National AIDS Spending Assessment 2015-2017

Expenditure Analysis of Jamaica's HIV Response

This is the fourth NASA exercise conducted by Jamaica. It represents expenditure for the Jamaican HIV response for the periods April 2015 to March 2017

Contents

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LIST OF ACRONYMS

AFEN	African Field Epidemiology Network
AHF	AIDS Healthcare Foundation
am-FAR	The Foundation for AIDS Research
ARV	Antiretroviral
ASHE	The Ashe Company
BOJ	Bank of Jamaica
CARPHA	Caribbean Public Health Agency
CDC	Centre for Disease Control
CHARES	Centre for HIV/AIDS Research and Education Services
CIHR	Canadian Institutes of Health Research
COF	Children of Faith
CVC	Caribbean Vulnerable Communities (Coalition)
DRL	Bureau of Democracy, Human Rights and Labour
EFL	Eve for Life
EJAF	Elton John AIDS Foundation
EU	European Union
FHI-Linkages	Family Health International – Linkages
GAC	Government of Canada
GDP	Gross Domestic Product
GFATM	Global Fund for AIDS Tuberculosis and Malaria
GOJ	Government of Jamaica
HIV	Human Immuno-deficiency Virus
HPP	Health Policy Plus

HST	HIV, STI and Tuberculosis Unit
HWWJ	Hope Worldwide Jamaica
IADB	Inter-American Development Bank
ICW	International Community of Women Living With HIV
IDP	International Development Partners
IMF	International Monetary Fund
JAPPAIDS	Jamaica's Paediatric, Perinatal and Adolescent HIV/AIDS Programme
JASL	Jamaica AIDS Support for Life
JCW	Jamaica Community of Positive Women
JEF	Jamaica Employers' Federation
JFLAG	Jamaica Forum for Lesbians, All-Sexuals and Gays
JN +	Jamaica Network of Seropositives
JRC	Jamaica Red Cross
JYAN	Jamaica Youth Advocacy Network
KPH	Kingston Public Hospital
KSAHD	Kingston & St. Andrew Health Department
MOEYI	Ministry of Education, Youth and Information
MOH	Ministry of Health
MOL&SS	Ministry of Labour & Social Security
NASTAD	National Alliance of State and Territorial AIDS Directors
NCDA	National Council on Drug Abuse
NCH	National Chest Hospital
NERHA	North East Regional Health Authority
NFM	New Funding Model
NFPB	National Family Planning Board

NHF	National Health Fund
NISP	National Integrated HIV and Sexual Health Plan
NPHL	National Public Health Laboratory
OI	Opportunistic Infection
OSY	Out of School Youth
PAHO	Pan American Health Organization
PANCAP	Pan Caribbean Partnerships Against HIV/AIDS
PCU	Project Coordinating Unit
PEPFAR	President's Emergency Plan for AIDS Relief
PIOJ	Planning Institute of Jamaica
PR	Principal Recipient
RCNF	Robert Carr Civil Society Networks Fund
SCHD	St. Catherine Health Department
SERHA	South East Regional Health Authority
SRHA	Southern Regional Health Authority
SR	Sub-Recipient
SSR	Sub Sub-Recipient
STHD	St. Thomas Health Department
SWAJ	Sex Work Association of Jamaica
TFM	Transition Funding Model
TH/AE	Total HIV/AIDS Expenditure
THE	Total Health Expenditure
UCSF	University of California San Francisco
UHWI	University Hospital of The West Indies
UN Women	United Nations Women - United Nations Entity for Gender Equality and the

	Empowerment of Women
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNTF	United Nations Trust Funds
USAID	United States Agency for International Development
UWI	University Hospital of The West Indies
WRHA	Western Regional Health Authority

Fact Sheet

Table 1 – Expenditure by Funding Source

Source Name	2015/16 USD	%	2016/17 USD	%
Public	$6,950,001	39	$6,345,447	35.5%
Private	$1,731,782	9.7	1,629,352	9.1%
International	$9,146,659	51.3	9,891,106	55.3
Total	$17,828,442	100	$17,865,905	100%

Table 2 – Expenditure by Types of Financing Agents

Financing Agent	Expenditure 2015/16	% Expenditure 2015/16	Expenditure 2016/17	% Expenditure 2016/17
Public	$12,486,874.80	70.0%	$13,937,082.62	78.0%
Private	$1,930,364.65	10.8%	$1,848,330.23	10.3%
Bilateral	$2,203,633	12.4%	$961,980.04	4.0%
Multilateral	$803,103.07	4.5%	$709,875.88	4.0%
Int'l Non Profit	$404,466	2.3%	$408,635.84	2.3%
Total	$17,828,441.77	100.0%	$17,865,904.61	100.0%

Table 3 – HIV Expenditure by Types of Service Providers

Providers	Expenditure 2015/16	% Expenditure	Expenditure 2016/17	% Expenditure
Public	$12,181,326.07	68.3%	$11,571,102.16	64.8%
Not for-profit	$4,495,129.02	25.2%	$3,797,138.03	21.3%
Private for-profit	$23,073.79	0.1%	$1,558,580.61	8.7%
Int'l Donors	$1,128,912.90	6.3%	$939,083.82	5.3%
Total	$17,828,441.78	100.0%	$17,865,904.62	100.0%

Table 4 – Expenditure by AIDS Spending Categories

Spending Categories	Expenditure 2015/16(USD)	% Expenditure 15/16	Expenditure 2016/17(USD)	% Expenditure 16/17
Prevention	$5,787,300.95	32.5%	$4,936,840.37	28.50%
Treatment/ Care	$2,347,196.04	13.2%	$2,391,328.31	14.50%
OVC Education	$21,049.10	0.1%	$6,805.95	0.00%
PCPM	$7,090,525.98	39.8%	$9,538,154.01	50.70%
Training	$1,672,662.09	9.4%	$150,179.15	0.90%
Social Protection	$48,834.08	0.3%	$70,757.74	0.40%
Advocacy	$800,519.85	4.5%	$727,605.43	4.07%
Research	$60,353.72	0.3%	$44,234.04	0.30%
Total	$17,828,441.79		$17,865,905.00	100%

Table 5 – Total HIV Expenditure by Beneficiary Populations

Beneficiary Populations	Expenditure 2015/16	% Expenditure 2015/16	Expenditure 2016/17	Expenditure 2016/17
PLHIV	$5,768,506.60	32.4%	$5,164,221.00	28.9%
CSW	$210,548.90	1.2%	$372,181.78	2.1%
MSM	$508,879.45	2.9%	$984,091.39	5.5%
Key Population	$1,038,159.60	5.8%	$259,971.51	1.5%
Prison	$11,508.15	0.1%	$23,272.40	0.1%
Marginalized/ at-risk youth	$210,058.81	1.2%	$61,096.78	0.3%
Youth in School	$288,892.38	1.6%	$255,334.58	1.4%
Women	$183,759.60	1.0%	$6,011.64	0.0%
Transgender	$19,078.43	0.1%	$98,434.96	0.6%
Most at-risk	$1,431,692.50	8.0%	$783,295.75	4.4%
General Population	$2,159,835.00	12.1%	$1,583,289.27	8.9%
No direct beneficiary	$4,085,346.70	22.9%	$7,940,189.00	44.4%
Others[1]	$1,912,176.37	10.7%	$334,514.90	1.9%
Total	$17,828,441.79	100.0%	$17,865,904.61	100.0%

[1] Other beneficiary populations include HIV exposed children, Health Care Workers and Specific Accessible Populations such as programmatic staff who have received capacity building or external training.

Table 6 HIV/AIDS Expenditure by Production Factor

Resource Cost	Expenditure 2015/16	%Expenditure 2015/16	Expenditure 2016/17	% Expenditure 2016/17
Wages	$7,045,632.97	39.5%	$7,222,168.94	40.42%
Consulting Services	$2,421,595.67	13.6%	$1,203,419.15	6.74%
Antiretroviral	$1,847,527.56	10.4%	$1,880,810.11	10.53%
Transportation	$353,343.80	2.0%	$400,050.72	2.24%
Logistics	$1,293,635.74	7.3%	$1,016,902.88	5.69%
Condoms	$1,429,363.81	8.0%	$1,423,638.72	7.97%
Food/ Nutrient	$218,268.56	1.2%	$385,842.8	2.16%
Medical Supplies and Reagents	$1,468,245.00	8.2%	$1,017,745.00	5.70%
Other Medication	$38,770.82	0.2%	$17,441.40	0.10%
Other	$1,712,057.87	9.6%	$3,297,884.54	18.46%
Total	$17,828,441.79	100.0%	$17,865,904.61	100.0%

Table 7 – Real vs Nominal Expenditure in JMD for Fiscal Year 2009/10 to 2016/17

Fiscal Years	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Nominal Expenditure	$1.45BN	$1.39BN	$1.45BN	$1.81BN	$1.27BN	1.67BN	$2.12BN	$2.27BN
Real Expenditure		$1.24BN	$1.2BN	$1.4BN	$894.6M	$1.09BN	$930.5 M	$963.8M

Key Messages

1. Total HIV expenditure falls short of that which is costed for both the 15/16 and 16/17 fiscal year for the National Integrated HIV & Sexual Health Strategic Plan 2014-2019 (NISP). Expenditure for each fiscal year under review is approximately $18M USD while costing estimates are $31M USD and $34M USD respectively.
2. The HIV response seems to be making a large investment in Programme Coordination, Planning and Management (PCPM) which could be indicative of investments in the broader health systems. Expenditure on PCPM stands at approximately 44% average over the two fiscal years under review.
3. Expenditure on MSM (Men Who Have Sex with Men) and Transgender seems to be aligning with the epidemic as they show increased expenditure, both in nominal value and percentage share of total HIV/AIDS expenditure, over the two years under review.
4. GOJ carries the greatest burden as it relates to Treatment and Care. It accounted for an average 58.2% of monies expended by Treatment and Care over the two fiscal years under review.
5. Investments in treatment seem to be sub-optimal especially as it relates to the costing estimates of the NISP. Improved resource tracking can increase the accuracy of expenditure analysis, especially as it relates to this strategic priority and spending category.
6. HIV stakeholders, such as NGOs and RHAs, have improved their capacity in reporting NASA information.
7. Institutionalization of National AIDS Spending Assessments (NASA) requires improved systems of health information which connects various health areas as well as the public and private health care sectors.

Background

Jamaica is the third largest island and the largest Anglophonic island in the Caribbean occupying 10,991km^2. At the end of 2016 the population stood at 2.73 million. Under the World Bank's classification of economies, Jamaica is considered an Upper Middle Income (UMI) country as its Gross

Domestic Product (GDP) falls between US$3955 and US$12235 (1). The Planning Institute of Jamaica (PIOJ) indicated that at the end of 2016 the country's GDP was US$5134 (2).

Jamaica's economy was hard hit by the international global crisis of 2008. In 2010, Jamaica received a $1.25bn USD loan from the IMF. (3) Under this agreement there was a wage freeze for the fiscal years 2012-2015, which affected employment in the public sector. Since 2011, Jamaica has seen economic stability and growth in the economy. The country saw its debt to GDP ratio reduce from 126% at the end of 2015 to 122% at the end of 2016. (2) By 2016, the country had received over US$800M through the Extended Fund Facility (EFF) of the IMF. However, in an effort to achieve greater economic growth, the country cancelled its EFF loan and signed a precautionary Standby Agreement (SBA). The change in the nature of the loan serves as an indication of a more favourable macroeconomic horizon.

The 2016 Economic and Social Survey of Jamaica (ESSJ) notes that the stabilization and growth in the Jamaican economy is allowing the country to realize its Medium Term Social-Economic Policy Framework (MTF) for the 2015-18 period. (2) The MTF states that a healthy and stable population is one of the country's national outcomes. (4) While the country has seen an increase in life expectancy and a reduction in maternal and child mortality it is now feeling the impact of non-communicable diseases and emerging illnesses such as Zika and Chickungunya (2) (5). As a result, there is an increased burden on the health system especially as it relates to efficiency and quality, particularly with a generally low healthcare worker ratio, which is estimated at 3 per 1,000 population. (5)

Although still operating in a tight fiscal space, the GOJ allocated $46.5bn JMD to healthcare in the 2016/17 fiscal year, representing an almost 19% increase from the previous fiscal year. This increased allocation for health represented 66.9% of Total Health Expenditure (THE). In 2016/17 the THE represented 6.2% of GDP – the highest it has been since 2008. (2)

Expenditure on health in Jamaica is supplemented by funding from International Development Partners (IDPs) such as PAHO, USAID, IADB, UNICEF, GFATM and UNAIDS, to name a few. Some of the expenditure focused on HIV is from entities such GFATM, USAID, UNAIDS and UNICEF.

Past National AIDS Spending Assessments (NASA) have indicated that on average, since the 2013/14 fiscal period, approximately 53% of total HIV/AIDS expenditure was from international sources with an average of 30% being from GOJ coffers. The remaining has come from private financing, more so out-of-pocket expenditure (6). The trends of previous NASAs have also indicated that the real value of HIV expenditure is on the decline. Over the years the spending categories of Programme Management, Prevention and Treatment have accounted for the largest portion of total HIV/AIDS expenditure. In the 2013/14 and 2014/15 periods, Prevention accounted for approximately 40% of expenditure with PCPM accounting for approximately 35% of expenditure and Treatment only 17%. The costing of the National Integrated HIV and Sexual Health Plan (NISP) 2014-2019, however, indicates the greatest level of expenditure should occur in the Treatment Category, with approximately 67% of all expenditure.

The budget by the National HIV Programme was estimated at a total of $6.96M USD and $7.49 M USD for each of the fiscal years under review. The budget included a $3.8M USD contribution from the GFATM for 2015/16 and $4.1 M USD for the 2016/17 period. USG through PEPFAR was budgeted at

approximately $2.2M USD for ea ch of the fiscal years. The GOJ budget was approximately $1 M USD each of the years.

HIV Overview

Approximately 30,000 persons are believed to be living with HIV in Jamaica, based on model estimates and case based surveillance, with 12% not being aware of their status. The country has both a concentrated and a general epidemic. The prevalence among the general population is estimated at 1.7%. The prevalence in the MSM population is still believed to be 33%, while Sex Workers (SW) account for 1.4% of reported cases. (7) The 2015 Concept Note Submission by Jamaica to the Global Fund indicated an HIV prevalence of 45% among transgender women, and 54% among those who identified as transgender female sex workers.

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. (8) There is an estimated increase in HIV prevalence, consistent with the onset of sexual behaviour, 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% (8). 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.

Since January of 1982 to December of 2016, the Ministry of Health has received reports of 35,904 diagnosed cases of HIV Infection of which, 9,821 (27.4%) are known to be deceased. The AIDS mortality rate has reduced from 25/100,000 in 2004 to approximately 13/100,000 in 2016. There has been a 48% decrease since the implementation of universal access to ARVs. Spectrum, however, estimates that there is an under-reporting of AIDS deaths in the country by at least 21%. (7)

The decrease in mortality can be attributed to increased testing access as well as improvements in treatment and clinical monitoring. However, although these improvements have taken place, retention in care is still minimal and adherence continues to be a challenge – thus affecting both morbidity and mortality. (7)

The urbanized parishes of Kingston, St. James and St. Catherine still carry the burden of the disease. At the end of 2015, 65% of all reported HIV cases were in these parishes. Kingston & St. Andrew and St. James have cumulative case rates of 1097.1 cases per 100,000 and 1531.8 cases per 100,000, respectively, which are higher than the national cumulative case rate of 752 cases per 100,000.

Introduction

The Jamaican health system is continuously undergoing review at the policy, planning and treatment levels. The system continues to function within the guiding framework of PAHO's universal access to health and universal health coverage policy umbrella. The Ministry of Health, through its strategic

business plan, continues to place priority emphasis on health governance, health financing and health information systems as well as non-communicable diseases. (7)

Health financing is always part of the policy agenda of government authorities around the world. The pressure of costs usually exceeds the generating ability of the system, making health financing a recurring matter of concern. The sources of these continual incremental cost increases are multiple. Yet, technology advancement, aging and increasing chronic diseases are among the main factors affecting the sustainability of the health sectors.

As with most countries experiencing demographic and epidemiological transition, Jamaica faces considerable challenges in organizing and financing the constantly moving conditions of the health sector. For instance, according to the most recent census data, the number of Jamaican people over the age of 60 years old is expected to jump from 10.5% of the population in 2005 to over 14% in 2025. (8) Due to this increase in median age, the prevalence rates of diabetes would increase by 13% and 18% within the entire population. (9) Hypertension prevalence rates would also increase, to either 30% (9) or 23.4%, (10) of the population.

The current population enjoys a comprehensive package of benefits which requires continuous flows of funds. The efficiency and effectiveness of this package is of immediate and ongoing concern as Jamaica is experiencing limited economic growth. The situation is exacerbated by the tax-based financing scheme that predominates in a country which is highly dependent on GDP growth. Together, these factors place enormous pressure on efforts to obtain additional funds to maintain the scope of coverage as it is currently experienced. The projected increases in future burdens on the system only serve to indicate the need for critical analysis of the system with an eye for ensuing long-term stability.

This economic environment also affects HIV/AIDS in Jamaica, especially as the country scales up its treatment interventions and becomes ready to absorb a greater financial burden as it relates to the illness. The UNAIDS Transition Readiness report indicates that the country has a high to moderate transition risk with a score of 26.9%. This means the country may be at risk of losing the gains made in the HIV response once monies from GFATM come to an end (11). This means that careful planning is imperative. An important part of this process is that of resource tracking.

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. (12) (13)

Jamaica has now undertaken four NASA exercises. Over the years, NASA has proven to be instrumental in planning the HIV budget and proposals. It has played an important role in the development of plans and proposals for the HIV response by both the country and international development partners.

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 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 funding decreases, it is imperative that Jamaica can track its resources expended, especially in treatment care and support and prevention, as it moves towards the WHO standard of 90/90/90. It is also important to track expenditure among populations such as PLHIV, MSM and Transgender. The move towards the global standard means increased investments in anti-retrovirals and access to the health care system. Therefore, the tracking of resources becomes integral to ensure the efficiency and effectiveness of programmes, while not losing gains made in other areas of the response.

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 to assist in creating an accurate picture of the national response. (14)

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 multi-sectoral response to HIV and AIDS. (15)

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. (15)

Each of the six vectors answers the above questions:

1. **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. **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. **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. **Production Factors (PF)** are the resources bought to produce the interventions (e.g. wages, services, ARVs).
5. **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. **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 Preparation
2. Data Collection
3. Data Entry
4. Data Validation
5. Data Analysis
6. 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, 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 for another three months.

Most stakeholders returned data via email; however, whenever needed the consultant visited stakeholders in person to collect data. Seventy-one percent of the 81 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	21	16	76%
Civil Society	16	12	75%
International Development Partners	15	11	73%
Private Sector (Insurance Agency, Labs)	23	15	65%
Private Doctors	6	6	100%
Total	**81**	**58**	**78%**

While responding, some organizations 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.

Data was considered received from an organization even if it was not submitted first hand. 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. Some pharmacy and laboratory data were 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 and cash books. Cash books were easier to glean the information. In the case of several NGOs, their audited financial reports provided a more detailed description of work implemented. 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 almost 80% provides an accurate picture of HIV expenditure in Jamaica, as most of the key partners in the response submitted data. Over the last four years, these respondents have accounted for approximately 75%-80% of HIV expenditure. The private sector response rate of 65% 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 three data entry clerks hired by the consultant and trained in NASA coding.

For accuracy and consistency, the consulting team including key experts 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.

When data was received from funding source/financing agents as well as provider of services, the expenditure from the provider of services was entered to prevent any double counting, as well as to ensure a level 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. All four RHAs were visited after each submitted their data. These meetings clarified any data received, thus ensuring greater disaggregation of expenditure on beneficiary populations and AIDS spending categories.
4. Three of the largest sub-recipients with respect to expenditure and scope of work received site visits and/or individual clarification meetings at a time convenient to them. Additionally, two sub-sub recipients participated in individual meetings before and/or after data submitted was reviewed and entered into database.
5. Individual validation meetings were convened with each region after data was entered into the database. Based upon the availability of the regions, a second face-to-face meeting was held to re-verify data entered. In the case of two regions, the second meetings took place via telephone and/or email. These meetings ensured the most accurate NASA coding.
6. 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.
7. Amendments to coding were made based on feedback from the NASA Steering Committee.
8. A validation meeting was held with all stakeholders. See
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Annex IV - Stakeholder List

	Organization	Status of Information Collected	Type of Organization
1	AHF	Partial Information	International NGO
2	ASHE	Information Received	NGO
3	Caribbean Vulnerable Communities	Partial Information	Regional NGO
4	Caribe Wellness	No Information	NGO
5	Children First	Information Received	NGO
6	Children of Faith	Information Received	NGO
7	Eve for Life	Information Received	NGO
8	FAMPLAN	No Information Received	NGO
9	Hope Worldwide	Information Received	NGO
10	Jamaica AIDS Support for Life	Information Received	NGO
11	Jamaica Community of Positive Women	Information Received	NGO
12	Jamaica Network of Seropositives	Information Received	NGO
13	Jamaica Red Cross	Information Received	NGO
14	Jamaica Youth Advocacy Network	Information Received	NGO
15	JFLAG	Information Received	NGO

	Organization	Status of Information Collected	Type of Organization
16	Mustard Seed Communities	No Information Received	NGO
17	National AIDS Committee/Trelawny PAA	No Information Received	NGO
18	CDC	Information Received	NGO
19	Health Policy Project	Information Received	NGO
20	FHI 360- Linkages	Information Received	NGO
21	PAHO	No Information Received	NGO
22	UNAIDS	Information Received	IDP
23	UNDP	Information Received	IDP
24	UNESCO	Information Received	IDP
25	UNFPA	Information Received	IDP
26	UNICEF	Information Received	IDP
27	UN Women	Partial	IDP
28	US Embassy/Small Grants	Information Received /No information to Give	IDP

	Organization	Status of Information Collected	Type of Organization
29	USAID/PEPFAR	Information Received	IDP
30	Delegation of European Union to Jamaica	No Information Received	IDP
31	UWI HARP	Information Received	University
32	Blood Bank	No Information Received	Public
33	ITECH/HRSA	Information Received	University/Training NGO
34	Jamaica Defence Force	No information to Give	Government
35	Jamaica Employers Federation	Information Received	Private Sector
36	JAPPAIDS	No Information Received	Quasi-Government
37	Ministry of Education	Information Received	Government
38	Ministry of Labour and Social Security	Information Received	Government
39	National Chest Hospital	Information Received	Government Hospital
40	National Council On Drug Abuse	Information Received	Government
41	National Family Planning Board	Information Received	Government

	Organization	Status of Information Collected	Type of Organization
42	National Health Fund	Information Received	Government
43	National HIV Programme (PEPFAR)	Information Received	Government
44	National Public Health Lab	Partial Information	Government
45	North East Region Health Authority	Information Received	Government
46	Planning Institute of Jamaica	No Information Received	Government
47	South East Region Health Authority	Information Received	Government
48	South Region Health Authority	Information Received	Government
49	Tourism Product Development Co. Ltd	Information Received	Government
51	University of West Indies- Lab	No Information Received	Quasi Government
52	CHARES /UHWI	Partial Information	Quasi Government
53	Western Region Health Authority	Information Received	Government
54	Jamaica Council of Churches	Partial Information	Faith Based
55	St Luke's Anglican, Cross Roads	No Information Received	Faith Based

	Organization	Status of Information Collected	Type of Organization
56	United Theological Centre/ College	No Information Received	Faith Based
57	Andrews Memorial Hospital Laboratory	Information Received	Private Lab
58	CARIMED	Information Received	Private Pharmaceutical
59	Central Medical Laboratories Ltd	Information Received	Private Lab
60	Consolidated Laboratory	No Information Received	Private lab
61	Eagle Medical Laboratories	No Information Received	Private Lab
62	Global Laboratories & Health Services Ltd	No Information Received	Private Lab
63	Hargreaves Memorial Laboratory	Information Received	Private Lab
64	Hi Tech	No Information Received	Private Lab
65	Life Medical Laboratories	No Information Received	Private Lab
66	Medical Associates Laboratory	Information Received	Private Lab
67	Medical Immunodiagnostic Laboratory	No Information Received	Private Lab
68	Microlabs	No Information Received	Private Lab

	Organization	Status of Information Collected	Type of Organization
69	Total Diagnostics Ltd	No Information Received	Private Lab
70	Guardian Life Ltd.	No Information Received	Private Lab/Insurance Co
71	Sagicor Life Jamaica Ltd.	No Information Received	Private Lab/Insurance Co
72	Caledonia Pharmacy, Mandeville	Information Received	Private Pharmacy
73	Charlies Pharmacy	Information Received	Private Pharmacy
74	Fontana Pharmacy Montego Bay	Information Received	Private Pharmacy
75	Fontana Pharmacy, Ocho Rios	Information Received	Private Pharmacy
76	J&J pharmacy Montego Bay	Information Received	Private Pharmacy
77	Krysdave Pharmacy, Maxfield avenue	Information Received	Private Pharmacy
78	K's Pharmacy Duhaney Park	Information Received	Private Pharmacy
79	Medicine Chest Pharmacy	Information Received	Private Pharmacy
80	Royale Pharmacy, Sav-la-Mar	Information Received	Private Pharmacy

ANNEX V - LETTERS DISTRIBUTED TO STAKEHOLDERS

GENERAL SENSITIZATION

MINISTRY OF HEALTH
HIV/ STI/ Tb Unit

6th Floor, RKA Building, **10-16 Grenada Way**, **Kingston 5**

Website: www.moh.gov.jm **Email:**

June 20, 2017

Dear Colleague:

National AIDS Spending Assessment April **1, 2015- March 31, 2017**

The Ministry of Health through funding from the United States Agency for International Development (USAID) project Threats to the Environment Citizen Vulnerability (DOAG) and the Global Fund to Fight Aids, Tuberculosis and Malaria (GFATM), and with technical support from the United Nations Programme on HIV and AIDS (UNAIDS), will be conducting a National AIDS Spending Assessment (NASA) for the period Apr 1, 2015- March 31, 2016 and April 1 2016- March 31, 2017.

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, 2015- March 31, 2016 and April 1 2016- March 31, 2017, we are requesting information from your organization regarding expenditure on HIV related activities and programmes throughout the island for the financial years April l, 2015 to March 31, 2016 and April 1, 2016 — March 31, 2017. The NASA 2015-2017 exercise will include site visits to several entities. You will be contacted in short order with the date that the consultant will visit your offices.

The process this year will include the institutionalization of NASA; therefore there will be a NASA Capacity Building Workshop. This workshop is tentatively scheduled for October 2017. It will entail participants to prepare data for the current fiscal year April 1, 2017- present. The data is to be used in activities during the workshop. Additional details will be provided concerning the workshop at a later date.

Ms. Renée Johnson is leading a consulting team which will be conducting this exercise. Ms Johnson and/ or one of her team members, Marilyn Facey, have been authorized to contact you regarding this information. The data collection template which is attached should be completed and returned by July 14, 2017 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.

Yours Truly

Dr. Nicola Skyers

Senior Medical Officer

PRIVATE DOCTORS

MINISTRY OF HEALTH
HIV/ STI/ Tb Unit

6th Floor, RKA Building, **10-16 Grenada Way**, **Kingston 5**

Website: www.moh.gov.jm **Email:**

June 20, 2017

Dear Whom it may concern:

National AIDS Spending Assessment April **1**, **2015- March 31, 2017**

The Ministry of Health through funding/technical support from the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), and the United Nations Programme on HIV and AIDS (UNAIDS), will be conducting a National AIDS Spending Assessment (NASA) for the period Apr 1, 2015- March 31, 2016 and April 1 2016- March 31, 2017.

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In order to complete the NASA exercise for the period April 1, 2015- March 31, 2016 and April 1 2016- March 31, 2017, we are requesting information from your organization regarding expenditure on HIV related activities and programmes throughout the island for the financial years April 1, 2015 to March 31, 2016 and April 1, 2016 — March 31, 2017.

As a Private Physician, this information includes but is not limited to information on:

- The average number of HIV patients seen annually?
- Average fee charged to each patient per visit?
- The average number of visits by PLHIV each year?
- Tests most frequently recommended for PLHIV other than CD4 and viral load? (CD 4, Viral Load, Liver Function, Executive Profile etc)
- How often are they referred for these tests?

- How many of them are on ARVs
- What percentage of HIV patients are on Opportunistic Infection (OI) medication?
- OI medications most frequently prescribed for patients

Ms. Renée Johnson is leading a consulting team which will be conducting this exercise. Ms Johnson and/ or one of her team members, Marilyn Facey, have been authorized to contact you regarding this information. The data collection template which is attached should be completed and returned by July 14, 2017 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.

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Yours Truly

Dr. Nicola Skyers

Senior Medical Officer

MINISTRY OF HEALTH
HIV/ STI/ Tb Unit

6th Floor, RKA Building, **10-16 Grenada Way**, **Kingston 5**

Website: www.moh.gov.jm **Email:**

June 20, 2017

Dear:

National AIDS Spending Assessment April **1**, **2015- March 31, 2017**

The Ministry of Health through funding/technical support from the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), and the United Nations Programme on HIV and AIDS (UNAIDS), will be conducting a National AIDS Spending Assessment (NASA) for the period Apr 1, 2015- March 31, 2016 and April 1 2016- March 31, 2017.

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, 2015- March 31, 2016 and April 1 2016- March 31, 2017, we are requesting information from your organization regarding expenditure on HIV related activities and programmes throughout the island for the financial years April l, 2015 to March 31, 2016 and April 1, 2016 — March 31, 2017. This includes information on the total number of each of the following, as well as the cost per unit:

1. HIV
2. CD4 and
3. HIV Viral Load
4. Liver function Test,
5. Renal Function,
6. Hepatitis B&C,

7. Blood Sugar and
8. Cholesterol tests

Ms. Renée Johnson is leading a consulting team which will be conducting this exercise. Ms Johnson and/ or one of her team members, Marilyn Facey, have been authorized to contact you regarding this information. The data collection template which is attached should be completed and returned by July 14, 2017 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.

Yours Truly

Dr. Nicola Skyers

Senior Medical Officer

University Hospital of the West Indies

MINISTRY OF HEALTH
HIV/ STI/ Tb Unit

6th Floor, RKA Building, **10-16 Grenada Way**, **Kingston 5**

Website: www.moh.gov.jm **Email:**

June 20, 2017

Dear RD:

National AIDS Spending Assessment April **1**, **2015- March 31, 2017**

The Ministry of Health through funding/technical support from the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), and the United Nations Programme on HIV and AIDS (UNAIDS), will be conducting a National AIDS Spending Assessment (NASA) for the period Apr 1, 2015- March 31, 2016 and April 1 2016- March 31, 2017.

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, 2015- March 31, 2016 and April 1 2016- March 31, 2017, we are requesting information from your organization regarding expenditure on HIV related activities and programmes throughout the island for the financial years April l, 2015 to March 31, 2016 and April 1, 2016 — March 31, 2017. The NASA 2015-2017 exercise will include site visits to several entities. You will be contacted in short order with the date that the consultant will visit your offices.

As the University Hospital of the West Indies, this information includes but is not limited to, HIV programmatic activities, as well as, information on:

- HIV hospital admission rates (both antenatal and general and paediatric wards)
- Length of stay of PLHIV on wards
- General Staffing on these wards (including nurses and doctors and their levels)
- Tests normally done while admitted/staying on wards
- The average cost absorbed by patients for HIV related hospital admissions (should include tests done as an in-patient, cost of bed, any medication purchased) i.e what does the hospital charge each patient?
- The average cost absorbed by the hospital per admission
- The staffing of CHARES and their commensurate pay scales (how many doctors, nurses, lab, administrator)
- How many HIV tests, CD4 and Viral Loads were done in the period under investigation
- What was the average cost of each test
- The number of ARVs and paediatric ARVs dispensed by your pharmacy
- OI medications most frequently filled by patients (further discussion will be held with pharmacists)

Ms. Renée Johnson is leading a consulting team which will be conducting this exercise. Ms Johnson and/ or one of her team members, Marilyn Facey, have been authorized to contact you

regarding this information. The data collection template which is attached should be completed and returned by July 14, 2017 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.

Yours Truly

Dr. Nicola Skyers

Senior Medical Officer

HIV/ STI/ Tb Unit

6th Floor, RKA Building, **10-16 Grenada Way**, **Kingston 5**

Website: www.moh.gov.jm **Email:**

NATIONAL CHEST HOSPITAL

June 20, 2017

Dear CEO:

National AIDS Spending Assessment April **1**, **2015- March 31, 2017**

The Ministry of Health through funding/technical support from the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), and the United Nations Programme on HIV and AIDS (UNAIDS), will be conducting a National AIDS Spending Assessment (NASA) for the period Apr 1, 2015- March 31, 2016 and April 1 2016- March 31, 2017.

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In order to complete the NASA exercise for the period April 1, 2015- March 31, 2016 and April 1 2016- March 31, 2017, we are requesting information from your organization regarding expenditure on HIV related activities and programmes throughout the island for the financial years April l, 2015 to March 31, 2016 and April 1, 2016 — March 31, 2017. This includes information on the total number of each of the following, as well as the cost per unit:

1. The number of Tuberculosis patients for the periods above
2. The number of these patients who were living with HIV
3. The cost of treatment for per person for the period
4. The average length of stay of patients for the period and the cost to the hospital
5. The number of multi-drug resistant tuberculosis and the number who were living with HIV and the associated costs of treating multi-drug resistant Tb
6. Cost of any capital machinery or materials bought to assist in treatment of Tb during the above mentioned periods
7. Salaries of staff for treating Tb (if all the hospital work is not focused on Tb approximate percentage of time or patients with Tb please give this percentage)

Ms. Renée Johnson is leading a consulting team which will be conducting this exercise. Ms Johnson and/ or one of her team members, Marilyn Facey, have been authorized to contact you

regarding this information. The data collection template which is attached should be completed and returned by July 14, 2017 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.

Yours Truly

Dr. Nicola Skyers

Senior Medical Officer

PHARMACIES

MINISTRY OF HEALTH
HIV/ STI/ Tb Unit

6th Floor, RKA Building, **10-16 Grenada Way**, **Kingston 5**

Website: www.moh.gov.jm **Email:**

June 20, 2017

National AIDS Spending Assessment April **1, 2015- March 31, 2017**

The Ministry of Health through funding/technical support from the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), and the United Nations Programme on HIV and AIDS (UNAIDS), will be conducting a National AIDS Spending Assessment (NASA) for the period Apr 1, 2015- March 31, 2016 and April 1 2016- March 31, 2017.

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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, 2015- March 31, 2016 and April 1 2016- March 31, 2017, we are requesting information from your organization regarding expenditure on HIV related activities and programmes throughout the island for the financial years April 1, 2015 to March 31, 2016 and April 1, 2016 — March 31, 2017.

As a Pharmacy/Distributor, this information includes but is not limited to information on:

- The names of ARVs sold by your company
- The cost per unit of ARV for the end user
- The total number of units sold to the period to the government
- The total number of units sold to private pharmacies/individuals
- Suggested retail price (if any) for end user.

Ms. Renée Johnson is leading a consulting team which will be conducting this exercise. Ms Johnson and/ or one of her team members, Marilyn Facey, have been authorized to contact you regarding this information. The data collection template which is attached should be completed and returned by July 14, 2017 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.

Yours Truly

Dr. Nicola Skyers

Senior Medical Officer

CONDOM DISTRIBUTORS

MINISTRY OF HEALTH
HIV/ STI/ Tb Unit

6th Floor, RKA Building, **10-16 Grenada Way**, **Kingston 5**

Website: www.moh.gov.jm **Email:**

June 20, 2017

National AIDS Spending Assessment April **1, 2015- March 31, 2017**

The Ministry of Health through funding/technical support from the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), and the United Nations Programme on HIV and AIDS (UNAIDS), will be conducting a National AIDS Spending Assessment (NASA) for the period Apr 1, 2015- March 31, 2016 and April 1 2016- March 31, 2017.

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In order to complete the NASA exercise for the period April 1, 2015- March 31, 2016 and April 1 2016- March 31, 2017, we are requesting information from your organization regarding expenditure on HIV related activities and programmes throughout the island for the financial years April 1, 2015 to March 31, 2016 and April 1, 2016 — March 31, 2017.

As a Pharmacy/Distributor, this information includes but is not limited to information on:

- The quantity of condoms and or lubricants sold for the period
- The total number of units sold for the period to the government
- The unit price or total cost of condoms and/or lubricants sold to the government or NGOs for that period (include discounts if any)
- The total number of units of condoms and/or lubricants sold to private pharmacies/gas stations/supermarkets etc
- The unit price and or total cost of condoms and/or lubricants sold to private pharmacies, gas stations, supermarkets, etc
- Suggested retail price (if any) for end user.

Ms. Renée Johnson is leading a consulting team which will be conducting this exercise. Ms Johnson and/ or one of her team members, Marilyn Facey, have been authorized to contact you regarding this information. The data collection template which is attached should be completed and returned by July 14, 2017 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.

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19. .

Data Analysis

Data analysis was done in Excel using pivot tables to create matrices which analysed 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 analysed 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 eight 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. (16) 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 because most of the expenditure in the category of resource costs focuses 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. Analysis of human resource costs can also assist with the measurement of the cost effectiveness of implementation of both prevention and treatment programmes.

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.
- 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 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.
- Health Information and Health Recording systems are limited due to their manual nature and various health sectors such as laboratory and pharmacy records are not inter-connected to inpatient and out-patient records. Health record information received from the MOH was only partially completed (20%) for each of the years in question.
- Difficulty in tracking information regarding treatment for opportunistic illnesses due to weaknesses in health information systems.
- Pharmacy records are manual therefore making it difficult to track the consumption of ARVs and Opportunistic Infections as it relates to PLHIV.

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's mark up 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 aggregate of each of the five 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. Where Gynaecology and

Obstetrics was received it was used. Staffing is standardized for type A and B hospitals. The salaries of these staff were taken at the highest end of their scale and pro-rated against the admission records of HIV patients and the type of hospital, A or B, and the respective admission rates. Admission rates were received for two hospitals in WRHA directly from the region, and from one specialist hospital and one hospital in the SERHA. All other admissions for hospitals were received from monthly health records reported to the MOH. It should be noted that MOH records were only 20% completed.

- 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, and the approximate number of patients as a percentage of patients seen of the total number of patients.
- The exchange rate used was an average of BOJ rates for the fiscal periods. The rate for 2015-2016 was 1USD: 118.77JMD, while the rate used for 2016-2017 was 1USD:127.17JMD. (17)
- The term "key populations" was used when unable to disaggregate beneficiary populations. Key populations include[2]:
    - MSM
    - CSW
    - OSY
    - Parents of OSY
    - Homeless Drug users
    - General Populations in High Risk Communities
- Specific populations not elsewhere classified were usually staff members[3] at the planning and coordination level who were involved in capacity building or educational activities.
- 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. An admission rate for PLHIV at health care facilities was received from the Health Records department at the Ministry of Health. Four hospitals provided their own HIV admission data. This result was then multiplied by the abolished user fees from 2007. Records received directly from MOH do not represent all admissions for the periods under review as the data is only 20% complete. No information received from one of the largest public health facilities in the country regarding in-patient activity.

[2] This is taken from UNAIDS NASA Classifications.
[3] As dictated by UNAIDS NASA Classifications.

Findings

A total of $17.8 MUSD and $15.8M USD were expended on HIV activities in Jamaica respectively for the period of 2015/16 and 2016/17. This represents the first time that the Jamaican dollar nominal values have exceeded $2 billion. However, the real value continued its downward trend from the 2013/14 fiscal period.

Figure 1 shows the trend in expenditure over the last eight years. At no time over the eight years did the real value of expenditure increase to the baseline year of 2009/10. This means that although the nominal value has increased, less goods and services are being purchased or consumed to implement the country's HIV response.

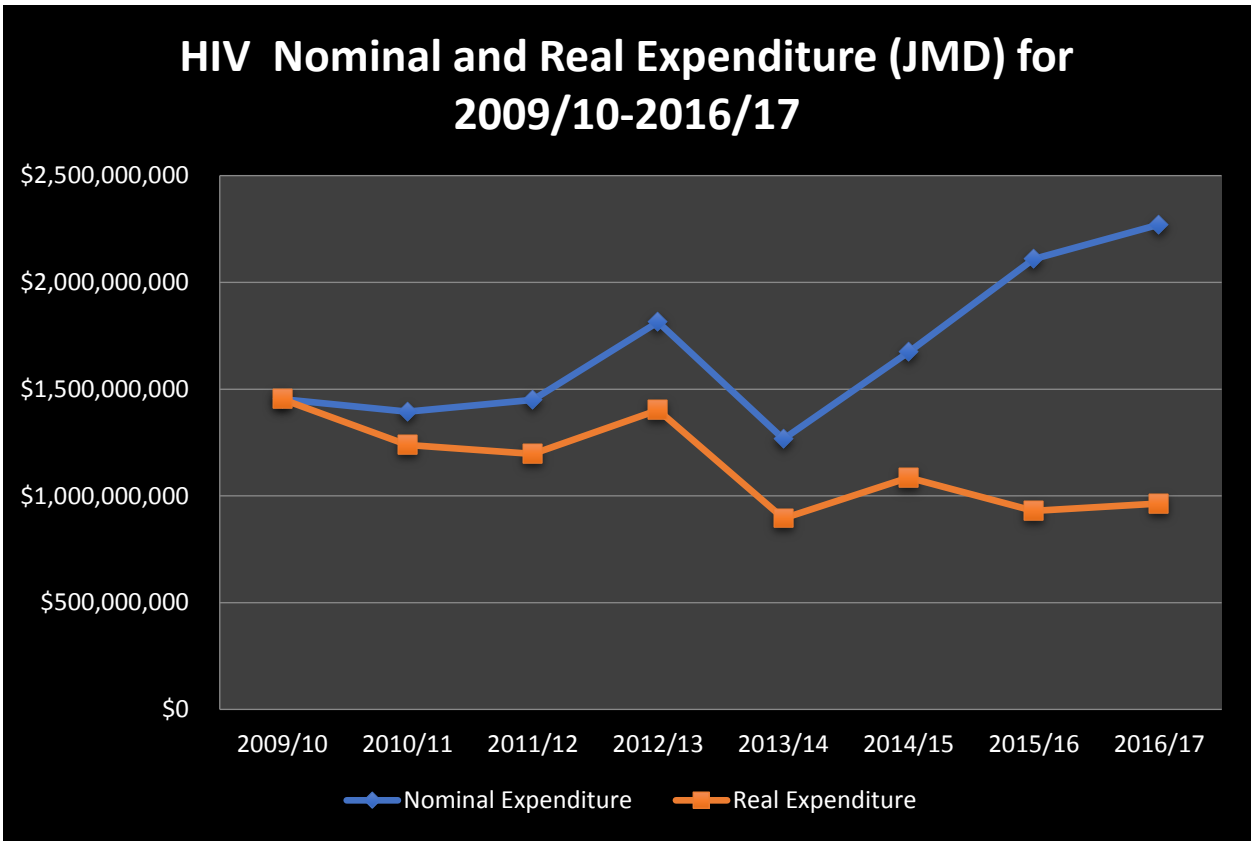

Figure 1 – Nominal vs Real Expenditure in JMD of HIV 2009/10-2016/17

Funding Source

Table 9 – Expenditure by Funding Source for the Fiscal Years 2015/16 & 2016/17

Source Name	2015/16 USD	%	2016/17 USD	%
Public	$6,950,001	39	$6,345,447	35.5%
Private	$1,731,782	9.7	1,629,352	9.1%
International	$9,146,659	51.3	9,891,106	55.3
Total	$17,828,442	100	$17,865,905	100%

Table 9 highlights the expenditure by funding source types. As with the previous two fiscal years, international funding sources contributed the most to total HIV/AIDS expenditure (TH/AE) in Jamaica, accounting for 51.3% of funds expended in the 2015/16 fiscal period and 62.3% of the funds expended in the 2016/17 fiscal period. The expenditure from the previous fiscal period was approximately 62%, thus indicating that the proportion of TH/AE expenditure from international source funds decreased in the 2015/16 period, but trended upwards to 55.3% in the 2016/17 fiscal period. The value of expenditure for the two fiscal years under review was $9.1 M USD and $9.9 Mil USD respectively.

The public sector expenditure increased by six percentage points to represent 39% of TH/AE for the 2015/16 period. This translated to approximately $6.95M USD expenditure. This represents a 70% increase in expenditure from the 2014/15 period. Public sector sources funded 35.5% of TH/AE for the 2016/17 period. This was an 3.5 percentage point decrease which is a 610,000 USD reduction in funds. The seeming decrease in expenditure brings the 2016/17 GOJ expenditure in line with both the values and the proportion of TH/AE of the 2013/14 and 2014/15 fiscal years. The anomaly of expenditure in the 2015/16 period can probably be attributed to the government filling the gap between the close out of the GFATM Transition Funding Model (TFM) grant and the GFATM New Funding Model (NFM) grant which began in January 2016, as well as, the decrease in the Jamaican dollar value against the US currency.

The expenditure by the private sector only represented 9.7% of expenditure on HIV and AIDS. The value of this expenditure is approximately $1.7M USD. Private sector expenditure as a percentage of total HIV and AIDS expenditure (TH/AE) decreased by 0.6 percentage points to represent 9.1% of TH/AE in the 16/17 fiscal year, accounting for $1.6M USD.

Table 10 – Expenditure by Selected Funding Sources

Source Name	Expenditure 2015/16	%	Expenditure 2016/17	%
Govt. of Jamaica	$6,950,000.89	39.0%	$6,345,446.58	35.52%
United States Govt.	$3,073,996.53	17.2%	$4,441,382.04	24.86%
Household Funds	$1,499,485.87	8.4%	$1,558,580.51	8.72%

UN Response	$929,768.11	5.2%	$780,148.56	4.37%
Global Funds	$4,511,990	25.3%	$4,060,940.04	22.73%
Other	$802,020	4.5%	$679,406.78	3.80%
Total	$17,828,441.77		$17,865,904.61	

The Government of Jamaica was the funding source with the single most expenditure for both fiscal periods under review. It accounted for 39% of TH/AE or $6.95M USD in 2015/16 and 35.5% of TH/AE or 6.35M USD in 2016/17. GOJ expenditure not only speaks to GOJ recurrent budget expenditure but also to counter-part expenditure which is part of the agreement with both USAID and GFATM. The United States Government (USG) saw an increase in expenditure in both fiscal years under review, mainly through its PEPFAR programme, expending $3.07M USD or 17.2% of TH/AE. The expenditure by the USG represents a 28% increase in the value expended from the 14/15 fiscal year, but only a 1.2% increase in TH/AE. The USG funding source continued its upward trend by accounting for 28% of TH/AE in 16/17. It was the only funding source which the value of expenditure as well as percentage of the TH/AE increased, as they expended $4.4M USD in the 16/17 fiscal year.

GFATM expenditure for 2015/16 was $4.5M USD, representing a 6.1% decrease in expenditure from the 14/15 fiscal year. This $4.5MUSD represents 25.3% of the TH/AE. GFATM's proportion of TH/AE decreased in 2016/17 fiscal year to 22.7%. The dollar value also decreased slightly to $4.06M USD. The UN Response and Household Funds both decreased in value as well as proportion of TH/AE.

Other financing sources account for organizations such as the Robert Carr Trust Fund and AIDS Healthcare Foundation which give monies to NGOs, and in the case of AIDS Healthcare Foundation also to the Western Region Health Authority (WRHA).

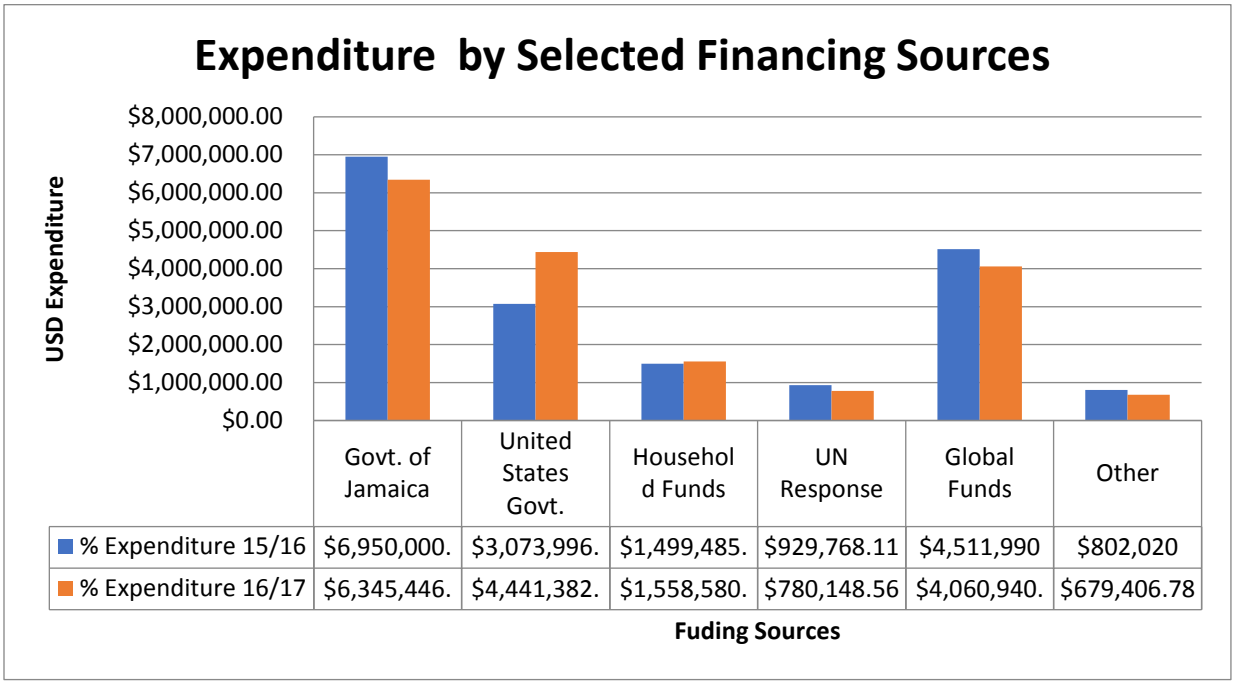

Figure 2 – HIV/AIDS Expenditure by Selected Funding Sources

Financing Agent

Table 11 shows the types of entities which managed the HIV resources over the two fiscal periods under review. The public sector or a government entity managed 70% and 78% of money expended respectively for each fiscal year. This is expected as the HIV STI/TB Unit at the MOH is the Principal Recipient of the GFATM NFM, thus they have the responsibility to manage and disburse funds on behalf of the agency. Additionally, they also manage funds from USAID/PEPFAR. UN agencies such as UNAIDS, UNICEF and UNESCO work closely with government ministries such as the MOH and Ministry of Education, Youth and Information, therefore funds from these agencies will be managed by public entities.

Multilateral agencies such as the UN agencies managed on average approximately 4.2% of expenditure over both years. Private financing sources which mainly represent Households (HH) were the financing agents with the second most money expended, with 10.8% and 10.3% respectively for the 2015/16 and 2016/17.

Table 11 – Expenditure by Financing Agents

Financing Agent	Expenditure 2015/16	% Expenditure 2015/16	Expenditure 2016/17	% Expenditure 2016/17
Public	$12,486,874.80	70.0%	$13,937,082.62	78.0%
Private	$1,930,364.65	10.8%	$1,848,330.23	10.3%
Bilateral	$2,203,633	12.4%	$961,980.04	4.0%
Multilateral	$803,103.07	4.5%	$709,875.88	4.0%
Int'l Non Profit	$404,466	2.3%	$408,635.84	2.3%
Total	$17,828,441.77	100.0%	$17,865,904.61	100.0%

Figure 3 below indicates the contribution of funding source types to types of financing agents. In the 2015/16 fiscal year, approximately 56% of the approximately $12.5M USD managed by public financing agents originated from public sources, with the remaining 44% coming from international sources. In 2016/17 the contribution of public financing sources decreased, only 45.5% of the $13.9M USD managed by public financing agents came from public sources, with the remaining 54.5% from international sources.

Approximately 90% and 88% of privately managed funds had their origin in private sources, respectively, for each financial year under review. The remaining proportion was from international sources. 100% of bilateral, multilateral and international NGO sources of funds for both years were from international funding sources.

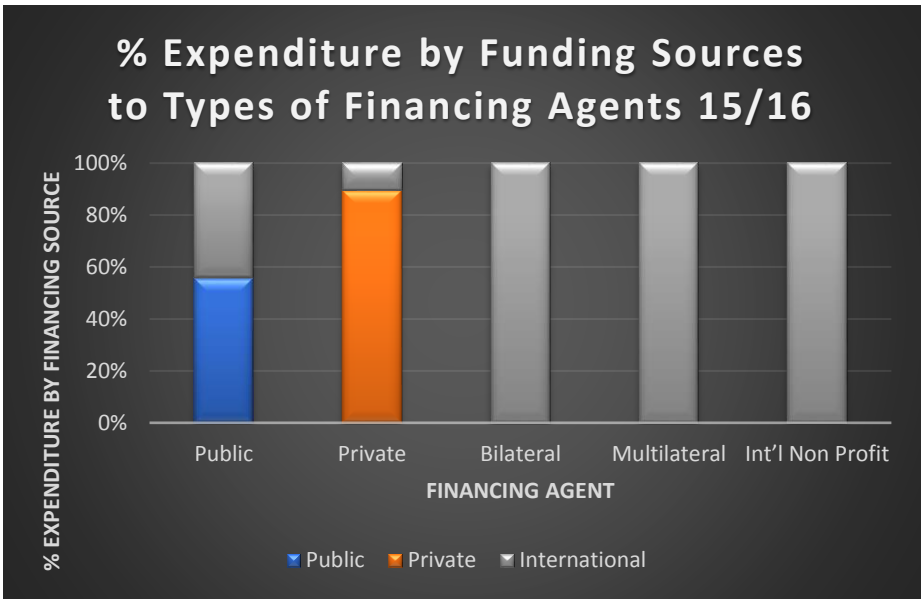

Figure 3 – Financing Agent Expenditure by the Contribution of Type of Funding Source 15/16

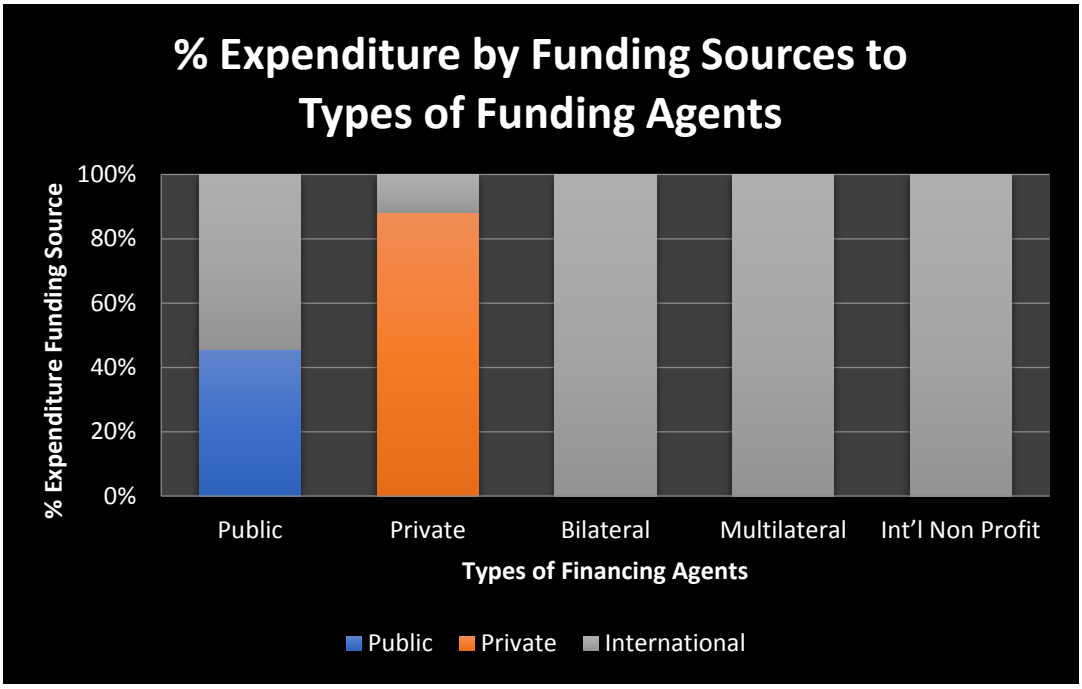

Figure 4 Financing Agent Expenditure by the Contribution of Type of Funding Source 16/17

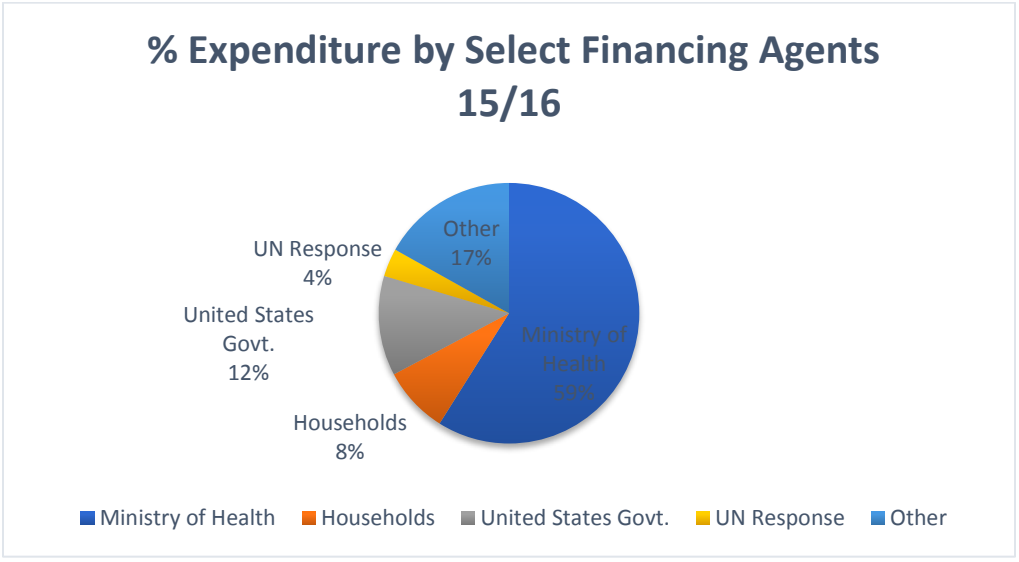

Figure 5 and Figure 6 highlight selected financing agents. The MOH manages more than half the funds expended on HIV in Jamaica. The USG management of funds came mainly through programmes associated with their CDC technical assistance projects. The category 'Other Financing Agents' includes government ministries such as the Ministry of Education, Youth and Information, and NGOs such as Caribbean Vulnerable Communities (CVC), Health Policy Plus and FHI 360-Linkages (see **Error! Reference s ource not found.**). The UN agencies management of funds was stable over both years at approximately 3% of TH/AE. The funds managed by the UN primarily concern administrative costs, which is in line with their technical support.

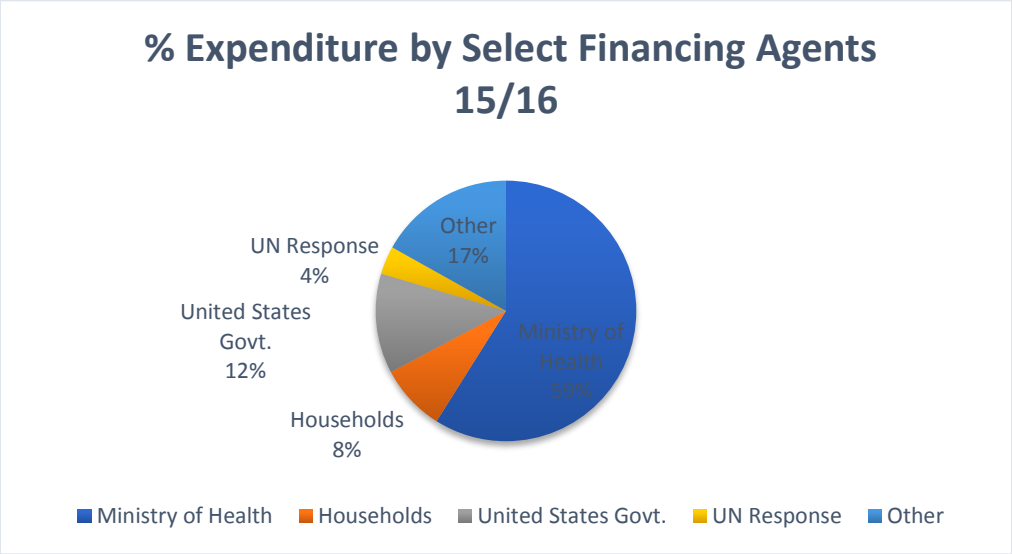

Figure 5 – Percentage Expenditure by Select Financing Agents 15/16

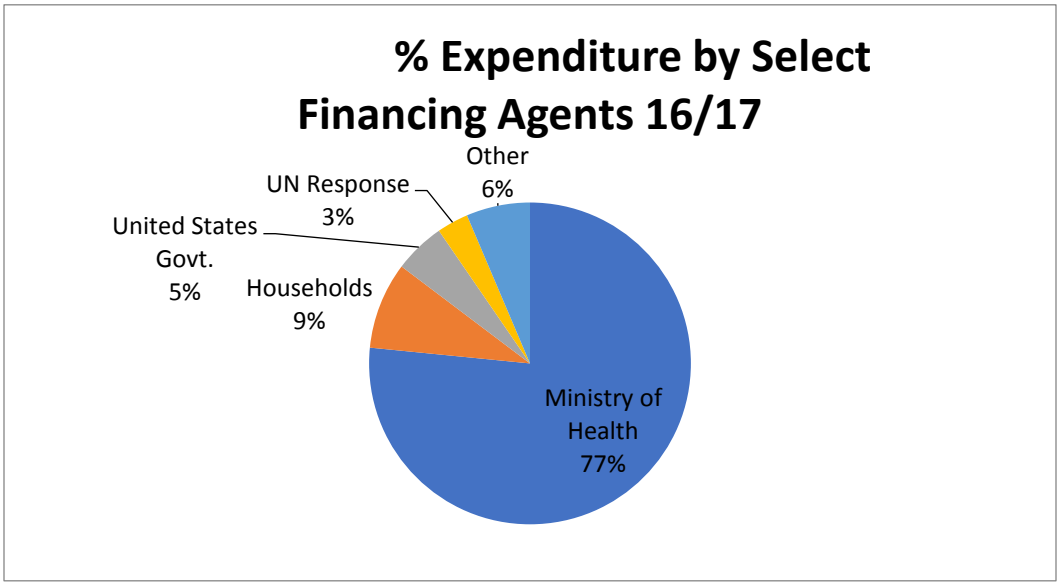

Figure 6 Percentage Expenditure by Selected Financing Agents 16/17

Service Providers

Table 12 shows the expenditure of HIV resources based on types of service providers. Public Service Providers include RHAs, NFPB and the MOEYI. Public service providers accounted for approximately 68.3% and 64.7% respectively of expenditure for the two fiscal years under review. The percentage of expenditure by public sector providers has been approximately 63% of TH/AE over the last three fiscal years starting 2014-2016. The 68.3% of TH/AE in 2015/16 represented $12.2M USD while the value of expenditure in 2016/17 was $11.5M USD. The change in the value of approximately $2.6M USD in public service providers could be attributed to possible reduction of in-patient costs due to less HIV-related admissions and/or change in staff cost.

The not for-profit service providers include many of the NGOs involved in the HIV response such Jamaica AIDS Support for Life, ASHE, Children First and the Jamaica Network for Seropositives. The not for-profit service providers expended approximately 25% and 21% of TH/AE respectively for fiscal year 2015/16 and 2016/17. International donors have reduced the level of service provided over the last four fiscal years, coming from $1.9M USD in the 2013/14 period to $939,000 USD in the 2016/17 fiscal period. This declining trend is also seen in the representation of proportion of TH/AE, going from 15% in 2013/14 to 5.3% in 2016/17. (18) This trend is possibly indicative of donors placing more trust in the hands of the stakeholders of the Jamaican HIV response, as well as the building of capacity in NGOs, resulting in them being better able to mobilize funds and to manage funds received.

Private for-profit institutions include laboratories and pharmacies which provide services such as testing, ARVs and condoms.

Table 12 – Expenditure by Types Service Providers

	Expenditure 2015/16	Expenditure 2016/17
Public	$12,181,326.07	$11,571,102.16
Non-Profit	$4,495,129.02	$3,797,138.03
Private For-profit	$23,073.79	$1,558,580.61
Int'l Donors	$1,128,912.90	$939,083.82
Total	$17,828,441.78	$17,865,904.62

Figure 7 shows the percentage of TH/AE by types of service providers. All categories of service providers saw a decrease in the percentage share of TH/AE, except for international donors which remained constant at approximately 6% and private for-profit service providers which increased from 1% to approximately 9% over the two fiscal years under review.

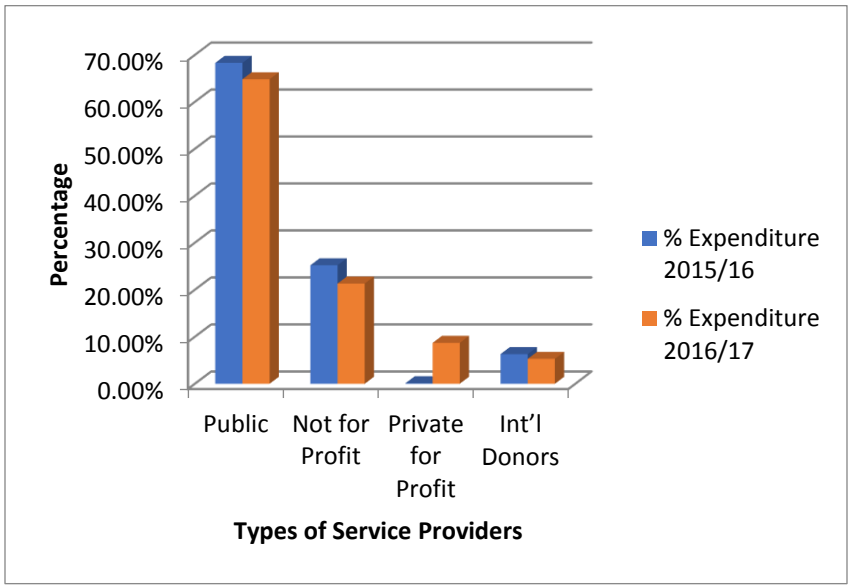

Figure 7 – Percentage Expenditure by Categories of Service Providers

Selected Service Providers

Table 13 – Selected Service Providers

Service Providers	Expenditure 2015/16	Expenditure 2016/17
ASHE	$2,249,161.11	$2,706,827.56
HWWJ		
CHILDREN FIRST		
EFL		
JASL		
JCW		
JFLAG		
JN+		
NFPB	$10,176,298.15	$10,560,848.87
RHAs		
PCU		
MOE	$278,973	$249,334.58
Total	$12,704,432.27	$13,517,011.00

Table 13 represents expenditure by seven government ministries and entities and seven civil society organization which are considered to be key implementers in the response. These providers:

1. Represent 74% and 76% of TH/AE respectively for the 2015/16 and 2016/17 fiscal years.
2. Expended total $12.7M USD and $13.5M USD respectively for the 2015/16 and 2016/17 fiscal years.
3. Represent larger service providers in public and private sector by expenditure.
4. Are integral in accessing key and at-risk populations such as PLHIV, MSM and youth.
5. In the case of JASL , ASHE, CF, NFB and RHAs, these are sub-recipients under the new GFATM Grant with JASL having several SSR.
6. In the case of EFL, JCW, JFLAG and JN+, these are all SSR of JASL under the new GFATM Grant.
7. JCW+ and JN+ are the only PLHIV networks in the island.

8. The MOEYI is the second largest GOJ implementer of activities for prevention.
9. RHAs and NFPB are the public entities affiliated with the MOH which implement the most HIV activities.
10. RHAs are involved in both treatment and prevention activities.

As noted above, services provided by the public sector accounted for most of the HIV/AIDS expenditure for both years. Agencies from the MOH who provided services represented 57% and 59% of TH/AE for each of the fiscal years under review. These include the Project Coordinating Unit (PCU), the RHAs and National Family Planning Board (NFPB). The PCU had the greatest level of expenditure as it coordinates the response and is responsible for capital expenditure, even for some of its sub-recipients.

The value of HIV/AIDS expenditure by the NFPB has increased each year since the 2013/14 fiscal period, from $395,000USD to $2.7M USD in the 2016/17 fiscal year. This increase in value also represents an increase in proportion of TH/AE, moving from only 3.1% in 2013/14 (18) to 15.2% in 2016/17. This expenditure is in tandem with integration of the HIV Programme with the NFPB. NFPB was designated the National Sexual Health Agency in 2013. Through the integration process, NFPB became responsible for prevention interventions on a national level as well the HIV advocacy and enabling environment response.

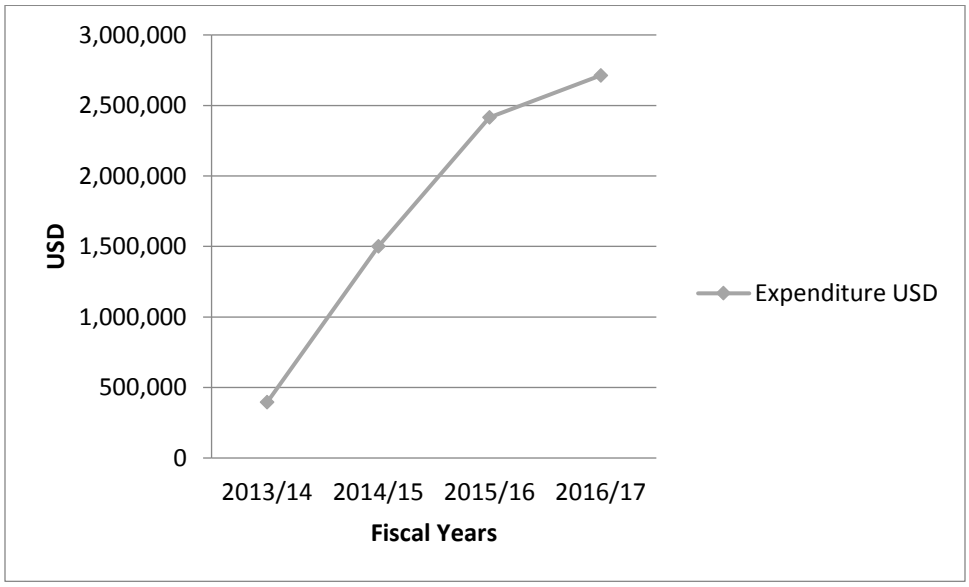

Figure 8 – Expenditure of NFPB for four fiscal years 2013/14-2016/17

Jamaica AIDS Support for Life (JASL) was the NGO service provider with the largest amount of expenditure. Expenditure by JASL was 9% of TH/AE for each fiscal year.

JASL expenditure is comparable to that of the RHAs. Both the RHAs and JASL provide services in prevention and treatment, with funding sources of the RHAs being GOJ, USG-PEPFAR and the GFATM. JASL receives funding from USG-PEPFAR, GFATM and other agencies such as the UN Trust Fund, AIDS

Healthcare Foundation and Canadian Institute of Health Research. JASL also has three chapters across the island covering the parishes with some of the greatest burdens of HIV, such as St. James, Kingston and Westmoreland. Additionally, information received from the regions was only partially completed due to the manual nature of the in-patient record keeping of the MOH.

Some of the NGOs such as JASL, Children First (CF), ASHE and Hope Worldwide (HWWJ) have revenue or donations due to services provided and/or donations from parent organizations, as with the case of HWWJ. An interesting observation for all NGOs (excluding JASL) is the increase in expenditure in the 2016/17 period from the 2015/16 period. This is due to the GFATM grant which took effect in January 2016. Prior to this, funds from the previous funding period had been exhausted and the country was expending from the reduced TFM. Additionally, while USG increased, its financial year and that of GOJ are not synchronized thus expenditure of these funds may have taken place in the beginning of the second of the two fiscal years under review.

The expenditure by all four RHAs totalled $3.4M USD in 2015/16 and $3.3M USD in 2016/17. The RHA expenditure is based on the fact that it provides prevention as well as treatment interventions. The RHA with the largest population is the SERHA which includes the urban parishes of Kingston & St. Andrew (KSA) and St. Catherine. This region also accounts for the second highest burden of HIV, with the parishes of the WRHA accounting for the largest burden of HIV in the island. (19) The seeming disparity in expenditure based on HIV burden between WRHA and SRHA is probably a function of the fact that SRHA has more hospitals, thus more in-patient information. The piloting of the Electronic Patient Administration System (EPAS) in two hospitals in the SRHA means that more robust data regarding in-patient care may have been received from these regions. It should be noted that the MOH records department indicated that only 20% of health records for each year in question had been received and processed. Figures 8-10 show the seeming disparity in expenditure compared to the burden of the disease by regions.

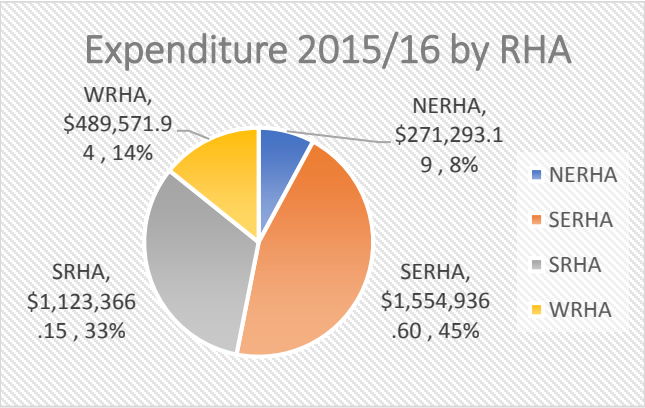

Figure 9 Expenditure by RHAs for Fiscal Years 15/16

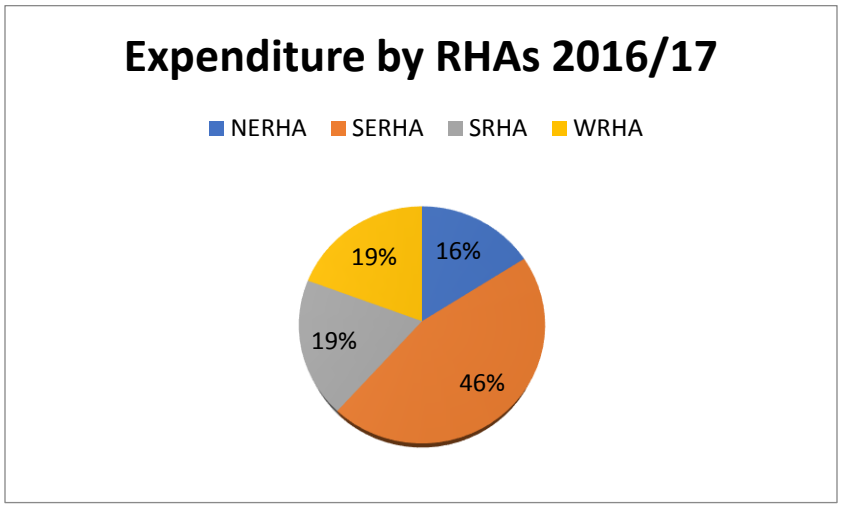

Figure 10 – Expenditure by RHAs 16/17

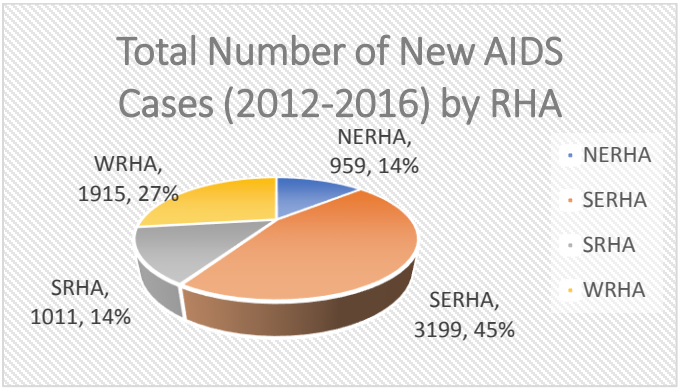

Figure 11 – Total number of New HIV Case by RHAs

AIDS Spending Categories

Table 14 – HIV Expenditure by AIDS Spending Categories

Spending Categories	Expenditure 2015/16(USD)	% Expenditure 15/16	Expenditure 2016/17(USD)	% Expenditure 16/17
Prevention	$5,787,300.95	32.5%	$4,936,840.37	27.63%
Treatment/ Care	$2,347,196.04	13.2%	$2,391,328.31	13.38%
OVC Education	$21,049.10	0.1%	$6,805.95	0.04%
PCPM	$7,090,525.98	39.8%	$9,538,154.01	53.39%
Training	$1,672,662.09	9.4%	$150,179.15	0.84%
Social Protection	$48,834.08	0.3%	$70,757.74	0.40%
Advocacy	$800,519.85	4.5%	$727,605.43	4.07%
Research	$60,353.72	0.3%	$44,234.04	0.25%
Total	$17,828,441.79		$17,865,905.00	100%

In both fiscal years under review, Programme Coordination and Programme Management (PCPM) was the AIDS Spending Category (ASC) which had the largest amount of expenditure. The value of expenditure was $7.09M USD and $9.53M USD respectively for the 2015/16 fiscal year and 2016/17 fiscal year; representing 39% and 53% respectively of TH/AE. PCPM represents expenditure from the PCU and includes salaries for the staff hired to manage and coordinate the National HIV response as well as the procurement of goods and services. Other activities which fall under PCPM are bio-surveillance activities; in the case of Jamaica, these would include Sex Worker Bio-Behavioural Studies. Also included under PCPM are administrative costs associated with managing the programme such as audits, communication mechanisms and accounting capacity.

Prevention activities accounted for the second highest expenditure among ASC. The value on this expenditure was $5.8M USD in 2015/16 and $4.9M USD in 2016/17. These figures accounted for 32.5% and 27.6% of TH/AE respectively for each fiscal year. This was then followed by Treatment which had an expenditure of approximately $2.3M USD in both fiscal years under review and accounted for 13.2 % and 13.8% of TH/AE respectively for the 2015/16 and 2016/17 fiscal years.

Advocacy expenditure reduced in its total share of TH/AE from the previous two fiscal periods, where it averaged approximately 5.5% of TH/AE (18). In 2015/16 and 2016/17 it averaged approximately 4.3% of

TH/AE, although there were minimal increases in value from approximately $780,000USD in 2014/15 to $800,000 USD in 2015/16. This however fell to approximately $720,000 USD in 2016/17.

Expenditure on Research, Social Protection and OVC continued to be minimal and represented less than 1% of TH/AE expenditure in both financial years under review. This was also the trend in the previous spending assessment; however the value of expenditure on Social Protection has increased by 785.3% from $7992 USD in 2014/15 to $70757USD in 2016/17.

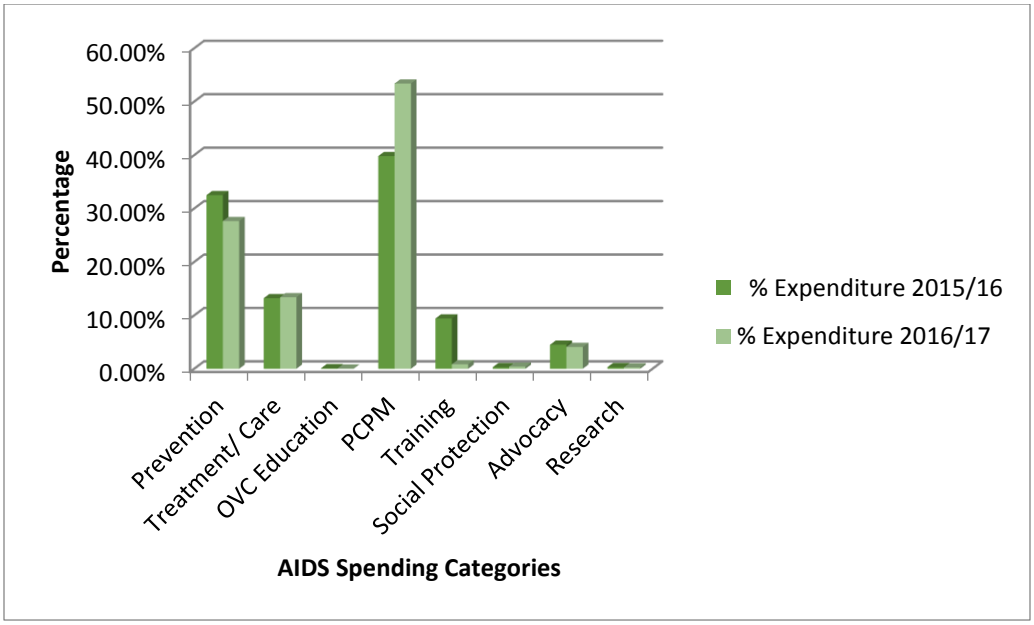

Figure 12 – Expenditure by AIDS Spending Categories

In 2015/16, 39% or $2.82M USD of prevention activities were funded from public sector sources, while 33% or $1.91M USD was expended from international sources. GFATM accounted for $1.1M USD of international funds, while the remaining international sources for prevention were USG and UN agencies. Private sources, namely household sources, contributed the least to prevention, which would have been expended on condoms.

In 2016/17, international funds contributed to the majority of prevention expenditure – 39% or $1.96M USD. Approximately 31% of prevention expenditure was provided from public sources or GOJ coffers. This represents a 32% decrease in value to $1.54M USD coming from the 2015/16 fiscal period. This decrease may represent changes in staff complements over the two years under review. Additionally, in the 2015/16 fiscal period, the GOJ may have had to fill the funding gap as the grant from GFATM did not commence until January 2016.

Sixty-three per cent and 64% of treatment expenditure, respectively for each fiscal year, originated from public funds or GOJ coffers. This majority can possibly be attributed to the fact that all salaries for in-

patient and some out-patient care originate from the GOJ recurrent budget, as well as GOJ absorbing approximately 40% of ARV costs.

PCPM, which accounted for the majority of HIV spending category expenditure in both years, received most of its funds from international organizations such as the GFATM and USG through PEPFAR. In fact, 67% or $6.05M USD of PCPM funds originated from international sources in 2016/17. This was an increase from the 2015/16 period when $4.03M USD or 56% of the PCPM expenditure originated from international sources. Public sector sources contributed 43% and 32% respectively to PCPM for the two years under review.

Approximately 84% of monies expended on advocacy activities were sourced from international agents in both the 2015/16 and 2016/17 fiscal years. Approximately 100% of expenditure on Research and Social Protection had its origins in international funds.

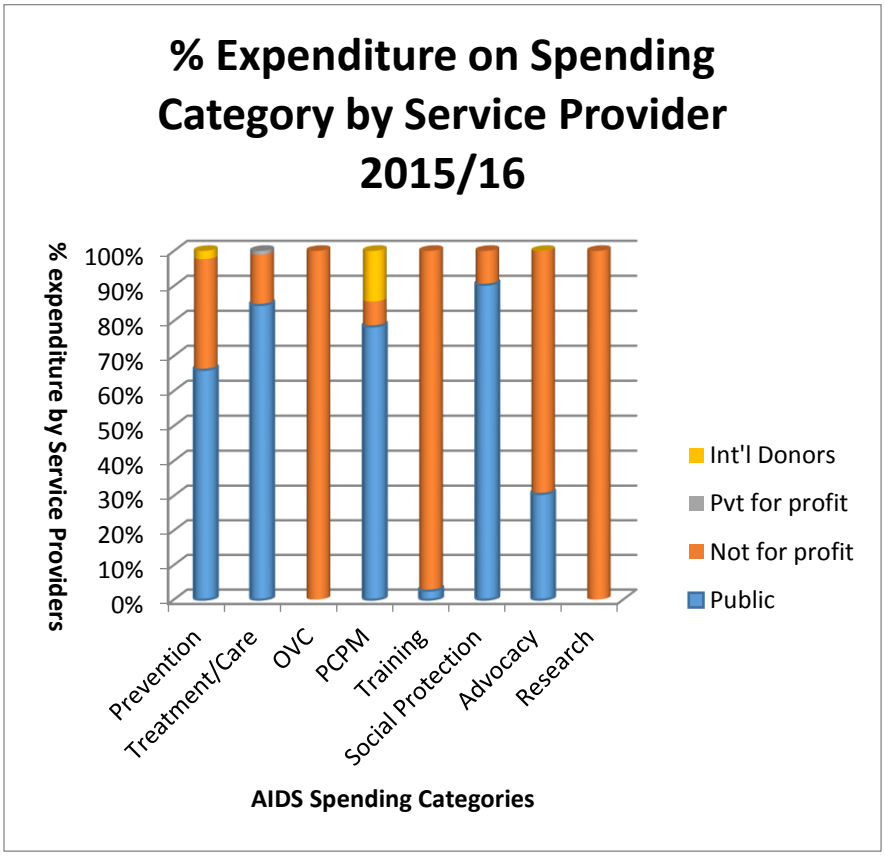

Figure 13 Percentage Expenditure by Types of Funding Sources on ASCs 15/16

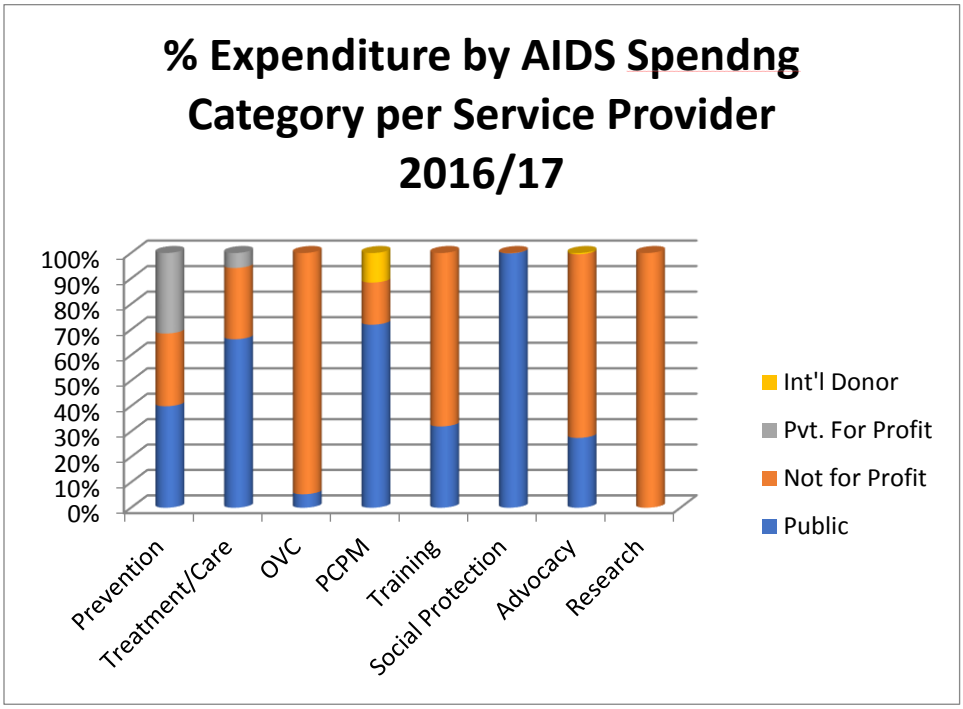

Figure 14 Percentage Expenditure by Type of Funding Source on ASC 16/17

AIDS Spending Broken Down by Sub-Categories

Table 15 outlines what types of interventions monies were expended under each ASC category. It shows that for the 2015/16 period, prevention interventions for MSM and Youth accounted for approximately 7.6% and 7.2 % of prevention interventions. Positive prevention activities accounted for 4.49% of prevention expenditure. The other category which includes Transgender, Homeless Drug Users and General Populations accounted for 78% of expenditure. In 2016/17, there was a reduction in the expenditure in the other category to 59% of prevention expenditure. MSM interventions represented 18% of prevention expenditure, while youth and sex workers represented 6.2% and 6.65% respectively. PLHIV prevention activities represented 8.03%.

Outpatient activities accounted for 35% and 39% of expenditure in the Treatment category, respectively for 2015/16 and 2016/17 fiscal years. PCPM accounted for 23% and 29% respectively of expenditure for each year under the ASC of the same name. In 2016/17, administrative costs represented 22% of the expenditure under this ASC. The other category under PCPM represents drug supplies, and bio-surveillance activities as well laboratory upgrading, and information technology represented 54% of PCPM expenditure in the 2015/16 period and 29% in the 2016/17 period. M&E represented 4.7% and 9.8% of expenditure, respectively, for the 2015/16 and 2016/17 fiscal years.

Table 15 – ASC Expenditure broken down by ASC Interventions for 2015/16 and 2016/17

	Expenditure by Spending Category				
		2015/16		2016/17	
PREVENTION		**5,787,300.95**	100%	**4,936,840.37**	**100%**
	MSM	415,660.79	7.18	888,254.83	17.99
	PLHIV	259,910.71	4.49	741,269.07	15.02
	YOUTH	437,770.19	7.56	308,276.08	6.24
	CSW	190,440.72	3.29	328,623.71	6.65
	Gen. Pop.	2,029,281.82	35.06	1,442,638.72	29.22
	Other Key Pop	560,637.33	9.68	159,061.24	3.23
	OTHER	1,893,599.39	32.74	1,068,716.71	21.65
TREATMENT AND CARE		**2,347,195.04**	**100%**	**2,391,328.31**	**100%**
	PITC			69,169.04	2.89
	ARV	3708.63	0.15	38,834.33	1.62
	Nutrition	9004.67	0.38	8409.88	0.35
	HIV lab test	701,007.11	29.87	431,348.43	18.04
	Outpatient	832,753.75	35.48	952,795.14	39.84
	Inpatient care	177,561.49	7.56	58,406.91	2.44
	Care/Treatment n.e.c.	524,135.12	22.33	645,415.41	26.99
	OTHER	99,028.27	4.23	186,949.17	8.14
OVC		**21,049.08**	**100%**	**6805.94**	**100%**
PCPM		**7,090,525.98**	**100%**	**9,350,743.05**	**100%**
	PCPM	1,642,970.99	23.17	2,682,449.46	28.69
	Admin/transaction cost	658,237.65	9.28	2,089,438.49	22.35
	M/E	330,928.50	4.67	912,900.14	9.76
	Patient tracking	591,388.05	8.34	523,006.93	5.59
	Drug Supply System	2,799,203.71	39.47	2,514,018.86	26.88
	Prog. Management/Admin n.e.c.	416,735.21	5.87	370,550.57	3.96
	OTHER	651,061.87	9.2	258,378.60	2.77
TRAINING		**1,672,662.09**	**100%**	**150,179.15**	**100%**
SOCIAL PROTECTION		**48,834.08**	**100%**	**70,757.74**	**100%**
ADVOCACY		**800,519.85**	**100%**	**727,605.43**	**100%**
	Advocacy	188,903.73	23.59	37,077.57	5.09
	Human rights	30,772.15	16.29	144,261.52	19.82
	Gender-based violence	238,614.93	29.81	182,630.76	25.10
	Enabling Environment n.e.c.	159,170.11	19.88	199,645.18	27.44
	OTHER	183,058.93	10.43	163,990.40	22.55
RESEARCH		**60,353.72**	**100%**	**44,234.04**	**100%**

AIDS Spending Category by Service Provider

Government/Public Sector agencies such as the RHAs, NFPB, and MOEYI provided the largest valued services in four out of the eight ASCs for the 2015/16 fiscal year. Public sector service providers accounted for prevention activities valued at approximately 66% or $2.9M USD. NGOs such as JASL, CF, ASHE, and HWWJ provided services valued at 31% or approximately $1.4M USD. In the Treatment category, for approximately 85% of monies spent, the services were provided by the government agencies and 14% were provided by NGOs such as JASL. The private for-profit organizations include pharmacies, pharmaceutical companies and private doctors where individuals access private care.

Approximately 78.4% or $5.5M USD expended on PCPM services were provided by the government sector. This is not surprising as the Project Coordinating Unit (PCU) of the national GFATM grant and the USG grant is in the MOH. IDPs such as UNAIDS provided services valued at approximately $1M USD under the PCPM category. This reflects the entity's organizational and administrative cost. For approximately 90% of the $48,334 USD expended on Social Protection, the services were provided by the public sector.

When categories such as OVC, Advocacy and Research are assessed, the service providers with the largest value were the NGOs. In the case of Research and OVCs, for 100% of the meagre expenditure, the services were provided by NGOs. This was also the case with Research. In the case of Advocacy, services provided by NGOs accounted for 69% of expenditure or $555,720 USD.

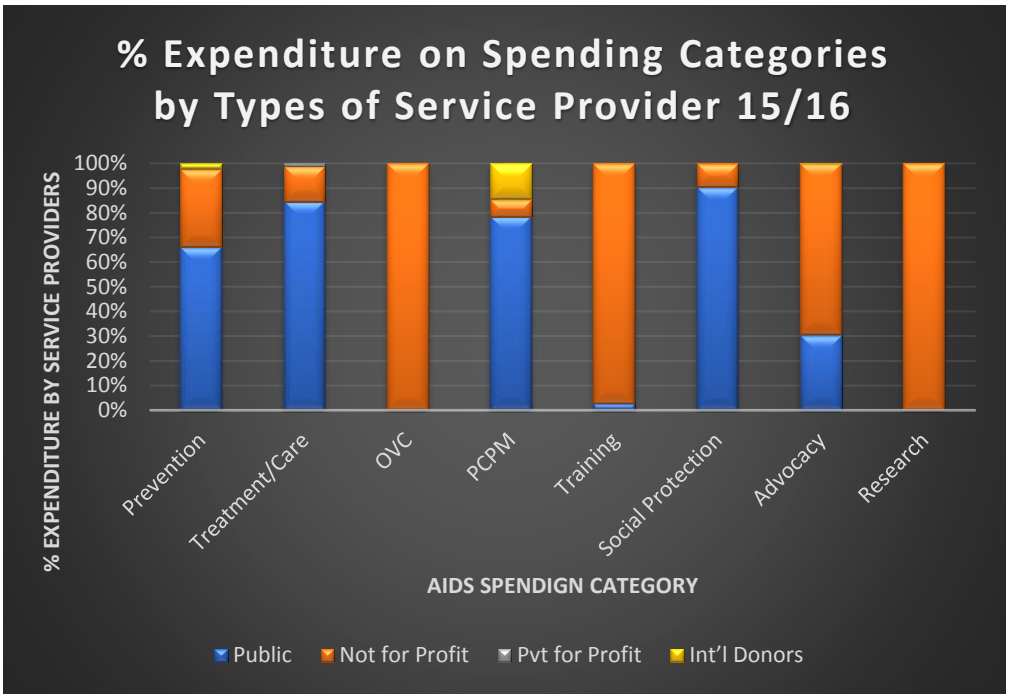

Figure 15 – Percentage Expenditure on AIDS Spending Categories by Types of Service Providers 15/16

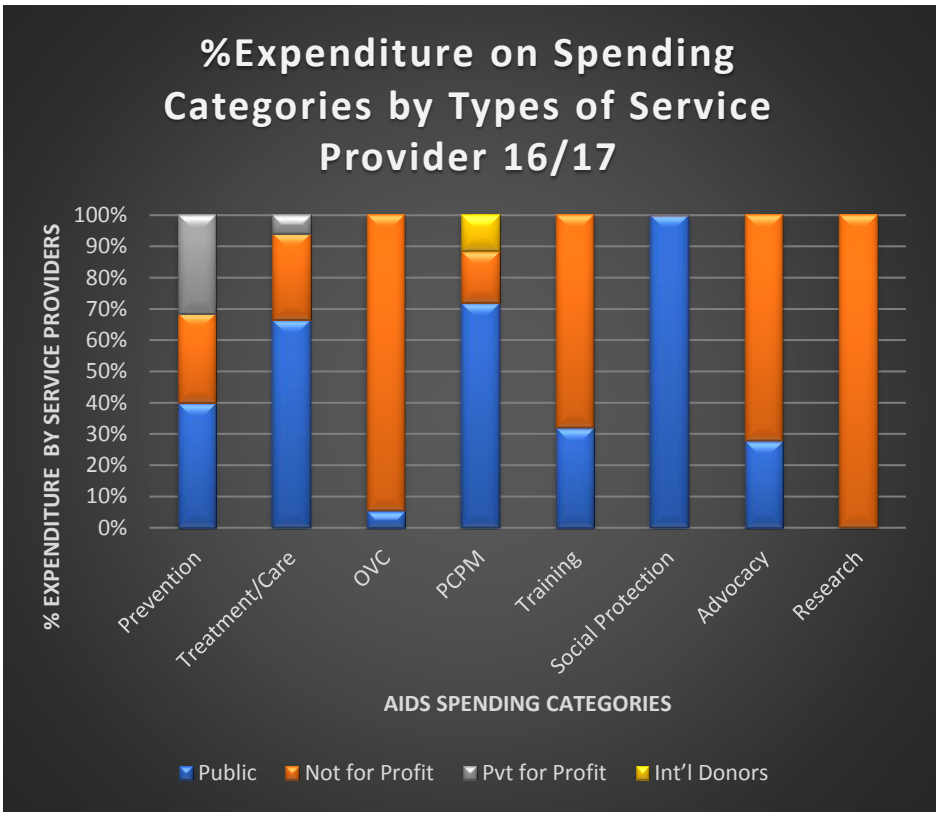

Figure 16 Percentage Expenditure on AIDS Spending Categories by Types of Service Providers 16/17

In 2016/17, Government service providers continued to have the largest valued expenditure in the ASCs. During this period, GOJ agencies provided services valued at approximately $2.2M USD or 45% in the Prevention Category, with NGOs services accounting for 26% or $1.2M USD of funds expended under Prevention. The private for-profit agencies provided services which represented 28.8%, or $1.4M USD. These include a private entity which sells condoms and have their source of origin as Household funds.

In 2016/17, government entities provided services valued 3.5M USD the Treatment category. This represented approximately 82% of money expended by service providers of treatment. NGOs provided $643,264 USD of treatment services.

GOJ provided PCPM services valued at approximately $5.8M USD. This is 72% of monies spent by service providers on PCPM. NGO and IDPs provided PCPM services valued at $1.4M USD and $954,452 USD. GOJ entities provided all services under the Social Protection category.

Once again in 2016/17 services provided by NGOs in the areas of OVC, Advocacy and Research were greater than any other category of service providers. For 95% of the $6,408 USD expended on OVCs, the services were provided by NGOs. One hundred percent of Research activities were provided by NGOs, while 72.3% of money expended on Advocacy services were provided by NGOs, to the value of $524,052

USD. The remaining 27% of expenditure or $199,913 USD services were provided by public sector, namely the NFPB which directs the country's Enabling Environment activities in the HIV response.

GOJ Expenditure on AIDS Spending Categories

Most of GOJ expenditure was in the ASC of Programme Planning and Coordination. PCPM accounted for approximately 44% of GOJ expenditure for each of the fiscal years under review. This means that GOJ accounted for 43% and 32% expenditure on PCPM, respectively, for each of the years under review.

Prevention accounted for 33% and 24% respectively of GOJ expenditure in 2015/16 and 206/17. GOJ bore 39% of the Prevention expenditure for the period 2015/16; however, the burden decreased to 31.4% in the 2016/17 fiscal period.

Treatment accounted for 21% and 31% of GOJ expenditure for the years 2015/16 and 2016/17 respectively. GOJ accounted for more than 63% of Treatment expenditure in 2015/16 and 64% in the 2016/17 period. This indicates that the burden of Treatment and Care rests with GOJ, especially as it relates to human resource.

Table 16 GOJ Expenditure on ASC and Percentage of ASC Expenditure

	2015/16			2016/17		
AIDS Spending Categories	**GOJ Expenditure (USD)**	**% of GOJ Exp**	**% of Total Exp ASC**	**GOJ Expenditure (USD)**	**% of GOJ Exp**	**% of Total Exp on ASC**
Prevention	$2,282,679.27	32.84	39.44	$1,549,051.03	24.41%	31.38
Treatment/Care	$1,486,222.60	21.38	63.32	$2,025,304	31.92%	64.42
OVC				$360.80	0.01%	5.3
PCPM	$3,056,452.62	43.97	43.11	$2,843,194.72	44.81%	31.69
Training	$2,525.89	0.03	0.15			
Social Protection						
Advocacy	$122,120.51	1.75	15.25	$114,556.60	1.81%	15.74
Research						

Beneficiary Population

Table 17 – HIV Expenditure on Beneficiary Populations

Beneficiaries	Expenditure 2015/16	% Expenditure 2015/16	Expenditure 2016/17	Expenditure 2016/17
PLHIV	$5,768,506.60	32.4%	$5,164,221.00	28.9%
CSW	$210,548.90	1.2%	$372,181.78	2.1%
MSM	$508,879.45	2.9%	$984,091.39	5.5%
Key Population	$1,038,159.60	5.8%	$259,971.51	1.5%
Prison	$11,508.15	0.1%	$23,272.40	0.1%
Marginalized/ at-risk youth	$210,058.81	1.2%	$61,096.78	0.3%
Youth in School	$288,892.38	1.6%	$255,334.58	1.4%
Women	$183,759.60	1.0%	$6,011.64	0.0%
Transgender	$19,078.43	0.1%	$98,434.96	0.6%
Most at risk	$1,431,692.50	8.0%	$783,295.75	4.4%
General Population	$2,159,835.00	12.1%	$1,583,289.27	8.9%
No direct beneficiary	$4,085,346.70	22.9%	$7,940,189.00	44.4%
Others	$1,912,176.37	10.7%	$334,514.90	1.9%
Total	$17,828,441.79	100.0%	$17,865,904.61	100.0%

Table 17 shows the expenditure on various beneficiary populations. PLHIV accounted for the largest value of expenditure by a single beneficiary population. Expenditure on PLHIV stood at approximately $5.8M USD in 2015/16. This accounted for 32.4% of TH/AE. The expenditure on PLHIV reduced in the 2016/17 period by 10.5% and thus only accounted for 28.9% of TH/AE with a value of $5.16M USD.

No Direct Beneficiary accounted for 22.9% and 44.4% of TH/AE, respectively, for each of the fiscal years under review. This represents a value of $4.08M USD and $7.9M USD respectively of expenditure for the 2015/16 and 2016/17 fiscal years. No Direct Beneficiary aligns to the fact that the AIDS Spending Category with the greatest expenditure is PCPM. Activities under this category tend not to be targeted at a beneficiary population, as it deals with planning and management of the response.

Key Populations are taken as interventions which take place in communities with general populations which have a high risk sexual health profile, such as high rate of teenage pregnancy and high rates of sexual transmitted illnesses. They accounted for 5.8% of TH/AE in 205/16 with a spend of $1.04M USD. This figure decreased by approximately 55% to $259,971 USD; thus only contributing to 1.5% of TH/AE.

Most at-risk populations include MSM, Transgender and SW, when the service provider is unable to provide disaggregated information on its beneficiary populations. To this extent, expenditures which are noted as CSW, Transgender and MSM can all be increased if this information is disaggregated. The MARPs expenditure represented 8% and 4.4% of TH/AE respectively for the fiscal years 2015/16 and 2016/17; therefore, total expended each year for MARPs was $1.4M USD and $783,295 USD in 2016/17.

MSM expenditure continued an upward trend based on the nominal value. In 2014/15, expenditure was approximately $591,000 USD and represented approximately 3.1% of TH/AE at that time, while the nominal value decreased to $508,000 USD in the 2015/16 period and increased by almost 93% in the 2016/17 fiscal year to $984,091USD.

Expenditure on the transgender population increased by approximately 415% in the 2016/17 fiscal period. The expenditure was approximately $19,078 USD in 2015/16 and approximately $98,435 USD in 206/17. The increase in expenditure among the transgender population is aligned to the country's move under the GFATM Concept Note of 2016-2018 which highlights the high susceptibility of transgender population to HIV and the need to focus on this community. (20)

Youth in school accounted for an average of 1.5% of TH/AE over both fiscal years, with expenditure being $288,892 USD and $255,334 USD respectively for each fiscal year under review. Programmes targeting women remain at 1% or less of the TH/AE. These programmes exclude female sex workers and are focused on empowerment and human rights programmes with women living with HIV, as well as gender-based violence programmes. Most women-focused activities are provided by EFL and JCW.

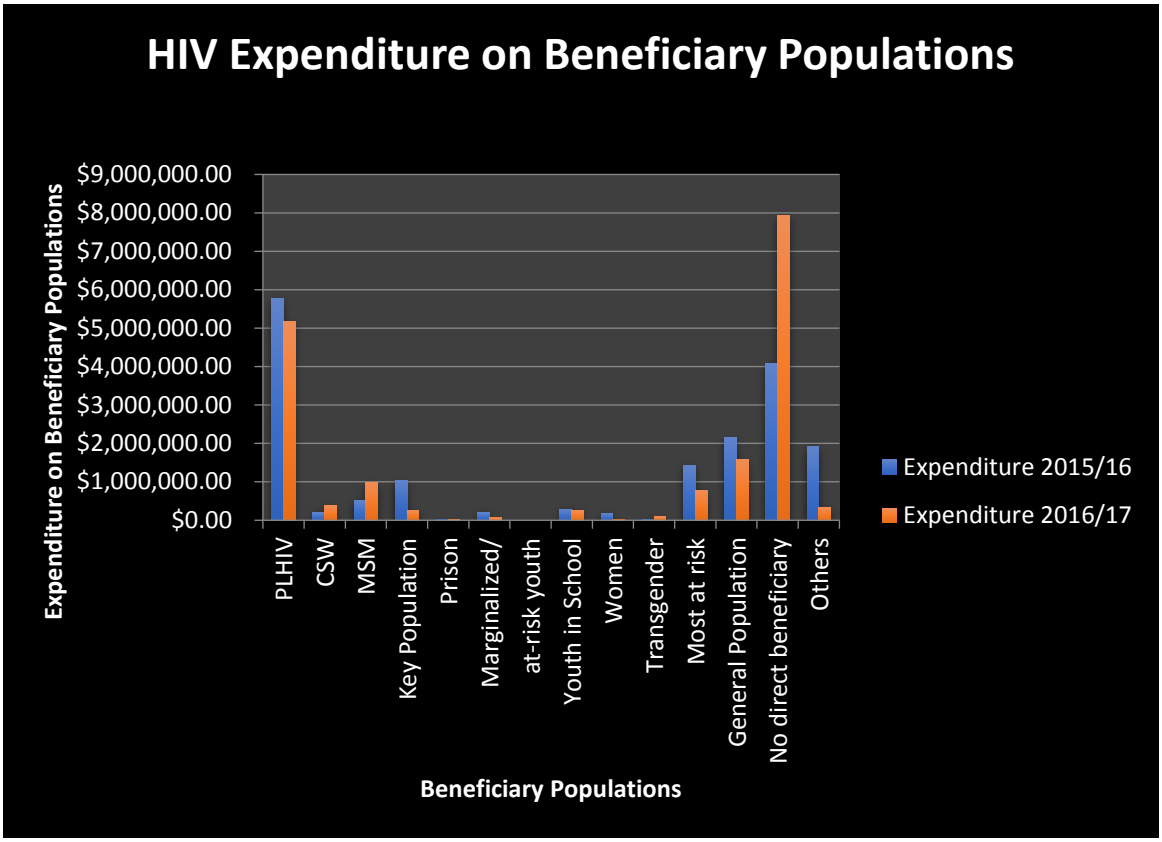

Figure 17 – HIV Expenditure by Beneficiary Populations

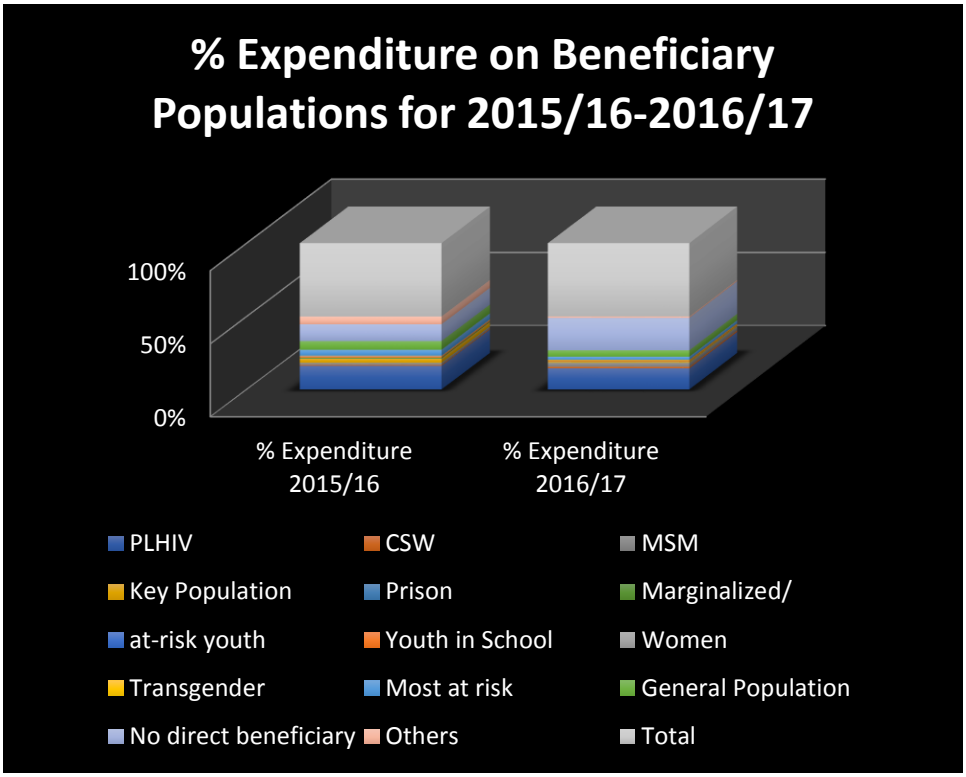

Figure 18 – HIV Percentage Expenditure on each Beneficiary Population

Funding Sources of Beneficiary Populations

In 2015/16, approximately $1.64M USD of funds from USG were expended on PLHIV. This accounted for approximately 36% of expenditure by the USG on HIV in Jamaica and 22% of monies spent on PLHIV. GOJ and the GFATM expended $2.78M USD and $2.38M USD respectively on PLHIV. This accounted for 38% and 52% respectively of expenditure by these two funding sources. GOJ contributed the most to PLHIV expenditure with 40% to this beneficiary population while GFATM contributed 33%. These three main funding sources contributed in total approximately 95% of monies expended on PLHIV for the 2015/16 period.

In 2016/17, 47% of GOJ expenditure was focused on PLHIV with expenditure of $2.98M USD. The 40% expenditure by GOJ represented approximately 58% of the PLHIV expenditure. GFATM contributed approximately $1.2M USD while USG expenditure fell to $603,183 USD. This represented 30% and 15% respectively of GFATM and USG expenditure in the 2016/17 period.

	2015/16			2016/17		
Beneficiaries	**GOJ Expenditure**	**% of GOJ Exp**	**% of Total Exp on BP**	**GOJ Expenditure**	**% of GOJ Exp**	**% of Total Exp on BP**
PLHIV	$2,780,031	40.00	38	$2,984,782.65	47.04%	57.80%
CSW	$85,718	1.23	15.47	$175,387.60	2.76%	47.12%
MSM	$35,278	0.51	6.93	$143,137.91	2.26%	14.55%
Key Pop	$1,007,999	14.50	31.52	$250,569.31	3.95%	13.59%
Prison						
At-risk youth						
In school	$196,034	2.82	67.85	$199,551	3.14%	77.28%
Women						3.77%
Transgender						
Other	$2,844,941	40.93	38.20	$$2,404,607.13	37.90%	47.12%

Table 18 – Percentage GOJ Expenditure on BPs and as Percentage of BP Expenditure

$1M USD or 14.5% of GOJ expenditure was focused on Key Populations; this represented 31% of monies expended on Key Populations in the 2015/16 period. However, this proportion dropped to $250,000 USD or 3.95% of GOJ expenditure. It represented 13.6% of expenditure on this population, as seen in

	2015/16			2016/17		
Beneficiaries	**GOJ Expenditure**	**% of GOJ Exp**	**% of Total Exp on BP**	**GOJ Expenditure**	**% of GOJ Exp**	**% of Total Exp on BP**
PLHIV	$2,780,031	40.00	38	$2,984,782.65	47.04%	57.80%
CSW	$85,718	1.23	15.47	$175,387.60	2.76%	47.12%
MSM	$35,278	0.51	6.93	$143,137.91	2.26%	14.55%
Key Pop	$1,007,999	14.50	31.52	$250,569.31	3.95%	13.59%
Prison						
At-risk youth						
In school	$196,034	2.82	67.85	$199,551	3.14%	77.28%
Women						3.77%
Transgender						
Other	$2,844,941	40.93	38.20	$$2,404,607.13	37.90%	47.12%

Table 18.

Only 1.5% and 0.5% of GOJ expenditure in the 2015/16 period was expended on SW and MSM respectively. They both increased to approximately 2.76% and 2.26% respectively of GOJ expenditure in the 2016/17 period. The expenditure by GOJ on these two populations represented approximately 15% and 7% respectively of expenditure on these populations for the 2015/16 period. In 2016/17, GOJ expenditure represented approximately 47% and 15% respectively for SW and MSM.

GOJ expended no funds on the Transgender population in either of the years under review. It however contributed approximately 68% and 77% respectively for each fiscal year under review to the expenditure on in school youth, which is indicative of MOEYI expenditure.

Resource Cost

Table 19 – HIV Expenditure on Resource Costs

Resource Cost	Expenditure 2015/16	%Expenditure 2015/16	Expenditure 2016/17	% Expenditure 2016/17
Wages	$7,045,632.97	39.5%	$7,222,168.94	40.42%
Consulting Services	$2,421,595.67	13.6%	$1,203,419.15	6.74%
Antiretroviral	$1,847,527.56	10.4%	$1,880,810.11	10.53%
Transportation	$353,343.80	2.0%	$400,050.72	2.24%
Logistics	$1,293,635.74	7.3%	$1,016,902.88	5.69%
Condoms	$1,429,363.81	8.0%	$1,423,638.72	7.97%
Food/ Nutrient	$218,268.56	1.2%	$385,842.8	2.16%
Medical Supplies and Reagents	$1,468,245.00	8.2%	$1,017,745.00	5.70%
Other Medication	$38,770.82	0.2%	$17,441.40	0.10%
Other	$1,712,057.87	9.6%	$3,297,884.54	18.46%
Total	$17,828,441.79	100.0%	$17,865,904.61	100.0%

Table 19 shows the expenditure by resource costs. 39% of TH/AE was spent on wages in the 2015/16 fiscal year. A similar percentage of 40.4% of the TH/AE was spent in the 2016/17 fiscal period. These percentages represent 7.05M USD and 7.22M USD respectively for the 2015/16 and 2016/17 fiscal periods.

Consulting services was the resource cost with the second most expenditure for fiscal periods 2015/16, with expenditure of $2.42M USD. $1.2M USD was expended on consulting services for the 2016/17 fiscal year. These figures represent 13.6% and 6.7% of TH/AE respectively for each fiscal year under review. ARVs represented 10.4% and 10.5% respectively of TH/AE for each fiscal year under review. This translates to $1.85 M USD and $1.88M USD respectively for each fiscal period under review. Approximately 90% of ARV expenditure each year is based on procurement which comes from GFATM and GOJ coffers. Any expenditure due to consumption in the assessment is based on purchases of ARV for treatment by individuals accessing the private pharmaceutical distribution companies.

Any expenditure regarding reagents and test kits are seen under medical supplies and reagents. Expenditure in this category for the period of 2015/16 was $1.46M USD and $1.02M USD in 2016/17, representing 8.2% and 5.7% of TH/AE respectively for each fiscal period under review.

The Other category represents resource costs such as administrative costs, publishing and capital costs related to laboratory equipment and information technology.

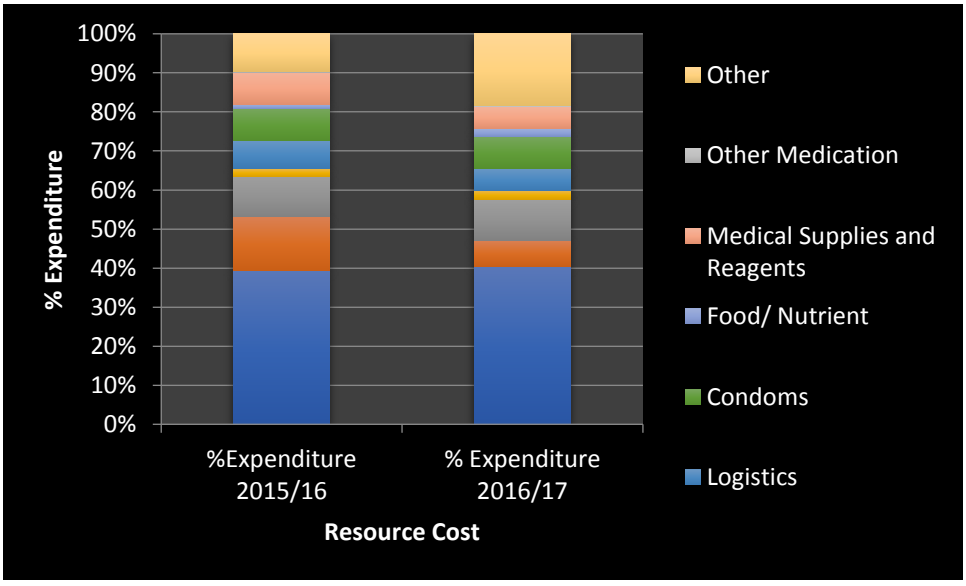

Figure 19 – Percentage Expenditure of Resource Cost as part of Total HIV Expenditure

Funding Source for Selected Resource Cost

Human Resources as stated previously is the production factor which accounts for the largest proportion of TH/AE. Further to this, as Jamaica moves towards test, treat and stay, the procurement and the consumption of ARVs is extremely important to assess the source of financing of these resource costs. This is even more so if Jamaica is to be considered transition ready. The tables below indicate that GOJ absorbed 64.8% of salary expenditure in the 2015/16 period and 57% in the 2016/17 fiscal period. The remainder for both years was from international funding sources.

In 2015/16, 90% of funds expended on ARVs was through international sources, namely the GFATM. Approximately 10% was expended through GOJ coffers. Less than 1% of ARV expenditure had its origins from private sources, namely household funds. In 2016/17 approximately 40% of expenditure on ARVs was from government coffers. This indicates an ARV absorption rate by the government of approximately 40%.

Table 20 – Resource Cost (Wages and ARV) by Funding Source 2015/16

Resource Cost	Financing Source (USD)		
	Public	Private	International
Wages	$4,571,255.71	---	$2,474,377.27
Antiretrovirals	$184,358.10	$3,708.63	$1,659,460.83

Table 21 – Resource Cost (Wages and ARV) by Funding Source 2016/17

Resource Cost	Financing Source (USD)		
	Public	Private	International
Wages	$3,997,779.89	---	$3,036,978.48
Antiretrovirals	$752,311.84	$10,205.315	$1,118,292.95

Trends, Observations and Analysis

- Real HIV expenditure has decreased over the eight years since the NASA has been conducted. At no point has the real value been equivalent to the baseline value of $1.45BN JMD in 2009/10. After a continuous decline in real value, the expenditure increased in real terms in 2012/13 to $1.4BN JMD.
- The 2013/14 year saw a decline in both the real and nominal HIV expenditure to approximately $894M JMD; however, it increased in the 2014/15 fiscal year. This trend in real and nominal expenditure pattern is similar to that of the government's health expenditure, which saw no increase in terms of real value from the 2008/09 fiscal period until 2014/15. (5)
- The seemingly low expenditure in the 2013/14 fiscal period on HIV can be attributed to the fact that the GFATM Round 9 grant was closing out and Jamaica was operating under considerably lower funds through the Transition Funding Model. GOJ expenditure represented the highest percentage of expenditure during that period. Such was the level of expenditure that the real value of the GOJ expenditure increased in the 2013-14 period. However, it decreased in the 2014/15 period, rose in 2015/16 and in 2016/17.
- This decrease in trend means less goods and services have been purchased to implement the HIV response. This may have implications for the targets set out in the NISP, as well as the country's move to the global standard of 90/90/90. (20)
- As HIV deaths decline, the possibility exists that the response is becoming more cost effective as it encourages early detection, thus leading more persons to access treatment, with the possibility of less morbidity and mortality. To understand the impact of HIV expenditure, the Goals model can be used to analyze whether the current expenditure and investments are making an impact on HIV incidence within the response in general.

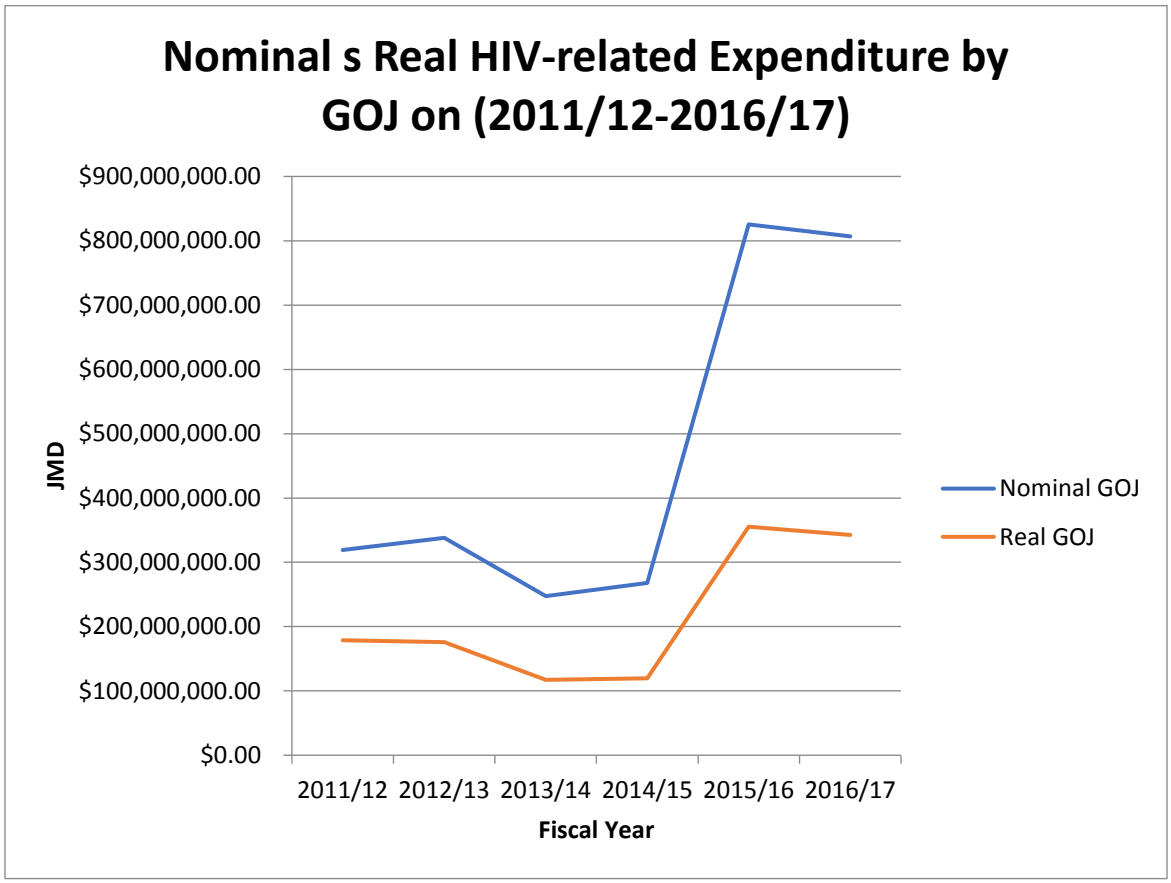

Figure 20 – GOJ HIV Expenditure-Nominal and Real Values 2011/12 -2016/17

- The three ASCs with the largest proportions of TH/AE over the years are Prevention, Treatment and PCPM. The expenditure trend from 2011/12 indicates that PCPM has always accounted for the greatest expenditure.
- In fact, treatment values would have to be increased almost four fold for this expenditure to be valued more than Prevention and PCPM.

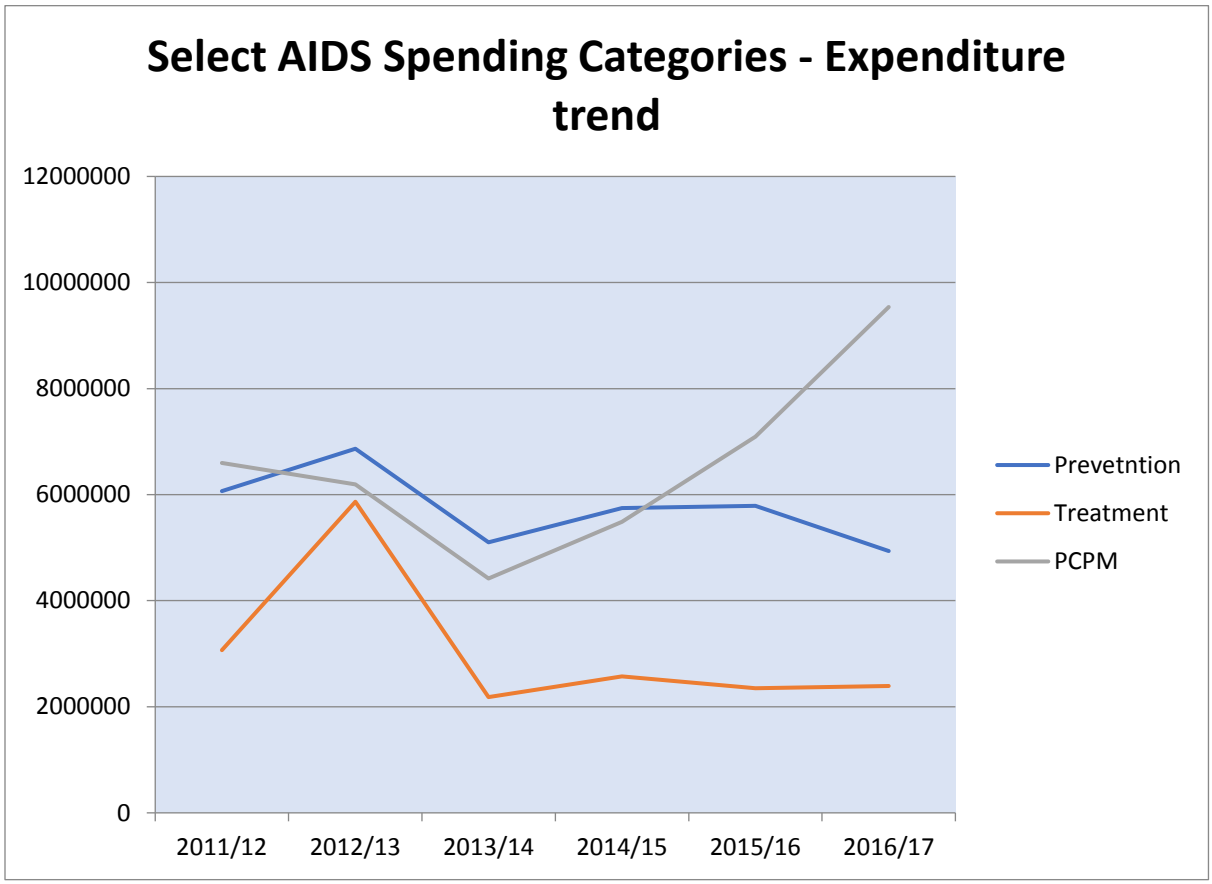

Figure 21 – HIV Expenditure Trend on Three Selected Spending Categories

- The National Integrated Strategic Plan 2014-2019 has five main strategic priorities. Some of the ASCs of NASA align to these five priorities. These priorities are Prevention and SRH Outreach and Universal Access to Treatment, Care and Support and SRH Services, Enabling Environment, Monitoring and Evaluation and Sustainability, Leadership and Governance. (21)
- A five-year costing of the NISP suggests that over the five years, Universal Access to Treatment, Care and Support should account for the largest proportion of costs, at 67%, as it relates to the implementation of the NISP. Prevention should account for 19% of expenditure, Enabling Environment 7%, Sustainability, Governance and Leadership should account for 6%, while Monitoring and Evaluation should account for 2%, if the plan is to be effectively implemented and targets to be achieved. (22)
- However, there does not seem to be an alignment of expenditure. The three-year (2014/15-2016/17) average of the costed NISP is approximately two times more than the total average expenditure for the same corresponding period, with values of $31.4M USD and $15.2M USD respectively (see Table 22).
- The closest alignment to the costed values is that of Prevention and Monitoring and Evaluation[4].

[4] This is the ASC .04.03, ASC. 04.4, ASC.04.5 and ASC.08

- Average expenditure for Prevention between 2014/15-2016/17 was valued at approximately $5.3M USD per annum, while the NISP was costed at an average of $6.2M USD for the same three-year period. This difference represents on average a difference of $900,000 USD or 14.5% difference in expenditure compared to the costing.
- The average expenditure of M&E across the 2014/5- 2016/17 years is approximately $680,000 USD, while the total average costing for the three-year period is $730,000 USD, representing only 6.8% less expenditure than the projected costs.
- Sustainability, Leadership and Governance, which refers to the systems to be implemented for strategic management and coordination of the NISP, was the only priority area where the expenditure was greater than what was costed. The average expenditure between 2014/15-2016/17 was $4.7M USD while the average costing was $1.9M USD. This may be indicative that in its current state the planning and coordination of the response is too top heavy, or it may indicate the increased investment to strengthen health systems which will assist in the sustainability of the HIV response, especially as international funding is on the decline.
- Only $760,000 USD was expended on average between 2014/15 to 2016/17 on Enabling Environment and Human Rights, while the estimated average cost for the period was $2.1M USD.
- The greatest dissonance between expenditure and costing is that of Treatment, Care and Support.
- The average expenditure for 2014/15-2016/17 under Treatment Care and Support[5] is valued approximately $3.8M USD, while the costing of Universal Treatment, Care and Support is almost 5.5 times more, valued at $20.4M USD on average for the period. Interestingly, the average costing of Treatment is more than the total average expenditure estimated by NASA for that period.
- The dissonance in Treatment and Care may be due to the fact that when costing Treatment and Care, private sector cost estimates from 2006 of $515 USD were used for ARVs, as well as the inclusion of maternal health care services. The NASA expenditure does not consider maternal health and any expenditure on ARVs is based on the consumption and procurement of ARVs at public sector rates and purchases. Further to this, treatment/healthcare costs are possibly under estimated in the NASA. Health information and health recording systems are weak in Jamaica, therefore information is lost as it relates to public sector treatment, especially in-patient. Thus, there is limited information on OI treatment and laboratory activities outside of HIV testing and CD4 testing.
- There is also missing information on treatment from the private sector. A true island-wide picture may not have been depicted as few private treaters have given information regarding private sector treatment.
- The number of PLHIV estimated to be on ARVs by costing of the NISP is more than reported during the NASA expenditure exercise. Information from the MOH indicates that the number of PLHIV on treatment was 8,585 in 2015/16 and 11,039 in 2016/17. Projections made during the

[5] This is the sum of ASC .02 along with Drug Supply Coding.

costing of the NISP estimated that 12,966 PLHIV and 14,750 PLHIV respectively for 2015/16 and 2016/17 should be on treatment. This discrepancy may be indicative of the health system, such as health information and patient tracking structures, which may have affected programme planning and implementation.

- ARV per PLHIV estimate based on expenditure for drugs procured in the 2015/16 and 2016/17 fiscal period was $215.20 USD and $112.21 USD respectively, which is approximately 50% and 25% respectively of the $515 USD which was used for costing projections. Costing estimates may not be accurate as they may have been based on old estimates of ARVs more than ten years ago.

Table 22 – Comparison HIV Expenditure vs Costing (USD Millions) of NISP Priority Areas

Priority Area	Costing 2014/15	Expended 2014/15	Costing 2015/16	Expended 2015/16	Costing 2016/17	Expended 2016/17
Prevention & SRH Outreach	7.1	5.7	5.5	5.7	6	4.5
Universal Access to Treatment	18.7	2.2	20.2	5.1	22.5	4
Sustainability, Leadership & Governance	1.5	4.8	2	3.96	2.2	5.4
Enabling Environment and Human Rights	1.9	.78	2.3	0.8	2.3	0.7
Monitoring and Evaluation	0.6	0.7	0.9	0.45	0.7	.9
Total	29.8	14.18	30.9	16.01	33.7	15.5

Budget Analysis

- There seems to be no alignment between the budget and expenditure.

- In 2015/16, the GFATM expenditure of $4.6M USD was 20% more than budgeted for at $3.8M USD. In 2016/17, there seemed to have been more alignment with only a 3% difference in expenditure, with the budget being $4.2M USD and expenditure being $4.3M USD.
- PEPFAR expenditure in 2015/16 at $848,000 USD was 61% less than budgeted. However, in 2016/17 the expenditure of $2.7M USD was 22% more than budgeted.
- The total GOJ counterpart funds budgeted was $932,000 USD in 2015/16 and $1.08 M USD in 2016/17. However, total GOJ expenditure which includes salaries for HCW in hospitals, the purchase of ARVs, and expenditure by the MOEYI, stood at $6.9M USD and $6.34M USD; representing a 640% and 488% difference between budget and expenditure for each fiscal year.
- The budgets are also less than that of the costed NISP.

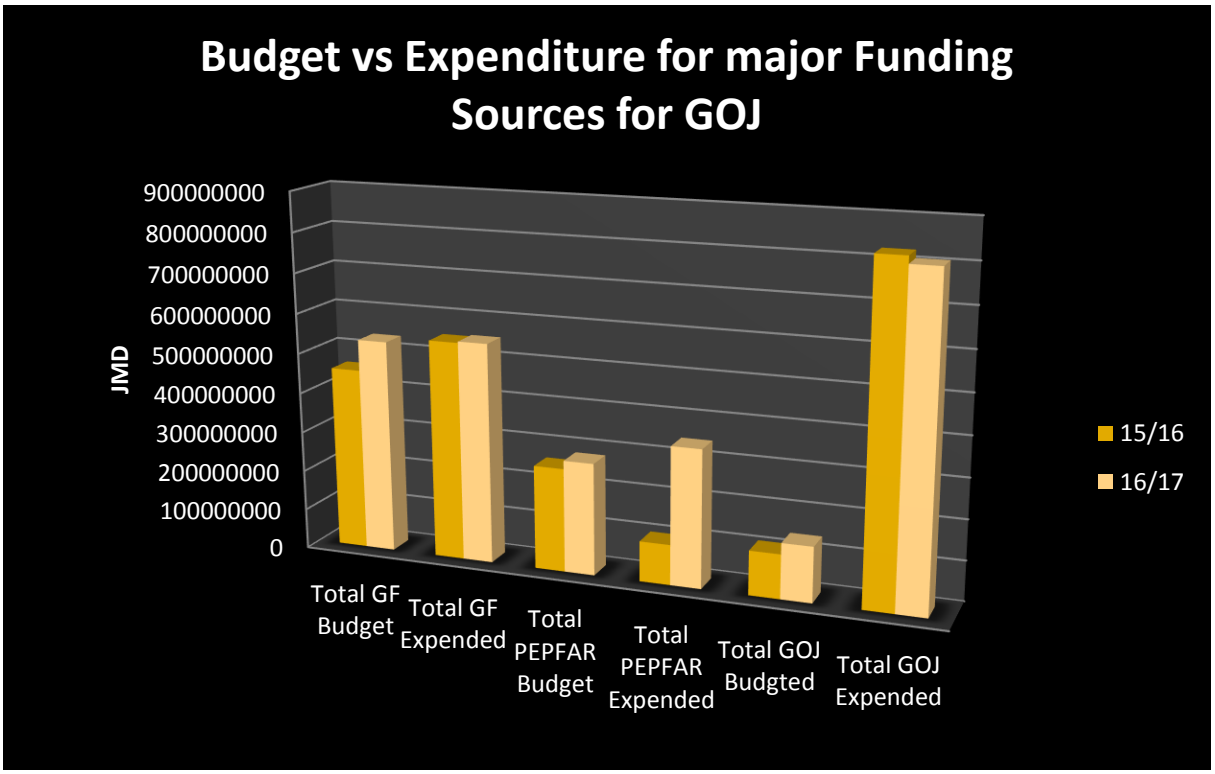

Figure 22 – Budget vs Expenditure for GOJ 2015/16 & 2016/17

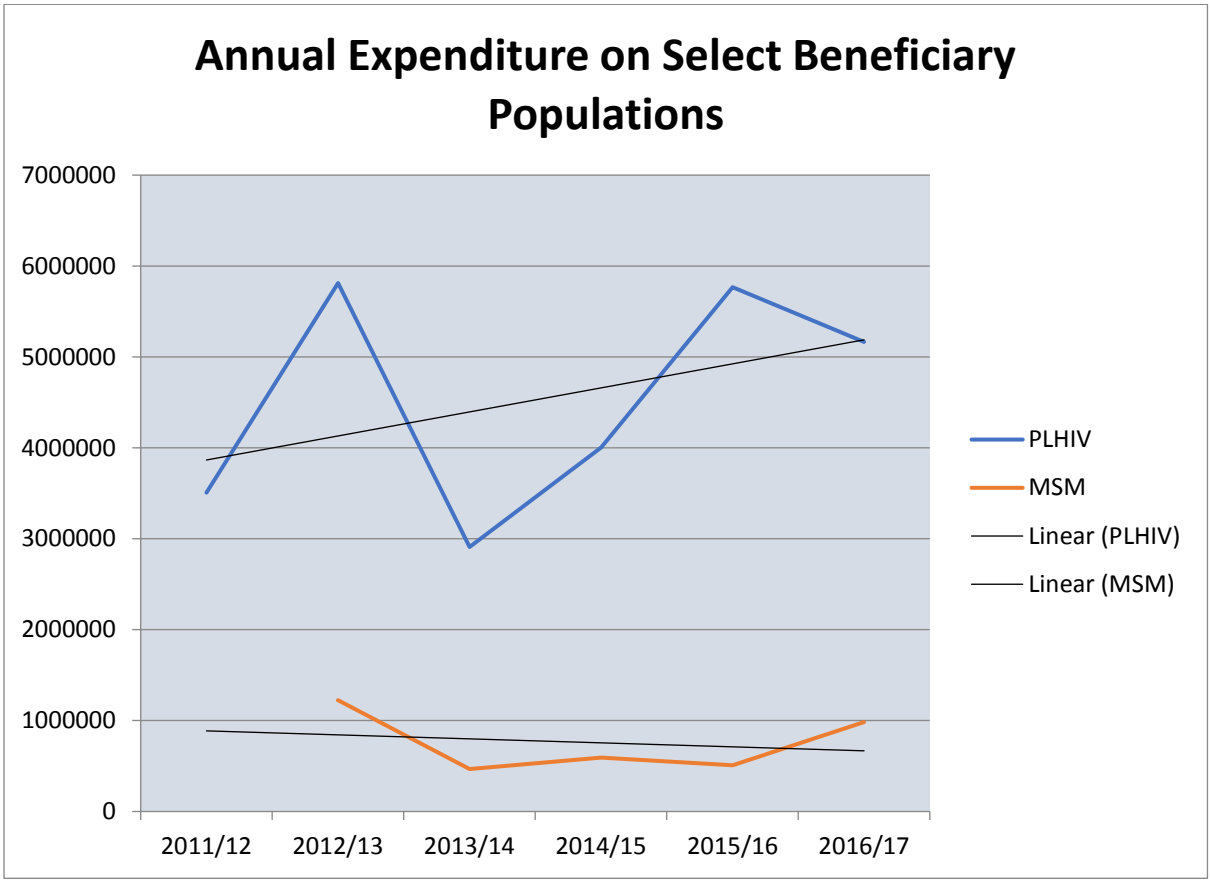

Figure 23 – Annual Expenditure on PLHIV and MSM 2011/12-2016/17

Expenditure data indicates that with respect to beneficiary populations, expenditure may be aligned to the epidemic. There was an increase in expenditure, from $508,879 USD in the 2015/16 period, by approximately 93% in the 2016/17 period, to $984,091 USD for MSM. The proportion in expenditure represents a move from 2.8% of TH/AE to 5.5%.

While accounting for only 0.1% of TH/AE in 2015/16 and 0.6% in 2016/17, Transgender shows the trend for increased investment. This community was highlighted as a Most at-Risk and targeted population in both Jamaica's Concept to UNAIDS and the NISP. (20) (21)

Table 23 and **Error! Reference source not found.** reveal that PLHIV has the highest per unit (person) expenditure relative to the other populations group isolated above. This is expected as this group would be directly impacted by very expensive interventions/treatments which would not be a cost item for the other groups. The comparison of per unit expenditure on PLHIV over the two fiscal years under review also reveals a significant decline in total and per unit expenditure. The unit cost per person declined by approximately 30% over the two years for PLHIV. The other two groups for which data was received for both fiscal years were FSW and MSM. Both groups experienced an increase in per unit expenditure of approximately 156% and 27% respectively. It is important to note that less FSWs were reached in

2016/17; the number of MSMs reached in 2016/17 was more than the numbers reached in the previous fiscal year.

The per unit costs for the targeted populations is more than that which was costed with NISP, however the costing in the NISP speaks specifically to general population interventions. However, if a comparison is done based on the general population costing per individual, it will be seen that the closest per person expenditure is that of the Transgender population is $13.89 USD; this value is in alignment with per capita expenditure on interventions. It should be noted, however, that field workers believe the effort to reach a TG is more time and labour consuming than reaching other populations. The key population per person expenditure which included general population in the calculations is at $15.11 USD per person as opposed to $12 USD per person for the 2016/17 fiscal period in the costed NISP.

Table 23 – Per Unit Expenditure for Targeted Beneficiary Populations 2015/16

Numbers Reached 2015/2016			
	Reached	**Total Expenditure [USD]**	**Per Unit Expenditure [USD]**
FSW	16,941	$210,548.94	$12.43
MSM	6,759	$508,879.45	$75.29
OSY	18,345*	$18,670.89	$1.02
PLHIV	8585	$5,768,506.59	$671.93
KEY Populations (including Gen. Pop)		$3,197,633.69	

Table 24 – Per Unit Expenditure for Targeted Beneficiary Populations 2016/17

Number Reached 2016/2017			
	Reached	**Total Expenditure [USD]**	**Per Unit Expenditure [USD]**
FSW	11,710	$372,181.78	$31.78
MSM	10,287	$984,091.40	$95.66
TG	820	$11,387.24	$13.89
PLHIV	11,039	$5,164,220.92	$467.82
KEY Populations (including Gen. Pop)	121,971	$1,843,260.78	$15.11

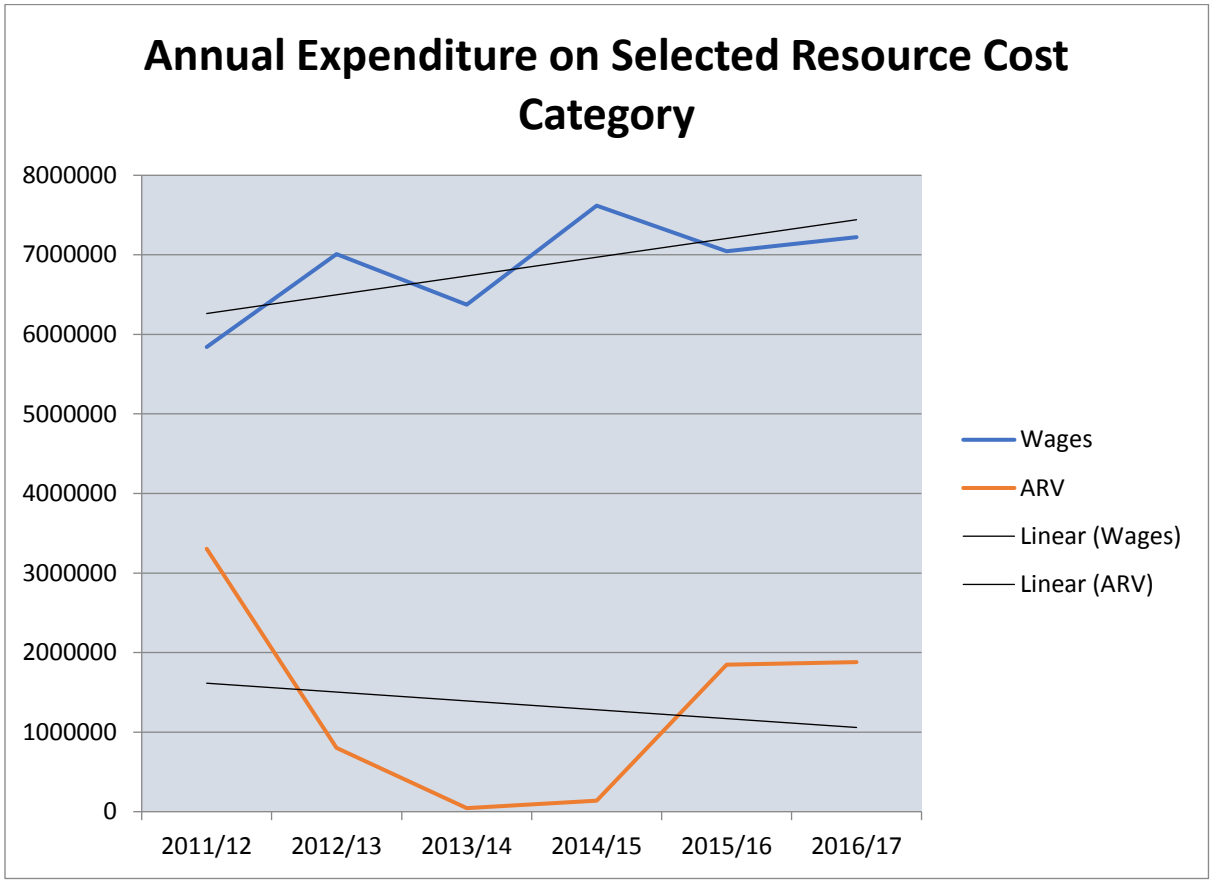

Figure 24 – HIV Expenditure Trend for Selected Resource Cost

Wages still account for the resource cost with the greatest expenditure. This trend has been consistent since the 2011/12 fiscal year to the present 2016/17. Examination of the Global Fund and USAID PEPFAR budget for MOH and its recipients indicates that there is some dissonance between the budgets and the expenditure.

Expenditure on ARVs by the country seems to have declined over the years, with the least amount being bought in the 2013/14 period. This is consistent with the end of one round of funding by the GFATM. There are concerns regarding the amount of expenditure in the two fiscal years under review. Expenditure on ARVs in the 2015/16 period is only slightly greater than that in the 2016/17 period; however, the test, start and stay programme which should scale up testing and the use of ARVs began in January 2017. The impact of this effort does not seem to be totally reflected in the expenditure of the 2016/17 period, possibly because the fiscal period ends in March 2017 and due to procurement processes, there may be a lag in the time of initiation of the ARV purchase to the time of actual payment. Therefore, 2017/18 data must be closely evaluated for the ARV procurement expenditure to assess if the country's efforts to scale up treatment are on track based on levels of investment as seen through expenditure.

Conclusion

While increasing nominally over the last eight fiscal years, HIV expenditure has decreased in terms of the "real value", meaning less goods and services are being purchased to implement Jamaica's HIV response. This calls for proper policy and programme planning, particularly given the context that while HIV deaths have been declining there has been increased numbers of new HIV cases.

Expenditure seems to be aligning with the epidemic as it relates to MSM and transgender, where there seems to be increased expenditure for each of the populations over the two years both in terms of value and proportion of TH/AE.

While gains in reduced mortality have been made, when planning and tracking resources, the country still needs to be mindful as there continues to be minimal expenditure on populations such as youth, OVC and women. If left ignored, this may impact the targets of the NISP. Therefore, it should be explored whether the seeming minimal expenditure on these populations can impede any gains which have been made in the Jamaican HIV response.

Given the current depiction of expenditure with the burden of investment on programme planning and coordination, planners and policy makers need to make long-term decisions to determine if this should be re-directed and invested in areas such as prevention and treatment, which are both interconnected. This is important as neither costing, expenditure nor budget of HIV implementation seem to be aligned. As part of the process to increase the efficacy of programme and policy planning, a more robust tracking of treatment expenditure is needed, especially as it relates to in-patient care and the burden on the overall public health system.

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Annex I - Matrices

Fiscal Years	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17
Nominal Expend	1,452,421,552	1,395,186,486	$1,450,572,386	1,814727,863	1,266,413,643	1,673,183,567	$2,109,399,478	$2,015,101,742
Real Expend		$1,238,911,708	$1,197,097,450	$1,402,066,411	$894,639,736	$1,085,287,705	$930,454,115	$868,204,111

Table 25 – Total AIDS Expenditure 2008/09 to 2016/17 [JMD)

Table 26 – Types of Financing Agents by Types of Funding Sources 2015/16 Fiscal Year

Fin. Agent	Funding Source (USD)		
	Public	Private	International
Public	$6,950,000.89		$5,536,873.91
Private		$1,731,781.716	$198,582.93
Bilateral			$2,203,633
Multilateral			$803,103.07
Int'l Non Profit			$404,466.27

Table 27 – Types of Financing Agents by Types of Funding Sources 2016/17 Fiscal Year

Fin. Agent	Funding Source (USD)		
	Public	Private	International
Public	$6,345,446.58		$7,591,636.05
Private		$1,629,352.02	$218,978.21
Bilateral			$961,980.04
Multilateral			$709,875.88
Int'l Non Profit			$408,635.84

Table 28 – Select Financing Sources by AIDS Spending Categories [2015/16]

Financing Source	AIDS Spending Category							
	Prevention	Treatment/Care	OVC	PCPM	Training	Social Protect	Advocacy	Research
GOJ	$2,282,679.27	$1,486,222.60	---	$3,056,452.62	$2,525.89	---	$122,120.51	
USG	$469,511.95	$191.97	---	$749,311.99	$1,657,970	$757.77	$196,253.27	
HH Funds	$1,362,218.68	$137,267.19	---	---	---	---	---	
UN Response	$236,248.43	---	---	$574,632.32	---	---	$118,887.37	
Global Fund	$1,144,647.34	$517,941.58	$21,049.09	$2,700,813.40	$10,164.41	$43,371.93	$74,001.94	
Other	$291,995.29	$205,572.68	---	$9,315.65	$2,002.19	$4,704.39	$289,256.76	$60,353.72

Table 29 – Select Financing Sources by AIDS Spending Categories [2016/17]

Funding Source	AIDS SPENDING CATEGORIES(USD)							
	Prevention	Treatment/Care	OVC	PCPM	Training	Soc. Protect	Advocacy	Research
GOJ	$1,546,173	$1,272,992.62	$360.80	$3,386,467.8	---	---	$114,556.59	
USG	$924,289.89	$364,983.32	---	$2,898,579.79	$68,066.95	$20,044.57	$165,417.52	
HH Funds	$1,423,638.72	$134,941.89	---	---	---	---	---	
UN Response	$118,170.04	---	---	$554,846.00	---	---	$107,132.52	
Global Fund	$825,036.02	$350,342	$6,445.15	$2,602,258.24	$82,112.19	$50,713.17	$144,033.26	
Other	$96,654.67	$268,068.48	---	$73,984.05	---	---	$196,465.54	$44,234

Table 30 – Financing Agents by AIDS Spending Categories [2015/16]

ASC	Financing Agent (USD)				
	Public	Private	Bilateral	Multilateral	Int'l Non Profit
Prevention	$4,033,589.59	$1,599,236.44	---	$51,041.51	$103,433.39
Treatment/Care	$1,524,469.17	$137,267.19	---	---	---
OVC	$21,049.08	---	---	---	---
PCPM	$5,917,637.24	$8,399.737	$575,149	$562,840	$26,500
Training	$44,178.08	---	$1,628,484	---	---
Social Protection	$48,834.07	---	---	---	---
Advocacy	$291,837.01	$185,461.27	---	$189,221.56	$134,000
Research	$60,353.71	---	---	---	---

Table 31 – Financing Agents by AIDS Spending Categories [2016/17]

ASC	Financing Agent				
	Public	Private	Bilateral	Multilateral	Int'l Non Profit
Prevention	$3,401,391.98	$1,465,888.47	---	---	$69,559.92
Treatment/Care	$1,922,750.79	$197,590.01	$126,166	---	$144,821.51
OVC	$6805.946	---	---	---	---
PCPM	$7,984,274.56	$75,984.05	$759,724	$552,846	$165,325
Training	$118,323.15	---	$31,856	---	---
Social Protection	$70,757.74	---	---	---	---
Advocacy	$432,778.45	$108,867.70	---	$157,029.88	$28,929.39
Research	---	---	$44,234.04	---	---

Table 32 – Financing Agent by Service Providers [2015/16]

Fin. Agent	Service Provider (USD)			
	Public	Not for-profit	Pvt. For-profit	Int'l Donors
Public	$10,606,974.48	$1,707,282.41	---	$172,617.9
Private	---	$430,878.77	$23,073.79	---
Bilateral	---	$1,821,742	---	$381,891
Multilateral	$39,939.51	$188,759.56	---	$574,404
Int'l Non Profit	$58,000	$346,466.27	---	---

Table 33 – Financing Agent by Service Providers [2016/17]

Financing Agent	Service Providers (USD)			
	Public	Not for-profit	Pvt. For-profit	Int'l Donors
Public	$11,383,691.59	$2,364,466.65	---	---
Private	---	$289,749.62	$1,558,580.61	---
Bilateral	---	$557,843.041	---	$404,137
Multilateral	---	$155,919.88	---	$553,956
Int'l Non Profit	---	$408,635.83	---	---

Table 34 – Financing Agents by Beneficiary Population [2015/16]

Financing Agent	Beneficiary Population (USD)									
	PLHIV	CSW	MSM	Key Pop	Prison	At risk Youth	In School	Women	Transgender	Other
Public	$5,318,685	$202,671.53	$451,288.56	$755,974.4	$11,508	$147,067.59	$248,953	---	$3,089.12	$5,345,266.45
Private	$240,837.19	$7,877.41	$8,650.88	$237,185.5	---	$62,991	---	---	---	$1,372,822.44
Bilateral	---	---	---	---	---	---	---	---	---	$575,149
Multilateral	$10,451	---	---	---	---	---	$39,939	$183,759	---	$568,953
Int'l Non Profit	$198,532.87	---	$48,940	$45,000	---	---	---	---	$15989.3	$96,004.09

Table 35 – Financing Agents by Beneficiary Population [2016/17]

Financing Agent	Beneficiary Population (USD)									
	PLHIV	CSW	MSM	Key Pop	Prison	At-risk Youth	In School	Women	Transgender	Other
Public	$4,712,375.17	$351,087.03	$958,631.41	$259,971.51	$23,272.40	$61,096.77	$252,212.62	$6,011.64	$11,387.23	$7,307,289.67
Private	$151,118.25	$21,094.74	$25,459.98	---	---	$12,698	$6000	---	---	$1,631,959.24
Bilateral	$126,166	---	---	---	---	---	---	---	---	$835,814.04
Multilateral	$6,726.25	---	---	---	---	---	---	---	---	$703,149.63
Int'l Non Profit	$167,835.23	---	---	---	---	---	---	---	---	$171,240.67

Service Providers	AIDS Spending Category (USD)							
	Prevention	Treatment/Care	OVC	PCPM	Training	Social Protection	Advocacy	Research
Public	$2,922,489.38	$1,888,754.05	---	$5,561,735.31	$43,470.83	$44,127.50	$244,336.89	---
Not for-profit	$1,398,973.43	$321,174.78	$21,049.08	$503,959.21	$1,629,191.249	$4,706.575	$555,720.95	$60,353.7
Pvt for-profit	---	$23,073.79	---	---	---	---	---	---
Int'l Donors	$103,619.448	---	---	$1,024,831.45	---	---	$462	---

Table 36 – AIDS Spending Category by Service Providers [2015/16]

Table 37 – AIDS Spending Category by Service Providers [2016/17]

Service Providers	AIDS Spending Category							
	Prevention	Treatment/Care	OVC	PCPM	Training	Social Protection	Advocacy	Research
Public	$1,803,839.99	$1,525,818.25	$360.8	$5.927,575.24	$51,238.57	$70,663.37	$199,913	---
Not for-profit	$1,288,963.59	$634,264.23	$6,445.14	$1,359,804.17	$108,940.57	94.362	$524,052	$44,234
Pvt for-profit	$1,423,638.72	$134,941.88	---	---	---	---	---	---
Int'l Donors	---	---	---	$954,452	---	---	---	---

Table 38 – AIDS Spending Categories by Beneficiary Population [2015/16]

Beneficiary Population	AIDS Spending Categories (USD)							
	Prevention	Treatment/Care	OVC	PCPM	Training	Social Protection	Advocacy	Research
PLHIV	$259,910.71	$2,184,999.76	$21,049	$2,960,574.59	---	$48,834.07	$293,138.36	---
CSW	$190,440.72	---	---	$9,511.21	$10,597	---	---	---
MSM	$415,660.79	$13,444.31	---	$37,228.67	$15,915.93	---	$26,629.74	---
Key Pop	$560,637.33	---	---	$391,914.31	---	---	$85,608.25	---
Prison	$11,508.15	---	---	---	---	---	---	---
At-risk youth	$148,877.81	---	---	---	---	---	$61,181	---
In school	$288,892.38	---	---	---	---	---	---	---
Women	---	---	---	---	---	---	$183,759.56	---
Transgender	$18,750.06	---	---	$328.36	---	---	---	---
Other	$3,892,622.98	$148,751.96	---	$3,690,968.81	$1,646,149.2	---	$150,202.92	$60,353.71

Table 39 – AIDS Spending Categories by Beneficiary Population [2016/17]

Beneficiary Populations	AIDS Spending Category (USD)							
	Prevention	Treatment/Care	OVC	PCPM	Training	Social Protection	Advocacy	Research
PLHIV	$741,269.07	$2,209,419.23	$360	$1,886,063.42	$5,421.02	$70,757.74	$250,929.63	---
CSW	$328,623.71	$34,584.52	---	$3,538.57	$5,434.97	---	---	---
MSM	$888,254.83	$36,446.58	---	---	$5,434.97	---	$53,955.00	---
Key Pop	$159,061.25	---	---	---	---	---	---	---
Prison	$23,272.4	---	$6,445.14	---	---	---	---	---
At-risk youth	$50,063.46	---	---	17,044.95	---	---	---	---
In school	$258,212.62	---	---	---	---	---	---	---
Women	$6,011.63	---	---	---	---	---	---	---
Transgender	$11,387.24	---	---	---	---	---	---	---
Other	$2,476,695.79	$110,877.97	---	$7,530,596.41	$133,888.18	---	$422,720.79	$44,234.04

Table 40 – Production Factors by AIDS Spending Categories [2015/16]

Production Factors	AIDS Spending Categories (USD)							
	Prevention	Treatment/Care	OVC	PCPM	Training	Social Protection	Advocacy	Research
Wages	$2,585,300.91	$1,613,971.37	---	$2,605,828.38	---	---	$240,532.31	---
Antiretrovirals	---	$3,708.63	---	$1,843,818.94	---	---	---	---
Transportation	$133,275.66	---	---	$141,880.4	---	$39,423.12	$38,764.62	---
Logistics	$521,902.49	$155,639.80	---	$77,269.09	$34,010.78	---	$444,459.85	$60,353.72
Condoms	$1,425,338.71	---	---	$4,024.48	---	---	---	---
Food/Nutrients	$218,268.56	---	---	---	---	---	---	---
Other	$903,214.61	$573,876.22	---	$2,417,704.70	$1,638,651.31	$9.410.96	$76,763.07	---

Table 41 – Production by AIDS Spending Categories [2016/17]

Production Factor	AIDS Spending Categories (USD)							
	Prevention	Treatment/Care	OVC	PCPM	Training	Social Protection	Advocacy	Research
Wages	$2118527	$2116507	---	$2764567	$15,192.26	---	$207,375.65	---
Antiretrovirals	---	$10,205.31	---	$1870604.7	---	---	---	---
Transportation	$171,331.04	$2,816.85	---	$125,447.79	---	$60,906.77	$39,548.25	---
Logistics	$286,440.69	$83,053.84	---	$378,759.2	$78,816.39	---	$189,832.76	---
Condoms	$1,423,238.72	---	---	---	---	---	---	---
Food/Nutrients	$380042.7	$4,227.43	---	$1,572.69	---	---	---	---
Other	$771790.5	$692,505.83	$6,805.95	$4142466	$56,170.51	$9,850.96	$290,848.76	$44,234

Table 42 – Types of Service Providers by Production Factors [2015/16]

Service Providers	Production Factors (USD)						
	Wages	Antiretrovirals	Transportation	Logistics	Condoms	Food/nutrients	Other
Public	$5,154,258.62	$1,843,818.93	$339,357.76	$408,824.62	$67,144.50	$218,268.56	$2,673,241
Not for-profit	$1,382,839.67	---	$5,915.05	$873,390.12	---	---	$2,232,984.19
Pvt For-profit	---	$3708.63	---	---	---	---	$19,365.16
Int'l Donors	$508,534.69	---	$19,492	$11,421	---	---	$600,886.22

Table 43 – Types of Service Providers by Production Factors [2016/17]

Service Providers	Production Factors (USD)						
	Wages	Antiretrovirals	Transportation	Logistics	Condoms	Food/nutrients	Other
Public	$5,714,691.64	$1,870,604.79	$354,841.62	$450,980.73	---	$385,842.83	$4,888,501.56
Not for-profit	$1,504,904.83	---	$45,209.09	$517,084.52	---	---	$1,651,999.15
Pvt For-profit	---	$10,205.32	---	---	$1,423,638.72	---	$124,736.57
Int'l Donors	$447,511	---	---	$7,983	---	---	$502,599

Table 44 – Select Service Providers[6] by AIDS Spending Categories [2015/16]

Select Service Providers	AIDS Spending Categories (USD)							
	Prevention	Treatment/Care	OVC	PCPM	Training	Social Protection	Advocacy	Research
NERHA	$40,149.02	$52,918.68		$175,867.99		$2,357.49		
SERHA	$359,054.32	$469,292.77		$580,846.43	$694.11	$33,535.14		
SRHA	$329,147.28	$320,035.34		$452,262.57	$21,920.95			
WRHA	$16147.87	$107,481.93		$41,097.34	$4,482.21	$8,234.86		
NFPB	$978,154.35	---		$1,249,015.8	$14,148.04		$115,564.56	
JASL[7]	$597,520.93	$153362.30		$228,759.07	$707.25	$4,706.58	$8,032.33	

Table 45 – Select Service Providers by AIDS Spending Categories [2016/17]

Select Service Providers	AIDS Spending Categories (USD)							
	Prevention	Treatment/Care	OVC	PCPM	Training	Social Protection	Advocacy	Research
NERHA	$57,302.82	$142149.6		$324608.2		$14,968.06		
SERHA	$414,582.78	$720,061.31		$348,728.78		$11,478.72		
SRHA	$100,744.15	$308179.1		$163,111.99		$18,318.84		
WRHA	$216782.3	$316964.5		$71,584.05		$25,897.73		
NFPB	$738,540.35	---		$1,774,671.02			$199,912.53	
JASL	$399,689.37	$443,034.05		$487,948.82		$94.36	$177,827.76	$44,234.04

[6] These service providers account for more than 50% of HIV activities outside of the Project Coordinating of the HIV/STI Tb Unit at the Ministry of Health.
[7] Local NGO with the largest spend.

Table 46 – Select Service Providers by Beneficiary Population [2015/16]

Select Service Providers	Beneficiary Populations (USD)									
	PLHIV	CSW	MSM	Key Pop	Prison	At-risk youth	Transgender	Women	General Population	Other
NERHA	$218,516.65	$3,675.21	$6,787.95	$6,956.82						$35,356.6
SERHA	$1,078,187.81	$10,019.78	$12,593.62			$49.85				$454,086
SRHA	$643,184.45	$17,239.25	$20,981.61							$441,961
WRHA	$300,227.30	$95,575.71	$44,071.72	$28,572.71						$21,124.5
NFPB	$177,116.34	$5,720.85	$5,394.16	$218,820.19	$11,508.15	$140.19			$577,098.01	$1,479,085
JASL	$371,425.79	$9,244.75	$58,640.42	$168,392.69			$15,989.31	$183,760		

Table 47 – Select Providers by Beneficiary Population [2016/17]

Select Providers	Beneficiary Population (USD)								
	PLHIV	CSW	MSM	Key Pop	Prison	At-risk youth	Transgender	Women	Other
NERHA	$332204	$6,258.74	$13,916.01	$100,910.25					$70,771.94
SERHA	$924,085.77	$87,254.59	$173,277.74	$126,155					$162,637.52
SRHA	$458,161.58	$6,303.67	$10,289.04						$143,976.75
WRHA	$366,641	$130,158	$81,167.6	$32,906.25					$23,358.28
NFPB	$22,220.23	$3,538.57	$81,044.01		$23,272.4				$2,583,048.69
JASL	$555,391.65	$55,625.67	$111,142.81						$830,668.27

Table 48 – Select Providers by Resource Categories [2015/16]

Service Providers	Resource Cost (USD)						
	Wages	ARV	Transport	Logistics	Condoms	Food/nutrients	Other
NERHA	$262,229.92		$2,357.49	$5,157.03			$1,548.72
SERHA	$1,448,061.61		$33,535.14	$71,705.6			$1,634.25
SRHA	$1,082,699.08			$39,985.08			$681.99
WRHA	$453,533.06		$6,338.37	$15,909.18			$13,791.32
NFPB	$1,169,233.55		$297,126.75	$110,002.11	$4,024.47	$12,205.95	$822,289.96
JASL	$825,288.77			$567,128.41			$214,908.86

Table 49 – Select Providers by Resource Categories [2016/17]

Select Service Providers	Resource Costs (USD)						
	Wages	ARV	Transport	Logistics	Condoms	Food/nutrients	Other
NERHA	$481,815.64		$12,706.1	$10,727.43			$29,538.93
SERHA	$1,358,904.32		$14,624.13	$50,432.77			$32,413.98
SRHA	$569,779.69		$15,482.68	$16,203.39			$17265.3
WRHA	$519,298.34		$30,823.05	$47,446.1			$36,664
NFPB	$1,066,795.42		$281,174.84	$73,833.87		$3,145.39	$1,301,335.52
JASL	$753,818.27		$25,380.36	$85,244.82			$773,629.76

Table 50 – Selected Funding Source by Types of Service Providers [2015/16]

Funding Source	Service Provider (USD)				
	Cen. Gov	Parastatal	Private	Civil Society	Multilateral
GOJ	$159,8954.9	$5,069,912.94	---	$281,133.06	---
USG	$104,835.73	$348,992.01	---	$2,238,277.79	---
HH	---	---	$23,073.79	---	---
GF	$2,819,015.72	$460,921.75	---	$1,188,310.03	---
UN	$230,838.75	---	$2,900	$121,625.37	$574,404.00
Other	$7,785.42	$70,976.89	---	$784,438.38	---

Table 51 – Selected Financing Sources by Production Factors [2015/16]

Funding Source	Production Factor (USD)						
	Wages	ARV	Transport	Logistics	Condoms	Food/nutrients	other
GOJ	$4,571,255.71	$184,358.10	$263,453.93	$4,875.14	---	$218,268.56	$177,789.46
USG	$416,224.37	---	$25,343.24	$314,641.38	---	---	$2,317,787.53
HH	---	$3,708.63	---	---	$1,362,218.68	---	$133,558.56
GF	$1,355,681.72	$1,659,460.83	$52,623.61	$273,298.47	$67,144.5	---	$1,103,780.56
UN	$623,175.00	---	$9,670.70	$174,181.68	---	---	$132,740.71
Other	$89,296.17	---	$2,252.30	$526,639.07	---	---	$245,013.14

Table 52 – Type of Financing Agent by Type of Service Provider [2015/16]

Financing Agent	Service Provider (USD)				
	Central Government	Parastatal	Private	Civil Society	Multilateral
Public	$4,598,844	$354,0057		$794,890.5	
Private			$25,973.79	$256,386.1	
Bilat				$1,821,742	
Multilateral	$39,939.51				$574,404
Int'l Non Profit		$23,000		$128,440	

Service Provider	AIDS Spending Category (USD)							
	Prevention	Treatment/Care	OVC	PCPM	Training	Social Protection	Advocacy	Research
Cen Gov	699,152.19	$417,561.7		$3,643,992.88	$16,327.69		$155.64	
Parastatal	$2,227,753.2	$1,471,192.4		$1,963,542.47	$27,143.15	$44,127.5	$244,181.26	
Pvt		$23,073.8		$2,900				
Civil	$659,891.2	$321,174.8	$21,049	$534,584.69	$1,629,191.25	$476.58	$555,720.95	$60,353.71
Multi	$11,102			$562,840			$462	

Table 53 – Type of Service Provider by AIDS Spending Category [2015/16]

Service Provider	Production Factor (USD)						
	Wages	ARV	Transport	Logistics	Condoms	Food/nutrients	other
Central Gov	$711,365	$1,843,819		$164,920.8	$63,120.03	$206,062.6	$1,787,903
Parastatal	$4,459,733		$339,357.8	$243,832.5	$4,024.48	$12,205.95	$927,482.3
Private		$3,708.63					$19,365.16
Civil Society	$1,410,612		$5,915.05	$873,390.1			$2,326,767
Multilateral	$463,923		$8,071	$11,421			$90,989

Table 54 – Type Service Provider by Production Factor [2015/16]

Table 55 – Selected Funding Source by Service Provider [2016/17]

Funding Source	Service Provider (USD)				
	Central Government	Parastatal	Private Sector	Civil Society	Multilateral
GOJ	$1,930,684.33	$4,005,782.50			
USG	$1,140,670.73	$1,227,473.03		$1,815,575.57	$19,106.00
HH			$1,558,580.61		
GF	$1,964,357.98	$808,679.23		$1,116,085.67	
UN	$103,015.04	$34,000.00		$89,177.52	$553,956.00
Other		$60,598.84		$618,807.94	

Table 56 – Selected Funding Source by Production Factor [2016/17]

Funding Source	Production Factor (USD)						
	Wages	ARV	Transport	Logistics	Condoms	Food/Nutrients	Other
GOJ	$3,997,779.89	$752,311.84	$263,401.53	$33,500.59		$381,615.39	$729,426.76
USG	$1,157,856.87		$46,058.72	$574,445.42			$2,663,021.03
HH		$10,205.32			$1,423,638.72		$124,736.57
GF	$1,331,693.90	$1,118,292.95	$87,817.17	$295,693.52		$4,227.43	$1,223,215.07
UN	$480,126.03		$1,537.31	$96,714.89			$201,770.32
Other	$67,301.68		$1,235.99	$16,548.46			$594,320.65

Table 57 – Type of Financing Agent by Service Provider [2016/17]

Financing Agent	Service Provider (USD)				
	Cen. Gov	Parastatal	Private Sector	Civil Society	Multilateral
Public	$5,335,401.44	$6,048,290.15		$2,364,466.65	
Private			$1,558,580.61	$289,749.62	
Bilat				$557,843.04	$19,106.00
Multilateral				$155,919.88	$553,956.00
Int'l non profit				$408,635.84	

Table 58 – Type of Service Provider by AIDS Spending Category [2016/17]

Service Provider	AIDS Spending Category (USD)							
	Prevention	Treatment/Care	OVC	PCPM	Training	Social Protection	Advocacy	Research
Central Government	$691,466.35	$93,163.29	$360.00	$4,509,172.43	$41,238.57			
Parastatal	$1,532,169.98	$1,519958.90		$2,725,585.34		$70,663.38	$233,912.54	
Private Sector	$1,423,638.72	$134,941.89						
Civil Society	$1,288,963.59	$643,264.24	$6,445.15	$1,181,144.17	$32,417.16	$94.36	$490,051.89	$44,234.04
Multilaterals				$569,421.00			$3,641.00	

Table 59 – Type of Service Provider by Production Factor [2016/17]

Service Provider	Production Factor (USD)						
	Wages	ARV	Transport	Logistics	Condoms	Food/Nutrients	Other
Central Government	$1,017,274.57	$1,870,604.79	$30.82	$251,250.97		$385,842.83	$1,817,770.29
Parastatal	$4,697,417.07		$354,810.79	$244,733.48			$3,070,731.27
Private Sector		$10,205.32			$1,423,638.72		$124,736.57
Civil Society	$1,520,097.09		$45,209.09	$392,614.15			$1,839,217.68
Multilateral	$447,511.00			$7,983.00			$117,568.00

Annex II

Glossary - Financing Sources

FS.01.01.01 Central Government Revenue

GF/TFM/Counterpart
GOJ/USAID Counterpart
GOJ Recurrent
GOJ/ Global Fund Counterpart

FS.01.99 Other Public Funds n.e.c.

University of the West Indies (UWI)

FS.02.01 For-profit Institutions and Corporations

ViiV Healthcare

FS.02.02 - Households' Funds

PERSONAL

FS.02.03 - Non-profit-making Institutions (other than social insurance)

ASHE
CF
HWWJ
JASL

FS.03.01.04 - Government of Canada

CIHR

FS.03.01.22 - Government of the United States of America

PEPFAR/HRSA
USAID/PEPFAR
DRL
PEPFAR
USAID/CDC

FS.03.02.07 - The Global Fund to Fight AIDS, Tuberculosis and Malaria

GF
GF-TFM

FS.03.02.07 The Global Fund to Fight AIDS, Tuberculosis and Malaria

GF/NFM
GF/TFM

FS.03.02.08 - UNAIDS Secretariat

UNAIDS

FS.03.02.09 - United Nations Children's Fund (UNICEF

UNICEF

FS.03.02.12 - United Nations Educational, Scientific and Cultural Organization (UNESCO)

UNESCO

FS.03.02.17 - United Nations Population Fund (UNFPA)

UNFPA

FS.03.02.99 - Multilateral funds or development funds n.e.c.

UN Trust Fund

FS.03.03.31 United Nations Foundation

UN Trust Fund

FS.03.03.34 - International Planned Parenthood Federation

IPPF

FS.03.03.99 - Other International Non-profit-making Organizations and Foundations n.e.c.

AHF

EJAF

RCNF

FS.03.03.99 Other International Not-for-profit Organizations and Foundations n.e.c.

RCNF

WGNRR

FS.03.04 - International Profit-making Organizations

MAC AIDS FUND

FS.03.04 International for-profit Organizations

AHF

ViiV Healthcare

Glossary – Financing Agents

FA.01.01.01.01 - Ministry of Health (or equivalent sector entity)

MOH
MOH/HST

FA.01.01.01.02 - Ministry of Education, Youth and Information (or equivalent sector entity)

MOEYI

FA.01.01.03.01 - Department of Health (or equivalent local sector entity)

SERHA
SERHA/KSAHD
SERHA/SCHD
SERHA/STHD
WRHA

FA.01.04 - Parastatal organizations

CIHR
UWI

FA.02 - Private sector

FA.02.04 - Private households (out-of-pocket payments)

FA.02.05 - Non-profit-making institutions (other than social insurance)

ASHE
Children First
EFL
HWWJ
JASL
JYAN
JFLAG

FA.02.06 - Private non-parastatal organizations and corporations (other than health insurance)

JEF

FA.02.99 - FA.02.99 Other private financing agents n.e.c.

CVC

FA.03.01.22 - Government of the United States of America

PEPFAR/CDC

FA.03.02.07 - FA.03.02.07 UNAIDS Secretariat

UNAIDS

FA.03.02.11 - United Nations Educational, Scientific and Cultural Organization (UNESCO)

MOEYI

FA.03.02.16 - United Nations Population Fund (UNFPA)

MOEYI

FA.03.02.99 - Other Multilateral entities n.e.c.

UN Trust Fund

FA.03.03.14 - Family Health International

FHI-Linkages

FA.03.03.99 - Other International non-profit-making organizations n.e.c.

EJAF

FA.03.03.99 Other International not-for-profit organizations n.e.c.

Health Policy Plus (HPP)

FA.03.04 - International profit-making organizations

AHF

HPP

MAC AIDS

Glossary – Providers of Services

PS.01.01 - Governmental Organizations

MOEYI
MOH

PS.01.01.01 – Hospitals

National Chest Hospital

PS.01.01.10 - Schools and Training Facilities

ITECH

PS.01.01.14 - Government Entities

MOH
NFPB
WRHA

PS.01.01.14.02 - Departments inside the Ministry of Health or equivalent (including NAPs/NACPs)

PCU

PS.01.01.14.02 Departments inside the Ministry of Health or equivalent (including. NAPs/NACPs)

MOH
NFM/PCU- Procurement
NFM/PCU-Treatment
NFM-PCU
NFPB
PCU
PCU/Accounts
PCU/NFM-M&E
PCU/Policy Advocacy
PCU/TFM
PCU/Treatment
PCU/-Treatment
PCU-Treatment/TD

PS.01.01.14.03 - Departments inside the Ministry of Education or equivalent

MOEYI

PS.01.01.99 Governmental Organizations n.e.c.

NCDA

PS.01.02 - Parastatal Organizations

NERHA
SERHA
SRHA
WRHA
SCHD

PS.01.02.01 – Hospitals

UHWI

PS.01.02.13 - Research Institutions

CARPHA

PS.02.01.01.10 - Schools and Training Facilities

ITECH

PS.02.01.01.13 - Research Institutions

AFEN
UCSF

PS.02.01.01.15 Civil Society Organizations (Non-profit non faith-based)

ASHE
CF
COF
Colour Pink
EFL
JASL
JCW
JFLAG
JRC
JYAN
Rise Life Management
FHI-Linkages
NASTAD
SWAJ

PS.02.01.02.14 Civil society organizations (Non-profit faith-based)

HWWJ

PS.02.01.02.99 - Other Non-profit Faith-based Private Sector Providers n.e.c.

JCC

PS.02.01.99 - Other Non-profit Private Sector Providers n.e.c.

JEF

PS.02.02.02 - Ambulatory Care

Private Doctors

PS.02.02.05 - Laboratory and Imaging Facilities

PS.02.02.08 - Pharmacies and Providers of Medical Goods

CARIMED

PS.02.02.10.03 Higher education (For-profit)

UWI/UWI HARP

PS.02.02.99 - Profit-making private sector providers n.e.c.

HPP

PS.03.02 - Multilateral Agencies

UNAIDS

Annex III - Draft Routine Data Collection

Over the last six years, Jamaica has employed the tracking of its HIV resources. The country is currently in its fourth cycle of tracking HIV expenditure. The process has been time consuming due to the retroactive nature and methodology used for data collection. The retrospective nature lends itself to:

- Challenges with data mining due to poor and/or limited records management processes
- Possible missing source documentations
- Possible errors in collating and summarizing the data
- Possible errors in transferring the data to the data collection tool
- Possible errors in translating data collected into the NASA format
- Change in staff who can assist in understanding information collected

The Ministry of Health, through the HIV/STI Unit, wishes to institutionalize the HIV resource tracking process. It is hoped that the process will no longer be retroactive and will encourage better data recording and will make the resource tracking process less onerous.

The National AIDS Spending Assessment is part of a broader concept of resource tracking which assists in evaluating efficiencies in the health system and contributes to better planning of policy and programmatic interventions. In fact, the second major NASA exercise was used as a framework for the development of the current Global Fund grant which the country is now implementing, hence the need for the process to become institutionalized and less time consuming. It must be noted that international standards estimate that any resource tracking exercise takes a minimum of six months to a maximum of 18 months, depending on the nature of the exercise.

In the Jamaican context, the process has taken on average six to seven months. A significant part of this process is data collection; with data collection from most partners taking approximately three months at minimum. The length of data collection is due largely to gaps in the record management systems of stakeholders, the public health system and private stakeholders, as well as the fact that many stakeholders have competing priorities, such as monthly reports due and/or audits from the donors.

NASA looks at six main components:

- Who finances the HIV response?
- Who manages the funds?
- Who provides the services?
- What programmes are provided?
- Who benefits from the programmes?
- What resources are consumed in the production of these programmes?

Currently data is collected from the following sectors:

- Ministry of Health, its regions and relevant agencies - Project Reporting
- Ministry of Health, its regions and relevant agencies - GOJ expenditure
- Ministry of Education, Youth and Information - GOJ expenditure and external funding
- Non-governmental organizations – Sub-Recipients/Sub Sub-Recipients
- Private Pharmacies - Reports on ARVs
- Private Laboratories - Reports on HIV tests

- Private Doctors
- Academia
- Other Government Sectors
- International Development Partners (IDPs)
- Faith Based[8]

Data Collection

Sub Recipients

Currently, the National HIV/STI Unit has several sub-recipients, sub sub-recipients and implementing partners who assist in the realization of Jamaica's HIV response. As a result, these organizations complete monthly financial and technical reports. Since the inception of NASA reporting in Jamaica, the financial reporting tool has evolved to align to NASA coding; however, there are still some discrepancies with this coding, the description of the codes and how expenditure is reported by the sub-recipients. Furthermore, the technical monthly report only accounts for targets and there is no seamless alignment between the technical and financial reports.

It must be noted, however, that the financial reporting sections take into consideration most of the inputs needed to track resource expenditure, such as:

- Cost Category - which can inform the NASA resource inputs and AIDS Spending Categories
- Interventions - which is akin to the NASA category of AIDS Spending Categories and Beneficiary Populations
- Modules - which can inform NASA AIDS Spending Categories

Challenges

There is a summary page (B1) which accounts for cumulative expenditure against the cost categories which were expended during a particular month; however, the summary page does not allow for cost break down of work/time apportioned to or number of beneficiary population reached (especially as it relates to Transgender or MSM). This information would have to be garnered from technical monthly reports if accuracy is to be improved, or from various computations across the other reporting sheets in the monthly financial reporting tool, namely the:

- B2
- B2A
- B4.1
- B4.2

The cost input categories such as the ones below *1.2-Salaries - outreach workers, medical staff and other service providers* can cause conflation with the HIV pillars of intervention, such as prevention and treatment, if used on its own.

[8] This is desirable but over the years has proven difficult to collect.

Recommendations

To improve the form and to make for a more seamless alignment between the financial and technical form, and to make resource tracking reporting less labour intensive, even if done retrospectively, the ***B1*** can be modified to:

1. Account for numbers of each target population which are reached during the period under question.
2. Provide a quarterly summary of the expended funds along with apportioned funds based on time and/or numbers reached of beneficiary populations.
3. Break cost input 1.2 category into more than one category, accounting for medical staff and treatment personnel as a different cost category.
4. Create drop down boxes in the form **B1** to assist SR/SSR in consistent reporting.
5. Create a similar sheet or tool for sub-recipients and sub sub-recipients to report on financial sources and agents outside of GF, USAID and GOJ. This should also be requested on a quarterly basis. This sheet can eliminate the following columns:

    - Total amount paid in this application (J$)
    - Balance to be paid (J$)
    - Date of payment appears on bank statement
    - Payee
    - Cheque status

In-patient Information - Regional Health Authorities

Currently, there are challenges in collecting information on in-patient care of PLHIV; this is due to the challenges with the health records and health information system of the Ministry of Health. In-patient resource tracking information includes but is not limited to:

1. Percentage/number of HIV admissions
2. Average length of stay - number of days (room costs etc.)
3. Tests conducted (HIV or non-related)
4. Medications given (opportunistic infections etc.)
5. Health care worker staffing for ward(s) which PLHIV frequent

The above information allows for the appropriation of expenditure on in-patient care. This can be done by creating a basic mathematical formula:

> Total= {(avg length x room costs)[9]+ (cost of test 1+ cost of test 2….)+ (cost medication 1+ cost of medication2….) + (Percentage of HIV Admissions x total health care staffing)}[10]

[9] Considering the no-user fee policy of the GOJ, estimated costs can be fashioned off the University of the West Indies which is a quasi-government hospital. If this information is not available, the user fees before the introduction of the no-user fees can be used as a proxy; however, this may not accurately represent the cost of living.

[10] The formula may have to be adjusted for sessional rates of Health Care workers.

Challenges

While an electronic patient administration system (PAS) exists in some sites, this collection of data retrospectively proves to be an issue, considering that:

1. The information being requested may not be an indicator being collected, therefore manipulation of the data must be done.
2. In many instances, manipulation of the data must be done manually.
3. If data is collected it is not linked electronically to PAS.
4. Pharmacy and laboratory information recorded are not linked electronically to the patients' records and are recorded manually by placing in dockets; therefore labour intensive manual searches would have to be done.
5. Due to the highly manual nature of the system, records are not updated to the MOH records management unit in a timely manner. Data received from the HSMR unit indicates that on average only 20% of the data from the fiscal years 2015-2016 and 2016-2017 has been updated as it relates to HIV admissions.
6. Due to the manual nature of health records-keeping in Jamaica, information is not easily accessible and can be compromised in cases when health service sites have operational issues, as is the case with Cornwall Regional Hospital which has had to transfer patients to other facilities.
7. Data retrieval can be personality-driven due to the manual nature of the system, even if an electronic system exists.

While staffing for the ward may be available, the exact salaries are not easily accessible as they reside in Human Resource or Accounts departments. This entails receiving the name of every health care worker assigned to a firm. To ascertain this information may prove to be tedious and impractical, and possibly present a breach of confidentiality.

Due to these challenges, current resource tracking related to NASA collects information on:

1. HIV admissions
2. Average length of stay of HIV patients
3. Staffing of wards (in-patient/gynae) – this includes ascertaining salary scales from the GOJ for professional categories issued by the Ministry of Finance

Recommendations

Resource tracking will continue to be challenging as it relates to in-patient information if a proper electronic health information platform is not developed and/or introduced. This platform must connect along the entire health service continuum, including in-patient care[11], pharmacy, laboratory testing and any other procedures conducted in the process.

When an electronic health information system is introduced there are several indicators which will increase the robustness of the resource tracking. These include:

1. HIV admissions (both as a secondary and primary condition).
2. Total and average length of stay.

[11] It should be noted that the PAS system records primary and secondary conditions which the patient is discharged for, therefore if further analysis can be done to track resources spent on patients due to OI outside of medications, however due to the manual nature of this system, health records personnel are unwilling disaggregate HIV as a primary or secondary cause for admission.

3. The type of ward patient was admitted - medicine, maternity, paediatrics, etc. (this will assist in determining human resource estimates).
4. Medications (including category of drug[12]) dispensed to patient during length of stay must be electronically linked to patient.
5. Laboratory test(s) must be electronically linked to patient.
6. The system must be easily manipulated to extract any necessary information, thus reducing the subjectivity of the health records personnel in data retrieval.
7. System must be able to easily manipulate site level data as well as regional data.
8. This information should be requested annually (reporting period of April 1 –March 31).

It is imperative that the HIV unit work with Health Records of the Ministry of Health to collect these indicators which will facilitate resource tracking, even if the patient administration system is manual.

Outpatient Care

Currently, approximations for resource tracking as it relates to HIV is based on:

1. Number of HIV clinics per week
2. Number of hours HCW spends on HIV outpatient clinic
3. Classification of HCW personnel working in HIV outpatient clinics

While salaries for some categories of workers such as adherence counsellors, psychologists and social workers are paid for through HST and its donors Global Fund and PEPFAR, it is difficult to account for other staff assigned to HIV outpatient treatment, such as doctors and nurses. Currently, there is no one standard across the RHAs and treatment sites; thus, each has to be taken on an individual basis based on the above indicators.

Going forward, where possible, a standardized formula to encompass all treatment sites and regions can be created.

Consumables

ARVs and OI Medication

The tracking of ARVs and OI medication are based on the amount of each which is consumed. This information would be retrieved from pharmacy records, which would indicate the quantities dispensed. Currently, the HIV/STI Unit collects information from both public and private pharmacies:

- ARVs - first line
- ARVs - second line
- ARVs - paediatric
- ARVs - PEP

However, no information is garnered on the dispensing of OI medication and any other pharmaceutical product such as vitamins and minerals.

[12] The name and condition it treats.

The challenge with accounting for expenditure on ARVs and OIs lies in the retrospective nature of the process, the manual nature of the process and the lack of connectivity between patients and the dispensing of drugs. Additionally, OI medications are not only dispensed for PLHIV, therefore it is critical to ensure that the units dispensed do not include other patients with other illnesses; hence the need for an electronic health information system which will be able to generate information on OI uptake as it relates to PLHIV and not just total OI uptake. Currently, no information on PLHIV OI uptake is requested from public pharmacies, and in order to ascertain this information prescriptions will have to be manually retrieved to ascertain any coverage of OIs for PLHIV.

Additionally, unit costs of drugs will have to be ascertained, especially as it relates to the public health system where drugs are free to the patient but cost the government. A clear understanding of the supply chain management is needed to estimate the unit costs of drugs moved during a particular time, as drugs bought today are not necessarily consumed today. When the unit costs have been ascertained, they can be applied to the number of units dispensed during the period under consideration. It is possible that an average may have to be used, depending on the rate of uptake compared to the rate of procurement.

Several private sector pharmacies partner with government to distribute ARVs. They all charge a small service fee. While not an exorbitant amount, it still affects household expenditure by PLHIV. The fees, which vary among the pharmacies, should also be information which the HIV/STI Unit collects on a yearly basis, in order to capture the out-of-pocket expenditure. Additionally, the OI medication uptake through private pharmacies must also be routinely collected and the cost per unit requested as well.

Recommendations

1. Pharmacy reports (both public and private) must include OI medication uptake, including units moved, the name of drug and if necessary the OI used to treat.
2. In the case of private pharmacies, the unit cost of each OI drug must be requested.
3. In their monthly reporting, private pharmacies (under the government's ARV programme) should indicate the service charge to patients. If this information is received from all pharmacies, an average of the prices received can be applied to all the ARVs dispensed over the period.
4. Continue to collect yearly expenditure data from distribution companies, such as CARIMED for ARVs.
5. Supply chain analysis is needed in order to determine unit costs of ARVs and OIs being dispensed during the period of investigation. Therefore, research must be done on the time taken for drugs to be released from the National Health Fund to the RHA from the time it was procured and received by NHF. The time taken for the consumption and distribution of the pharmaceuticals after arrival at the RHAs must also be evaluated in order to ascertain the most realistic unit cost of medications.
6. If no information is available regarding ARV uptake at the treatment sites, the movement of stock at the NHF during the time period can be used, applying the value of stock dispensed as the money expended.

Test Kits

The same approach to the dispensing of ARVs along with supply chain management is needed to track the expenditure on test kits and their use.

Therefore, the number of test kits used for the period under question must be received from NGOs and RHAs. This must then be matched back to procurement and supply chain documentation to garner the unit cost of test kits. If unable to account for the number of test kits used by NGOs or RHAs, the NHF distribution of stock data can be assessed for the value of goods sent to the various organizations over the period in question. It should also be noted

that the MOH is able to provide data on the number of HIV test conducted; this however does not include those conducted by NGOs. If the unit cost of test kits can be ascertained, it can be applied to this quantity to track expenditure on test kits.

NASA is concerned about the population in which test kits are used. Currently, this data would have to be retrieved from technical and programmatic data submitted by sub-recipients and unit cost applied where applicable. It is difficult to ascertain this information at sites when general HIV tests are conducted. However, the unique identifier code and the sub-populations which tests are conducted on can be more easily tracked.

Laboratory

Private Labs

Currently, the HST collects information from several private labs on HIV testing; however, the information requested does not include information on CD4 count and viral load.
Many of the private labs do not perform the above-mentioned tests as they are sent to the National Public Health Lab.

However, the private labs charge customers for the service of performing these tests. In order to track this expenditure private labs should be asked the following:

- Number of HIV tests conducted (positive and negative)
- Cost of HIV test - where not all prices are received an average of all costs can be calculated
- Number of CD4 tests facilitated
- Cost of CD4 tests
- Number of viral load tests facilitated
- Cost of viral load tests
- The cost of tests most frequently done by PLHIV (this information can be received from private doctors as well as the treatment unit)

It becomes more difficult to collect information on tests conducted which are not HIV-related. The closest approximation of this would be to assess the private doctors' records and see the tests which were recommended and completed. However, if the patient records system in the private practice is manual this may pose a challenge to the physicians, especially those with large numbers.

The number of patients recommended to do tests by the doctor can be applied to the cost of each test in order to provide an approximation of HIV expenditure on non-HIV tests in the private sector.

Recommendations

It should be noted that although data is being collected on a monthly basis from private pharmacies on HIV tests, some stakeholders are hesitant to divulge their income. Therefore, an environment of trust needs to be developed between the HIV unit and the private partners through an MOU, which should be accompanied by meetings, to address the fears of the sector.

HST should work with Health Records and Health Information units to ensure that these indicators are also captured in any future health information or health records system which may be installed in the broader Ministry of Health.

Private Doctors

Currently, there are several doctors on the private physician list of the Treatment section of the HST unit at the Ministry of Health, many of whom treat patients within the public sector[13], however it is accessing the information related to out- of-pocket expenditure which is critical from the sector. Additionally, no routine data is collected from this group. The following data needs to be routinely collected, if resource tracking is to be ensured:

- Average number of HIV patients seen annually
- Average fee charged to each patient per visit
- Average number of visits by PLHIV each year
- Tests most frequently recommended for PLHIV other than CD4 and viral load (CD4, viral load, liver function, Executive Profile etc.)
- Frequency of referral for these tests
- Number of patients on ARVs
- Where do they access ARVs
- Percentage of HIV patients on Opportunistic Infection (OI) medication
- OI medications most frequently prescribed for patients
- Where do they access OIs
- Number of PLHIV who use Health Insurance
- Value paid by Health Insurance schemes

A routine data collection timeline should be agreed upon by HST and the private doctors on their roster for treatment. Many of the private doctors have small numbers of patients which they treat. Some doctors on the list have indicated that they treat small numbers like one to three persons, who intersect within the public sector treatment services. HST needs to decide if such small samples are of interest when collecting resource tracking information.

While the Public Health Act binds the private physician to report Class 1 notifiable diseases, there is no formal reporting system between the private health sector and the government. To ensure that institutionalization of resource tracking is implemented in the private health sector, HST should explore the signing of an MOU with either the Medical Association of Jamaica and/or doctors on their HIV private treatment roster. Furthermore, HST should work with the Health Records Unit and Health Information Unit to ensure that these indicators are part of any health information system which is implemented by the Ministry of Health.

Private Hospitals

This group is largely untouched. However, during NASA data collection there seems to be information which can be garnered from this sector, as follows:

[13] It should be noted that many of the private doctors have few PLHIV in private practice.

1. Number of HIV patients admitted
2. Total cost to patient, including length of stay, tests, OI drugs, ARVs, etc.
3. Number of patients using insurance
4. Total amount covered by health insurance

In order to collect this information, an MOU should be created between the private hospitals and the HST. Similar to other private health providers, HST should work with Health Records and Health Information in creating indicators and a plan for reporting to the MOH which would include private hospitals. Information from these entities can be collected annually and a tool should be created/amended for this purpose.

Private Hospitals to be considered:

- UHWI
- Tony Thwaites Wing of UHWI
- Andrews Hospital
- Medical Associates

Conclusion/Suggestions

Institutionalizing routine resource tracking involves the following:

1. More frequent data collection from stakeholders.
2. Improved Health Information systems.
3. Efforts with Health Records to create/amend tools and indicators for routine collection.
4. Increasing the number of indicators collected from various stakeholders.
5. Improving data collection tools/amended data collection tools for pharmacies and laboratories.
6. Creating policies to increase data collection on a timely basis among stakeholders.
7. Building consensus with stakeholders regarding the most effective timing for data collection.
8. Assessing the nuances of each stakeholder, such as the issue of confidentiality with private physician practitioners.

Institutionalization Matrix

Table 60 – Institutionalization Resource Tracking Matrix

Stakeholder	Recommendations to Ensure Institutionalization	Data Needed	Source of Data	Organization with Data
Sub-Recipients - NGOs/RHAs	• Include in MOUs that routine resource tracking information should be submitted on a timely basis including donors external to MOH • Develop/amend a summary reporting template which captures technical and financial information • Collect NASA data every quarter	• Activities implemented • Target populations • Resource input	Monthly technical reports Financial reports Recommended summary reporting template	Sub-recipient HIV Unit
Non Sub-Recipient HIV Stakeholders (I-TECH, Linkages, HPP, AHF etc.)	• Develop MOU regarding quarterly report of resource tracking	• Activities implemented • Partner(s) involved • Beneficiary Population(s)	Existing NASA tool	Local offices International offices Partners External accounting partners
IDPs	• Lobby/partner with IDPs to ensure any new stakeholder in the HIV response sends the	• Activities implemented • Partner(s) involved • Beneficiary population(s)	Existing NASA tool Country reports	Local offices International offices Partners

Stakeholder	Recommendations to Ensure Institutionalization	Data Needed	Source of Data	Organization with Data
	Ministry of Health quarterly reports on HIV expenditure and resource tracking			
Regional Health Authorities				
Hospitals-In-Patient	• Work with the Health Records Unit/Health Information Unit of the Ministry of Health to establish indicators	• Average length of stay • Ward PLHIV admitted to • Staffing of wards • MOF salary scales	HSMR MOF salary scale	Treatment sites RHA medical records Health records-MOH
Pharmacies	• Work with pharmacists to collect information	• ARVs dispensed over the period • Disaggregation of ARVs by first/second line/paediatric etc. • Prescription charge • Number of OI medication dispensed • Cost of OI medications dispensed • Quantities of any other pharmaceutical dispensed • Cost of other pharmaceutical distributed	Dispensary database Prescription records Supply chain records-NHF Procurement records HST	Regional pharmacies Treatment Unit HST NHF
Laboratories	1. Coordinate Laboratory information with that of inpatient HIV stays 2. Collect Quality Control Testing	• Number of HIV-related tests conducted per RHA/nationally • Quality control tests/ expenditure	HSMR from Health Records Procurement records from National Public Health Laboratory Procurement records	RHAs MOH Procurement Units National Public

Stakeholder	Recommendations to Ensure Institutionalization	Data Needed	Source of Data	Organization with Data
	information and each public health laboratory 3. Integrate Laboratory outpatient tests for HIV patients not including VL and CD4	• Number and costs of confirmatory tests • Staffing at National Public Health Lab and regions dedicated to HIV testing • Numbers of any other tests associated with HIV such as liver function, CBC, kidney etc. and their associated costs (reagent, maintenance of machine etc.)	from Ministry of Health	Health Laboratory
Private Pharmacies	• A public/private partnership with private entities and/or umbrella organizations such as the Medical Association of Jamaica and the Pharmaceutical Association inclusive of an MOU/Policy • Create/Amend data collection tools for routine timely data collection • Work with Health Records and Health Information to include private	• ARVs dispensed over the period • Disaggregation of ARVs by first/second line/paediatric etc. • Prescription charge • Number of OI medications dispensed • Cost of OI medications dispensed • Quantities of any other pharmaceutical dispensed • Cost of other pharmaceutical distributed	Pharmacy reports to MOH Dispensary database Prescription	Treatment Unit of HST Private Pharmacy

Stakeholder	Recommendations to Ensure Institutionalization	Data Needed	Source of Data	Organization with Data
Private Laboratories	sector indicators in any new health information systems. • Assign personnel from HST to work with private entities to build trust between private entities and HST • Build the capacity of a team to collect data from Private Doctors[14]	• Number of HIV tests conducted (positive and negative) • Cost of HIV test - where not all prices are received an average of all costs can be calculated • Number of CD4 tests facilitated • Cost of CD4 tests • Number of viral load tests facilitated • Cost of viral load tests • The cost of tests most frequently done by PLHIV (this information can be received from the private doctors as well as the treatment unit)	Internal Database Reports sent to HST	Private Laboratories Surveillance Unity MOH
Private Doctors		• Average number of HIV patients seen annually • Average fee charged to each patient per visit • Average number of visits by PLHIV	Private physicians' medical records	Private Doctor

[14] Process time consuming for private practioners to enter data regularly. Additionally to protect confidentiality only, in some instances the doctors are the only ones who know the status of the patients.

Stakeholder	Recommendations to Ensure Institutionalization	Data Needed	Source of Data	Organization with Data
		each year • Tests most frequently recommended for PLHIV other than CD4 and viral load (CD4, viral load, liver function, Executive Profile etc.) • Frequency of referral for these tests • Number of patients on ARVs • Where do they access ARVs • Percentage of HIV patients on OI medication • OI medications most frequently prescribed for patients • Where do they access OIs • Number of PLHIV who use Health Insurance • Value paid by Health Insurance scheme		
Private Hospitals	• Build partnerships with private hospitals to receive timely data on HIV expenditure • Use private physicians as part of a buy-in	• Number of HIV patients admitted • Total cost to patient, including length of stay, tests, OI drugs, ARVs etc.	Hospitals' patient administration records	Hospital

Stakeholder	Recommendations to Ensure Institutionalization	Data Needed	Source of Data	Organization with Data
	mechanism • Work with Health Records and Health Information to create a public/private partnership in health for information sharing • Create/amend data collection tool for the purposes of the private hospitals	• Number using insurance • Total amount covered by health insurance		

Annex IV - Stakeholder List

	Organization	Status of Information Collected	Type of Organization
1	AHF[15]	Partial Information	International NGO
2	ASHE	Information Received	NGO
3	Caribbean Vulnerable Communities	Partial Information	Regional NGO
4	Caribe Wellness	No Information	NGO
5	Children First	Information Received	NGO
6	Children of Faith	Information Received	NGO
7	Eve for Life	Information Received	NGO
8	FAMPLAN	No Information Received	NGO
9	Hope Worldwide	Information Received	NGO
10	Jamaica AIDS Support for Life	Information Received	NGO
11	Jamaica Community of Positive Women	Information Received	NGO
12	Jamaica Network of Seropositives	Information Received	NGO
13	Jamaica Red Cross	Information Received	NGO

[15] Information received through partner organization.

	Organization	Status of Information Collected	Type of Organization
14	Jamaica Youth Advocacy Network	Information Received	NGO
15	JFLAG	Information Received	NGO
16	Mustard Seed Communities	No Information Received	NGO
17	National AIDS Committee/Trelawny PAA	No Information Received	NGO
18	CDC	Information Received	NGO
19	Health Policy Project	Information Received	NGO
20	FHI 360- Linkages	Information Received	NGO
21	PAHO	No Information Received	NGO
22	UNAIDS	Information Received	IDP
23	UNDP	Information Received	IDP
24	UNESCO	Information Received	IDP
25	UNFPA	Information Received	IDP
26	UNICEF	Information Received	IDP
27	UN Women	Partial	IDP
2	US Embassy/Small Grants	Information Received /No information to	IDP

	Organization	Status of Information Collected	Type of Organization
8		Give	
29	USAID/PEPFAR	Information Received	IDP
30	Delegation of European Union to Jamaica	No Information Received	IDP
31	UWI HARP	Information Received	University
32	Blood Bank	No Information Received	Public
33	ITECH/HRSA	Information Received	University/Training NGO
34	Jamaica Defence Force	No information to Give	Government
35	Jamaica Employers Federation	Information Received	Private Sector
36	JAPPAIDS	No Information Received	Quasi-Government
37	Ministry of Education	Information Received	Government
38	Ministry of Labour and Social Security	Information Received	Government
39	National Chest Hospital	Information Received	Government Hospital
40	National Council On Drug Abuse	Information Received	Government
41	National Family Planning Board	Information Received	Government
42	National Health Fund	Information Received	Government

	Organization	Status of Information Collected	Type of Organization
43	National HIV Programme (PEPFAR)	Information Received	Government
44	National Public Health Lab	Partial Information	Government
45	North East Region Health Authority	Information Received	Government
46	Planning Institute of Jamaica	No Information Received	Government
47	South East Region Health Authority	Information Received	Government
48	South Region Health Authority	Information Received	Government
49	Tourism Product Development Co. Ltd	Information Received	Government
51	University of West Indies- Lab	No Information Received	Quasi Government
52	CHARES /UHWI	Partial Information	Quasi Government
53	Western Region Health Authority	Information Received	Government
54	Jamaica Council of Churches[16]	Partial Information	Faith Based
55	St Luke's Anglican, Cross Roads	No Information Received	Faith Based
56	United Theological Centre/ College	No Information Received	Faith Based
57	Andrews Memorial Hospital Laboratory	Information Received	Private Lab

[16] Information received through UNAIDS records

	Organization	Status of Information Collected	Type of Organization
58	CARIMED[17]	Information Received	Private Pharmaceutical
59	Central Medical Laboratories Ltd	Information Received	Private Lab
60	Consolidated Laboratory	No Information Received	Private lab
61	Eagle Medical Laboratories	No Information Received	Private Lab
62	Global Laboratories & Health Services Ltd	No Information Received	Private Lab
63	Hargreaves Memorial Laboratory	Information Received	Private Lab
64	Hi Tech	No Information Received	Private Lab
65	Life Medical Laboratories	No Information Received	Private Lab
66	Medical Associates Laboratory	Information Received	Private Lab
67	Medical Immunodiagnostic Laboratory	No Information Received	Private Lab
68	Microlabs	No Information Received	Private Lab
69	Total Diagnostics Ltd	No Information Received	Private Lab
70	Guardian Life Ltd.	No Information Received	Private Lab/Insurance Co
71	Sagicor Life Jamaica Ltd.	No Information Received	Private Lab/Insurance Co

[17] Information Received for both ARV expenditure and Condom Consumption

	Organization	Status of Information Collected	Type of Organization
72	Caledonia Pharmacy, Mandeville	Information Received	Private Pharmacy
73	Charlies Pharmacy	Information Received	Private Pharmacy
74	Fontana Pharmacy Montego Bay	Information Received	Private Pharmacy
75	Fontana Pharmacy, Ocho Rios	Information Received	Private Pharmacy
76	J&J pharmacy Montego Bay	Information Received	Private Pharmacy
77	Krysdave Pharmacy, Maxfield avenue	Information Received	Private Pharmacy
78	K's Pharmacy Duhaney Park	Information Received	Private Pharmacy
79	Medicine Chest Pharmacy	Information Received	Private Pharmacy
80	Royale Pharmacy, Sav-la-Mar	Information Received	Private Pharmacy

ANNEX V - LETTERS DISTRIBUTED TO STAKEHOLDERS

GENERAL SENSITIZATION

MINISTRY OF HEALTH
HIV/ STI/ Tb Unit

6th Floor, RKA Building, **10-16 Grenada Way**, **Kingston 5**

Website: www.moh.gov.jm **Email:**

June 20, 2017

Dear Colleague:

National AIDS Spending Assessment **April 1, 2015- March 31, 2017**

The Ministry of Health through funding from the United States Agency for International Development (USAID) project Threats to the Environment Citizen Vulnerability (DOAG) and the Global Fund to Fight Aids, Tuberculosis and Malaria (GFATM), and with technical support from the United Nations Programme on HIV and AIDS (UNAIDS), will be conducting a National AIDS Spending Assessment (NASA) for the period Apr 1, 2015- March 31, 2016 and April 1 2016- March 31, 2017.

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, 2015- March 31, 2016 and April 1 2016- March 31, 2017, we are requesting information from your organization regarding expenditure on HIV related activities and programmes throughout the island for the financial years April l, 2015 to March 31, 2016 and April 1, 2016 — March 31, 2017. The NASA 2015-2017 exercise will include site visits to several entities. You will be contacted in short order with the date that the consultant will visit your offices.

The process this year will include the institutionalization of NASA; therefore there will be a NASA Capacity Building Workshop. This workshop is tentatively scheduled for October 2017. It will entail participants to prepare data for the current fiscal year April 1, 2017- present. The data is to be used in activities during the workshop. Additional details will be provided concerning the workshop at a later date.

Ms. Renée Johnson is leading a consulting team which will be conducting this exercise. Ms Johnson and/ or one of her team members, Marilyn Facey, have been authorized to contact you regarding this information. The data collection template which is attached should be completed and returned by July 14, 2017 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.

Yours Truly

Dr. Nicola Skyers

Senior Medical Officer

PRIVATE DOCTORS

MINISTRY OF HEALTH
HIV/ STI/ Tb Unit

6th Floor, RKA Building, **10-16 Grenada Way**, **Kingston 5**

Website: www.moh.gov.jm **Email:**

June 20, 2017

Dear Whom it may concern:

National AIDS Spending Assessment **April 1, 2015- March 31, 2017**

The Ministry of Health through funding/technical support from the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), and the United Nations Programme on HIV and AIDS (UNAIDS), will be conducting a National AIDS Spending Assessment (NASA) for the period Apr 1, 2015- March 31, 2016 and April 1 2016- March 31, 2017.

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In order to complete the NASA exercise for the period April 1, 2015- March 31, 2016 and April 1 2016- March 31, 2017, we are requesting information from your organization regarding expenditure on HIV related activities and programmes throughout the island for the financial years April 1, 2015 to March 31, 2016 and April 1, 2016 — March 31, 2017.

As a Private Physician, this information includes but is not limited to information on:

- The average number of HIV patients seen annually?
- Average fee charged to each patient per visit?
- The average number of visits by PLHIV each year?
- Tests most frequently recommended for PLHIV other than CD4 and viral load? (CD 4, Viral Load, Liver Function, Executive Profile etc)
- How often are they referred for these tests?
- How many of them are on ARVs
- What percentage of HIV patients are on Opportunistic Infection (OI) medication?
- OI medications most frequently prescribed for patients

Ms. Renée Johnson is leading a consulting team which will be conducting this exercise. Ms Johnson and/ or one of her team members, Marilyn Facey, have been authorized to contact you regarding this information. The data collection template which is attached should be completed and returned by July 14, 2017 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.

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Yours Truly

Dr. Nicola Skyers

Senior Medical Officer

MINISTRY OF HEALTH
HIV/ STI/ Tb Unit

6th Floor, RKA Building, **10-16 Grenada Way**, **Kingston 5**

Website: www.moh.gov.jm **Email:**

June 20, 2017

Dear:

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The Ministry of Health through funding/technical support from the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), and the United Nations Programme on HIV and AIDS (UNAIDS), will be conducting a National AIDS Spending Assessment (NASA) for the period Apr 1, 2015- March 31, 2016 and April 1 2016- March 31, 2017.

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, 2015- March 31, 2016 and April 1 2016- March 31, 2017, we are requesting information from your organization regarding expenditure on HIV related activities and programmes throughout the island for the financial years April l, 2015 to March 31, 2016 and April 1, 2016 — March 31, 2017. This includes information on the total number of each of the following, as well as the cost per unit:

9. HIV
10. CD4 and
11. HIV Viral Load
12. Liver function Test,
13. Renal Function,
14. Hepatitis B&C,
15. Blood Sugar and
16. Cholesterol tests

Ms. Renée Johnson is leading a consulting team which will be conducting this exercise. Ms Johnson and/ or one of her team members, Marilyn Facey, have been authorized to contact you regarding this information. The data collection template which is attached should be completed and returned by July 14, 2017 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.

Yours Truly

Dr. Nicola Skyers

Senior Medical Officer

University Hospital of the West Indies

MINISTRY OF HEALTH
HIV/ STI/ Tb Unit

6th Floor, RKA Building, **10-16 Grenada Way**, **Kingston 5**

Website: www.moh.gov.jm **Email:**

June 20, 2017

Dear RD:

National AIDS Spending Assessment **April 1, 2015- March 31, 2017**

The Ministry of Health through funding/technical support from the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), and the United Nations Programme on HIV and AIDS (UNAIDS), will be conducting a National AIDS Spending Assessment (NASA) for the period Apr 1, 2015- March 31, 2016 and April 1 2016- March 31, 2017.

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.

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As the University Hospital of the West Indies, this information includes but is not limited to, HIV programmatic activities, as well as, information on:

- HIV hospital admission rates (both antenatal and general and paediatric wards)
- Length of stay of PLHIV on wards
- General Staffing on these wards (including nurses and doctors and their levels)
- Tests normally done while admitted/staying on wards
- The average cost absorbed by patients for HIV related hospital admissions (should include tests done as an in-patient, cost of bed, any medication purchased) i.e what does the hospital charge each patient?

- The average cost absorbed by the hospital per admission
- The staffing of CHARES and their commensurate pay scales (how many doctors, nurses, lab, administrator)
- How many HIV tests, CD4 and Viral Loads were done in the period under investigation
- What was the average cost of each test
- The number of ARVs and paediatric ARVs dispensed by your pharmacy
- OI medications most frequently filled by patients (further discussion will be held with pharmacists)

Ms. Renée Johnson is leading a consulting team which will be conducting this exercise. Ms Johnson and/ or one of her team members, Marilyn Facey, have been authorized to contact you regarding this information. The data collection template which is attached should be completed and returned by July 14, 2017 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.

Yours Truly

Dr. Nicola Skyers

Senior Medical Officer

MINISTRY OF HEALTH
HIV/ STI/ Tb Unit

6th Floor, RKA Building, **10-16 Grenada Way**, **Kingston 5**

Website: www.moh.gov.jm **Email:**

NATIONAL CHEST HOSPITAL

June 20, 2017

Dear CEO:

National AIDS Spending Assessment **April 1, 2015- March 31, 2017**

The Ministry of Health through funding/technical support from the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), and the United Nations Programme on HIV and AIDS (UNAIDS), will be conducting a National AIDS Spending Assessment (NASA) for the period Apr 1, 2015- March 31, 2016 and April 1 2016- March 31, 2017.

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, 2015- March 31, 2016 and April 1 2016- March 31, 2017, we are requesting information from your organization regarding expenditure on HIV related activities and programmes throughout the island for the financial years April l, 2015 to March 31, 2016 and April 1, 2016 — March 31, 2017. This includes information on the total number of each of the following, as well as the cost per unit:

8. The number of Tuberculosis patients for the periods above
9. The number of these patients who were living with HIV
10. The cost of treatment for per person for the period
11. The average length of stay of patients for the period and the cost to the hospital
12. The number of multi-drug resistant tuberculosis and the number who were living with HIV and the associated costs of treating multi-drug resistant Tb
13. Cost of any capital machinery or materials bought to assist in treatment of Tb during the above mentioned periods
14. Salaries of staff for treating Tb (if all the hospital work is not focused on Tb approximate percentage of time or patients with Tb please give this percentage)

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Senior Medical Officer

PHARMACIES

MINISTRY OF HEALTH
HIV/ STI/ Tb Unit

6th Floor, RKA Building, **10-16 Grenada Way**, **Kingston 5**

Website: www.moh.gov.jm **Email:**

June 20, 2017

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As a Pharmacy/Distributor, this information includes but is not limited to information on:

- The names of ARVs sold by your company
- The cost per unit of ARV for the end user
- The total number of units sold to the period to the government
- The total number of units sold to private pharmacies/individuals
- Suggested retail price (if any) for end user.

Ms. Renée Johnson is leading a consulting team which will be conducting this exercise. Ms Johnson and/ or one of her team members, Marilyn Facey, have been authorized to contact you regarding this information. The data collection template which is attached should be completed and returned by July 14, 2017 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.

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Yours Truly

Dr. Nicola Skyers

Senior Medical Officer

CONDOM DISTRIBUTORS

MINISTRY OF HEALTH
HIV/ STI/ Tb Unit

6th Floor, RKA Building, **10-16 Grenada Way**, **Kingston 5**

Website: www.moh.gov.jm **Email:**

June 20, 2017

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As a Pharmacy/Distributor, this information includes but is not limited to information on:

- The quantity of condoms and or lubricants sold for the period
- The total number of units sold for the period to the government
- The unit price or total cost of condoms and/or lubricants sold to the government or NGOs for that period (include discounts if any)
- The total number of units of condoms and/or lubricants sold to private pharmacies/gas stations/supermarkets etc
- The unit price and or total cost of condoms and/or lubricants sold to private pharmacies, gas stations, supermarkets, etc
- Suggested retail price (if any) for end user.

Ms. Renée Johnson is leading a consulting team which will be conducting this exercise. Ms Johnson and/ or one of her team members, Marilyn Facey, have been authorized to contact you regarding this information. The data collection template which is attached should be completed and returned by July 14, 2017 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.

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Dr. Nicola Skyers

Senior Medical Officer

Annex VI - Validation Meeting Report

NASA Validation Meeting

Date: April 26, 2018

Time: 9 a.m. – 2 p.m.

Venue: Jamaica Employers' Federation Conference Room

Attendees:

The attendees represented several organizations within the HIV response. The organizations represented at the validation meeting were:

- PEPFAR USAID
- PEPFAR CDC
- JCW+
- JN+
- SERHA
- SRHA
- Treatment unit HIV/STI Unit
- Finance unit HIV/STI Unit
- Adolescent unit HIV/STI Unit
- M&E unit HIV/STI Unit
- NFPB
- UNAIDS
- UNICEF

Introduction:

The validation meeting was facilitated by the Lead Consultant, Renée Johnson. Charlton McFarlane, the Health Economist and member of the consulting team also made presentations to the group present. Ms. Johnson greeted the individuals and briefed them on the objective of the meeting. Ms. Marion Scott brought greeting on behalf of the HIV/STI Unit, highlighting the importance of NASA in the HIV planning process.

Ms. Johnson and Mr. McFarlane presentation focused on the following areas:

1. What is NASA
2. Processes of NASA
3. Total Expenditure by Funding Source, Financing Agent, AIDS Spending Category, Service Provider, Beneficiary Population and Resource Cost
4. Total Expenditure Specially selected Service Providers (including RHAs, NGOs)
5. Trend Analysis of by total expenditure, selected resource costs and selected beneficiary populations

Questions were fielded from attendees throughout the morning's presentation. The table depicts the questions and the relevant solutions.

Feedback and Recommendations - NASA Review – April 26, 2018

Issue/Concern	Response	Recommendation for Report
• How is JASL spending more than the regions?	JASL has several funding streams outside of PEPFAR and Global Fund. Additionally, they have 3 branches and work across the continuum of prevention and treatment. It was also noted that government cost/expenditure are underestimated	
• Explain increase in spending for NERHA AND WRHA and decrease for other RHAs. • Explain the difference in spending between SRHA and WRHA considering the difference in population covered under each Why is prevention expenditure still higher than treatment considering the shift in focus for donors? Can you provide an example/the codes used to break down the data to demonstrate this?	Consultant we assess database and source data to check these differences. A possible reason for these differences may also include that PEPFAR resources are not focused in all regions. Treatment is targeted and prevention is population wide. This may explain the difference despite donor focus. Prevention has always been more expensive based on the activities and the larger numbers to be reached. Underestimation of healthcare costs could also be a reason for this seemingly less expenditure. The consultants posited that the rates UHWI charged could be used to estimate government expenditure on in patient care, as opposed to	The trends for the RHAs should be included in the report. The consultants will seek to highlight the nexus between prevention and treatment in narrative. This will include NASA codes and definition The consultants will try and attempt to collect private sector room and board rates and apply these to government in patient services. The consultants will also highlight in the narrative any other rationales which could lead to the differences in

Issue/Concern	Response	Recommendation for Report
	gazette GOJ rates prior to 2007. Some participants believed this was not the most accurate cost/rates, as UHWI rates are also subsidized, and those of the private sector should be accessed. It was also highlighted that prevention expenditure was decreasing therefore possibly becoming more aligned to the concept of test and start	treatment and prevention expenditure. The consultants will also highlight what activities are coded or considered treatment and care under the NASA terminology
Can the system track HIV patients who are admitted to a hospital? Is this expense tracked as an HIV patient or as a citizen of Jamaica?	The consultant highlighted the limitation of the health information and recording systems in Jamaica, which makes it challenging to full track a patient no matter their illness.	
What is the definition of key populations	It was highlighted that when the information is received from stakeholders, in some cases it is not disaggregated by	The graphs in the report should have key populations disaggregated by type. The narrative will describe who are key populations. The narrative will also have to indicate what seems to be limited expenditure on general population, considering that prevention interventions are focused on targeted populations.

- Who is included in Key Pop category? Why are these persons (MSM, SW, at-risk youth) then further disaggregated because this gives the impression these beneficiaries are separate from KP category?
    - It is not always possible to disaggregate into specific beneficiaries because reports received from stakeholders are not always classified according to specific groups, e.g. JASL does not disaggregate into MSM or SW but simply provides data as Key Pop.

What is included in treatment and care?

Explain what was done in the absence of NHF data to determine drug procurement?

Will the final report reflect drug consumption or procurement only?

How is general population reflected in the graph on percentage expenditure for beneficiaries?

Explain costing from NHF? Does it include treatment for OIs?

Resource Cost

"Other" seems to be covering too much e.g Lab. This needs to be separated because lab is a big expenditure.

Does logistics include meeting costs and consultants?

ARV expenditure for 2016/2017 cannot be less than for 2015/2016 because Test and Treat started in 2017. Explain further.

Graph may not be the best way to represent this data.

How is social protection coded?

Trend Analysis

Nominal spend - Started from 09 at 1.5 billion and now over 2 billion at a 25% increase in total spend.

Real spend is of course less based on CPI. Unit spend per person would be less also but now required to reach more persons with less.

Nominally, least is being spent on treatment but this may be underestimated. Categories are being missed. However, for treatment to be within 50% of prevention spending then treatment would be underestimated by 100%. The size of the gap between treatment and prevention is still a concern despite the underestimation.

Suggest overlay beneficiary spend chart with GOJ spend to see how spend among financers is different by beneficiary.

Expenditure for ARV is for the procurement only. Include this on the chart to be clear.

Overall overlap of populations is an issue. They need to be separated as much as possible

Program goals also overlap, so BCC teams are involved in treatment. Make this explicit in charts.

In 2016 there was a push to procure ARV in preparation for Test and Start so the trend analysis does not seem accurate. However, this is data from NHF. Was MOH data included?

Explain further in narrative the decrease seen in 2013/2014 on all the graphs.

Conclusion

The general consensus is that most of questions asked and any nuances with respect to the 6 vectors must be clearly articulated in the narrative of the report. This includes the elaboration of the other category under each of the vectors as well as the description of HIV activities such the overlap between treatment and care.