0	576,379	0			
Multi	10000	0	18451	0	0	0	0			

'Table 23 Expenditure of ASC broken down by subcategories' below disaggregates each ASC based on the various types of activities and interventions for the 2013/14 period. This includes key populations, such as OSY and related target populations, as well as workplace and PMTCT interventions. This category also includes condom marketing. The single largest expenditure on prevention interventions took place among youth both in and out of school, with \$552,883USD or 10.8% of prevention interventions. This was followed by interventions with MSM with 6.3% of the expenditure in this category. Prevention interventions for PLHIV accounted for the least of the expenditure in the Prevention category.

In 2014 expenditure among CSW interventions accounted for the least proportion with 1.7% or \$1,012,47USD. Once again expenditure on youth accounted for the single most prevention intervention with 11.2%. This was followed by MSM interventions at 9%. This signified an almost 3% increase over the previous year's expenditure.

Table 23 Expenditure of ASC broken down by subcategories 2013/14

	Expenditure by Spend	ing Category	,				
		2013/14		2014/15	2014/15		
PREVENTION	N	5102575	100%	5749382	100%		
	MSM	321886	6.3%	521500	9%		
	PLHIV	24181	0.5%	111139	1.9		
	YOUTH	552883	10.8%	645827	11.2		
	CSW	78894	1.5%	101247	1.8		
	OTHER	4124729	80.8%	4369667	76.		
TREATMENT AND CARE		2182764	100%	2575778	100%		
	PITC	168425	7.7	121089.7	4.7		
	ARV	47510	2.2	176661.2	6.9		
	Nutrition	1706	0.08	1543	0.06		
	HIV lab test	276693	12.7	1080946	41.9		
	Outpatient	1002310	45.9	754494.	29.3		
	ТВ	157349	7.2	44494	1.7		
	OTHER	528769	24.2	396549.	15.4		
PCPM		4419034	100%	5488822	100%		
	PCPM	2702132	61.14757	3693727	67.29544		
	Admin/transaction cost	461,593.1	10.4	313573.8	5.7		
	M/E	237301	5.4	627,007	11.4		
	Patient tracking	724,728	16.4	569,370	10.4		

	OTHER	293,280	6.6	285,144	5.2
TRAINING		180158.1	100%	436267.8	100%
SOCIAL PRO	TECTION	9804.09	100%	7992.81	100%
ADVOCACY		745664.2	100%	780104.4	100%
	Advocacy	179,773	24.1	161,064	20.6
	Human rights	61,066	8.2	244299	31.3
	Gender-based violence	83407	11.2	118,514	15.2
	OTHER	421,416.	56.5	256,228	32.8
RESEARCH		1383.52	100%	35378.75	100%

Outpatient care facilities and treatment accounted for 45% of expenditure or approximately \$1MUSD in the Treatment and Care ASC for the 2013/14 period. The "other" category which includes Psychological services and In Patient accounted for the second highest expenditure. Activities related to HIV Laboratory testing accounted for 41% of the 2014/15 expenditure for this category. In dollar value this was approximately \$1.1MUSD while outpatient care contributed 29% of expenditure or \$750,000USD.

PCPM accounted for the majority of expenditure in both years with 61% and 67% of expenditure respectively, or \$2.7MUSD and \$3.6MUSD, for 2013/14 and 2014/15. Patient Tracking followed with approximately four times less expenditure with 16% in this category for 2013/14. In 2014/15 the second highest level of expenditure was Monitoring and Evaluation with 11% of expenditure.

In the Advocacy category, advocacy interventions expended \$1.8MUSD or 24% of funds for 2013/14 while human rights activities accounted for the majority of expenditure in 2014/15. Gender- based violence activities accounted for 11% of Advocacy expenditure in 2013/14. This increased in the 2014/15 fiscal year by 4 percentage points to 15% of funds expended or approximately \$118,000USD.

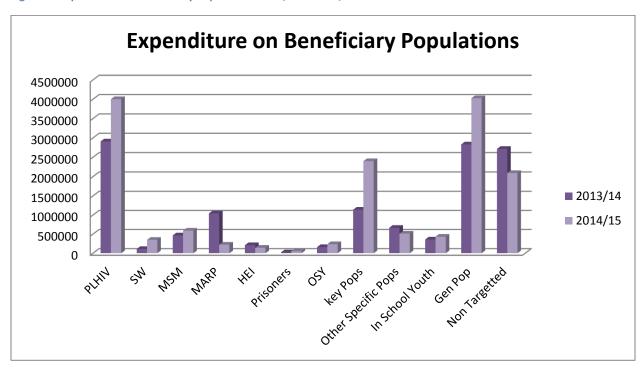
Beneficiary Populations

Table 24 Expenditure on Beneficiary Population

	2013		2014	
	Expenditure (USD)	%	Expenditure (USD)	%
PLHIV	2909678	23.1	4003482	26.5
SW	112866	0.9	349729	2.3
MSM	467074	3.7	591752	3.9
MARP	1043110	8.3	223338	1.5
HEI	210687	1.7	142534	0.9
Prisoners	22852	0.2	54333	0.4

OSY	160922	1.3	238550	1.6
Key Pops	1139204	9	2400898	15.9
Other Specific Pops	665424	5.3	513993	3.5
In-School Youth	360818	2.9	433780	2.9
Gen Pop	2831842	22.4	4028978	26.7
Non Targeted	2716902	21.5	2092355	13.9
Total	12641382	100	15073726	100

Figure 11 Expenditure on Beneficiary Populations 2013/14 & 2014/15



PLHIV and general population accounted cumulatively for 45% and 53% respectively for the 2013/14 and 2014/15 fiscal years. Each of these two beneficiary population groups recorded increases in the recorded expenditure over 2013/14.

MSM accounted for approximately 3.8% for both fiscal years under review. It must be noted that while the proportion of total spend in the BP remained constant, it increased in absolute terms when compared to what was spent in 2013/14. In absolute terms, the MSM spend in 2013/14 was recorded at \$467,074USD compared to the 2014/15 recording of \$591,752USD.

It should be noted that MARPs encompasses, MSM & CSW when unable to disaggregate. Therefore expenditure on these populations, if disaggregated, would lead to increased expenditure in each of the MSM and CSW categories. Further disaggregation of these populations was not possible due to

respondents' inability to break down the detail required, due to the retrospective nature of the exercise and the fact some entities serve both MSM and CSW. Key populations spoke to OSY, parents of OSY and general population communities which in the Jamaican context were at higher risk based on social and economic indicators.

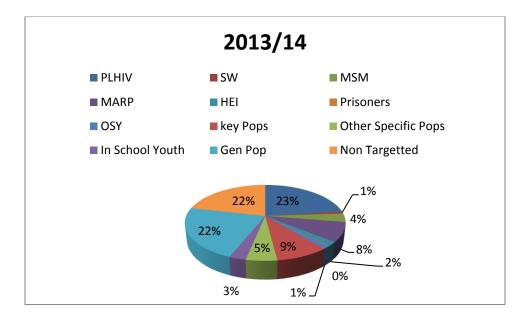


Figure 11 Percentage Expenditure of BP 2013/14

Resource Cost

This category looks at the goods and services which were purchased for the AIDS interventions to take place. Resource cost are normally decided by the service provider with supervision or input from financing agents if necessary.

Resource cost can be either current or capital expenditure. Resource cost includes the purchase of ARVs and condoms as well as wages and the purchasing and maintenance of vehicles.

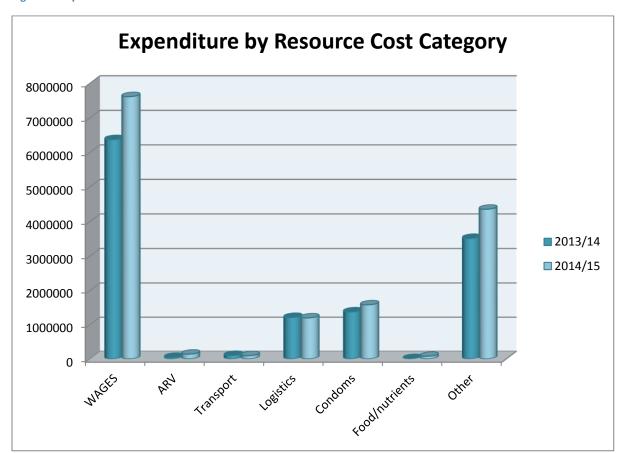


Figure 12 Expenditure on Resource Cost

HR has the greatest proportion of expenditure of resource factors, averaging almost three times the next highest resource category. HR cost approximately \$7.61million USD in 2014/15, representing an increase of approximately 17% over the \$6.37million USD for 2013/14 period. HR represented 50% of resource cost expenditure for each year. Expenditure on condoms represented approximately 10% of money expended on resource cost in both fiscal years. It should be noted that personal out-of-pocket funds contributed to the majority of condom expenditure.

Logistics cost approximately \$1.15MUSD, decreasing marginally from the \$1.17M USD in the previous period. The other categories analysed were ARV, transportation, and food/nutrients, which II proved individually insignificant relative to the other two resource cost categories. In fact, expenditure on ARVs represented less than 1% of expenditure in 2013/14. It should be noted that \$2millionUSD was spent on ARVs in the 2012/2013 period, or approximately 10% of funds expended in that fiscal period. The

decrease in expenditure on this item may be attributed to the overstocking of ARVs in the previous period as the GF Round 7 Grant came to a close. In 2014/15 the percentage expenditure on ARVs increased slightly from 0.3% to 0.9%.

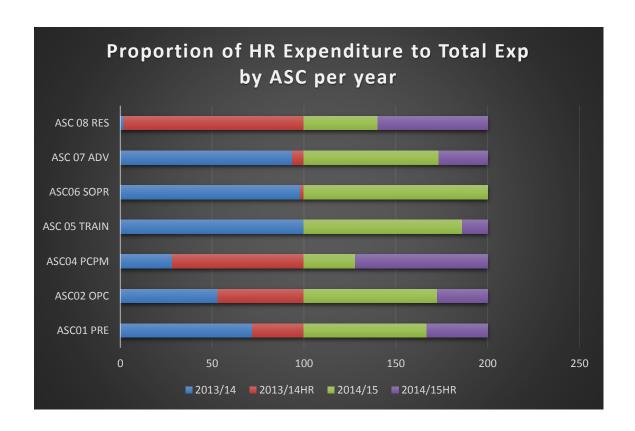
Human Resource Expenditure

Human resources once again accounted for the greatest levels of expenditure in the two periods under review. This is similar to the previous two NASA exercises. The following is analysis of HR cost as it relates to several variables, ASC and Funding Source.

Table 25 Human Resource Cost by AIDS Spending Categories

	2013/14		2014/15	
	Expenditure (USD)	Percentage of ASC Category	Expenditure (USD)	Percentage of ASC Category
PREVENTION	1774782	34	2176741	38
Treatment & Care	1190413	55	921712	36
PLANNING, COORDINATTION AND PROGRAMME MANAGEMENT	3359392	76	4076966	74
TRAINING	0	0	57228	13
SOCIAL PROTECTION	189	1.9	0	0
ADVOCACY	48603	6.5	364991	47
RESEARCH	1358	98	21168	60
TOTAL	6374738	50	7618808	51

Human resource cost was specifically pulled out and assessed by ASC. The results are contained in the table above. In terms of absolute numbers, the highest HR spend was within the PCPM category, with a total spend of \$3.4M USD in 2014/15, up from \$2.69MUS in 2013/14. The ASC with the second highest HR spend was Prevention, with a total of \$1.68MUSD in 2014/15,increasing from \$1.2MUSD in the previous fiscal period of 2013/14. The categories with the highest overall spend all accounted for the highest HR spend, although not in the same order. Treatment and Care in both years accounted for the third highest spend in HR.



The GoJ was the main funder of Human Resource cost with approximately \$3.6MUSD in each of the fiscal years under review. It represented 87% and 90% of GoJ expenditure for 2013/14 and 2014/15 respectively. In 2013/14 it accounted for 55% of GF expenditure. However, while the absolute dollar value increased from \$1.7MUSD to \$1.9USD, the percentage share for GF decreased to approximately 40%.

Outside the Household funds which expended no funds on HR, the USG was the main funding source with the least expenditure on HR with 28% and 32% respectively for 2013/14 and 2014/15.

Table 26 Human Resource Cost vs Other Expenditure by Funding Source 2013/14

Funding Source	2013/14			2014/15		
	Total Exp.	HR Exp.	% share	Total Exp.	HR Exp.	% share
GOJ	4221876.12	3698552	87.6	4093248	3690993	90.1
USG	2585154.49	732165.81	28.3	2404866	780374.2	32.4
House Hold	1372407.23	0	0	1475623	0	0
Global Fund	1748361.42	966155	55.2	4897317	1956156	39.9
UN Response	955730.13	375849	39.3	1088898	520399.7	47.7
Other	1757852.55	602014	34.2	1113773	670885.5	60.2
Total	12641381.9	6374738	50.42754	15073726	7618808	50.5

Discussion and Recommendations

Considerations for future NASA Exercise

- Data collection should be integrated into finance monitoring processes with sub-recipients such as regions and civil society organizations.
- As part of institutionalizing NASA a database must be set up in order for the data collection process not to be burdensome to stakeholders. This institutionalizing will also assist in increasing the importance of NASA along with other Ministry of Health monitoring processes, thus providing more accurate data for the expenditure assessment and creating a more accurate description of the country's expenditure. If this is not done, the response stands the risk of lack of responsiveness from stakeholders.
- This database should be integrated into the collection of data from non-sub-recipients but those who contribute to the response such as private laboratories. The data from this sector should include:
 - -Total number of HIV tests done
 - -Number of positive HIV tests
 - -Number of CD4 tests done
 - -Number of viral load test done
 - Average cost of each test annually
 - The use of health insurance
- Private physicians, especially those who are known to be HIV specialists, should also report HIV patient treatment expenditure. This includes:
 - Number of HIV patients treated annually
 - Average cost per visit
 - Average number of visits each year
 - Types of test normally requested for HIV patients
 - Regularity of these tests
 - OI medications prescribed
 - Supplements prescribed
 - Comorbidities and treatment as such
 - Patient fills prescription at public or private pharmacy sites

- The use of health insurance
- NASA's accuracy is also based on other health information and record management systems. Therefore for NASA to provide a more accurate depiction of HIV expenditure, the information management systems of RHAs and NGOs and even private entities must be improved and digitalized. This will reduce the time taken for data preparation and collection, assist in responsiveness of stakeholders and accuracy in data, thus contributing to a more fulsome report.
- The tool used to collect data for the NASA database to be institutionalized should include narrative surrounding the work of each stakeholder who will contribute to the NASA report. This will assist those collating the data to better code activities based on the NASA tool and thus facilitate a more comprehensive, robust and accurate NASA report.
- The NASA tool needs to be improved to capture more comprehensive information/currency of response. For instance there is no coding for Technical Assistance, whether as a resource cost or an AIDS Spending Category. Therefore technical assistance is lost in areas such as planning and coordination or in general areas such as HIV Specific Laboratory with a resource cost labeled Consultant.
- The NASA tool should be updated. Amendments should be made to the beneficiary populations, especially as the response matures to incorporate transgender females, as new data emerges regarding prevalence in this community compared to MSM.
- Updating of the tool should also look at the coding for resource costs and take into consideration operation activities versus simply administrative activities. There should also be room for communication, as the use of communication tools is extremely important in several interventions as well as planning coordination.
- The NASA data entry tool should also be updated to allow for several data entry personnel to enter data in the same master file, thus reducing the loss of data when trying to merge various files in which data has been entered.

Considerations for Jamaica's HIV Planning

- The fact that the real expenditure on HIV/AIDS has decreased as well as the purchasing power from 2009 until 2015, the cost effectiveness of projects, interventions and the overall response needs to be analyzed. This will further assist the country as it becomes transition ready. Moreover, this is important as the GoJ increases its expenditure in both real and nominal terms amidst a health system which is challenged by being under-resourced.
- As Jamaica increases its preparation for transition readiness it needs to evaluate some of its gaps in expenditure data. This includes transportation for patients. While there is funding for small numbers of PLHIV to receive travel assistance, this may need to increase especially as the country moves towards test and treat and aims to increase its retention in care. Questions surrounding transportation for access need to be asked with the aim of facilitating all who may need assistance. It is also an area where the government may need to employ partnerships with private sector entities if this expenditure can't be covered in total by government resources.
- Jamaica is applying for the elimination of mother-to-child transmission. However, the limited expenditure on this area needs to be evaluated. This expenditure here speaks mainly to PMTCT nurses. While a PMTCT protocol is in existence a proper expenditure analysis on this area has gaps if proper planning of EMTCT is to be undertaken. Currently, there is limited information on the expenses of ARVs directly attributed to PMTCT. This is especially true for ARVs used at the point of delivery. Additionally, indirect expenditure on social interventions by civil society organizations which empower women and girls living with HIV is difficult to disaggregate but is necessary to assist in the EMTCT process.
- While the country has in the past ordered more ARVs than needed at a point in time, it needs to assess possible gaps in its supply chain. It is incumbent on the MoH and NHF to determine the burden which may be possibly created by clients who are treated privately and receive the low cost and no cost medication in the public sector and thus are not being properly accounted for as part of public sector treatment sites. It is recognized that this burden may not be huge but its impact must still be evaluated especially as Jamaica becomes transition ready and needs to expend its resources efficiently and effectively. This is also important as the country tests and treats and tries to improve retention in care.
- Expenditure on HIV and OIs and NCDs has to be evaluated. As NASA becomes institutionalized it needs to glean this expenditure, which will be a burden both in the public and private health systems for varying reasons. It speaks to accessing healthcare, as well as the number of laboratory tests needed to be done by patients and the medications needed. A study in Kenya noted that when both HIV and NCD screening took place simultaneously, HIV positive patients

had a significantly higher rate of hypertension than those who were HIV negative. This increases the expenditure by and on the patient, creating burdens on government and private insurance schemes and public insurance schemes such as the NHF. If this expenditure was known it could facilitate better health planning.

- It should be noted that services provided to NGOs by several private suppliers may sometimes be done at reduced cost. Therefore the actual economic cost for activity must be used in budgeting and planning.
- Minimum expenditure takes place on our youth, both those in and out of school.
- NASA data should and can be used to measure the effectiveness of the service providers, both public and non-governmental. This may be key in implementing an efficient and effective programme with dwindling funds and in light of the transitioning from GF funding.

Key Messages

- 1. There is an increase in GoJ expenditure both nominal and real over the last six years. However, the purchasing power has reduced, therefore the cost effectiveness of the response should be evaluated.
- 2. NASA needs to be institutionalized in short order.
- 3. Institutionalizing NASA will increase its accuracy and relevance.
- 4. Health records and health information management both in public and private sector are integral to the institutionalizing of NASA.
- 5. Gaps in expenditure need to be evaluated accordingly thus informing better HIV and health planning as the country prepares for transition readiness.
- 6. The NASA tool needs to be improved and updated to reflect more accurately the current response.
- 7. The Global Fund continues to be the main funder of Jamaica's HIV Programme.
- 8. Wages continue to be the greatest resource cost expenditure.

Conclusion

Jamaica still relies heavily on international donor funds for its HIV response. However over the years GoJ expenditure has increased both in nominal and real value terms; while the total AIDS expenditure has deceased in real terms over the years.

Notably, the GoJ accounts for the majority of expenditure on treatment and care, while HH funds contribute a small percentage to treatment and care. Due to the limited information from private physicians this figure should be used as an indicator of possible expenditure for PLHIV, especially as Jamaica prepares to transition and is challenged by limited public sector health care workers.

While the RHAs account for the majority of expenditure by service providers, civil society/NGOs have continued to play an important role in the response especially is it relates to prevention. The RHAs are integral to the treatment and care process in the public sector both from a clinical and social perspective. Further analysis should be done among these groups to evaluate the cost effectiveness and implementation in the various sectors. This is especially important as the government has tight budgetary constraints, and even in light of them not employing the full cadre of workers in the health sector.

NASA exercise needs to be institutionalized. If not, the process will become arduous for stakeholders, thus reducing response rates and accuracy of data submitted. NASA institutionalization should also include private sector partners such as laboratories and private doctors who are integral in HIV treatment and management. This information will assist in planning HIV activities and interventions in the future, especially in this period of transitioning.

Bibliography

- 1. [Online] [Cited: November 21, 2016.] https://www.google.com.jm/search?q=gdp+per+capita+jamaica&oq=gdp&aqs=chrome.2.69i59j69i57j6 9i59j0l3.2714j0j7&sourceid=chrome&ie=UTF-8.
- 2. **World Bank.** *www.worldbank.org.* [Online] [Cited: November 21, 2016.] http://www.worldbank.org/en/country/jamaica/overview.
- 3. **Jamaica Parliament.** *www.japarliament.gov.jm.* [Online] [Cited: November 21, 2016.] http://www.japarliament.gov.jm/attachments/1040_Sectoral%20Presentation.pdf.
- 4. **Clinton Health Access Initiative.** *Human Resources Requirements for HIV Treatment Facilities.* Kingston: s.n., 2014.
- 5. Ministry of Health, Jamaica, Policy and Planning Unit. National Health Account. Kingston: s.n., 2015.
- 6. National AIDS Spending Assessment 2011-2013. Kingston: National HIV Programme, 2014.
- 7. Ministry of Health, HIV/STI/TB Unit, Jamaica. AIDS report 2014. Kingston: Ministry of Health, 2015.
- 8. **Jamaica Country Coordinating Mechanism for the Global Fund.** *JAM-H Concept Note for the Global Fund.* Kingston: s.n., 2015.
- 9. **World Health Organization.** *www.who.int.* [Online] [Cited: November 21, 2016.] http://www.who.int/woman_child_accountability/progress_resources/en/.
- 10. **UNAIDS.** *www.unaids.org.* [Online] [Cited: Month 21, 2016.] http://www.unaids.org/en/dataanalysis/datatools/nasapublicationsandtools.
- 11. —. www.unaids.org. [Online] [Cited: November 21, 2016.] http://files.unaids.org/en/media/unaids/contentassets/dataimport/pub/manual/2009/20090916_nasa_classifications_edition_en.pdf.
- 12. —. www.unaids.org. [Online] [Cited: November 21, 2016.] http://files.unaids.org/en/media/unaids/contentassets/dataimport/pub/basedocument/2009/2009040 6_nasa_notebook_en.pdf.
- 13. **Statistical Institue of Jamaica.** *www.statinja.gov.jm.* [Online] [Cited: November 21, 2016.] http://statinja.gov.jm/Trade-Econ%20Statistics/CPI/NewCPI.aspx.
- 14. **Bank of Jamaica.** Bank of Jamaica. *www.boj.org.jm.* [Online] 2016. [Cited: 11 16, 2016.] http://www.boj.org.jm/foreign_exchange/fx_historical_rates.php.

Appendix I

Table 27 Matrices of Funding Agency x Beneficiary Population 2013/14

2013/14	PLHIV	CSW	MSM	KEYPOP	ARY	PRISON	GENPOP
PUB	2459221	74210.17	327937.9	257165.1	151846.7	2852.06	3800796
PVT	9708.89	0	0	0	0	0	1454980
MULTI	2699	8343.45	9457.14	252532	9076	0	822605.6
BILAT	0	0	21513.4	100092	0	0	368844.7
NGO	438049.3	23011.33	108166.1	514811.9	0	20000	1381558

Table 28 Matrices of Funding Sources by Beneficiary Population

2014/15	PLHIV	CSW	MSM	KEYPOP	ARY	PRISON	GENPOP
PUB	3661879	302032.4	477168.9	1710072	210767.7	30613.57	4686071
PVT	26368.26	0	0	0	0	0	1471055
MULTI	22600	0	0	167700	27783.24	0	678621.7
BILAT	0	0	0	0	0	0	87387.29
NGO	292634.1	47696.77	114583.9	523126	0	23720	409112.9

Appendix 11- Letters to stakeholders

General Stakeholders

Dear Colleague:

National AIDS Spending Assessment April 1, 2013- March 31, 2015

The Ministry of Health in collaboration with the Joint United Nations Programme on HIV and AIDS (UNAIDS) and through financing from the Global Fund against AIDS, Tuberculosis and Malaria (GFATM) will be conducting a National AIDS Spending Assessment (NASA) for the period April 1, 2013 – March 31, 2015. NASA seeks to evaluate the expenditure and track the resources consumed under the HIV and AIDS response in Jamaica and is a standardized tool which allows for global comparisons.

This assessment informs the country on its HIV expenditure and burden, as well as, analyses the cost effectiveness of the HIV response. Data gathered from NASA assists the National HIV Programme, its donors and partners to budget and plan for HIV Programmes more effectively thus improving the efficacy of the HIV Response.

In order to complete the NASA exercise for the period April 1, 2013- March 31, 2015, we are requesting information from your organization regarding expenditure on HIV related activities and programmes throughout the island for the financial years April 1, 2013 to March 31, 2014 and April 1, 2014 – March 31, 2015.

Ms. Renée Johnson, an external consultant has been hired to conduct this exercise and has been authorized to contact you regarding this information. The data collection template which is attached should be completed and returned by May 11, 2016 to rmoniquejohnson@gmail.com. Any questions regarding the NASA process should be addressed to Ms. Johnson at the abovementioned email or via telephone, 1-876-845-1581.

Your organization's contribution to this process will allow the country, both public and private sector, to increase the effectiveness of the national HIV response. All information received will be treated confidentially and will only be used in the NASA exercise. The Ministry of Health thanks you for your usual cooperation and anticipates working with you as we serve the health needs of the population.

Private Doctors

Dear Colleagues

The Ministry of Health in collaboration with the Joint United Nations Programme on HIV and AIDS (UNAIDS) will be conducting a National AIDS Spending Assessment (NASA) for the period April 1, 2013 – March 31, 2015. NASA seeks to evaluate the expenditure and track the resources consumed under the HIV and AIDS response in Jamaica and is a standardized tool which allows for global comparisons.

This assessment informs the country on its expenditure and analyses the cost effectiveness of these expenditures and the activities under the HIV response. In previous NASA exercises data was not collected from the private sector. This year the Ministry is seeking to improve its stakeholder involvement and response which will in turn increase the accuracy of the NASA data. To this end we are requesting the following information from your organization regarding HIV related tests which have been conducted at your laboratories throughout the island for the financial years April 1, 2013 to March 31, 2014 and April 1, 2014 – March 31, 2015:

- 1. The average number of HIV patients seen annually?
- 2. Average fee charged to each patient per visit?
- 3. The average number of visits by PLHIV each year?
- 4. The tests which PLHIV are referred? (CD 4, Viral Load, Liver Function, Executive Profile etc)
- 5. How often are they referred for these tests?
- 6. How many of them are on ARVs
- 7. How often are

Ms. Renée Johnson, an external consultant, has been authorised to contact you regarding this information. The requested information should be returned by **June 11, 2016.** We recognize the limited time; however your organization's contribution to this process will allow the country, both public and private sector, to increase the effectiveness of the national HIV response.

All information received will be treated confidentially and will only be used in the NASA exercise.

Laboratories

Dear Colleagues

The Ministry of Health in collaboration with the Joint United Nations Programme on HIV and AIDS (UNAIDS) will be conducting a National AIDS Spending Assessment (NASA) for the period April 1, 2013 – March 31, 2015. NASA seeks to evaluate the expenditure and track the resources consumed under the HIV and AIDS response in Jamaica and is a standardized tool which allows for global comparisons.

This assessment informs the country on its expenditure and analyses the cost effectiveness of these expenditures and the activities under the HIV response. In previous NASA exercises data was not collected from the private sector. This year the Ministry is seeking to improve its stakeholder involvement and response which will in turn increase the accuracy of the NASA data. To this end we are requesting the following information from your organization regarding HIV related tests which have been conducted at your laboratories throughout the island for the financial years April 1, 2013 to March 31, 2014 and April 1, 2014 – March 31, 2015:

☑ The total number each of HIV, CD4 and HIV Viral Load tests conducted, Liver function Test, Renal Function, Hepatitis B&C

The cost per unit of each test for the end user

Ms. Renée Johnson, an external consultant, has been authorised to contact you regarding this information. Your organization's contribution to this process will allow the country, both public and private sector, to increase the effectiveness of the national HIV response.

All information received will be treated confidentially and will only be used in the NASA exercise.