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# CONSOLIDATED SPENDING ON HIV AND TB IN SOUTH AFRICA (2014/15–2016/17)



**August 2018**

This publication was produced for review by the Government of South Africa, the United States Agency for International Development, and the Global Fund to Fight AIDS, Tuberculosis and Malaria. It was prepared by Teresa Guthrie, Kavya Ghai and Michael Chaitkin of the Health Finance and Governance Project; Nthabiseng Khoza, Nomkhosi Mbukiso Zulu, and Vincent Madisha of the National Department of Health; Nhlanhla Ndlovu, Silindile Shezi, Joshua Karume, Portia Motsoeneng and Siphethelo Simelane of the Centre for Economic Governance and Accountability in Africa; and Gesine Meyer-Rath, Sithabiso Masuku and Lise Jamieson of the Health Economics and Epidemiology Research Office at the University of the Witwatersrand

## **The Health Finance and Governance Project**

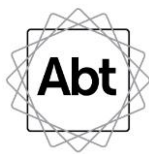
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# CONTENTS

<b>Contents.....</b>	<b>i</b>
<b>Acronyms .....</b>	<b>v</b>
<b>Acknowledgments .....</b>	<b>vii</b>
<b>Executive Summary .....</b>	<b>ix</b>
<b>1. Introduction.....</b>	<b>1</b>
1.1 Background .....	1
1.2 Purpose of this Report .....	1
1.3 Capacity Building and Automation.....	2
<b>2. Methodology.....</b>	<b>3</b>
2.1 Scope .....	3
2.2 Sources of data and assumptions applied.....	3
2.3 Exclusions .....	5
2.4 Classification of the 'TB/HIV' spending according to disease area .....	6
2.5 Financial years.....	6
2.6 Exchange rates.....	6
2.7 Crosswalking approach and categories.....	7
<b>3. Findings.....</b>	<b>9</b>
3.1 Overall spending on HIV, TB and TB/HIV over the three years .....	9
3.2 Total HIV and TB spending over the three years by source/department .....	10
3.3 Expenditure on HIV in South Africa.....	11
3.4 Expenditure on TB in South Africa.....	51
3.5 Comparison of HIV and TB spending with the National Strategic Plan (NSP) cost estimates.....	60
<b>4. Summary and Conclusions.....</b>	<b>63</b>
4.1 Key findings .....	64
4.2 Conclusions.....	66
4.3 Looking ahead.....	67
<b>5 References .....</b>	<b>69</b>
<b>Annexes.....</b>	<b>71</b>
Annex 1: Total spending on HIV and TB by SAG, USG and Global Fund by focus and year (2014/15–2016/17, R) .....	71
Annex 2: Total HIV and TB spending by source (2014/15–2016/17, R) .....	71
Annex 3: Funder share of total HIV and TB spending (2014/15–2016/17, %).....	72
Annex 4: Total HIV spending by source (2014/15–2016/17, R) .....	72
Annex 5: Funders relative contribution to HIV intervention categories (2016/17, %).....	72
Annex 6: HIV expenditure by funder and activity (2016/17, R).....	73
Annex 7: DOH spending by budget mechanism (2016/17, R).....	74
Annex 8: Combined PDOH HIV spending by sub-programme (2014/15–2016/17, R) .....	75
Annex 9: PDOH HIV sub-programme spending, CG and voted funds (2016/17, R) .....	76
Annex 10: DOH HIV spending and number of PLHIV by province (2016/17, R).....	77
Annex 11: HIV expenditure by district and funder, with PLHIV population (2016/17, R) .....	77



Annex 12: NDOH HIV sub-programme spending (2016/17, R).....	79
Annex 13: NDOH HIV cost category spending (2016/17, R).....	79
Annex 14: Combined DOH, Global Fund and PEPFAR spending on ART and number of patients remaining in care (2014/15–2016/17, R) .....	80
Annex 15: DOH total ART spending with number of patients remaining in care, PLHIV, and DOH spending per person on ART and per PLHIV (2016/17, R) .....	80
Annex 16: PDOH ART spending by cost category and province (2016/17, R).....	81
Annex 17: ART spending by funder and district, with PLHIV population (2016/17, R) .....	82
Annex 18: DOH and PEPFAR spending on Condom programme (2014/15–2016/17, R) .....	83
Annex 19: DOH spending on Condom programme and spending per condom distributed (male and female) (2016/17, R) .....	84
Annex 20: DOH spending on male condoms and spending per male condom distributed (2016/17, R) .....	84
Annex 21: DOH spending on female condoms and spending per female condom distributed (2016/17, R) .....	85
Annex 22: MMC spending by funder (2014/15–2016/17, R).....	85
Annex 23: DOH spending on MMC and DOH spending per circumcision performed (2016/17, R) .....	85
Annex 24: DOH condom programme spending by cost category (2016/17, R).....	86
Annex 25: DOH MMC spending by cost category (2016/17, R) .....	86
Annex 26: DOH and PEPFAR spending on MMC by district (2016/17, R) .....	87
Annex 27: HTS spending by funder and HIV tests performed (2014/15–2016/17, R) .....	88
Annex 28: DOH HTS sub-programme spending by province, number of HIV tests, PLHIV population and unit expenditure per test (2016/17, R) .....	89
Annex 29: DOH HTS spending by cost category (2016/17, R) .....	90
Annex 30: DOH and PEPFAR HTS spending by district (2016/17, R) .....	91
Annex 31: HBC spending by funder (2014/15–2016/17, R).....	93
Annex 32: PDOH and PDSO spending on HBC by province (2016/17, R).....	93
Annex 33: PDOH HBC spending by cost category and province (2016/17, R).....	94
Annex 34: DOH, DSD and PEPFAR HBC spending by district (2016/17, R) .....	95
Annex 35: DOH spending on Regional Training Centres (Training) (2016/17, R) ..	96
Annex 36: Regional Training Centre (Training) cost category spending (2016/17, R) .....	97
Annex 37: Provincial DSD HIV-related Sub-programmed Spending per province (2016/17, R) .....	98
Annex 38: DBE HIV Life Skills CG (2014/15–2016/17, R) .....	98
Annex 39: DBE Life Skills CG spending by province (2016/17, R) .....	99
Annex 40: TB spending by funder and province, with number of TB patients (2016/17, R) .....	100
Annex 41: TB spending by funder and district (2016/17, R).....	100
Annex 42: DOH TB spending by intervention (2014/15–2016/17, R) .....	102
Annex 43: TB spending by intervention and source (2016/17, R).....	103
Annex 44: DOH spending on TB by intervention and province (2016/17, R) .....	104
Annex 45: TB spending compared to the estimated resources needed for the NTP (2014/15–2016/17, R).....	104
Annex 46: Drug sensitive (DS) and drug resistant (DR) TB cases treated in SA ..	105
Annex 47: Comparison of the HIV and TB spending in 2016/17 with cost estimates of the previous NSP (2012/13–2016/17) for 2016/17 (R millions) 106	
Annex 48: Comparison of HIV and TB expenditure in 2016/17 with the new NSP estimated costs for 2017/18 (R).....	106
Annex 49: Expenditure not directed towards NSP priorities (2016/17, R) .....	106
Annex 50: Spending by NSP goal in 2016/17 versus NSP resource need in 2017/18 (R and % of total) .....	107
Annex 51: NDOH PLHIV estimates (provided by USAID) .....	108
Annex 52: BAS common codes crosswalked to the six classification sets.....	109

## List of Tables

Table ES 1. Summary of data sources and possible levels of disaggregation .....	xi
Table 1: Possible levels of disaggregation for each funding source.....	3
Table 2: USAID's TB spending proportional split to interventions.....	4
Table 3: Matching the SAG and USG FYs for the expenditure analysis .....	6
Table 4: Exchange rates for conversion of US dollars to SA Rands.....	6
Table 5: HIV programme classification across categories.....	7
Table 6: Funding mechanism for DOH's HIV spending (2016/17, R millions) .....	13
Table 7: Comparison of DOH and PEPFAR's units of expenditure with the NSP unit costs (2016/17, R).....	19
Table 8: DOH spending on RTC (2014/15–2016/17, R) .....	41
Table 9: Proportional shares of DSD sub-programmes that were assumed to be HIV-related .....	47
Table 10: DBE's HIV and AIDS Life Skills CG by key intervention (%) .....	49
Table 11: Sources of funding for TB in South Africa (2014/15–2016/17, R) .....	52

## List of Figures

Figure ES 1. Total HIV and TB spending by source and year (R millions) (left) and funder share (%) (right) .....	xii
Figure ES 2. Funders' relative contributions to HIV intervention categories (2016/17, %) .....	xiii
Figure ES 3. HIV spending by district and funder (left axis) and number of PLHIV (right axis) in 2016/17 .....	xv
Figure 1: Total spending on HIV and TB by SAG, USG and Global Fund by focus and year (2014/15–2016/17, R millions).....	9
Figure 2: Total HIV and TB spending by source and year (R millions) (left) and funder share (%) (right) .....	10
Figure 3: Total HIV spending by source and year (with SAG split by department) (R millions).....	11
Figure 4: Funder's relative contribution to HIV intervention categories (2016/17, %)....	12
Figure 5: DOH spending by budget mechanism (2016/17, R millions) .....	13
Figure 6: Combined PDOH spending by programme in absolute (R millions) (left) and proportional (%) (right) (2014/15–16/17) .....	14
Figure 7: HIV programme spending by province in absolute (R millions) (top) and proportional (%) (bottom) in 2016/17 .....	15
Figure 8: DOH HIV spending (R millions) and number of PLHIV by province in 2016/17 .....	16
Figure 9: HIV spending by district and funder (R millions, left axis) and number of PLHIV (right axis) in 2016/17.....	17
Figure 10: NDOH programme spending (left) and cost category (right) (2016/17, R millions).....	18
Figure 11: Combined DOH, Global Fund and PEPFAR spending on ART and number of patients remaining in care (2014/15–2016/17, R millions) .....	20
Figure 12: DOH spending on ART by province and #s of patients RIC and PLHIV (2016/17, R millions) (top) and DOH ART spending per person on ART and per PLHIV (2016/17, R) (bottom) .....	21
Figure 13: DOH provincial ART spending by cost category absolute (2016/17, R millions) (left) and proportional (2016/17, %) (right) .....	22
Figure 14: ART spending by funder and district, with PLHIV population (2016/17, R millions).....	23
Figure 15: Combined DOH and PEPFAR spending on condom programme (2014/15–2016/17, R millions).....	24
Figure 16: DOH condom programme spending (2016/17, R millions) (left) and spending per condom distributed (male and female) (2016/17, R) (right).....	25

Figure 17: DOH spending on male condoms (2016/17, R million) (left) and DOH spending per male condom distributed (2016/17, R) (right) .....	25
Figure 18: DOH total spending on female condoms (2016/17, R millions) (left) and DOH spending per female condom distributed (2016/17, ZAR) (right) .....	26
Figure 19: DOH total condom programme spending by cost category absolute (2016/17, R millions) (top) and proportional (2016/17, %) (bottom) by province. ....	27
Figure 20: MMC spending by funder and MMCs performed (2014/15–2016/17, R millions).....	28
Figure 21: DOH total spending on MMC (2016/17, R millions) (left) and DOH spending per circumcision (2016/17, R) (right).....	29
Figure 22: DOH MMC spending by cost category in absolute (2016/17, R millions) (top) and proportional (2016/17, %) (bottom) terms by province.....	30
Figure 23: DOH and PEPFAR spending on MMC (2016/17, R millions) and PLHIV population by district .....	32
Figure 24: HTS spending by funder and # of HIV tests (2014/15–2016/17, R millions) ..	33
Figure 25: DOH total spending on HTS (2016/17, R millions) and number of clients tested (left) and DOH spending per client tested and PLHIV (2016/17, R) (right) ..	34
Figure 26: DOH HTS spending by cost category in absolute (2016/17, R millions) (left) and proportional (2016/17, %) (right) terms by province.....	35
Figure 27: DOH and PEPFAR HTS spending by district (2016/17, R millions) .....	36
Figure 28: Total spending on HBC by funder (2014/15–2016/17, R millions) .....	37
Figure 29: DOH spending on HBC by province (2016/17, R millions).....	38
Figure 30: DOH HBC spending by cost category in absolute (2016/17, R millions) (left) and proportional (2016/17, %) (right) terms by province .....	39
Figure 31: DOH and PEPFAR HBC spending by district (2016/17, R millions) .....	40
Figure 32: DOH RTC spending by province (2016/17, R millions) .....	41
Figure 33: DOH spending on RTC by district (2016/17, R millions) .....	42
Figure 34: DOH RTC spending by cost category in absolute amounts (2016/17, R millions) (left) and proportionally (2016/17, %) (right) by province .....	43
Figure 35: Change in DOH and PEPFAR spending in PEPFAR priority districts between 2015/16 and 2016/17 .....	45
Figure 36: Change in DOH and PEPFAR spending in PEPFAR transition districts between 2015/16 and 2016/17 .....	46
Figure 37: DSD HIV-related spending (2014/15–2016/17, R millions) .....	47
Figure 38: Provincial DSD HIV-related spending per sub-programme (2016/17, R millions) (left) and proportionally (2016/17, %) (right) .....	48
Figure 39: Trends in PDSD HIV-related spending (2014/15–2016/17, R millions) .....	48
Figure 40: DBE HIV Life Skills CG (2014/15–2016/17, R millions).....	49
Figure 41: PDBE HIV Life Skills CG spending by intervention (2016/17, R millions) .....	50
Figure 43: TB spending by funder (2014/15–2016/17, R millions) (left) and by province with number of TB patients (2016/17, R millions) (right) .....	53
Figure 44: TB spending across the districts, by source of funding (2016/17, R millions) ..	54
Figure 45: Total DOH TB spending by intervention (2014/15–2016/17, R millions).....	55
Figure 46: Proportional TB intervention spending by source of funding (2016/17, %)....	56
Figure 47: Spending on TB interventions by PDOHs and NDOH in absolute amounts (2016/17, R millions) (top) and proportional amounts (2016/17, %) (bottom).....	57
Figure 48: DOH annual unit of spending per DS- and DR-TB patient compared to estimated unit cost (2014/15–2016/17, R).....	58
Figure 49: TB spending compared to the estimated resources needed for the NTP (2014/15–2016/17, R millions).....	59
Figure 50: Comparison of the HIV and TB spending in 2016/17 with the cost estimates of the previous NSP (2012/13–2016/17, R millions).....	60
Figure 51: Actual HIV and TB expenditure (2016/17, R billions) and the NSP estimated costs (2017/18, R millions) .....	61
Figure 52: Expenditure not directed towards NSP priorities (2016/17, R millions).....	61
Figure 53: Proportional spending by NSP goal versus NSP prioritisation (2016/17–2017/18, %).....	62

# ACRONYMS

<b>ANC</b>	antenatal care
<b>ART</b>	antiretroviral therapy
<b>ARV</b>	antiretroviral drugs
<b>BAS</b>	Basic Accounting System (public)
<b>C&amp;S</b>	care and support
<b>CEGAA</b>	Centre for Economic Governance and Accountability in Africa
<b>CG</b>	Conditional Grant
<b>COP</b>	Country Operational Plan (PEPFAR)
<b>DBE</b>	Department of Basic Education
<b>DOH</b>	Department of Health
<b>DR-TB</b>	drug-resistant tuberculosis
<b>DS-TB</b>	drug-sensitive tuberculosis
<b>DSD</b>	Department of Social Development
<b>EA</b>	Expenditure Analysis (PEPFAR reports)
<b>EC</b>	Eastern Cape
<b>EPRE</b>	Estimates of Provincial Revenue and Expenditure
<b>ES</b>	equitable share
<b>FS</b>	Free State
<b>FY</b>	financial year
<b>GBV</b>	gender-based violence
<b>Global Fund</b>	Global Fund to Fight AIDS, TB and Malaria
<b>GP</b>	Gauteng
<b>HBC</b>	home-based care
<b>HE<sup>2</sup>RO</b>	Health Economics and Epidemiology Research Office
<b>HFG</b>	Health Finance and Governance Project
<b>HIS</b>	health information system/s
<b>HPV</b>	human papilloma virus
<b>HSRC</b>	Human Sciences Research Council
<b>HTA</b>	high transmission areas / sex workers
<b>HTS</b>	HIV testing services
<b>IPT</b>	isoniazid preventive therapy
<b>KZN</b>	KwaZulu-Natal
<b>LP</b>	Limpopo
<b>M&amp;E</b>	monitoring and evaluation
<b>MDR-TB</b>	multidrug-resistant tuberculosis
<b>MMC</b>	medical male circumcision



<b>MP</b>	Mpumalanga
<b>MSM</b>	men who have sex with men
<b>NACM</b>	National ART Cost Model
<b>NASA</b>	National AIDS Spending Assessment
<b>NC</b>	Northern Cape
<b>ND</b>	not disaggregated
<b>NDOH</b>	National Department of Health
<b>NHA</b>	National Health Accounts
<b>NIMART</b>	nurse initiated and managed ART
<b>NPO</b>	non-profit organisation
<b>NSP</b>	National Strategic Plan for HIV, TB and STIs
<b>NTP</b>	National Tuberculosis Plan
<b>NW</b>	North West
<b>OI</b>	opportunistic infection
<b>OVC</b>	orphans and vulnerable children
<b>PDOH</b>	Provincial Department of Health
<b>PEP</b>	post-exposure prophylaxis
<b>PEPFAR</b>	President's Emergency Plan for AIDS Relief (United States Government)
<b>PLHIV</b>	people living with HIV
<b>PM</b>	programme management
<b>PMTCT</b>	prevention of mother-to-child transmission
<b>PR</b>	Principal Recipient (Global Fund)
<b>PrEP</b>	pre-exposure prophylaxis
<b>PUDR</b>	Progress Update and Disbursement Request (Global Fund)
<b>R</b>	South African Rand
<b>R4D</b>	Results for Development
<b>RIC</b>	remaining in care
<b>SA IC</b>	South Africa Investment Case
<b>SAG</b>	South African Government
<b>SANAC</b>	South African National AIDS Council
<b>SBCC</b>	social and behaviour change communication
<b>SDC</b>	step-down care
<b>SHA</b>	System of Health Accounts
<b>TB</b>	tuberculosis
<b>TROA</b>	total remaining on ART
<b>US</b>	United States
<b>USAID</b>	United States Agency for International Development
<b>USG</b>	United States Government
<b>WC</b>	Western Cape
<b>XDR-TB</b>	extensively drug-resistant tuberculosis

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# EXECUTIVE SUMMARY

## Background and Purpose

The South African Government (SAG) and its development partners have mounted a formidable response to the world's largest HIV epidemic and a persistent burden of tuberculosis (TB), the country's leading killer. Nearly 4 million South Africans initiated antiretroviral therapy (ART) by the end of financial year 2016/17, helping to curtail new infections and reduce the number of annual HIV-related deaths. Mortality from TB has also declined thanks, in part, to improved treatment success.

Despite progress, challenges remain. Roughly 3 million people living with HIV (PLHIV) lack treatment, and each year more than a quarter million are newly infected. Moreover, nearly a half million South Africans contract TB every year, with an increasing share affected by drug-resistant strains.

To effectively plan and steward the health system, the SAG routinely monitors programmatic and financial performance of the response to HIV and TB, including by tracking expenditure. Analysis of spending, including trends in sources, levels, geographic and programmatic distribution and cost drivers can help policymakers to assess whether resources are reaching priority populations, interventions, and hotspot geographies; to identify potential opportunities to improve allocative and technical efficiency; and to stimulate more productive dialogue at multiple levels of the system.

This review of HIV and TB expenditure in South Africa is an input to policy, planning and management processes within and amongst spheres of government and between government and development partners. The data have been especially useful to national and provincial programme managers as they perform their oversight functions, leading to improved spending of available resources. With 52 annexes, it also serves as an authoritative reference document detailing levels and trends in HIV and TB spending by the three main funders of the disease responses: the SAG, the United States Government (USG), primarily via the President's Emergency Plan for AIDS Relief (PEPFAR), and the Global Fund to Fight AIDS, Tuberculosis, and Malaria (the Global Fund). The findings have informed South Africa's report to the UNAIDS Global AIDS Monitor and the country's forthcoming funding request to the Global Fund.

## Approach and Methods

Through a process of capacity building and technical support led by Results for Development (R4D), via the United States Agency for International Development's (USAID's) Health Finance and Governance project, a consortium produced this analysis, including officials from the National Department of Health (NDOH) and researchers from the Centre for Economic Governance and Accountability in Africa (CEGAA) and the Health Economics and Epidemiology Research Office (HE<sup>2</sup>RO) at the University of Witwatersrand, via USAID's Innovations Research on AIDS Program (INROADS) and Financial Capacity Building and Technical Support Project (FIN-CAP). Other agencies provided essential data or funding (or both), including the National Departments of Basic Education (DBE) and Social Development (DSD), USAID and the Global Fund.

The consortium sought not only to update available analysis but also to institutionalise capacity within the government, CEGAA and HE<sup>2</sup>RO to compile, analyse and interpret available expenditure data and use the data in relevant forums. Accordingly, the research process included a series of collaborative training workshops, inclusive consultations with key stakeholders and concurrent development, led by HE<sup>2</sup>RO, of an Excel-based automation tool that can search, summarise and code HIV- and TB-related transactions in the SAG's public Basic Accounting System (BAS) (Box ES 1).

This review builds on previous analyses of HIV and TB spending, most recently those conducted as inputs to South Africa's HIV and TB Investment Case, which covered financial years (FY) 2011/12 through 2013/14. This iteration of analysis answers the following questions:

1. How much was spent on HIV and TB by the three main funders (SAG, USG, and Global Fund) during FY 2014/15 through 2016/17?
2. How was spending distributed across geographies and interventions?
3. Which cost categories drove spending?
4. How did spending and outcomes compare across provinces for the key HIV programmes?
5. How did government spending change while PEPFAR's 'focus for impact' efforts concentrated PEPFAR investment in 27 of South Africa's 52 districts?
6. How does the spending according to interventions compare with the newly costed National Strategic Plan for HIV, TB and STIs 2017–2022?
7. What financial and epidemiological data challenges limit analysis and interpretation?

### **Box ES 1.**

#### **BASLY - a new tool to catalyse expenditure analysis**

In consultation with consortium partners, researchers from HE<sup>2</sup>RO developed an Excel-based tool, called BAS Lightyear (BASLY), that automates several key steps of HIV and TB expenditure analysis. These include searching Department of Health (DOH) BAS records for every HIV and TB transaction, extracting these into a common database, crosswalking the interventions and cost categories to the reduced lists of common codes and running high-level analysis on this dataset. In addition, the tool can analyse any other expenditure data along with the DOH extract if the data are arranged in the BAS output structure. The tool will allow government and partners to complete these steps in a few hours\*, compared to the weeks, or even months, previously required. The tool could potentially be adapted to other disease or programme areas, if the financial transactions have a suitable identifier.

In early 2018, HE<sup>2</sup>RO trained officials from the NDOH to use BASLY, which will assist them in their routine analysis of provinces' quarterly and annual spending. At the time of writing, the team was exploring further development of BASLY, such as to add capability for more extensive automated analysis and for the incorporation of development partners' expenditure data.

\* Depending on the processing power of the laptop on which BASLY is being run.



The expenditure review required data from numerous sources, as summarised in Table ES 1. The data were crosswalked to a common set of spending categories and compiled into a master database for analysis. In addition to estimating nationwide expenditure in aggregate, by intervention area and by cost element, where possible the team also disaggregated estimates to the provincial and district levels.

Table ES 1. Summary of data sources and possible levels of disaggregation

Funding source and channel		Data source	Disaggregation		
			National	Provincial	District
SAG	DOH through voted funds and conditional grant (CG)	SAG BAS	✓	✓	✓
	Department of Basic Education (DBE) through CG	Estimates of national and provincial revenue and expenditure	✓	✓	
	Department of Social Development (DSD) through voted funds		✓	✓	
USG	PEPFAR	Expenditure Analysis Tool	✓		✓
	USAID (non-PEPFAR)	USAID official	✓		
Global Fund		Principal Recipients' (PRs') progress updates and disbursement requests	✓		

Note: Previous analysis also included spending by three additional SAG entities: Department of Correctional Services, the Department of Defence and the South African Police Service. Together these accounted for less than 0.5% of spending during 2011/12–2013/14 and so were excluded from this study.

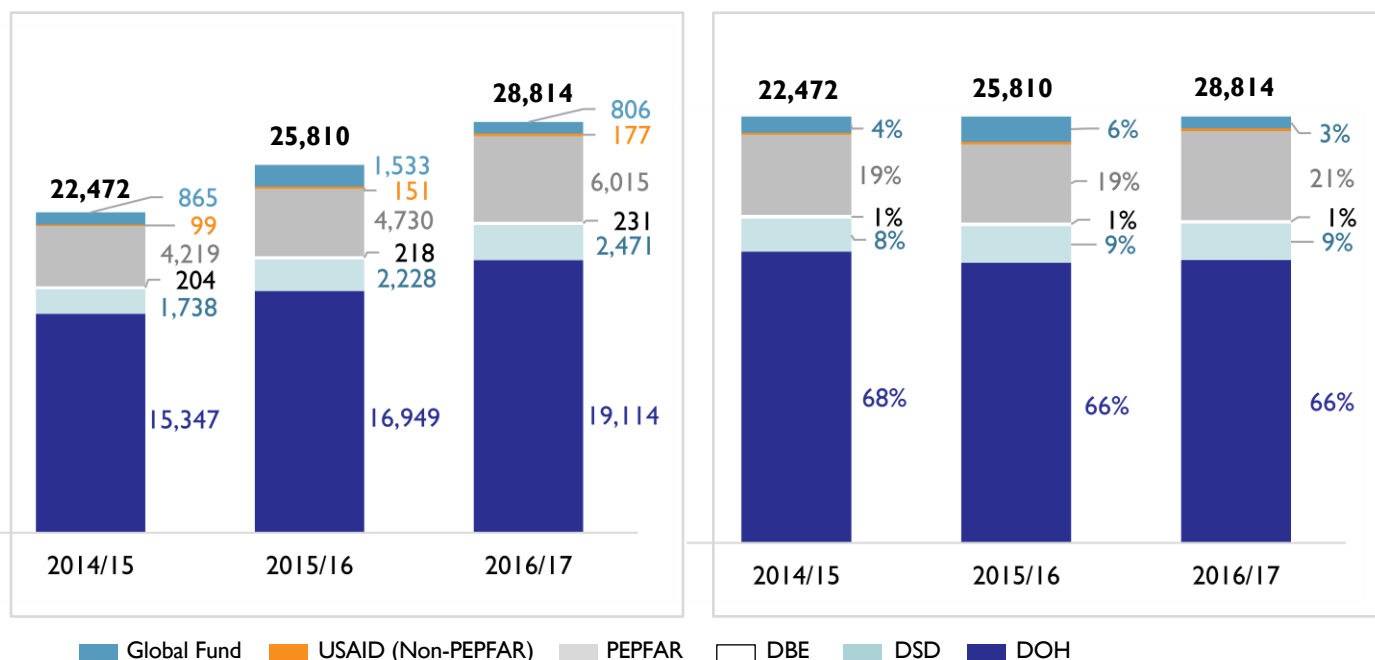
## Selected Findings

This review includes dozens of spending estimates at the national, provincial and district levels for three funders of the two multifaceted and interconnected disease responses. A selection of headline findings is summarised here.

### National Level

**The SAG continued to lead the scale-up of South Africa's HIV and TB responses.** Combined spending for HIV and TB across the SAG, USG and Global Fund increased from R22.5 million in FY 2014/15 to R28.8 million in 2016/17, reflecting average annual growth of 13% over the three years and sustaining steady growth since 2003/04. In 2016/17, the SAG accounted for 76% of total spending—66% by DOH, 9% by DSD and nearly 1% by DBE—followed by the USG (21%) and Global Fund (3%) (Figure ES 1). South Africa continues to stand out amongst countries with substantial HIV and TB burdens for domestically financing most of the disease responses.

Figure ES I. Total HIV and TB spending by source and year (R millions) (left) and funder share (%) (right)



**Conditional grants, especially the DOH's Comprehensive HIV, AIDS and TB CG, were the most important financing mechanism for the HIV response.** In 2016/17, the DOH CG channelled 90% of total DOH spending on HIV and 59% of the overall spending on HIV. Only 5% of DOH HIV spending was financed from provincial DOHs' voted funds, and only in Mpumalanga, Gauteng and Western Cape did voted funds account for at least 8% of DOH spending on HIV. All the DBE spending on HIV came from the Department's HIV and AIDS Life Skills CG. In contrast, DSD spending on HIV came entirely from voted funds, which accounted for 13% of domestic HIV spending in 2016/17 and included their HIV/AIDS sub-programme (100%), and the community-based care services for vulnerable children (100%), as well as 20% of: care and services to families, victim empowerment, substance abuse prevention, child care and protection sub-programmes, and 10% of child and youth care and youth development programmes – since all these activities are prevention or mitigation priorities in the new National HIV, TB and STI Strategic Plan. In addition, the DSD provides foster grants and child support grants for vulnerable children, the spending on which have not been captured here but nevertheless represent important mitigation efforts.

**Donor commitment to combatting HIV and TB in South Africa remained strong despite long-run expectations of declining support.** Support from the USG, mainly through PEPFAR, grew over the three years, from R4,219 million in 2014/15 to R6,015 million in 2016/17<sup>1</sup>. The USG held steady as the source of about one fifth of HIV and TB spending, a modest increase in share compared to the previous three-year period. Meanwhile, after Global Fund spending increased from R865 million in 2014/15 to R1,533 in 2015/16, its contribution dropped to R806 million in 2016/17. This mainly reflects

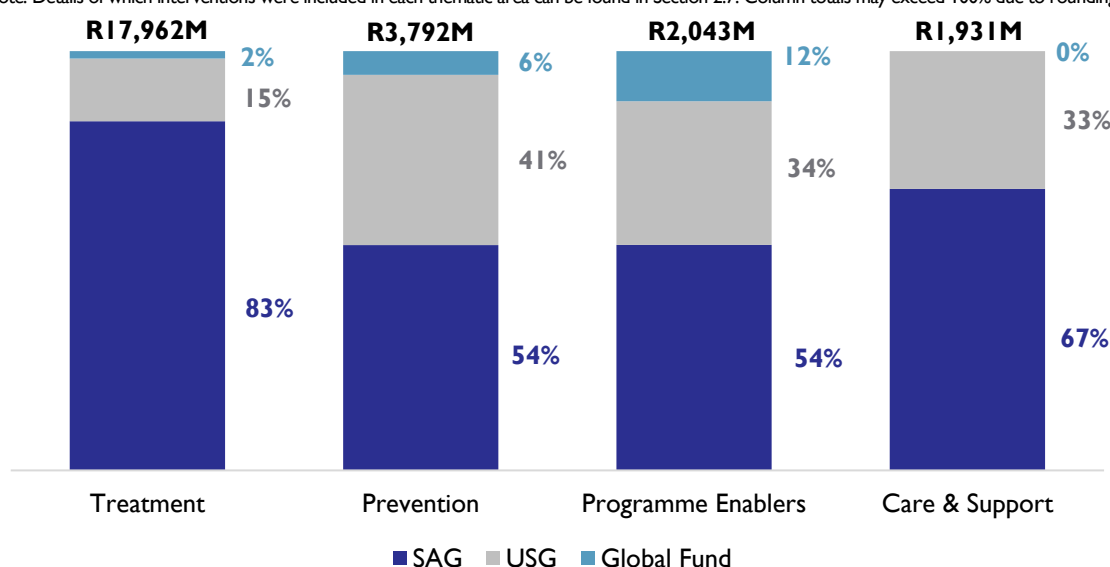
<sup>1</sup> The US dollar value of PEPFAR's contribution decreased from 2014/15 to 2015/16, but the Rand value increased due to weakening of the Rand relative to the US dollar during that period.

sluggish spending in the first year of a new three-year grant. Importantly, the new Global Fund grant will amount to R4.3 billion<sup>2</sup> for 2016–2018, compared to roughly R3 billion spent from the 2013–2015 grant.

**Within the HIV response, government funded a large share of treatment, whereas donors drove significant shares of spending in prevention.** In 2016/17, South Africa domestically financed 83% of HIV treatment costs and 67% of other care and support activities. In addition, the SAG financed around half of prevention (including youth interventions, condoms, human papilloma virus vaccination and workplace interventions,) and investments in enablers, including gender empowerment, substance abuse prevention, training and some advocacy, communications and social mobilization (ACSM) (Figure ES 2). Activities for which donors provided more than half of the financing in 2016/17 included HIV testing services (HTS), prevention of mother-to-child transmission (PMTCT), medical male circumcision (MMC), post-exposure prophylaxis (PEP) and outreach to key populations. However, the majority of the PEPFAR funding has been for technical support for these activities rather than for direct service delivery, while the SAG funding is for the direct service delivery and often a portion of the DOH spending on these is embedded in the general primary health (PHC) spending, such as salaries of nurses doing HST or PMTC as well as other PHC services, so these expenditures are not labelled as HST and PMTCT specifically.

**Figure ES 2. Funders' relative contributions to HIV intervention categories (2016/17, %)**

Note: Details of which interventions were included in each thematic area can be found in Section 2.7. Column totals may exceed 100% due to rounding.



**ART drove most of South Africa's HIV spending.** Spending on ART increased from R9,807 million in 2014/15 to R12,863 million in 2016/17, reflecting the steady increase of PLHIV on treatment—at the end of 2016/17, nearly 4 million PLHIV remained in care. Thus in 2016/17, ART accounted for nearly half of overall HIV spending and ranged from 50% to 80% of the provincial DOH HIV spending. The next biggest areas of spending were home-based care (9%), HTS (7%), care for orphans and vulnerable children (7%) and MMC (4%).

<sup>2</sup> This amount is equivalent to the US\$324 million committed by the Global Fund, based on an exchange rate of R13.25 per US dollar used by the Global Fund in the approved budget for the 2016–2018 grants, provided by the South African National AIDS Council (SANAC).

**TB spending continued to rise thanks to growing domestic and donor financing for the disease.** Combined TB spending increased from R2,652 million in 2014/15 to R3,147 in 2016/17, increasing annually by 8% on average, over the three years. The SAG (via DOH) accounted for 79% of total TB spending, with the USG contributing 20% (nearly 15% through PEPFAR and 6% through separate USAID funding). The Global Fund contributed R30 million in 2016/17, less than 1% of total TB spending, in addition to spending on TB/HIV integrated efforts that were included in the HIV spending total. Whilst modest, this reflects the Global Fund's increased commitment to combatting TB in South Africa. In 2016/17, the TB spending was concentrated in the cities of Johannesburg, Cape Town, Durban, Tshwane and Ekurhuleni, which accounted for nearly one third of TB spending.

**TB spending was harder to capture than HIV spending.** Most domestic spending on TB was financed from provinces' voted funds, with some CG funds. The voted funds are less reliably coded in the BAS than the CG funds. Consequently, the DOH's decision to increase TB funding via the DOH's Comprehensive HIV, AIDS and TB CG should lead to better tracking of the SAG's TB spending in the future. Additionally, the actual TB spending was probably higher than captured here because only SAG expenditure specifically recorded as TB-related in the BAS could be identified. Promisingly, there were signs of improvement in the coding of TB spending from voted funds. Finally, disaggregated TB spending, including by geography and programme area, was especially hard to characterise and interpret, suggesting the need for further improved coding of TB expenditures in the BAS.

## Subnational Level

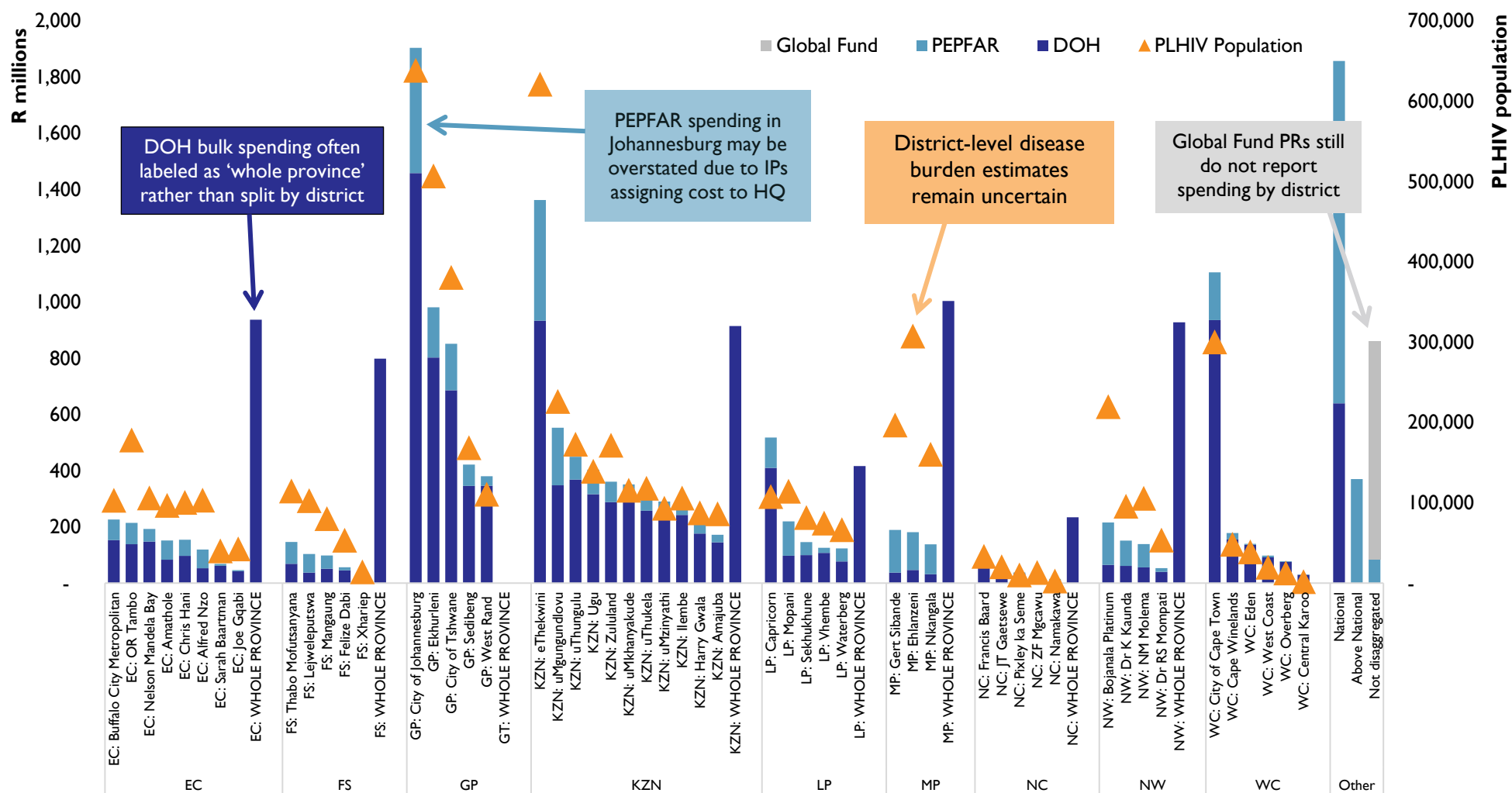
This study broke new ground for district-level analysis and confronted some challenges with respect to data quality and completeness.

**Sub-national analysis of HIV spending is more feasible than ever, although some constraints persist.** This review offers the most detailed analysis available of combined district-level spending on HIV. Improvements by the SAG and PEPFAR in the geographic disaggregation of expenditure data were key. Moreover, TB spending was not examined by district in previous reviews. Nonetheless, certain features of all three funders' data still limited the sub-national analysis:

- Several provincial DOHs did not comprehensively code their spending to districts, in some cases leaving substantial portions of expenditure in 'whole province' categories;
- PEPFAR's expenditure data only differentiated between national- and district-level spending, meaning all support to provincial functions was lumped together with PEPFAR's national spending, and;
- The Global Fund's principal recipients (PRs) did not track their expenditure by geography, meaning that disaggregating the Global Fund spending data would have required intensive dialogue with each PR merely to generate rough estimates of provincial and district splits. Therefore, in this report Global Fund's spending is labelled as "not disaggregated" or "ND."

**With some exceptions, HIV spending was roughly distributed according to district-level disease burden.** KwaZulu-Natal and Gauteng, the highest HIV-burdened provinces, spent the most on HIV. Eight metropolitan areas account for over a quarter of the spending (26%), reflecting the concentration of PLHIV in major cities like Johannesburg, Durban (eThekweni), Tshwane and Cape Town. Combined DOH and PEPFAR spending was spread across districts roughly in accordance with the estimated numbers of PLHIV, noting enduring challenges with both the disaggregation of spending and estimation of disease burden at the district level.

Figure ES 3. HIV spending by district and funder (left axis) and number of PLHIV (right axis) in 2016/17



Abbreviations: HQ = Headquarter, IP = implementing partner; EC = Eastern Cape; FS = Free State; GP = Gauteng; KZN = KwaZulu-Natal; LP = Limpopo; MP = Mpumalanga; NC = Northern Cape; NW = North West; WC = Western Cape.

## Implications

Up-to-date data on spending trends are critical for policy, planning and programme management.

**Expenditure data help policymakers better match funding allocations to priorities.** Detailed analysis of spending patterns helps the SAG and development partners to compare their plans with their past and current budgets with spending which, when combined with outcome and population data, provides a measure of efficiency and equity. The data also equip government officials to make and defend sometimes controversial decisions to reallocate funds across geographies or interventions.

**Consolidated analysis of domestic and donor spending enables better joint planning, including for an eventual transition away from donor support.** The breakdown of SAG, PEPFAR and Global Fund contributions in this review should focus attention on particularly donor-dependent interventions that make critical contributions to epidemic control. Like many other countries, South Africa relies heavily on development partners to finance key outreach, prevention and advocacy activities, as well as those aimed at addressing social and economic structural drivers of the epidemic. Transitioning these activities to domestic ownership will require additional domestic resource mobilisation and new institutional arrangements (e.g., co-financing across sectors), purchasing mechanisms and monitoring systems to ensure available funds are used efficiently, effectively and equitably.

**Routine expenditure review facilitates programme management and enables real-time adjustments based on dialogue between national and sub-national actors.** This study builds directly upon existing quarterly and annual CG reviews, during which national, provincial and district officials interrogate programmatic and expenditure data to understand performance and jointly address any areas of concern. The study process helped the FIN-CAP team to deepen their analytical skills that they immediately deployed to help provinces to improve their generation and use of high-quality expenditure data, leading to significant quality improvements in the HIV CG quarterly financial reports. Most provincial financial managers also requested FIN-CAP to provide training and technical support to district managers. Prior to FIN-CAP's involvement, the NDOH had to expend considerable effort to cross-check provincial reports with their own analysis of BAS records and work with provinces to address discrepancies. Insights from FIN-CAP's engagement with provincial and district officials also enriched interpretation of the multi-year expenditure trends presented in this study.

**Champions of performance-based purchasing in South Africa should draw lessons and encouragement from the HIV response.** This expenditure analysis shows the value of the CGs that account for the bulk of HIV public spending in terms of the CG ability to be tracked through detailed and accurate expenditure data directly linked to outputs. The CG Framework and oversight process constitute an important performance-linked contracting system for government-financed health services. The model of using funds mobilised and pooled by the national sphere to pay for services delivered by health providers instead of inputs (e.g. labour and commodities) is, in a sense, a microcosm of the vision set forth in the recently introduced National Health Insurance Bill. In fact, the SAG is already taking steps to ensure robust planning and oversight to other facets of primary health care—for example, the 2018 Division of Revenue Act added a component for community outreach services, a key element of NDOH's primary health care strategy, to the Comprehensive HIV, AIDS and TB CG. This echoes previously examined options for extending the grant framework to include more primary care services as a possible interim step towards integrating HIV financing into the proposed National Health Insurance Fund.

## Looking Ahead

This report contributes to the growing body of evidence on the magnitude, composition and trends of HIV and TB spending in South Africa. Data and analysis assembled during the study have already informed important management and planning processes, including the NDOH's routine CG reviews, the SAG's annual submission for UNAIDS Global AIDS Monitoring report, negotiations over PEPFAR's Country Operational Plan for 2018, and preparation of South Africa's new funding request to the Global Fund for 2019–2021.

The report also marks an important capacity milestone. Besides generating the detailed methods and findings documented here, the consortium organised multiple skills exchanges that bolstered all partners' capacity to undertake this work in South Africa and beyond. The process also yielded a tool for automated data extraction and analysis, which is already being used by the NDOH for its quarterly review of provincial HIV spending.



# I. INTRODUCTION

## I.1 Background

The South African Government (SAG) continues to drive the national responses to HIV and tuberculosis (TB), which persist as major public health problems: there were 270,000 new HIV infections in 2016 and 450,000 new TB cases in 2015<sup>3</sup>. By increasing the access to antiretroviral therapy (ART), with nearly 3.8 million people on ART by early 2017, great strides have been made in reducing mortality: annual HIV deaths have fallen from 681,434 in 2006 to an estimated 150,375 in 2016, whilst annual TB deaths decreased from 69,916 in 2009 to 37,878 in 2015<sup>4</sup>. Despite progress, challenges remain. Roughly 3 million people living with HIV (PLHIV) lack treatment, and each year more than a quarter million are newly infected. Moreover, nearly a half million South Africans contract TB every year, with an increasing share affected by drug-resistant strains<sup>5</sup>.

Importantly, the SAG and development partners continued to increase their financial commitments to HIV and TB earlier this decade, with total spending increasing from R17.4 billion in 2011/12, to R19.2 billion in 2012/13 and to R22.1 billion in 2013/14, representing an average annual increase of 16% over those three years<sup>6</sup>. During that period, the SAG's public funding contribution made up 80%, reaching R17.8 billion in 2014/15.

The South African HIV and TB Investment Case<sup>7</sup> gave important guidance to the country in terms of prioritizing those interventions that had proven impact, and detailed expenditure tracking allowed the government and partners to reconsider areas for reprioritisation. The report fed into resource mobilisation efforts such as National Department of Health (NDOH) budget bids, Country Operational Plans (COPs) for the United States President's Emergency Plan for AIDS Relief (PEPFAR) and the country's application to the Global Fund to Fight AIDS, TB and Malaria (Global Fund). Importantly, in addition to increasing funding for HIV, the SAG National Treasury committed additional funding to TB through the ring-fenced conditional grant (CG) that goes to the NDOH for its HIV activities. The grant is now called the Comprehensive HIV, AIDS and TB CG<sup>8</sup>.

## I.2 Purpose of this Report

This report is the latest in a series focused on spending by the three most important funders of HIV and TB interventions: the SAG, the United States Government (USG) and the Global Fund. It presents findings from a consolidated analysis of spending for FYs 2014/15 through 2016/17, building on previous

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<sup>3</sup> South African National AIDS Council. 2017. National Strategic Plan for HIV/AIDs, TB and STIs. Pretoria: SANAC. [www.sanac.org.za](http://www.sanac.org.za)

<sup>4</sup> *ibid*

<sup>5</sup> South African National AIDS Council (SANAC). 2017. National Strategic Plan for HIV/AIDs, TB and STIs. Pretoria: SANAC. [www.sanac.org.za](http://www.sanac.org.za)

<sup>6</sup> Guthrie, T., Ryckman, T., Soe-Lin, S., Hecht, R. 2015. Consolidated Spending on HIV and TB in South Africa (2011/12–2013/14). Washington DC: Results for Development.

<sup>7</sup> Department of Health, South Africa, and South African National AIDS Council. 2016. South African HIV and TB Investment Case - Summary Report Phase I.

<sup>8</sup> National Treasury. South African Government. 2017. Estimates of National Expenditure. [www.treasury.gov.za](http://www.treasury.gov.za)



estimates of national spending on HIV and TB for 2011/12-2013/14<sup>9</sup>, sub-national spending on HIV for 2013/14<sup>10</sup> and earlier assessments of HIV spending<sup>11</sup>. This expenditure tracking study answers the following questions:

1. How much was spent on HIV and TB by the three main funders (SAG, USG, and Global Fund) during FYs 2014/15 through 2016/17?
2. How was spending distributed across geographies and interventions?
3. Which cost categories drove spending?
4. How did spending and outcomes compare across provinces for the key HIV programmes?
5. How did government spending change while PEPFAR's 'focus for impact' efforts concentrated PEPFAR investment in 27 of South Africa's 52 districts?
6. How does the spending according to interventions compare with the newly costed National Strategic Plan (NSP) for HIV, TB and STIs 2017-2022?
7. What financial and epidemiological data challenges limit interpretation?

## 1.3 Capacity Building and Automation

Alongside the analysis, this endeavour sought to institutionalise capacity within the government and select South African research organisations to compile, analyse and interpret available expenditure data and use the data in relevant forums. Accordingly, the research process included a series of collaborative training workshops, inclusive consultations with key stakeholders and concurrent development, led by HE<sup>2</sup>RO, of an Excel-based tool, called BAS Lightyear (BASLY). This tool automates several key steps of the HIV and TB expenditure analysis by searching, summarising and coding HIV- and TB-related transactions in the BAS.

BASLY searches DOH BAS records for every HIV and TB transaction, extracts them into a common database, crosswalks the interventions and cost categories to a reduced list of common codes and runs high-level analysis on this dataset. In addition, the tool can analyse any other expenditure data along with the DOH extract if the data are arranged in the BAS output structure. The tool will allow government and partners to complete these steps in a few hours (depending on the processing power of the laptop on which BASLY is being run), compared to the weeks, or even months, previously required. The tool could potentially be adapted to other disease or programme areas, if the financial transactions have a suitable identifier.

In early 2018, HE<sup>2</sup>RO trained officials from the NDOH to use BASLY, which will assist them in their routine analysis of provinces' quarterly and annual spending. At the time of writing, the team was exploring further development of BASLY, such as to add capability for more extensive automated analysis and for the incorporation of development partners' expenditure data.

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<sup>9</sup>Guthrie, T., Ryckman, T., Soe-Lin, S., Hecht, R. 2015. Consolidated Spending on HIV and TB in South Africa (2011/12–2013/14). Washington, DC: Results for Development Institute. <https://www.r4d.org/resources/analysis-consolidated-spending-hiv-tb-south-africa/>

<sup>10</sup> Guthrie, T., Mahbub, R., Ghai, K., Chaitkin, M. 2017. Provincial and District Spending on HIV in South Africa (2013/14). Washington, DC: R4D.

<sup>11</sup> For instance, see South African National AIDS Council. 2012. The National AIDS Spending Assessment (2007/08 to 2010/11). Pretoria: SANAC

## 2. METHODOLOGY

### 2.1 Scope

This expenditure tracking exercise attempts to capture spending on HIV and TB in South Africa across the South African FYs 2014/15 to 2016/17 by the SAG (Departments of Health (DOH), Social Development (DSD) and Basic Education (DBE)), USG (through funding from PEPFAR and other United States Agency for International Development (USAID) funding) and the Global Fund.

Where possible, spending estimates are disaggregated to the provincial or district level, or both (**Error! Reference source not found.** Only the DOH's spending could be analysed with both provincial and district disaggregation, whereas spending by the other two SAG departments could only be split by province. PEPFAR reports spending at the national and district levels, but not provincial, whilst the Global Fund does not systematically report expenditure with sub-national identifiers.

Table 1: Possible levels of disaggregation for each funding source

Funding source	Possible levels of disaggregation		
	National	Provincial	District
SAG: DOH	✓	✓	✓
SAG: DSD	✓	✓	
SAG: DBE	✓	✓	
USG: PEPFAR	✓		✓
USG: USAID (non-PEPFAR)	✓		
Global Fund	✓		

### 2.2 Sources of data and assumptions applied

#### 2.2.1 Expenditure

SAG channels funds through two primary mechanisms: voted funds and conditional grants. Per the South African Constitution, voted funds (also commonly referred to as equitable share (ES) funds) are revenues apportioned to each sphere of government to perform its functions and deliver services. Each sphere—national, provincial and local—determines how to allocate its voted funds across and within sectors. Additionally, national departments often make conditional grants (CGs) to the provincial and local spheres for specific purposes. CGs are subject to additional review based on performance frameworks codified in the annual Division of Revenue Act.

For the DOH, expenditure data (both CG and voted funds) were captured from the SAG's Basic Accounting System (BAS), which provides details for every transaction incurred using public funds. The labelling is routine for the HIV CG but is done less systematically by disease for voted spending.

For TB we did *not use estimations* of outpatient TB treatment as done previously but relied only on the BAS coded spending. However, we believe the BAS records have somewhat under-estimated outpatient treatment spending since most of the clinics' TB costs appeared to be captured at the hospital level, and probably some embedded in the primary health care spending especially human resources, which were not labelled as TB specifically.

The DBE and DSD expenditures were captured from the Estimates of Provincial Revenue and Expenditure (EPRE) for 2016/17, which provided the outcome (spending) for 2014/15, the revised estimates for 2015/16 and the estimated budget for 2016/17<sup>12</sup>.

For the Provincial Departments of Education, spending on HIV is on activities entirely financed through the department's HIV and AIDS Life Skills CG. The total amount of the HIV and AIDS Life Skills CG was allocated according to the interventions stipulated in the CG Framework, with flexibility amongst provinces to prioritise the allocation mix according to need, and crosswalked to the common intervention of "youth" as the key beneficiary of all DOE HIV activities.

For the DSD, spending on various sub-programmes that relate directly to HIV care and support (C&S), or indirectly to HIV prevention, were captured, where the latter were based on proportions suggested by discussions with the DSD programme staff.

The data for PEPFAR's spending came from PEPFAR's Expenditure Analysis (EA) tool, which aggregates spending reported annually by PEPFAR's implementing partners. In addition, USAID's reported spending on TB (outside of the PEPFAR mechanisms) of \$12 million per annum was captured<sup>13</sup>, and was split between interventions as suggested by the USAID TB programme managers, as shown in Table 2.

**Table 2: USAID's TB spending proportional split to interventions**

USAID TB Interventions	% of total
TB treatment (no drugs, nor direct service delivery)	40%
TB prevention	30%
TB screening and diagnostics	15%
TB active (or intensive) case finding	15%

The Global Fund's expenditure data came from their Principal Recipients' (PR's) Progress Updates and Disbursement Requests (PUDRs), where expenditures and performance outcomes are consolidated bi-annually, according to the new funding model modules and interventions<sup>14</sup>.

Each funder has its own process for reviewing its expenditure estimates. For the SAG's conditional grants, expenditures are monitored quarterly, and each department internally audits its BAS records at the end of the financial year. All public spending is also subject to audit by the Auditor-General, a Constitutionally mandated independent state institution regulated by the Public Audit Act. PEPFAR expenditure data are based on financial records of the executing government agencies (e.g., USAID, CDC) and electronic questionnaires submitted annually by implementing partners. These and other USG

<sup>12</sup>National Treasury. 2016. Estimates of Provincial Revenue and Expenditure (EPRE) 2016. (<http://www.treasury.gov.za/documents/provincial%20budget/2016/4.%20Estimates%20of%20Prov%20Rev%20and%20Exp/Default.aspx>)

<sup>13</sup>The additional TB funds were provided by USAID. These data are not publicly available.

<sup>14</sup>The Global Fund to Fight AIDS, Tuberculosis and Malaria. April 2013. The Global Fund's New Funding Model. Fourth Replenishment 2014-2016. [https://www.theglobalfund.org/media/1467/replenishment\\_2013newfundingmodel\\_report\\_en.pdf?u=636486807360000000](https://www.theglobalfund.org/media/1467/replenishment_2013newfundingmodel_report_en.pdf?u=636486807360000000)

expenditure data are reviewed internally. The Global Fund's expenditure data are reported semi-annually by the PRs and then verified, and adjusted where necessary, by the Local Fund Authority (LFA).

## 2.2.2 Programme indicators and unit expenditure estimates

For the analysis of the DOH's HIV CG's achieved outputs against programmatic spending, the CG's non-financial indicator data reported by provinces (obtained from the District Health Information System, DHIS) were shared by the NDOH. These were used to estimate the units of expenditure for those interventions where the output indicator was a direct reflection of all the spending in that programme, such as ART spending divided by the numbers of patients remaining on ART. These unit expenditures were compared with unit costs<sup>15</sup> from various sources, such as the National ART Cost Model (NACM 2016)<sup>16</sup>, the NDOH tender (2015)<sup>17</sup> for condoms, and the South African Investment Case (SA IC)<sup>18</sup> for Medical Male Circumcision (MMC) and HIV testing services (HTS).

## 2.2.3 District PLHIV estimates

For this analysis, the district PLHIV estimates were provided by PEPFAR (Annex 51). These estimates were based on three sources; the antenatal care survey (ANC), Human Sciences Research Council (HSRC) HIV behavioural survey and the NDOH total remaining on ART (TROA) numbers and are generally accepted until the Thembisa model generates more reliable district estimates.

## 2.3 Exclusions

The expenditure tracking omitted the following known expenditure on HIV and TB in South Africa:

- Other public departments, such as Correctional Services, Defence and the Police Services, which in analysis of the previous three-year period accounted for less than 0.5% of total spending
- Development partners other than the PEPFAR and Global Fund, estimated to be a small share
- Medical schemes and other voluntary health insurance
- Individuals' out-of-pocket expenditure
- Costs of the treatment (in- and outpatient) of opportunistic infections related to HIV infection, since these are embedded in the DOH general district health and hospital spending and not labeled as HIV-specific in the BAS. However, it is assumed that with the expansion of the ART programme in South Africa, these costs have been significantly reduced over the years.

The exclusions are assumed to be a very small proportion of the spending on HIV and TB (as was found by the National AIDS Spending Assessment (NASA) done in 2010), and the bulk has been captured through the sources included: DOH, DBE, DSD, PEPFAR and Global Fund. However, it may be

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<sup>15</sup> Note that units of expenditure do not usually equate to cost estimates, because the latter consider the full range of resources consumed in delivering the service, whereas the former only capture those expenditures which had been specifically labelled to that intervention. For example, personnel salaries are often not broken down by the specific activities that staff undertake and therefore may not be fully captured in the unit of expenditure.

<sup>16</sup> Health Economics and Epidemiology Research Office (HE<sup>2</sup>RO). N.d. Cost and Budget Modelling.

<http://www.heroza.org/projects/cost-budget-modelling>

<sup>17</sup> National Department of Health, South Africa. 2015.

<sup>18</sup> Department of Health, South Africa, and South African National AIDS Council (SANAC). 2016. South African HIV and TB Investment Case. Pretoria: SANAC. <http://sanac.org.za/2016/03/22/investment-case-report>

worthwhile to update estimates of other sources in the next few years, particularly because patterns of private spending on HIV and TB may have changed since 2010.

## 2.4 Classification of the 'TB/HIV' spending according to disease area

DOH and Global Fund expenditure that is labelled as 'TB/HIV' is largely incurred for HIV testing of TB patients and therefore is aggregated under the HIV disease area. In comparison, PEPFAR's spending on 'TB/HIV' includes TB prevention, TB exams, TB clinical monitoring and related laboratory services, TB treatment, and screening and referral of TB clients for HIV testing and clinical care. Therefore, the PEPFAR TB/HIV spending was aggregated under the TB disease area.

## 2.5 Financial years

The expenditure data in this report are presented according to the SAG FY that starts 1<sup>st</sup> April and ends 31<sup>st</sup> March of the following calendar year. The Global Fund's PUDRs match this schedule with PRs reporting expenditures biannually for the periods of April to September and October to March. PEPFAR's EA reporting aligns with the USG FY, which runs from 1<sup>st</sup> October to 31<sup>st</sup> September. The best possible match as illustrated in Table 3 was used. For example: SAG FY 2014/15 overlapped with USG FY 2013/14 (which was reported in PEPFAR's EA 2014).

Table 3: Matching the SAG and USG FYs for the expenditure analysis

Common Year (as used in this report)	SAG FY		USG FY	
	Start	End	Start	End
2014/15	Apr-14	Mar-15	Oct-13	Sep-14
2015/16	Apr-15	Mar-16	Oct-14	Sep-15
2016/17	Apr-16	Mar-17	Oct-15	Sep-16

## 2.6 Exchange rates

For the conversion of US dollars to South African Rands (R), rates of exchange as recommended by PEPFAR (in the EA guidance documents) and the Global Fund (in the PUDRs) were used, for the EA and Global Fund data respectively.

Table 4: Exchange rates for conversion of US dollars to SA Rands

Year	PEPFAR EA data	Global Fund PUDR data
2014/15	10.56	11.47
2015/16	12.62	15.00
2016/17	14.71	14.07

## 2.7 Crosswalking approach and categories

The SAG (DOH only), PEPFAR and Global Fund use different categorisations for their programmes, which required crosswalking or matching the datasets as closely as possible. The common crosswalk developed for the previous analyses was updated by adding categories where required. This required in-depth understanding of each funder's programmes, appropriate labelling and discussions with relevant staff to find the best match.

The first step for developing the crosswalk was consolidating the BAS categories or programme names to a reduced list of 'common BAS codes'. This was necessary since programme labels were not standardised across programmes, across provinces and even within provinces. There were variations in labelling for both the DOH CG and voted funds although in the latter, this variation was greater making it difficult to identify the programme areas using the usual variable in BAS (Sub\_Programme\_Level\_6). Therefore, the best possible choice was made using information across other variables. This was particularly noticeable amongst the voted TB transactions where TB was identified in the responsibility variables, such as in the facility name (e.g., TB hospital), in the sub-programme or in the cost category (e.g. anti-TB meds). Around 420 HIV and 110 TB codes were found in BAS for DOH spending on HIV and TB, and these were collapsed into 63 common BAS codes (see Annex 52). To this core list, categories for the interventions from DSD, DBE, PEPFAR and Global Fund programmes were matched. Where activities did not have a corresponding BAS code, a new label with "(non-BAS)" was added to the core list (10 additions).

The PEPFAR EA data uses programme classifications that could not always be matched to the BAS codes, and therefore had to be estimated in consultation with PEPFAR. For example, their spending on Facility-Based Care, Treatment and Support included 'ART' and 'TB/HIV' activities that were split 75% and 25% respectively. The remaining PEPFAR categories were logically matched, and new labels with "(non-BAS)" were added where activities did not have a matching BAS classification.

The Global Fund PUDRs report their spending against the new funding model modules and interventions. These are generic, standardised interventions applied globally, and therefore they had to be cross-walked to more nuanced interventions, based on discussions with PRs about the specific South African programmes. Further, the HIV programmes were classified in to broader categories of treatment, prevention, programme enablers and C&S (Table 5).

Table 5: HIV programme classification across categories

HIV programme category	HIV programmes included
I. Treatment	<ol style="list-style-type: none"><li>1. Antiretroviral therapy (ART)</li><li>2. Adherence</li><li>3. Home based care (HBC)</li><li>4. HIV testing services (HTS)</li><li>5. Palliative / hospice care</li><li>6. Step down care (SDC)</li><li>7. TB/HIV</li></ol>

HIV programme category	HIV programmes included
II. Prevention	<ol style="list-style-type: none"> <li>1. Blood bank spending</li> <li>2. Condoms</li> <li>3. HIV prevention ND</li> <li>4. Human papilloma virus (HPV)</li> <li>5. High transmission areas / sex workers (HTA/SW)</li> <li>6. Key populations</li> <li>7. Medical male circumcision (MMC)</li> <li>8. Pre-exposure prophylaxis (PrEP)</li> <li>9. Prevention of mother-to-child transmission (PMTCT)</li> <li>10. Sexually transmitted infections (STI)</li> <li>11. Social and behaviour change communication (SBCC)</li> <li>12. Workplace prevention</li> <li>13. Youth</li> </ol>
III. Programme enablers	<ol style="list-style-type: none"> <li>1. Advocacy, communications and social mobilisation (ACSM)</li> <li>2. Gender-based violence (GBV) / gender empowerment</li> <li>3. Health systems strengthening: procurement and supply chain management (HSS: PSM)</li> <li>4. Monitoring and Evaluation / Health information systems (M&amp;E / HIS)</li> <li>5. Policy and systems development</li> <li>6. Laboratory strengthening</li> <li>7. Community capacity / institutional strengthening</li> <li>8. Programme management (PM)</li> <li>9. Research, surveys</li> <li>10. Regional training centres (RTC) / training</li> <li>11. Substance abuse prevention</li> <li>12. Surveillance</li> </ol>
IV. Care and support	<ol style="list-style-type: none"> <li>1. Care and support (C&amp;S)</li> <li>2. Infrastructure / upgrade / maintenance for health care facilities</li> <li>3. Orphan and vulnerable children (OVC)</li> </ol>

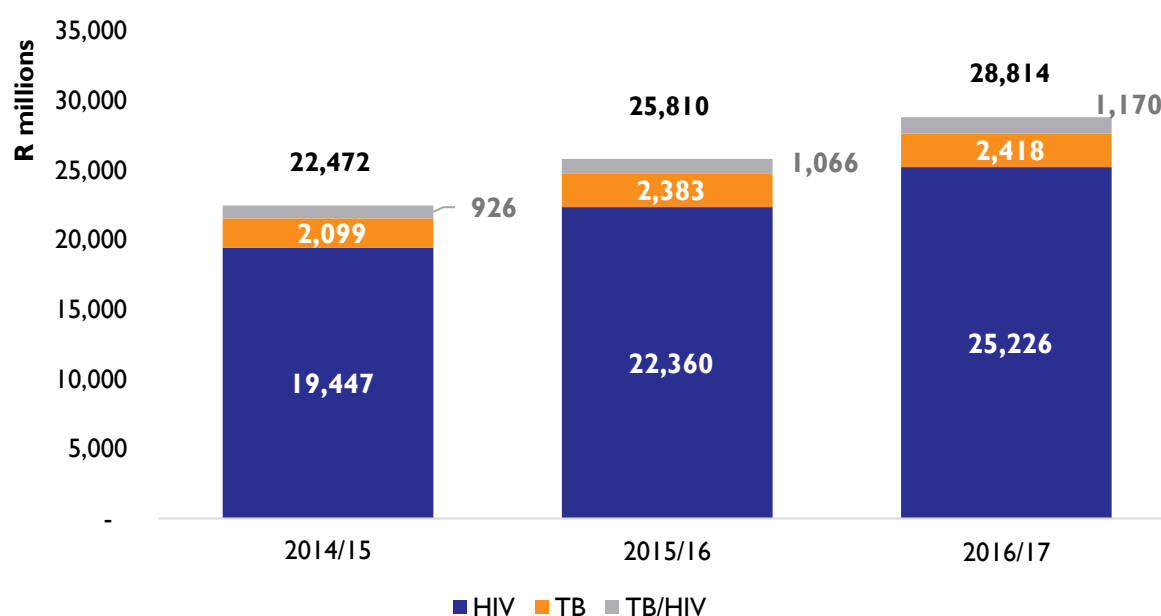
In addition to crosswalking the dataset to the common activity classification within BAS, the HIV and TB transactions were also matched to six other classification systems (in Annex 52); those of the NASA, the System of Health Accounts (SHA), the SA Investment Case (IC) and the new NSP's goals, objectives and sub-objectives. The NASA and SHA codes will allow for the international comparisons and reporting, such as for the UN Global AIDS Monitor, whilst the SA IC and NSP categorisation will allow for the national stakeholders to compare their spending against the country-specific priorities and goals.

## 3. FINDINGS

### 3.1 Overall spending on HIV, TB and TB/HIV over the three years

Total spending on HIV and TB from the three sources (SAG, USG and Global Fund) has steadily grown over the three-year period from 2014/15 to 2016/17<sup>19</sup> (Figure 1). In 2014/15 it was R22,472 million; this spending increased by 15% in 2015/16 to R25,810 and then by 12% to R28,814 million in 2016/17. The increase has primarily been driven by the steady scale-up of the HIV response, from R19,447 in 2014/15 to R22,360 in 2015/16 to R25,226 in 2016/17. In contrast, TB expenditures have essentially flat-lined in the past two years: they increased from R2,099 million in 2014/15 to R2,383 million in 2015/16, but then only to R2,418 million in 2016/17.

Figure 1: Total spending on HIV and TB by SAG, USG and Global Fund by focus and year (2014/15–2016/17, R millions)



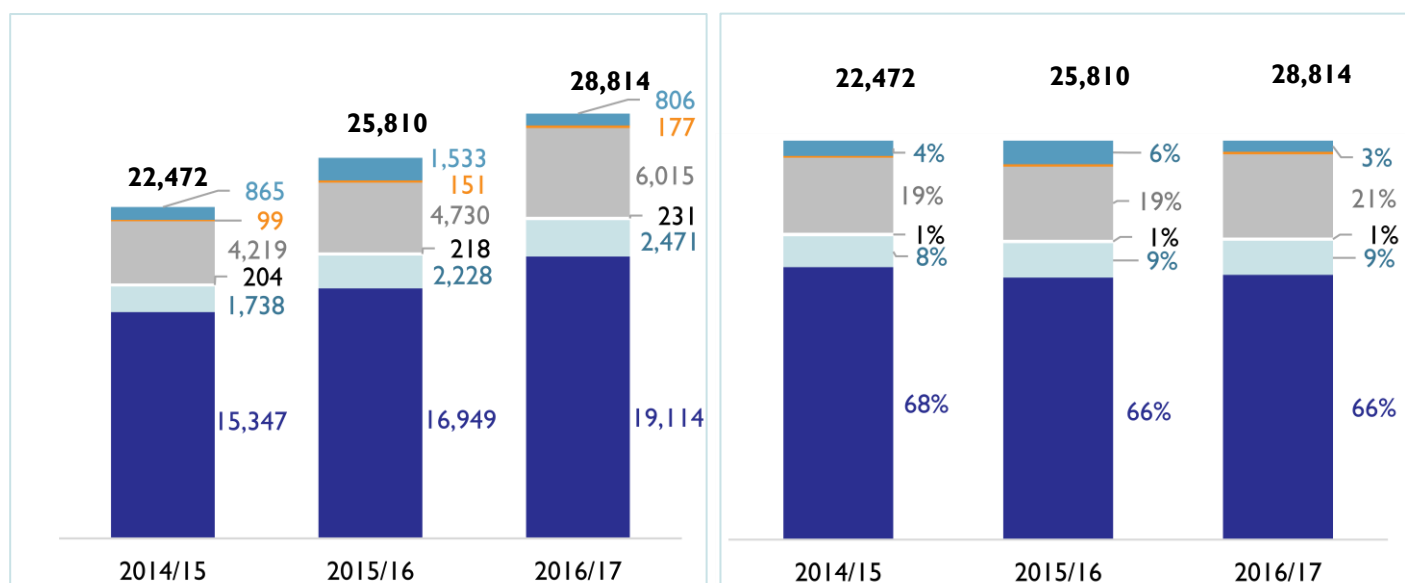
<sup>19</sup> All spending reported in Rand (R) and BAS categories unless otherwise noted.

## 3.2 Total HIV and TB spending over the three years by source/department

The SAG (driven by the DOH) has continued to lead South Africa's HIV and TB responses, providing 76% of total funding in 2016/17, with important contributions from the USG (21%) and Global Fund (3%).

In 2014/15 the SAG spent R17,289 million, the USG spent R4,318 million and the Global Fund R865 million on HIV and TB. In 2015/16 SAG's spending grew to R19,395 million, USG's to R4,881 million and the Global Fund's to R1,533 million. By 2016/17 the SAG and USG spending had increased to R21,816 million and R6,192 million respectively. In contrast, Global Fund spending decreased to R806 million (Figure 2); PRs were slower to spend against the grants given that it was the first year of the new three-year grant period, with new PRs and programmes.

Figure 2: Total HIV and TB spending by source and year (R millions) (left) and funder share (%) (right)



Global Fund USAID (Non-PEPFAR) PEPFAR DBE DSD DOH

Sources of data:

SAG = BAS records, and some department budgets (Estimates of National Expenditure, ENEs).

USG = EA dataset.

Global Fund = PRs' PUDRs.

The relative share of the three funders (Figure 2, right) remained steady over the three years. The SAG's contributions made up more than three-quarters of the total funding across this period, whilst the USG's contributions increased slightly to 21% from 19% in previous years. The Global Fund's share increased slightly between 2014/15 to 2015/16 (4% and 6% respectively) and then dropped to 3% in 2016/17 which is reflective of the slower spending by PRs during the first year of a new grant period.

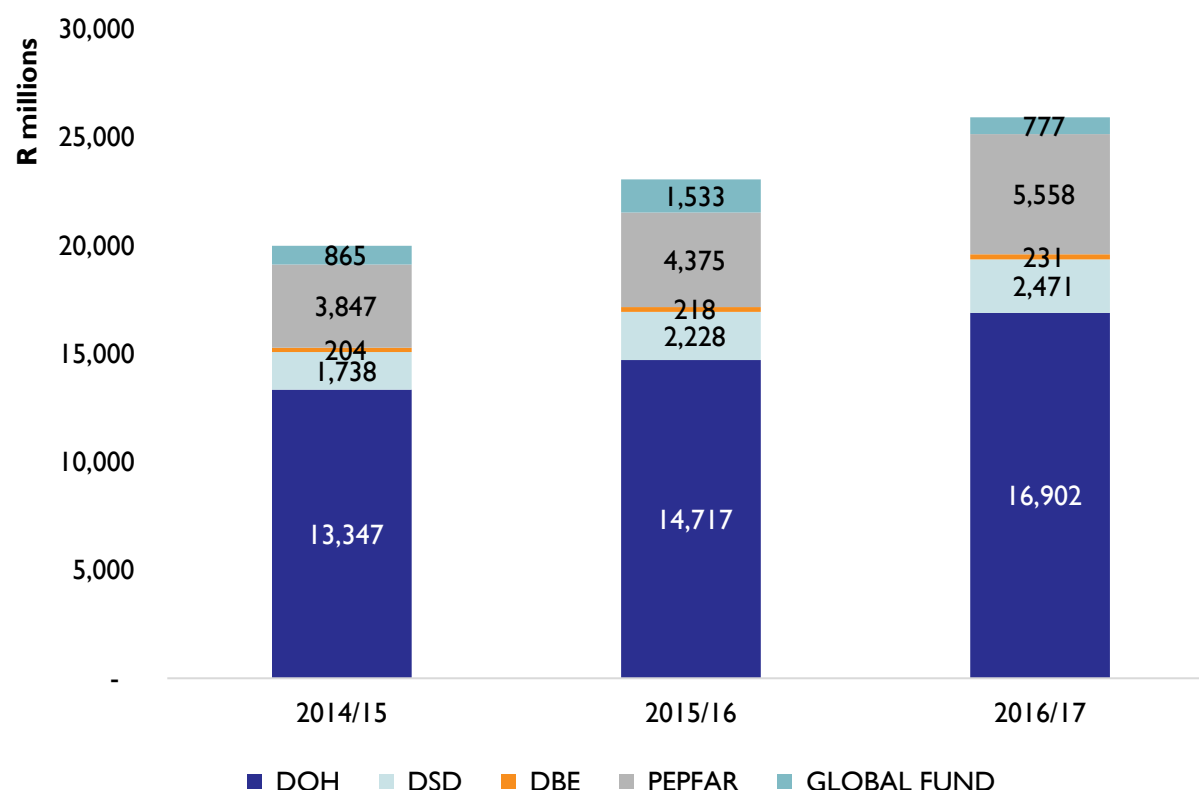
The following sections take a closer look at spending within each of the disease areas.

## 3.3 Expenditure on HIV in South Africa

### 3.3.1 Total HIV spending by source

Total spending on HIV (including integrated TB/HIV spending by the DOH and Global Fund) increased from R20,001 million in 2014/15 to R23,071 million in 2015/16 and R25,940 million in 2016/17 (Figure 3).

Figure 3: Total HIV spending by source and year (with SAG split by department) (R millions)



This scale up has been led by the DOH where expenditures rose from R13,347 million in 2014/15 to R14,717 million in 2015/16 and R16,902 million in 2016/17. DSD and DBE contributions towards HIV have also been increasing each year and capped at R2,471 million and R231 million (through the HIV/AIDS Life Skills CG) in 2016/17 respectively.

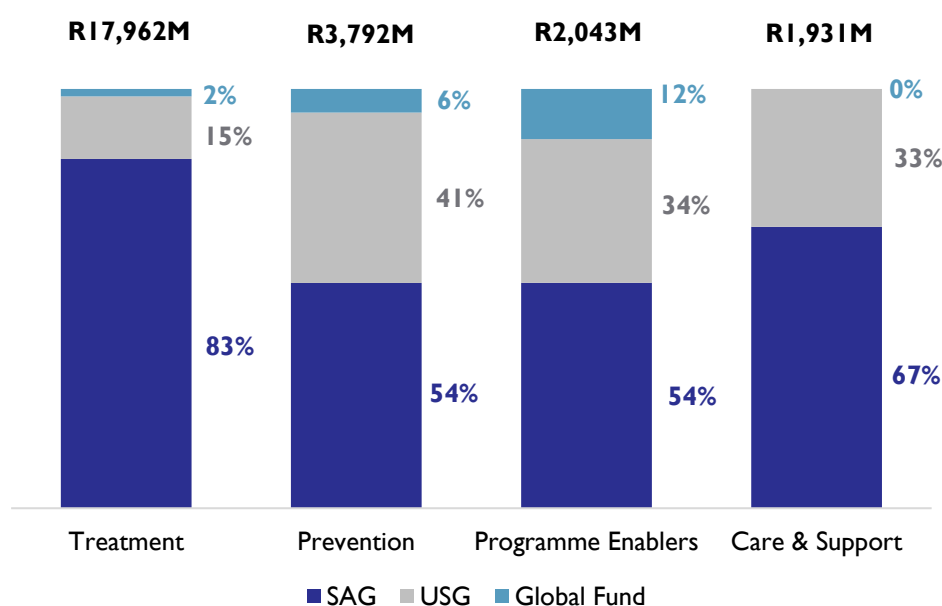
USG's expenditures on HIV through PEPFAR have been increasing year on year<sup>20</sup> from R3,847 million in 2014/15 to R5,558 million in 2016/17. Global Fund's HIV spending also increased from R865 million in 2014/15 to R1,533 million in 2015/16, and dropped to R777 million in 2016/17, as explained, due to the slow start in the first year of the new grant cycle.

<sup>20</sup> PEPFAR spending between 2014/15 and 2015/16 went down in dollar terms from \$399,505,373 to \$374,798,741 however due to US to R exchange rate fluctuations, the amount in R terms increased between the two years.

### 3.3.2 Share of spending by source, aggregate and by intervention categories

Whilst the bulk of South Africa's HIV response, especially treatment, is domestically financed, donor funding plays an important role across other interventions areas. In 2016/17, the SAG (DOH, DSD and DBE) drove the bulk of contributions across treatment (83%), prevention (50%), programme enablers (54%) and C&S (67%). Donor contributions, especially PEPFAR's, were significant across the prevention (44%), programme enablers (54%) and C&S (33%) categories. Across these categories, the Global Fund's contributions were the largest in the programme enablers (12%) category, where it supported important investments in advocacy, communication and social mobilisation, research and surveys, and purchasing and supply management.

Figure 4: Funder's relative contribution to HIV intervention categories (2016/17, %)



### 3.3.3 Composition of DOH spending on HIV by funding mechanism

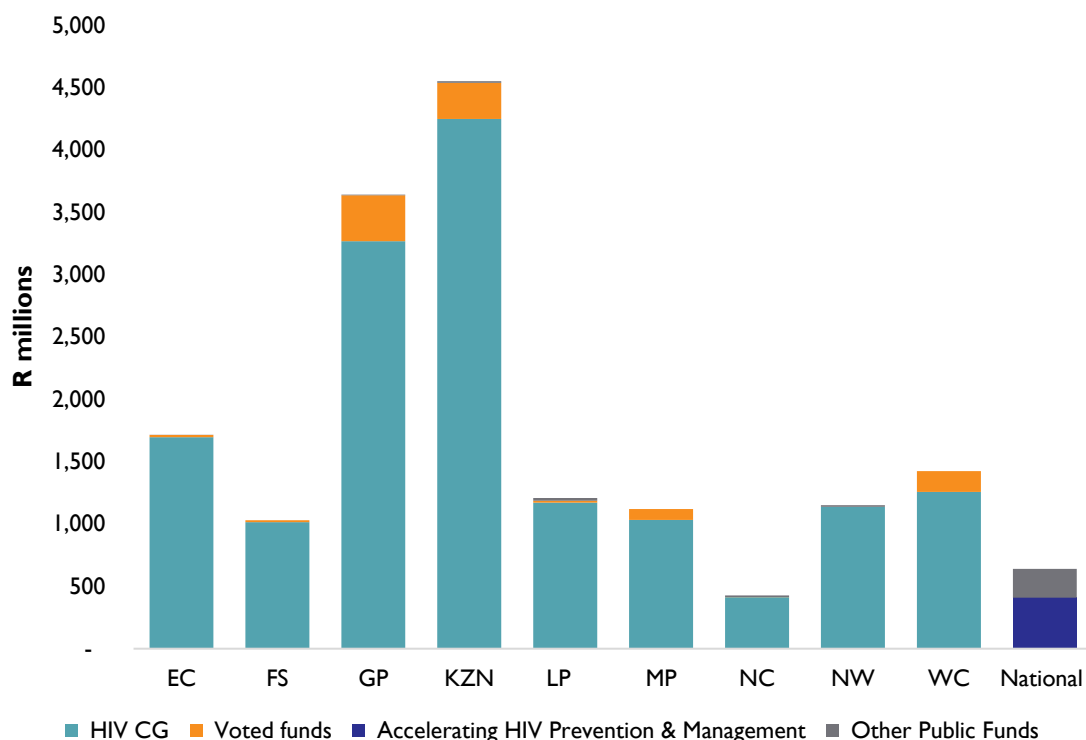
Whilst the DOH HIV/AIDS and TB CG is the primary public funding mechanism for HIV interventions in South Africa, smaller contributions come in from other grants as well. In 2016/17 90% of total DOH funding for HIV was channelled through the HIV and TB CG with smaller contributions via funding mechanisms such as the voted funds (6%) and other public funding sources (4%). The latter included funding from grants such as the health facility revitalisation grant, health professionals' training and development grant, National Health Insurance grant, national tertiary services grant, and social security expanded public works programme (EPWP) grant. Some spending against these grants was labelled as HIV, or as HIV interventions, in the BAS records. At the National level, some HIV funding was channelled through the Accelerating HIV Prevention and Management grant, which earmarks special purpose HIV funds.

Table 6: Funding mechanism for DOH's HIV spending (2016/17, R millions)

Funding Mechanism	HIV and TB CG	Voted Funds	Accelerating HIV Prevention and Management	Other Public Funds
Amount (R)	15,234,439,918	967,353,296	405,166,106	295,393,494
Share (%)	90%	6%	2%	2%

In addition to the CG, the provincial DOHs, primarily Gauteng (GP), KwaZulu-Natal (KZN) and Western Cape (WC), drew resources from their voted funds as well as other public sources to supplement their spending. NDOH spending on HIV was largely funded by the Accelerating HIV Prevention and Management Grant with a small portion from the voted funds and other public sources.

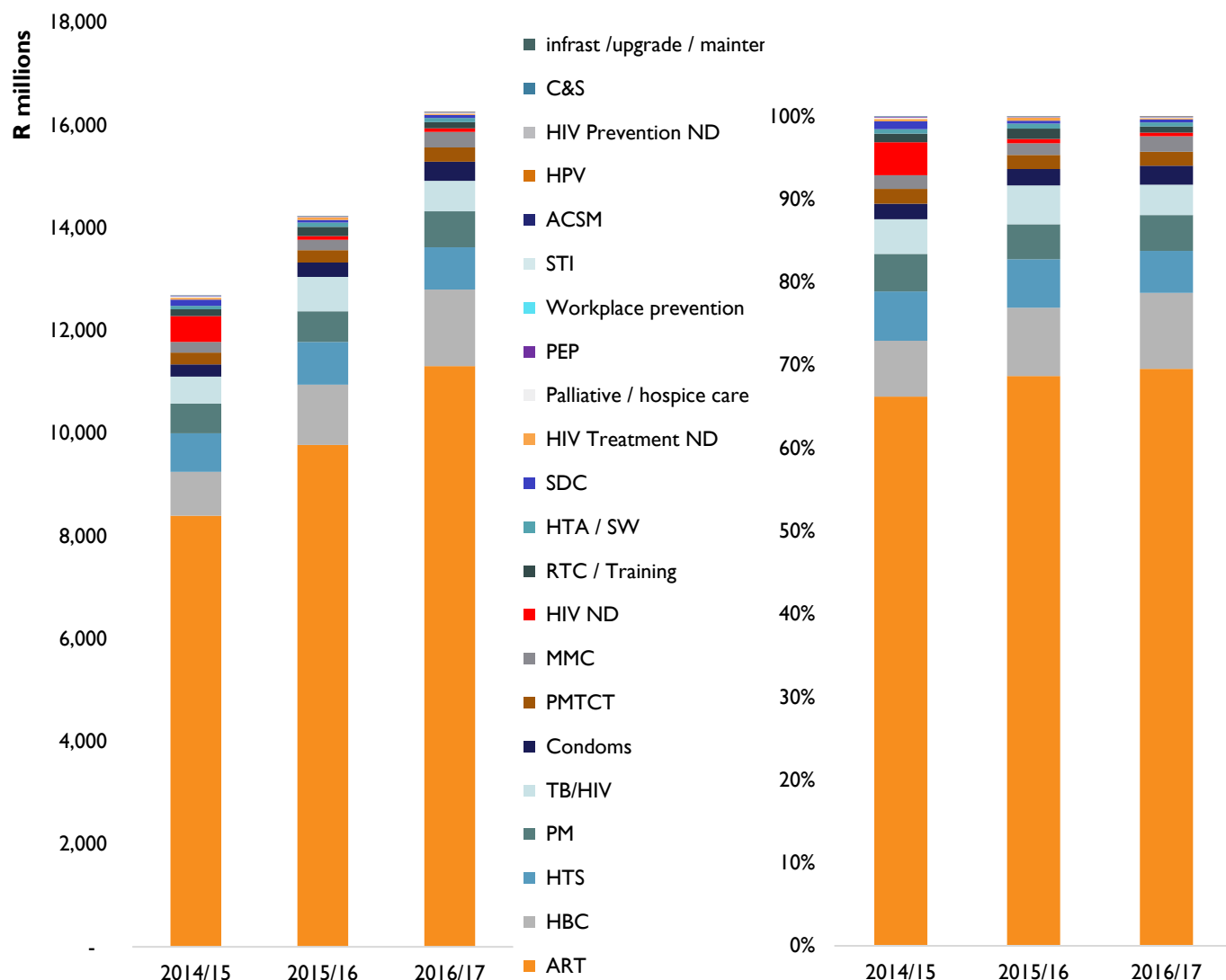
Figure 5: DOH spending by budget mechanism (2016/17, R millions)



### 3.3.4 Provincial Departments of Health spending on HIV

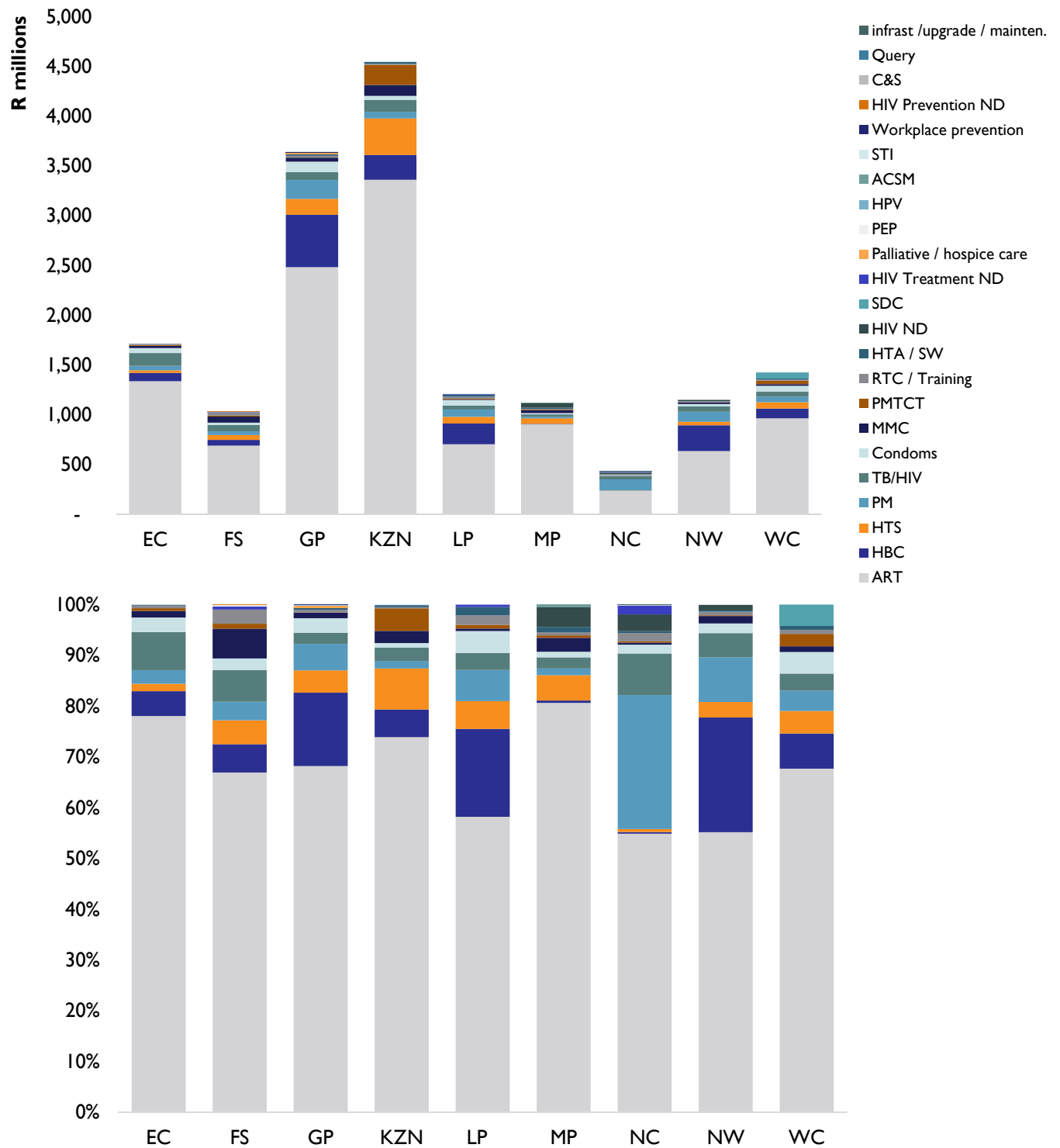
Over the three-year period (2014/15 to 2016/17) the provincial department of health (PDOH) spending on HIV programmes steadily increased, driven by the spending on the ART programme (Figure 6).

Figure 6: Combined PDOH spending by programme in absolute (R millions) (left) and proportional (%) (right) (2014/15–16/17)



In 2016/17 ART spending contributed to 70% of the PDOH's HIV expenditure. Other programmatic spending was relatively small, including home-based care (HBC) (9%), HTS (5%), programme management (PM) (4%) and integrated TB/HIV (4%) (Figure 7 bottom). Other programmes accounted for less than 4%. Notably, in Northern Cape (NC), expenditure on programme management was second to the ART programme and was a larger share of total HIV spending than in other provinces, reflecting poor coding in their BAS records.

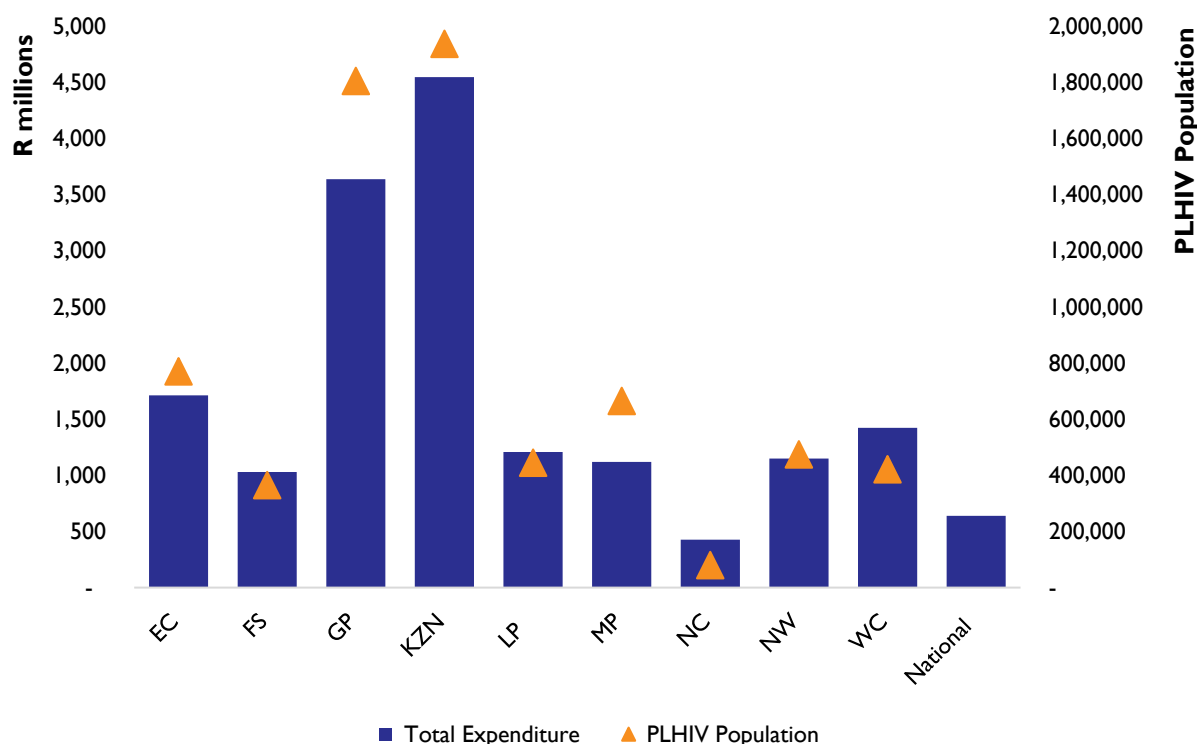
Figure 7: HIV programme spending by province in absolute (R millions) (top) and proportional (%) (bottom) in 2016/17



Note: See Annex 9 for the table of Rand amounts for each province.

Overall the distribution of provincial HIV spending on HIV aligned fairly well with HIV burden (Figure 8). The bulk of the HIV spending (27%) occurred in KZN with the highest share of people living with HIV (PLHIV) (28%), followed by GP (22% of spending and 26% of PLHIV) and Eastern Cape (EC) (10% of spending and 11% of PLHIV). NC had the lowest share of spending (3%) and the lowest percentage of PLHIV (1%). The NDOH accounted for 4% of the total HIV spending for its national-level function described earlier. In section 3.3.6, the spending per PLHIV is considered.

Figure 8: DOH HIV spending (R millions) and number of PLHIV by province in 2016/17

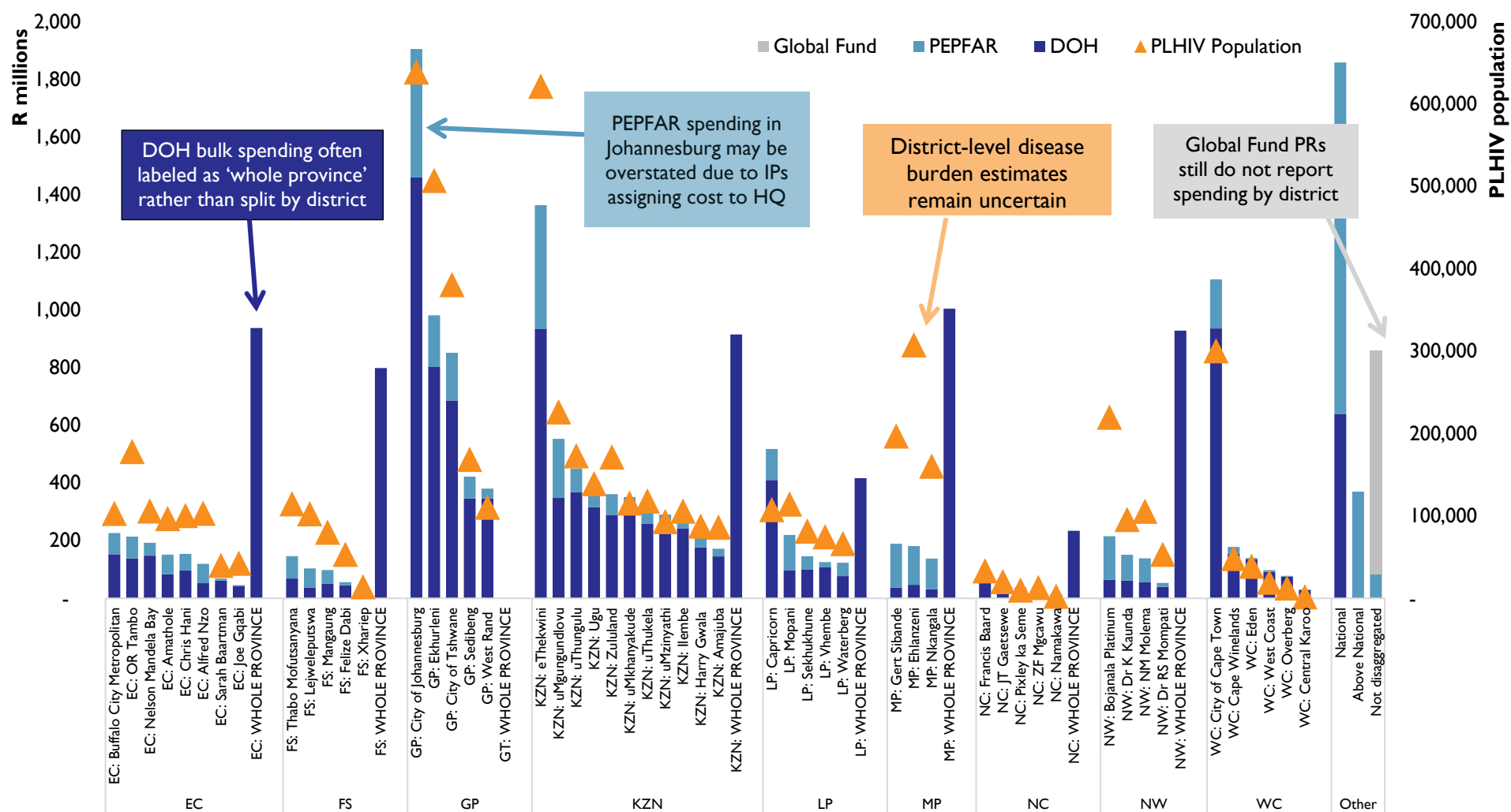


HIV spending was highest in the metropolitan areas starting with Johannesburg (GP) followed by eThekweni (Durban) (KZN), Cape Town (WC), Ekurhuleni (GP) and City of Tshwane (GP), which was commensurate with their HIV burden (Figure 9).

In the DOH BAS records the HIV spending was often labelled as “whole province”, which made it difficult to understand the actual spending at the district level. A small share of the whole province spending could be attributed to activities that benefitted the whole province such as provincial-level programme management and administrative expenditure; however, for the most part it indicates incomplete coding by provinces, which would require improvement for better tracking of district HIV spending. The issue of poor regional coding is highlighted in Mpumalanga (MP) where bulk of the HIV spending was coded as ‘whole province’. Consequently, district-level spending in MP appears much smaller and not aligned with the district’s HIV burden.

At the time of this study, the Global Fund’s spending could not be disaggregated by district and so is labelled “ND”. Also, important to note is that PEPFAR’s national-level spending includes provincial-level expenditures including programme management costs at headquarters and research and technical support to provinces which could not be extracted since the EA tool only has district and above site identifiers.

Figure 9: HIV spending by district and funder (R millions, left axis) and number of PLHIV (right axis) in 2016/17

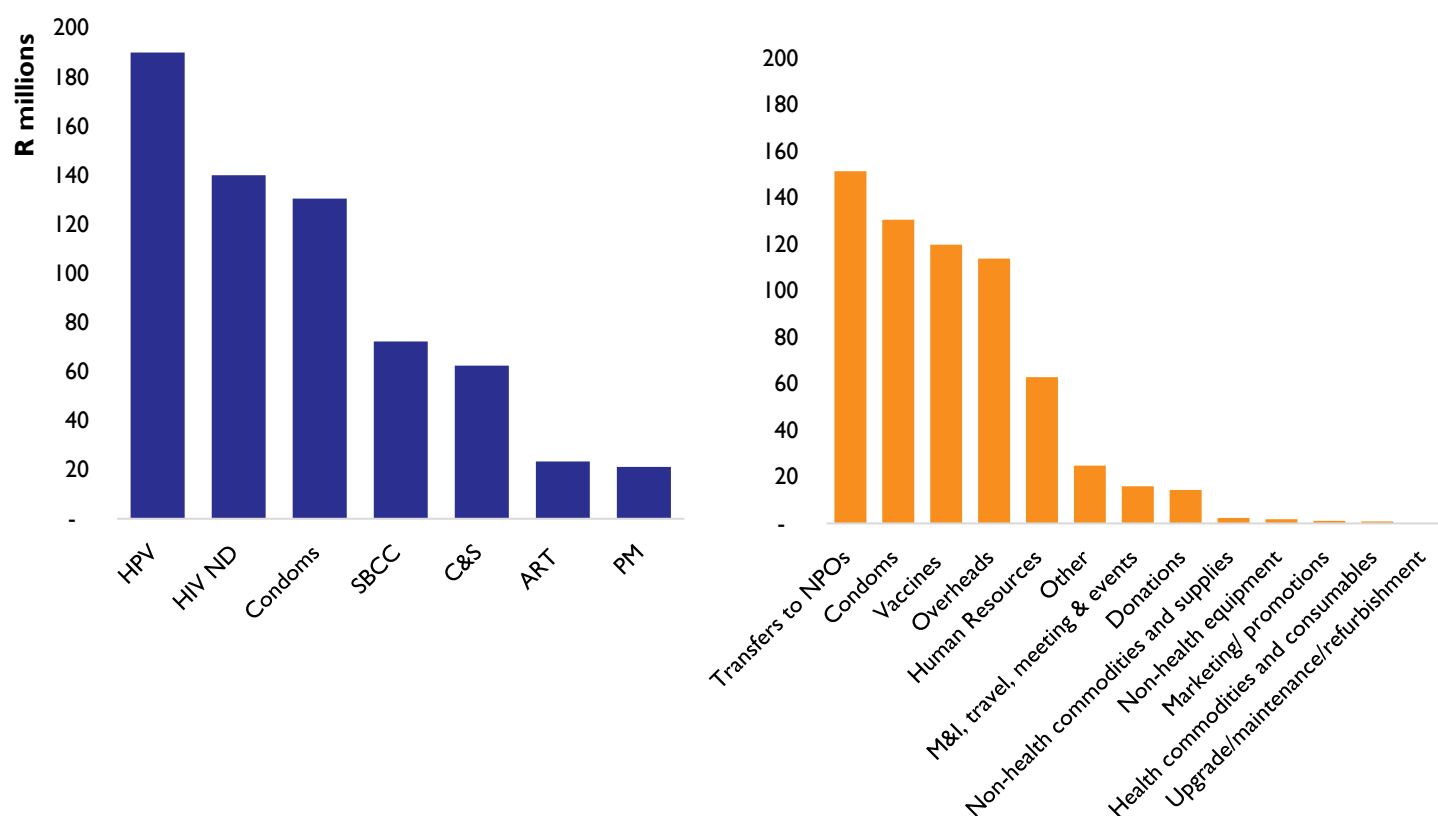


Abbreviations: HQ = Headquarter, IP = implementing partner; EC = Eastern Cape; FS = Free State; GP = Gauteng; KZN = KwaZulu-Natal; LP = Limpopo; MP = Mpumalanga; NC = Northern Cape; NW = North West; WC = Western Cape.

### 3.3.5 HIV spending by the NDOH

In 2016/17, the bulk (30%) of the NDOH's HIV spending (when excluding the HIV CG transfers to the provinces) went towards Human Papilloma Virus (HPV) vaccination which is being prioritised. At the request of the National Treasury, therefore, all transactions with any HPV identifier in the BAS records were captured to identify all spending on HPV, most of which occurred at the national level for the HPV vaccination being rolled out to all girls under the age of 12 years. Condom spending contributed to 20% of NDOH's HIV expenditures, due to the procurement of large quantities of condoms the NDOH distributed to provinces. Next came 4% spending on 'PHILA'<sup>21</sup>, the social and behaviour change communication (SBCC) campaign, and 4% on C&S services<sup>22</sup>. Smaller shares (less than 4%) were spent on ART management and other programme management. Also, worth noting is that nearly 22% of NDOH spending on HIV could not be disaggregated due to poor coding.

Figure 10: NDOH programme spending (left) and cost category (right) (2016/17, R millions)



<sup>21</sup> Phila is a government-sponsored campaign to promote healthier lifestyles among South Africans by encouraging "knowing one's health status, increased physical activity, healthier eating, adherence to treatment, good sexual health and a safe, [and a] violence-free society." Source: <http://phila.org.za/about/>.

<sup>22</sup> C&S spending at the national level refers to transfers from NDOH to nongovernmental organizations. In the 2016/17 BAS national records these refer to the transactions "HIV/AIDS NGO" and "LIFELINE".

The NDOH HIV expenditures broken down by cost categories indicated that in 2016/17 nearly a quarter of the spending comprised transfers to non-profit organisations (NPOs) followed by condoms (20%), HPV vaccination (19%), overhead (18%) and human resources (10%) whilst smaller shares (less than 5% each) were spent on other cost categories.

### 3.3.6 HIV programmatic highlights

This section first summarises technical efficiencies across key programmes using programmatic output data (where available) along with financial data. It then examines the key DOH HIV programmes looking at various analyses across spending over time, by funder and geography and cost category

#### 3.3.6.1 Summary of technical efficiencies across key HIV programmes

In terms of technical efficiencies, it is difficult to assess whether South African spending on specific programmes operates at optimal efficiency without an in-depth examination of the each programme and the contextual factors influencing costs—as the variation between the provincial units of expenditure attests to in the following sections. The analysis presented here can only highlight the outliers that would require further exploration. Nevertheless, we undertook a simple comparison of some of the key DOH units of expenditure with the unit costs used on the most recent NSP costing.

Due to differences in implementation, the programmes that were directly comparable were limited to: ART, condoms (male and female), MMC and HTS. Positively, most of the comparable units of expenditure in 2016/17 were slightly less than the unit costs used in the NSP costing, except for MMC which was almost half of the unit cost. The NDOH suspected that the PDOHs were including MMCs undertaken by PEPFAR funded sites in their outcome reporting (as per DHIS reporting), and hence their lower unit of expenditure. Generally, we could conclude that for these few programmes, the DOH appears to have achieved some degree of technical efficiencies in implementation.

**Table 7: Comparison of DOH and PEPFAR's units of expenditure with the NSP unit costs (2016/17, R)**

Programme	NSP unit cost (adjusted to 2016/17 prices)	Source of NSP unit cost	Average DOH unit of expenditure (2016/17)	Average PEPFAR unit of expenditure (2016/17)
ART	R3,100	NACM (HE <sup>2</sup> RO 2016)	R2,962	
Male condoms (commodity only)	R0.43	NDOH tender 2015. 20% margin for secondary distribution costs	R0.41	
Female condoms (commodity only)	R6.90	NDOH tender 2015. 20% margin for secondary distribution costs	R4.36	
MMC	R1,418.88	SA IC inflation adjusted. Corroborated by Avenir study, 2016 <sup>23</sup>	R730.31	R2,557
HTS (provider initiated)	R94.01	SA IC. Assumes a 10% positivity rate	R59	R129

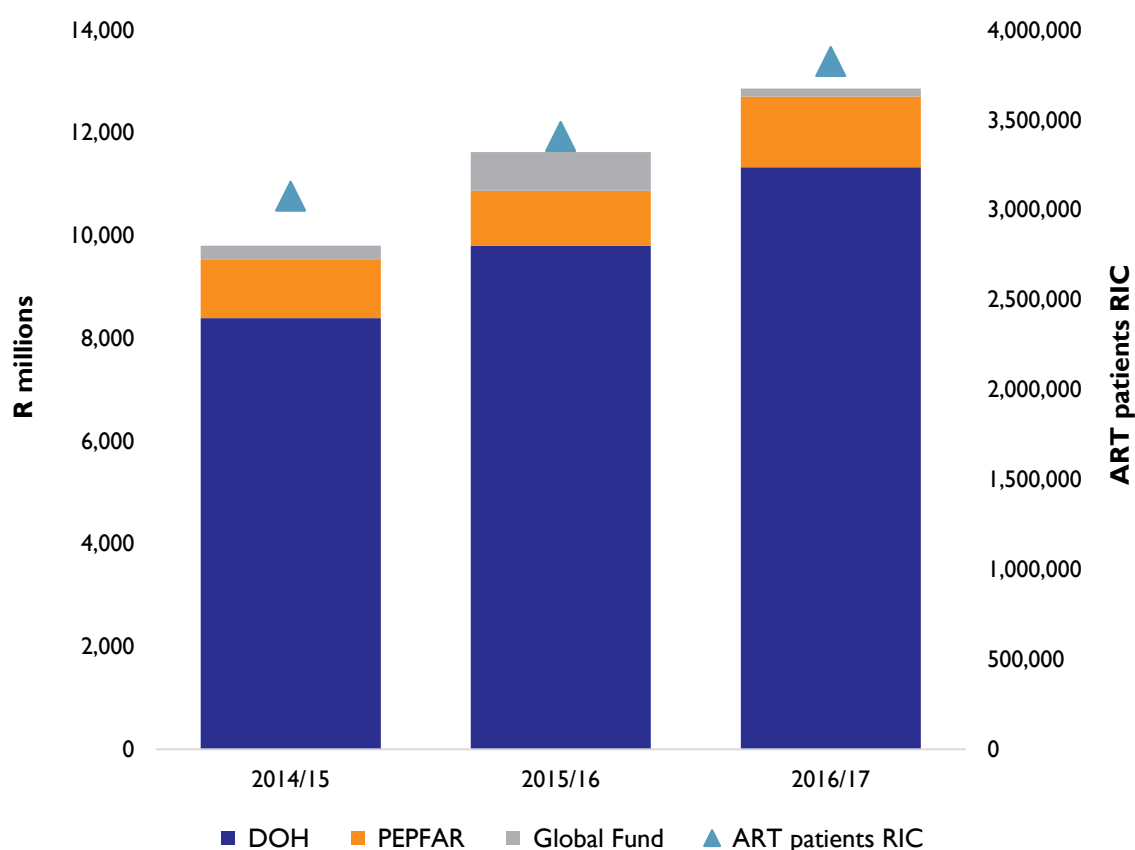
<sup>23</sup> Tchenche, M., Palmer, E., Hate, V., Thambinayagam, A., Loykisoonlal, D., Njeuhmeli, E., et al. (2016) The Cost of Voluntary Medical Male Circumcision in South Africa. PLoS ONE 11(10): e0160207. doi: 10.1371/journal.pone.0160207

### 3.3.6.2 ART programme spending

#### ART spending by funder

Overall, ongoing scale-up of treatment drove increases in total ART spending over the three-year period. Figure 11 illustrates the increase in total ART spending, split by the three funders, as well as the increasing total number of patients remaining in care (RIC). Like noted previously, Global Fund spending saw a decrease in 2016/17 given it was the first year of the new grant period with new programmes and new PRs which resulted in slower spending. To estimate PEPFAR's ART spending, we allocated 75% of spending on 'facility-based treatment and care services' to ART and the remaining 25% to TB/HIV per recommendations by PEPFAR management. PEPFAR's direct commodity spending on antiretroviral drugs (ARVs) is also included in our estimates of spending on ART.

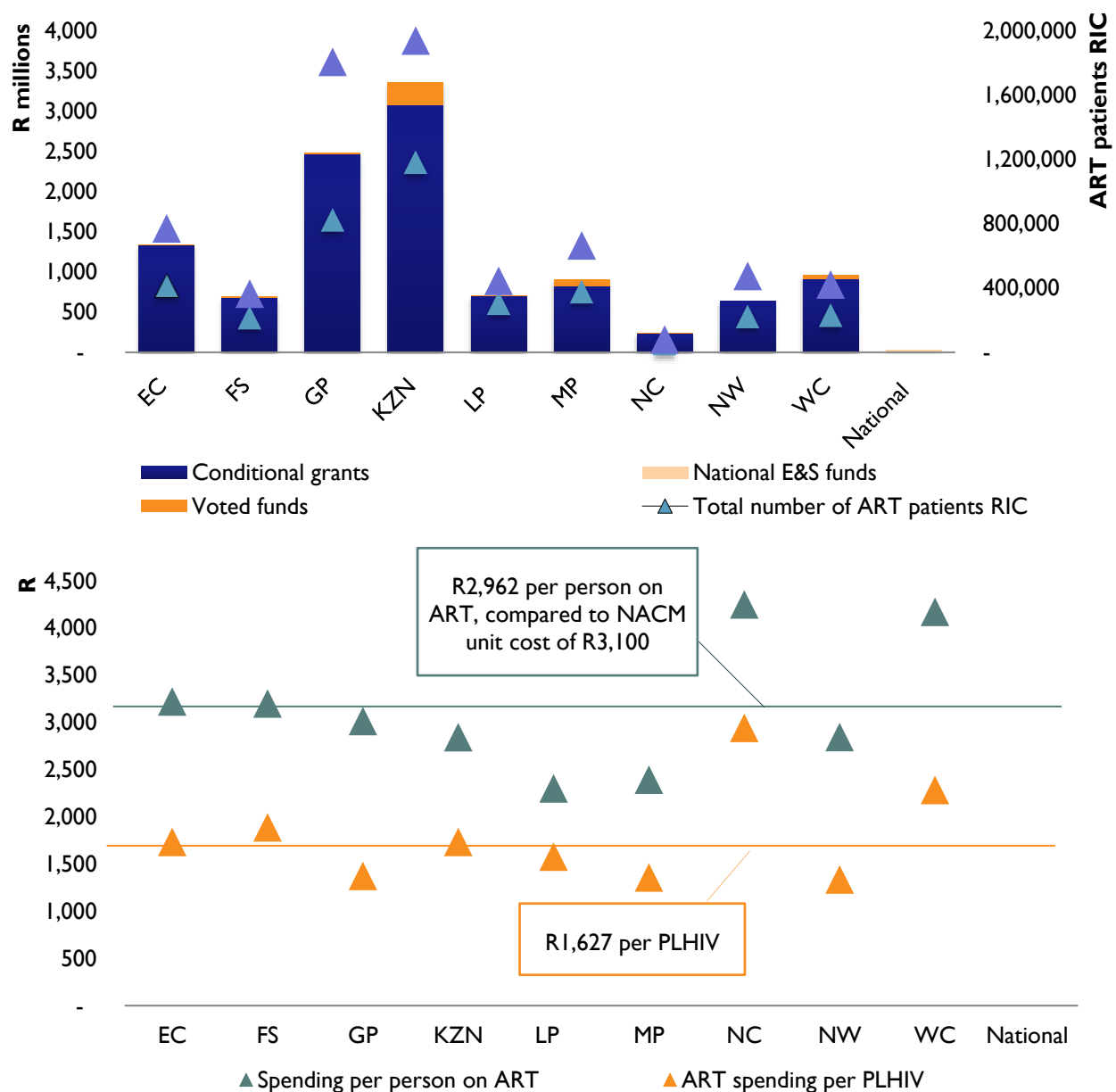
Figure 11: Combined DOH, Global Fund and PEPFAR spending on ART and number of patients remaining in care (2014/15–2016/17, R millions)



## ART spending by province

The following figure 12, left, shows the ART spending per province (split by CG and voted funds) as well as the HIV burden (in terms of numbers of PLHIV) and the number of patients RIC in 2016/17. In 2016/17, KZN, GP and EC recorded the highest ART spending which aligned with their PLHIV and patients RIC numbers. On average, in 2016/17 R2,977 was spent across provinces on ART (including the national-level spending on ART), which was in line with the NACM-estimated cost of R3,100 per person on ART. There was some provincial variation for ART spending that ranged from R2,302 in Limpopo (LP) to R2,844 in KZN to R3,223 in EC and R4,251 in NC. The higher spending in NC may be due to the sparse and dispersed population of the province.

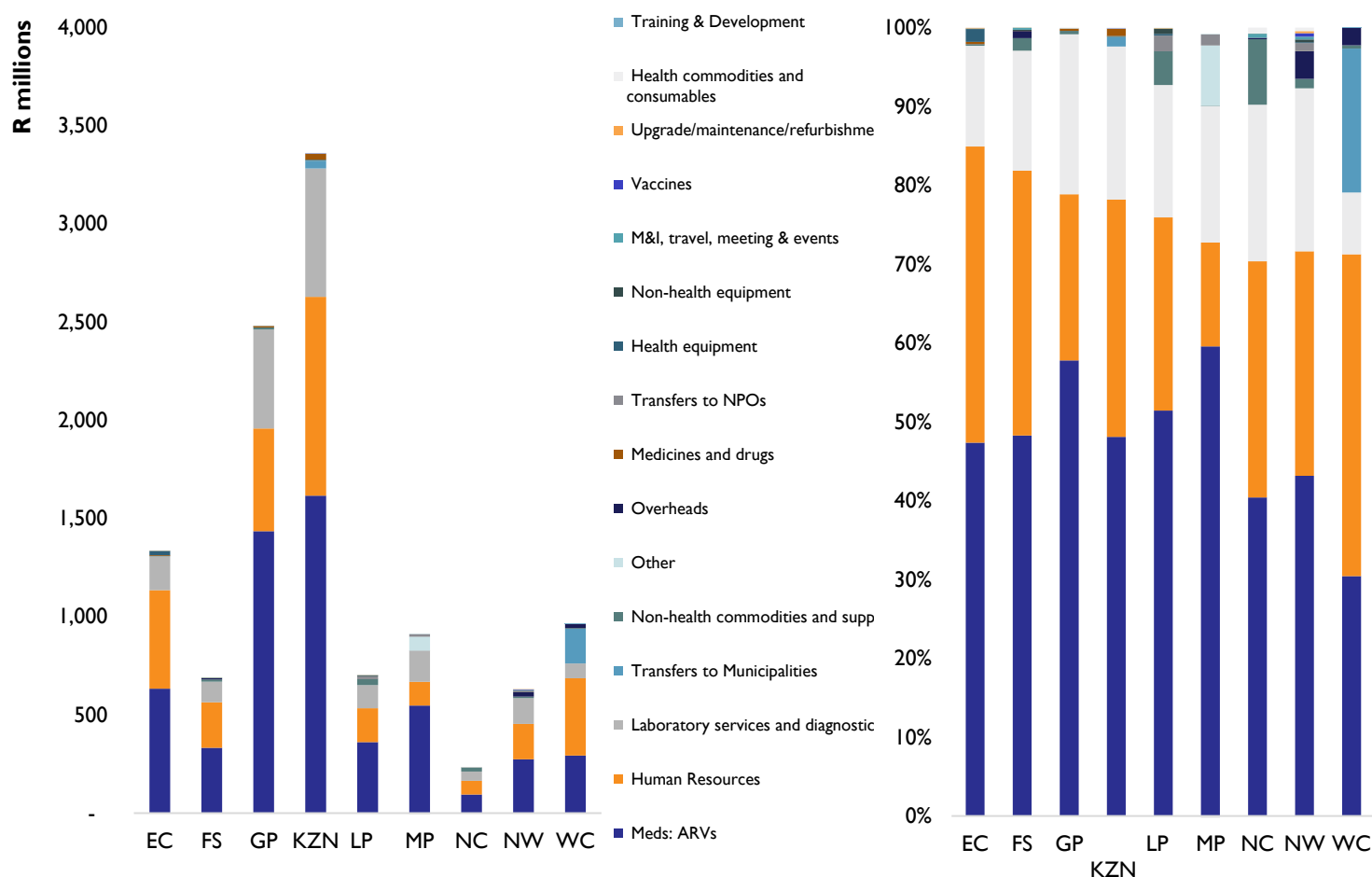
Figure 12: DOH spending on ART by province and #s of patients RIC and PLHIV (2016/17, R millions) (top) and DOH ART spending per person on ART and per PLHIV (2016/17, R) (bottom)



### ART programme spending by cost category

ARVs, human resources and labs were the main cost drivers for ART in 2016/17. WC was the only province whose ART programme spent more on human resources than on ARVs, with a larger portion going to human resources. This may have been because of the integration of HIV services into general primary health care services, with health care workers delivering other services in addition to HIV. WC also had a much higher share of spending on transfers to municipalities as compared to other provinces.

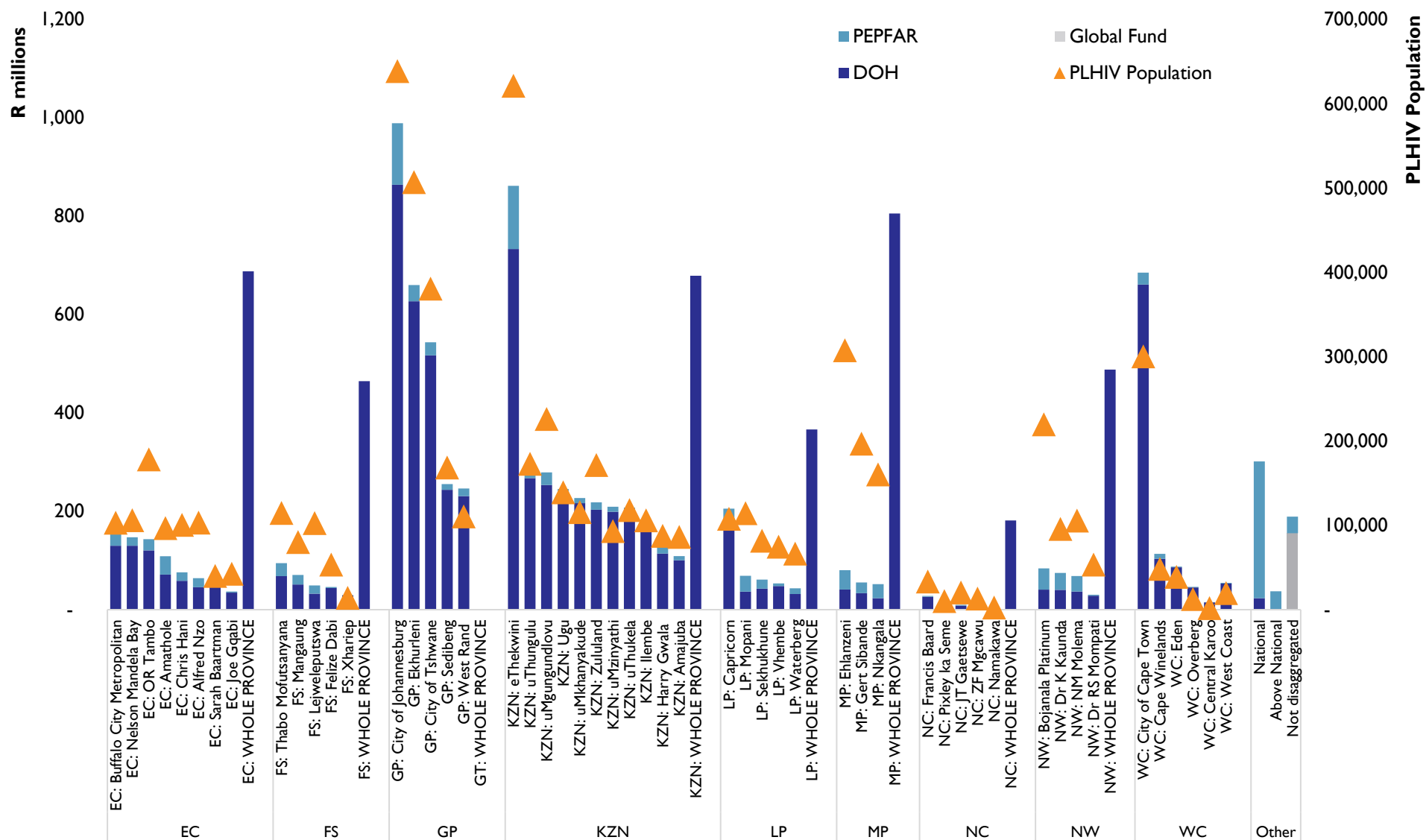
Figure 13: DOH provincial ART spending by cost category absolute (2016/17, R millions) (left) and proportional (2016/17, %) (right)



### ART spending by district

ART spending tended to be highest in metropolitan areas starting with Johannesburg (GP), eThekwin (KZN), Cape Town (WC), Ekurhuleni (GP) and City of Tshwane (GP) and aligned with their higher PLHIV populations. Like previously highlighted, coding in the DOH BAS of some spending to the whole province identifier, rather than to specific district identifiers, hindered accurate district-level comparisons of ART spending. For example, ART spending in MP was mostly labelled as 'province level' making it impossible to ascertain if spending across districts reflected the geographic distribution of need. The Global Fund's ART spending could not be disaggregated by geography at the time of the analysis.

Figure 14: ART spending by funder and district, with PLHIV population (2016/17, R millions)

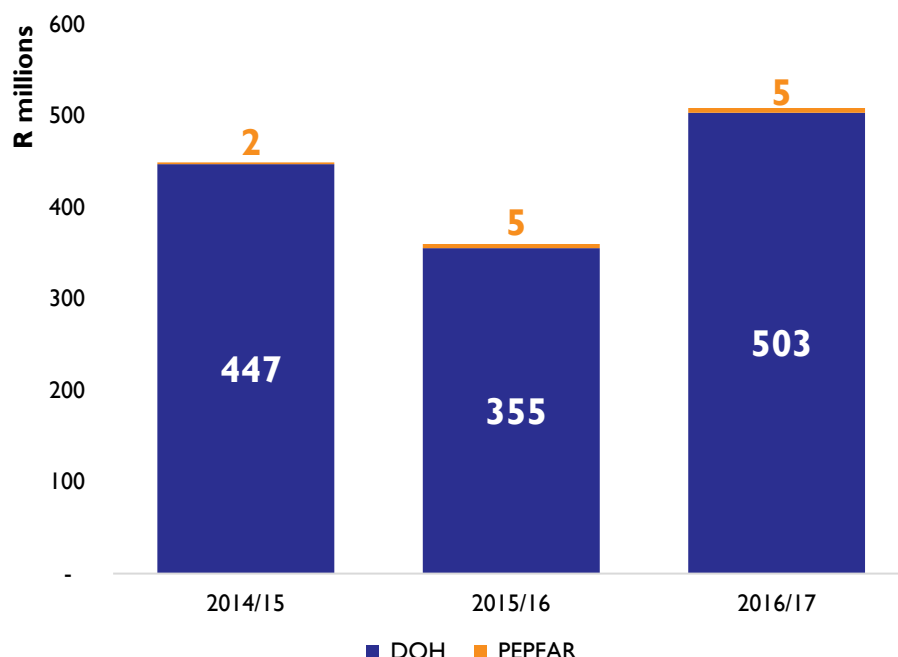


### 3.3.6.3 Comprehensive condom programming

#### **Condom programme spending by funder**

Overall, condom spending, mostly coming from the DOH budget, increased by 13% between 2014/15 and 2016/17, although there was a decrease in 2015/16 because unused stock from the previous year was carried into the following year. There were some small contributions from PEPFAR (extracted from their cost category “condoms”).

**Figure 15: Combined DOH and PEPFAR spending on condom programme (2014/15–2016/17, R millions)**

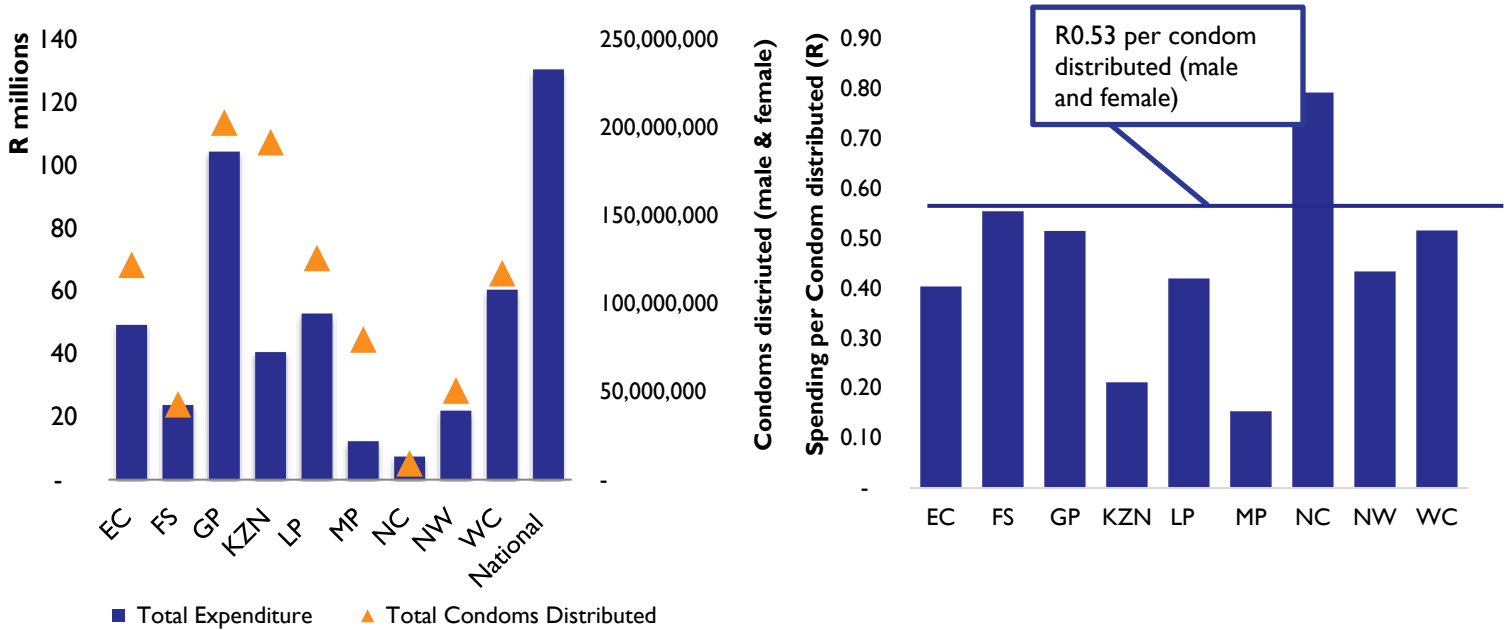


#### **Condom spending and distribution by province**

There was significant variation by province in spending on the condom programme, which comprised spending on commodities and other programme costs. The expenditure was fairly aligned with the number of condoms (male and female) distributed in 2016/17 (Figure 16, left), except in KZN and MP, where condom distribution numbers were high despite lower spending. In fact, this discrepancy is explained by the NDOH's condom procurement on behalf of the provinces. This is reflected in the high expenditures recorded by the NDOH which was then not attributed to the provinces to which the condoms were distributed.

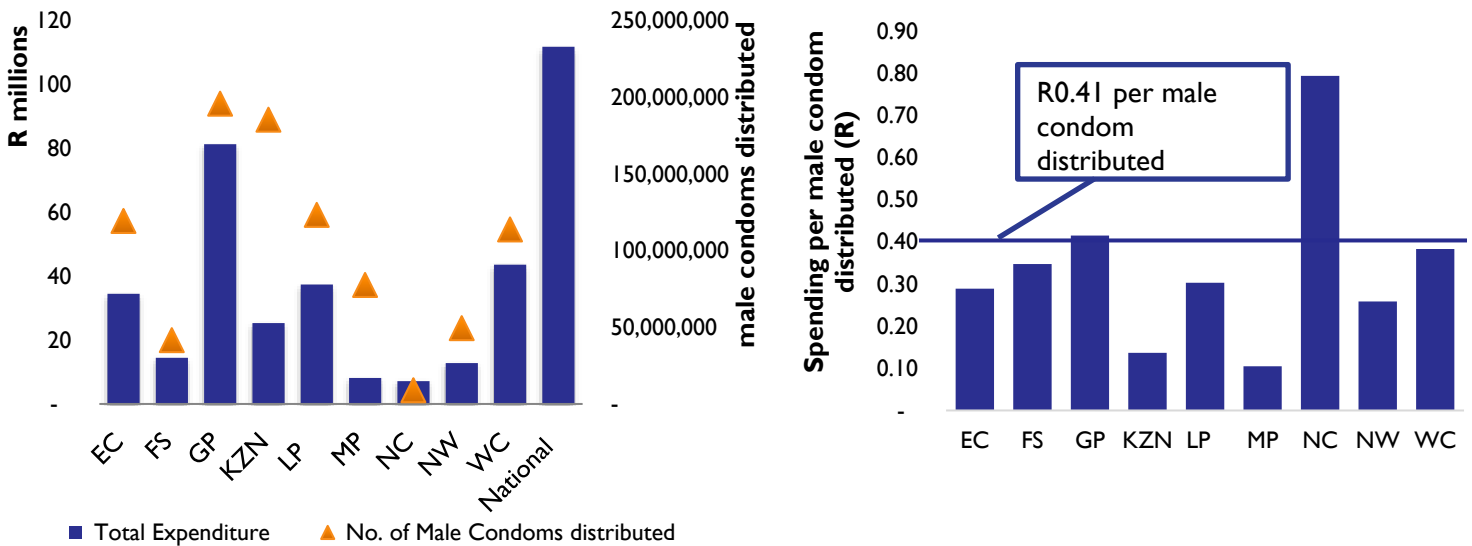
The above point is confirmed when we look at expenditure per output. In KZN and MP high distribution numbers despite lower spending showed a low cost per item distributed (R0.21 and R0.15 respectively). These estimates should be interpreted with caution since these provinces received a large share of the commodities in kind (from the NDOH) and so didn't spend their PDOH funds to produce a share of the results reported. Within provinces, GP had the highest expenditure and number of condoms distributed (R0.51 per item), whilst NC reported the lowest spending and distribution, but the highest spending per item at R0.79. On average, R0.53 was spent per distributed condom in 2016/17, representing an average unit of condom programme expenditure, including commodity and other programme costs.

Figure 16: DOH condom programme spending (2016/17, R millions) (left) and spending per condom distributed (male and female) (2016/17, R) (right)



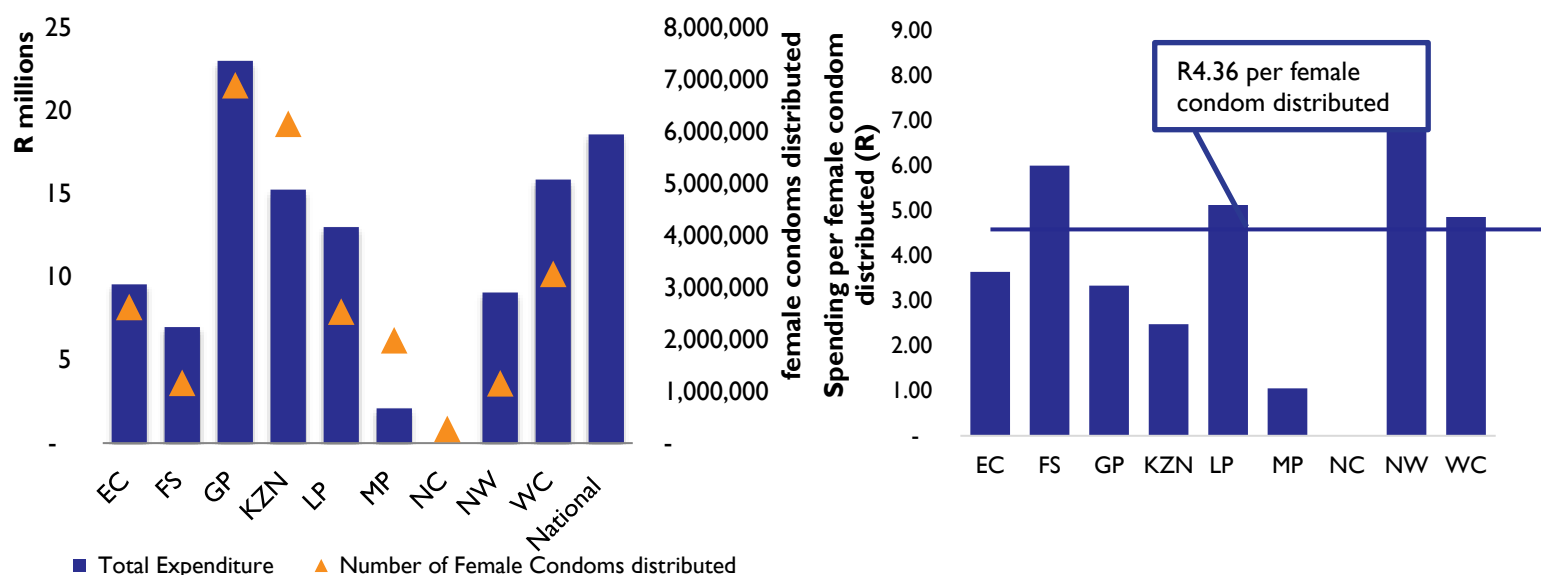
Similar patterns were found when considering the specific spending on male condom commodities (Figure 17). GP had the highest total spending and number of male condoms distributed, with an average spending per unit of R0.42, and NC had the highest unit spending (R0.79) whilst having the lowest total spending and number of male condoms distributed. MP appeared to have the lowest unit cost at R0.10 per unit, but this appeared to be due to NDOH spending supporting their male condom programme as explained above. On average, including the national-level spending, R0.41 was spent per male condom distributed across the provinces, which comes close to the NSP's unit cost of R0.43.

Figure 17: DOH spending on male condoms (2016/17, R million) (left) and DOH spending per male condom distributed (2016/17, R) (right)



Spending on the female condom items (R113 million) reflected that GP spent the highest and distributed the largest number of female condoms amongst the provinces in 2016/17, with an average cost of R3.34 (Figure 18, left). In FS, LP, North West (NW) and WC expenditure on female condoms appeared much higher with fewer female condoms distributed than in other provinces. Hence their spending per female condom distributed was higher than the national average of R4.36, which was lower than the R6.09 NSP unit cost. MP had the lowest reported spending per female condom distributed, less than R1.05, but again, this was probably due to the NDOH providing them without attributing it to MP. Similarly, although female condoms were distributed in NC, there was no expenditure reported in the BAS records.

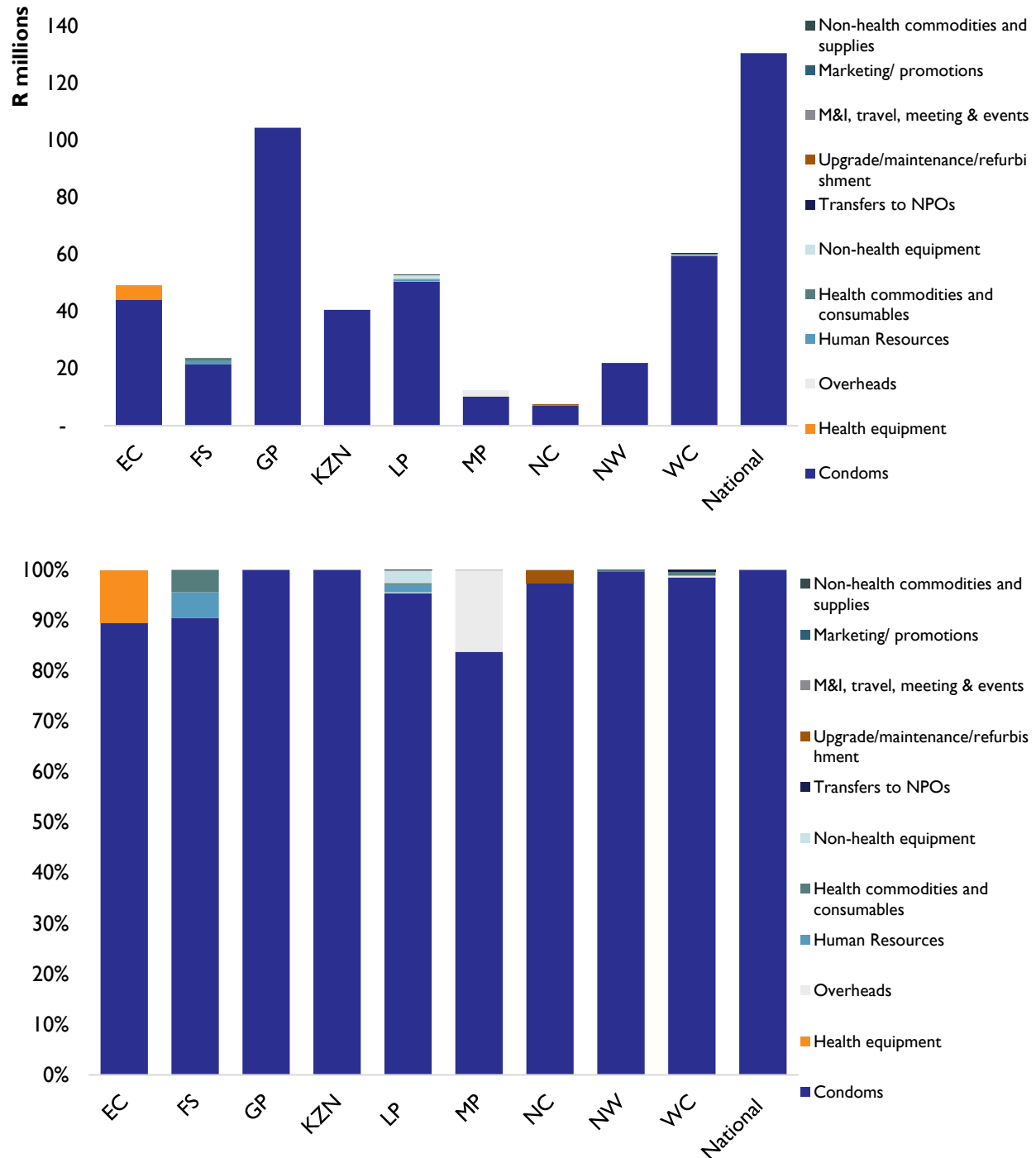
Figure 18: DOH total spending on female condoms (2016/17, R millions) (left) and DOH spending per female condom distributed (2016/17, ZAR) (right)



### Condom programme cost category breakdown

Most condom programme expenditure was on commodity costs, across all the provinces. Compared to other provinces, EC spent proportionally more on health equipment, MP on overhead and FS on human resources.

Figure 19: DOH total condom programme spending by cost category absolute (2016/17, R millions) (top) and proportional (2016/17, %) (bottom) by province

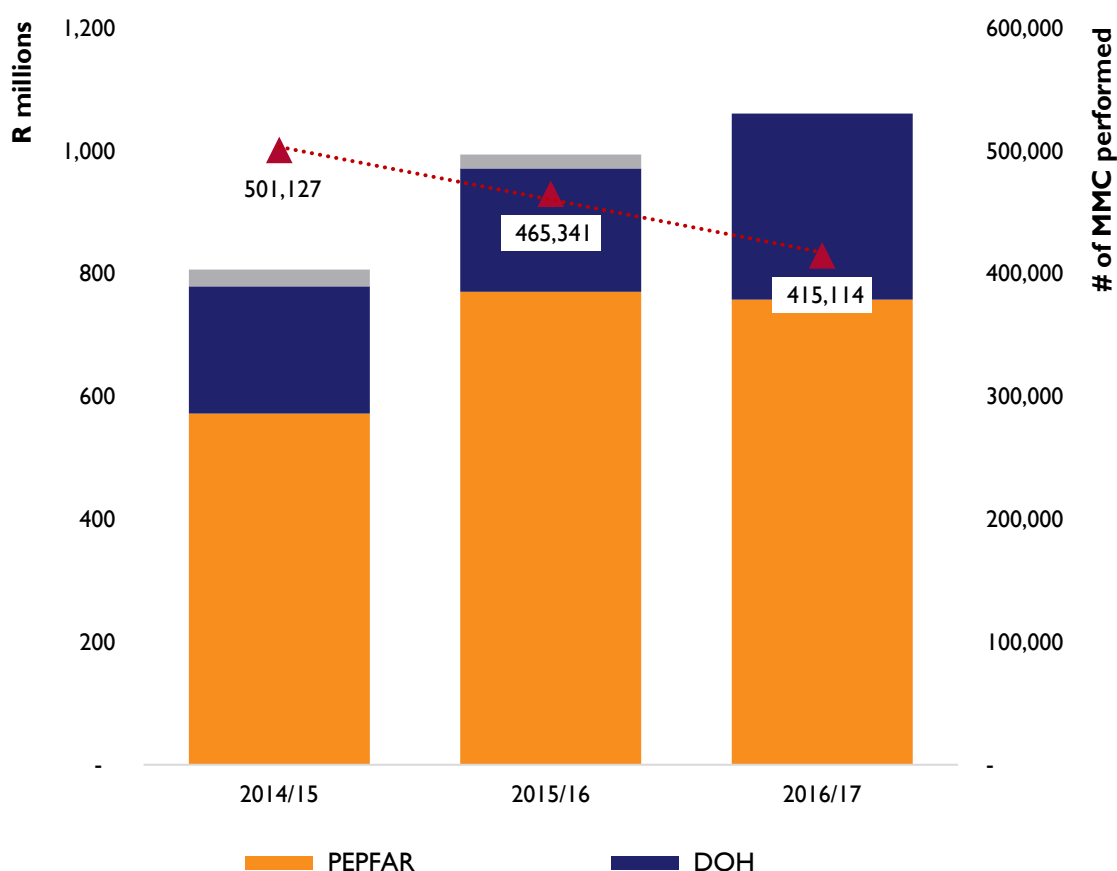


### 3.3.6.4 Medical male circumcision

#### **MMC spending by funder**

MMC spending grew each year over the study period, increasing by 23% between 2014/15 to 2015/16, and by another 7% in 2016/17. PEPFAR provided the bulk of the funding over the period, although its share decreased from 77% in 2015/16 to 71% in 2016/17. Much smaller contributions came from the Global Fund in 2014/15 and 2015/16, (3% and 2% respectively) and in 2016/17 the new Global Fund grant had no MMC contribution. There was a decrease in the number of MMCs performed each year, and it may have become more expensive to reach each new uncircumcised man as MMC coverage increased.

Figure 20: MMC spending by funder and MMCs performed (2014/15–2016/17, R millions)



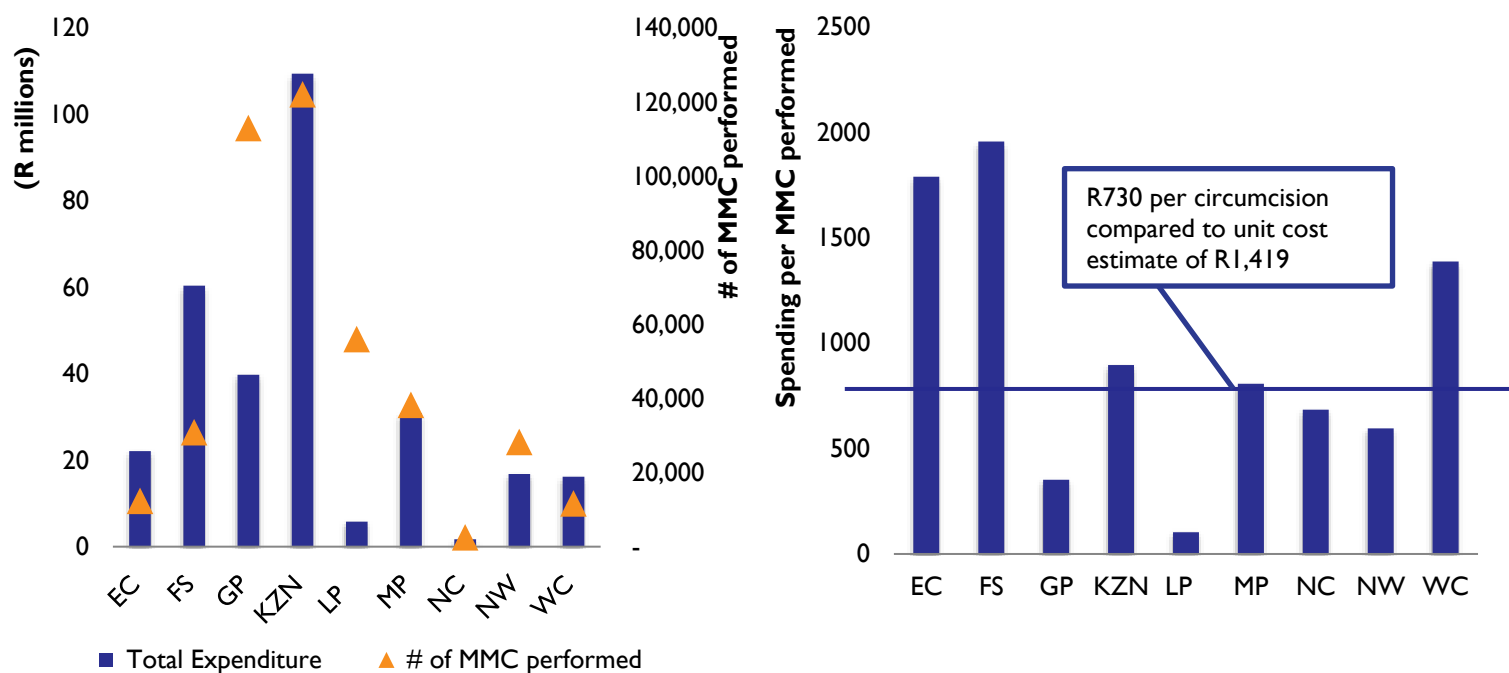
### DOH spending on MMC across provinces

In 2016/17, the KZN PDOH had the highest MMC spending, followed by FS and GP. In terms of MMC performance, KZN also had the highest numbers of men circumcised, followed by GP and LP (Figure 21, left). Unfortunately, MMC spending by PEPFAR (as noted above the largest contributor to the programme), could not be split by the provincial level (only by district, see next section) to aggregate with DOH spending.

Consequently, when considering the provincial spending per male circumcised, it is important to note that PEPFAR's expenditures were not accounted for, and hence the DOH-alone spending per circumcision is not representative of the full cost. For example, in GP, KZN and LP the DOH spending appears low compared with the circumcisions performed, because PEPFAR's spending contributed to these outputs.

Amongst PDOHs, LP spent the least (R103) per circumcision performed in 2016/17 whilst FS spent the most (R1,956), a wide variation. On average, the PDOHs spent R730 per circumcision, nearly half of the NSP unit cost estimate of R1,419. This may reflect under-representation of PEPFAR provincial funding for MMC, although its outputs are included in the national indicator. When adding total PEPFAR MMC spending to PDOH MMC spending in 2016/17, the spending per circumcision performed was R2,557 in 2016/17, R1,138 higher than the NSP unit cost.

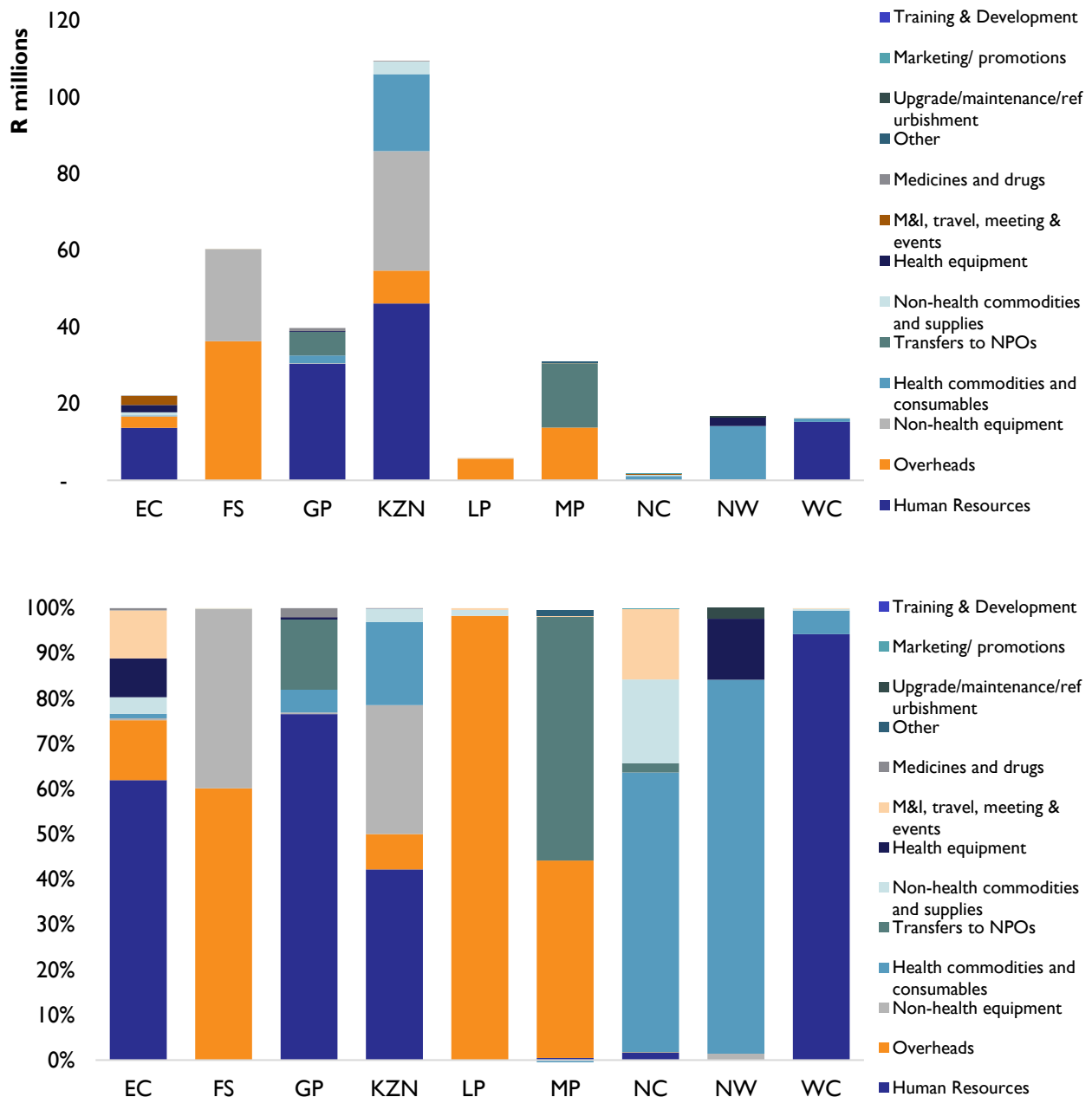
Figure 21: DOH total spending on MMC (2016/17, R millions) (left) and DOH spending per circumcision (2016/17, R) (right)



### MMC spending by cost category

In terms of the cost category breakdown for the MMC programme, there were interesting variations between the provinces. In EC, GP, KZN and WC the bulk of the spending went towards human resources whilst in FS and LP, overheads consumed the largest share of MMC spending. In NC and NW, health commodities and consumables drove DOH expenditure. Also, interesting to note is that in MP transfers to NPOs formed almost half of expenditures indicating that their MMC activities were likely outsourced to NPOs.

Figure 22: DOH MMC spending by cost category in absolute (2016/17, R millions) (top) and proportional (2016/17, %) (bottom) terms by province



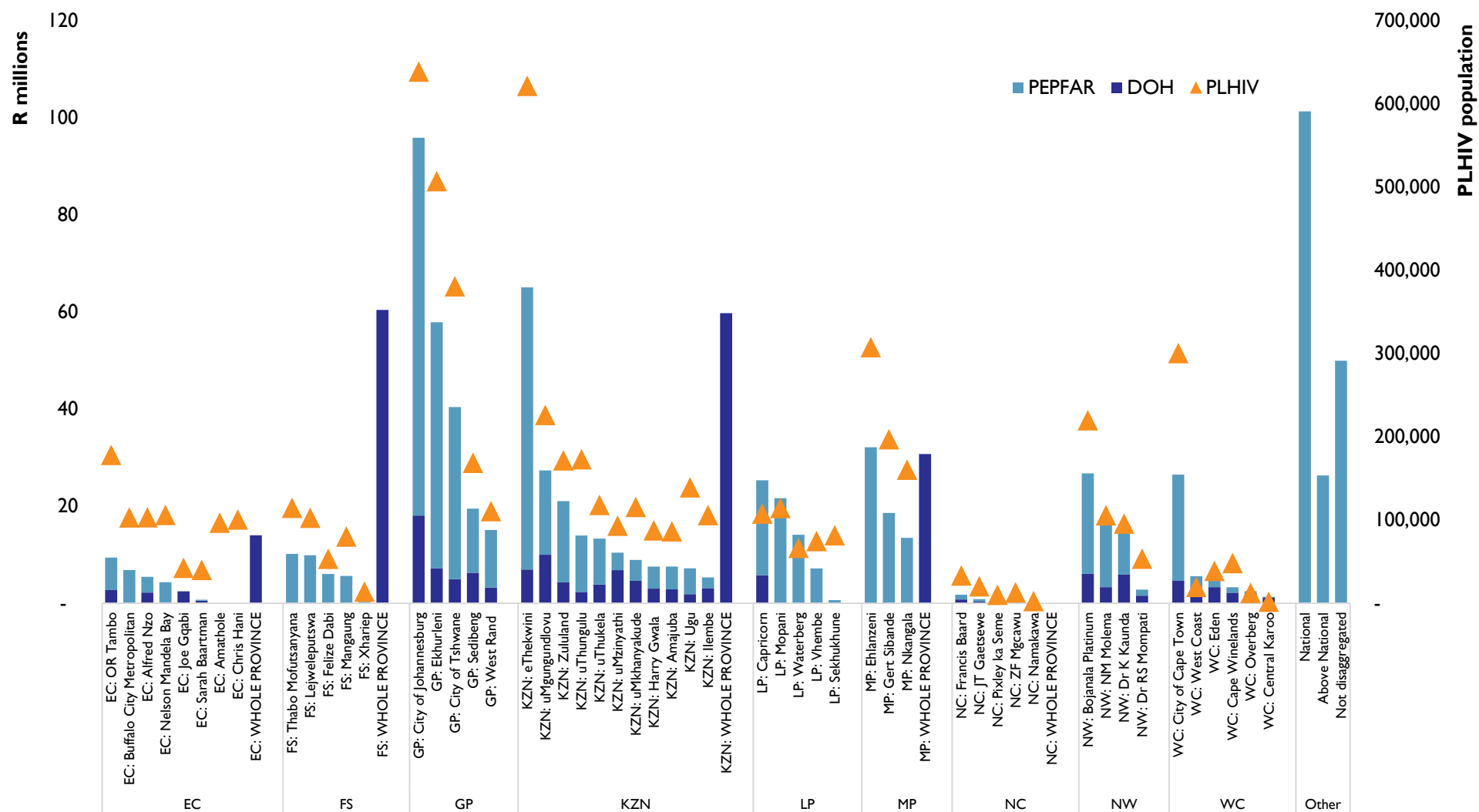
### ***MMC spending by district***

Overall PEPFAR drove MMC spending in South Africa, with four major metro areas accounting for 30% of all MMC spending, aligning well with the fact that they are home to 30% of PLHIV. In fact, like for ART, the distribution of MMC spending maps fairly well to the distribution of HIV burden (Figure 23).

However, PEPFAR's combined above-site spending (National and above-National) on MMC formed the largest share at 20%. As mentioned previously, part of PEPFAR's national-level spending (13%) accounts for provincial expenditures but since the EA tool captured only the district and above-site location, it was not possible to estimate or attribute these to provinces. A smaller but significant share (7%) of PEPFAR's spending, which they labelled as "commodity SA", also was not geographically disaggregated.

In districts of NC and WC (barring Cape Town) where HIV prevalence was lower than elsewhere, the DOH sustained its modest levels of MMC spending. In EC, FS, KZN and MP, the DOH MMC expenditures were largely coded to the whole province identifier, which made district-level analyses difficult especially when comparing spending to the HIV prevalence.

Figure 23: DOH and PEPFAR spending on MMC (2016/17, R millions) and PLHIV population by district

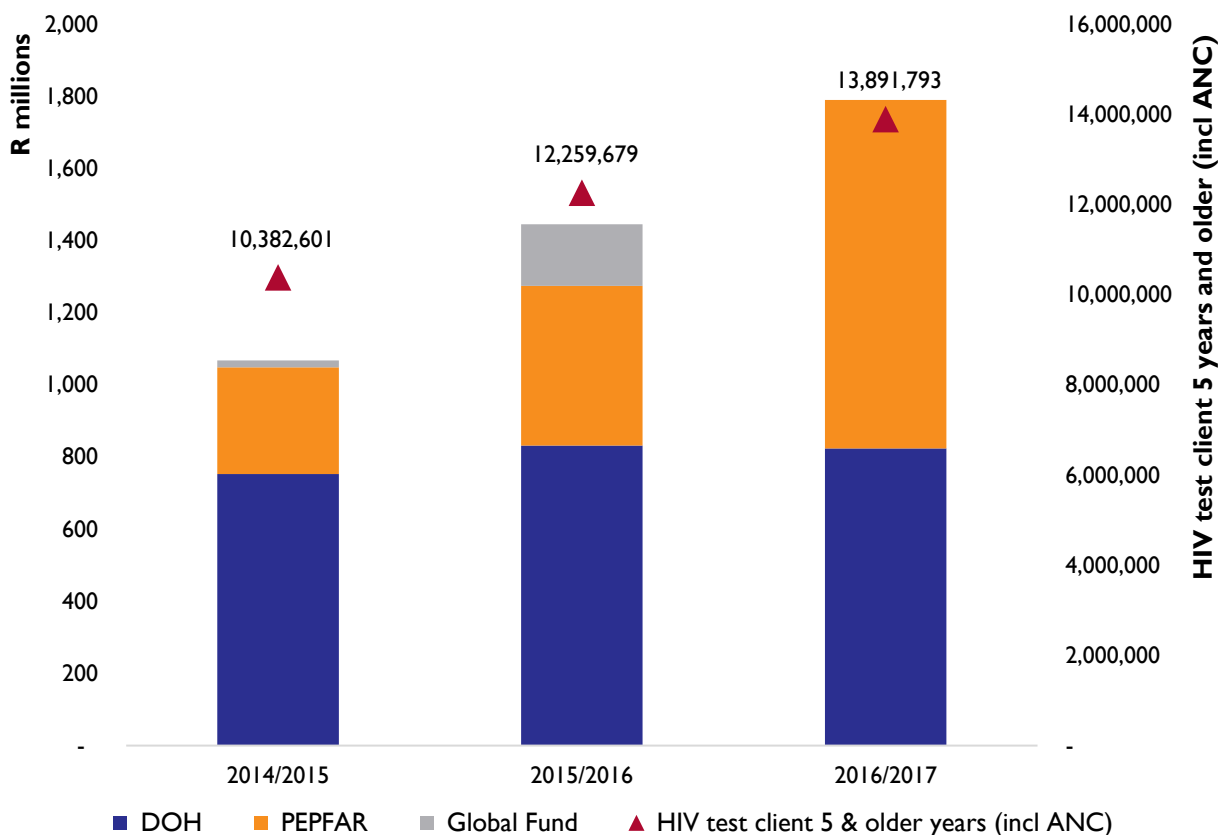


### 3.3.6.5 HIV Testing Services

#### HTS spending by funder

Overall, total spending on HTS grew over the three-year period, driven by a massive increase of 118% in PEPFAR's contributions in 2016/17. DOH HTS spending remained relatively constant, despite the NDOH's adoption of the 90-90-90 policy, which requires an increase in people being tested. Between 2014/15 and 2015/16, the Global Fund's spending on HTS grew by nearly 80%, whilst in 2016/17 no Global Fund spending was recorded due to the start of a new grant period (as explained previously). The total number of HIV tests conducted over the period increased from 10,382,601 in 2014/15 to 13,891,793 in 2016/17, representing a total unit expenditure of R59 in 2016/17. This unit expenditure was lower than the NSP estimated cost of R94, possibly since the expenditure records may not have labelled the staff time specifically to testing, but which would have been included in the NSP cost estimate.

Figure 24: HTS spending by funder and # of HIV tests (2014/15–2016/17, R millions)

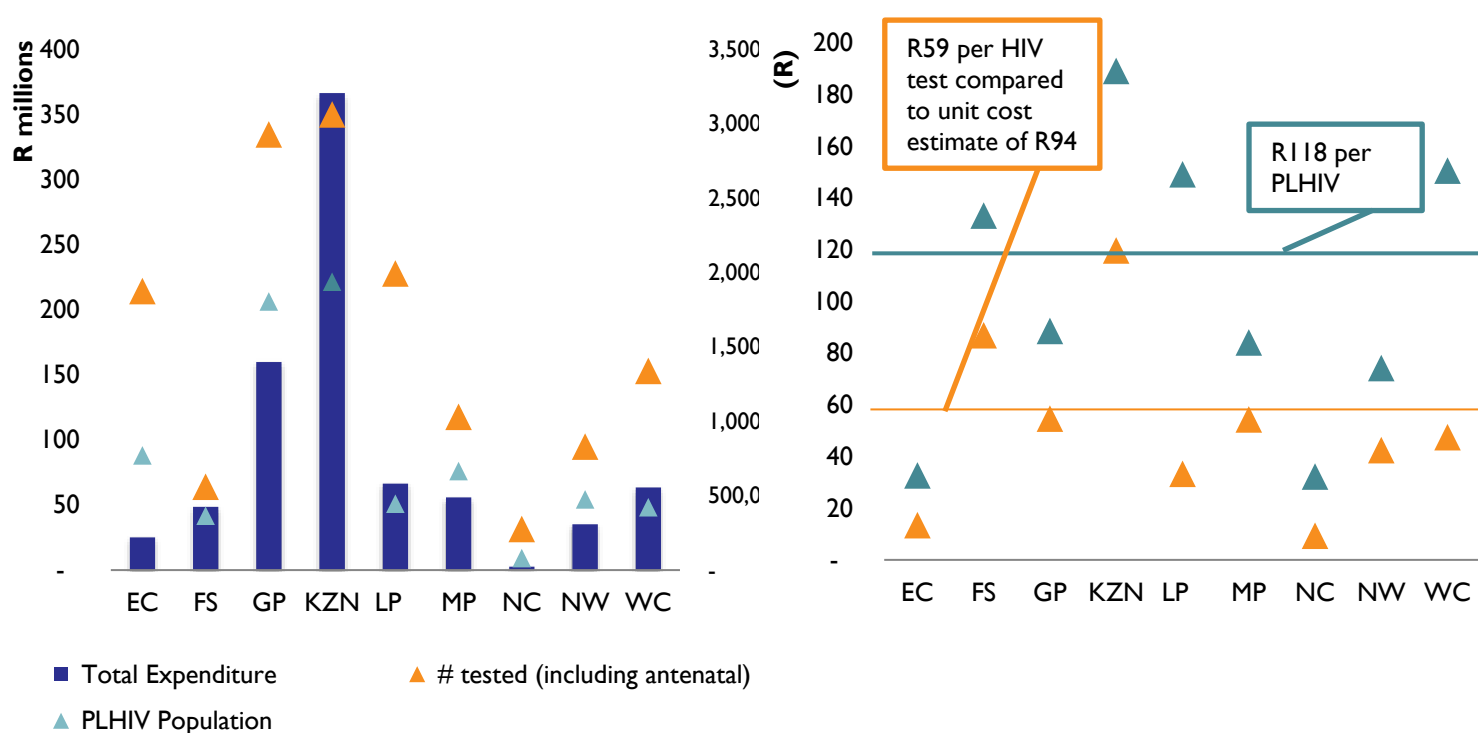


### DOH spending on HTS across provinces

In 2016/17, KZN spent the most on HTS whilst NC spent the least. GP (R159 million) had the second highest spending which was not quite half of KZN's (R366 million) expenditure. The remaining provinces were within a third spending range of around R50 million (Figure 25, left).

In terms of outputs, KZN and GP had the greatest numbers of clients tested which aligned with their spending and higher HIV prevalence, whilst FS and NC were on the lower end of testing, in line with their lower HIV burdens than other provinces. EC, LP, NC, NW and WC expenditure per client tested was much below the provincial average of R59. This shows that despite lower spending, EC achieved more outputs than did other provinces that spent more on testing; alternatively, it shows that EC did not attribute all its HTS spending specifically to HTS.

Figure 25: DOH total spending on HTS (2016/17, R millions) and number of clients tested (left) and DOH spending per client tested and PLHIV (2016/17, R) (right)

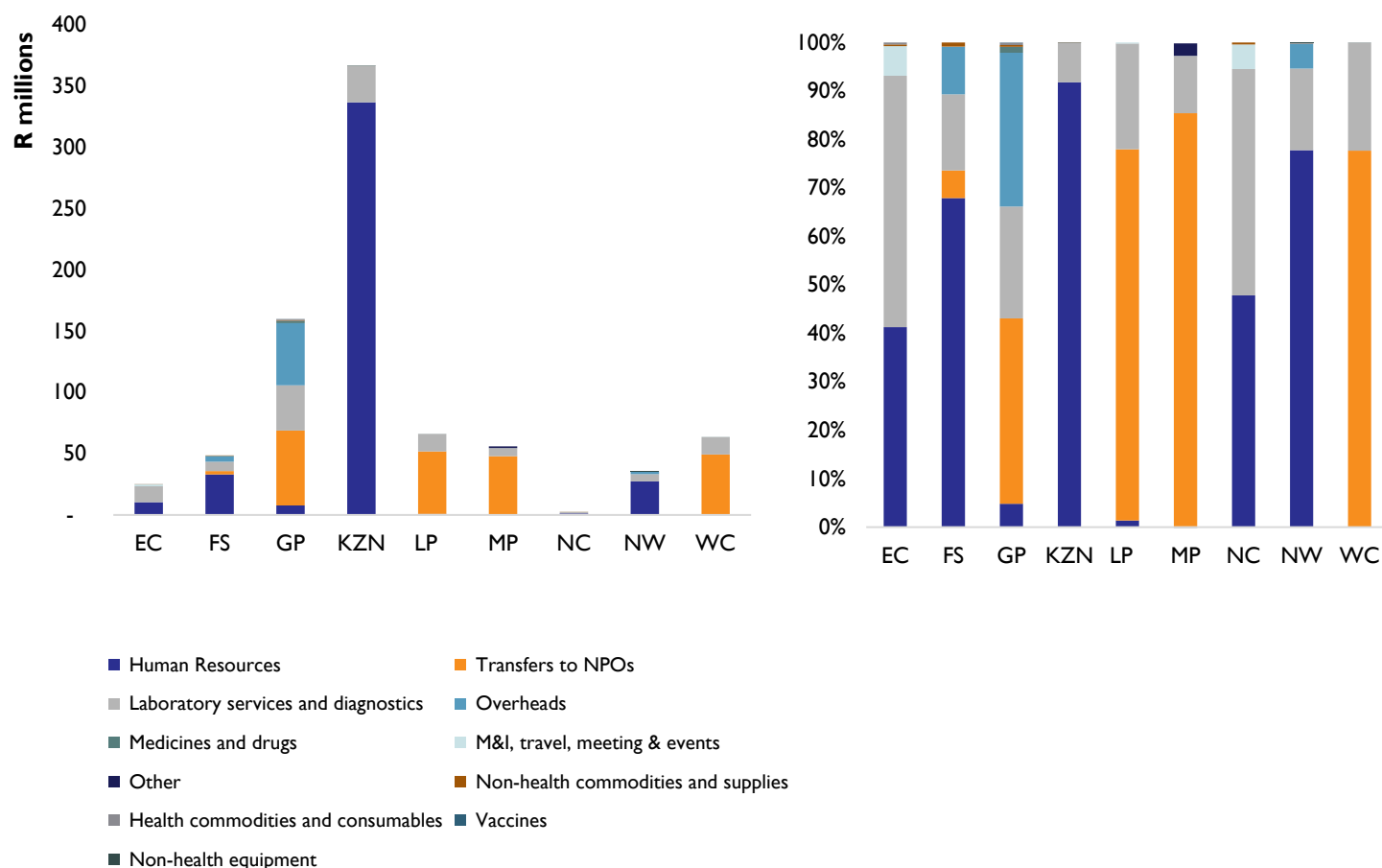


Compared to the average expenditure, the NSP cost estimate of R94 per HIV test was higher than the provincial average. This is probably explained by the fact that the indicator of number of tests performed is the national indicator and includes the PEPFAR HTS output figures, but figure 25, right presents only the DOH spending, thus under-estimating the full unit of expenditure on HTS. When adding PEPFAR's HTS expenditure to DOH spending, the per test expenditure increases to R129, higher than the NSP estimate of R94.

### HTS spending by cost category

Further examination of the cost category breakdown for the HTS programme shows that in FS, KZN, NC and NW, human resources was the biggest cost driver, especially in KZN (92%) whereas in LP, MP and WC transfers to NPOs drove the spending. In EC and NC, laboratory services and diagnostics, which included HIV test kits, represented about 50% of HTS spending. GP was the only province with 30% of spending (R4,774,550) that went towards overhead, which might have been for standalone testing facilities.

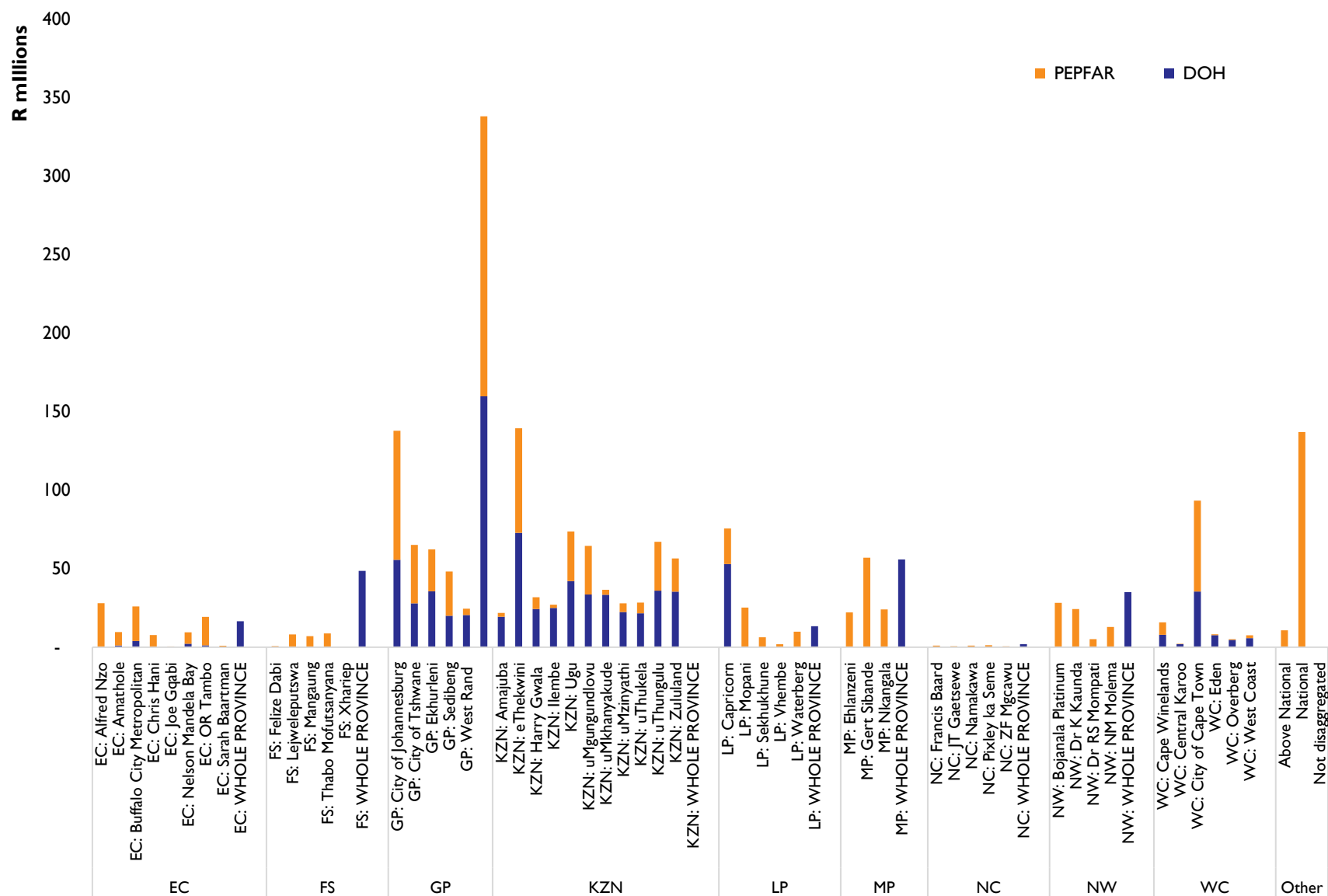
Figure 26: DOH HTS spending by cost category in absolute (2016/17, R millions) (left) and proportional (2016/17, %) (right) terms by province



### HTS spending by district

As seen above, PEPFAR's HTS contributions nearly doubled in 2016/17, surpassing DOH spending in absolute terms. Figure 27 shows DOH and PEPFAR spending on HTS by district in 2016/17 (there was no Global Fund spending attributed to HTS in 2016/17). A large share of PEPFAR's HTS spending was at the national level followed by the metro areas of Johannesburg, eThekweni and Cape Town. In GP, KZN and WC, HTS spending was better disaggregated by district, whilst in the other provinces, DOH coding to 'whole province' made meaningful district comparisons with PEPFAR spending challenging.

Figure 27: DOH and PEPFAR HTS spending by district (2016/17, R millions)

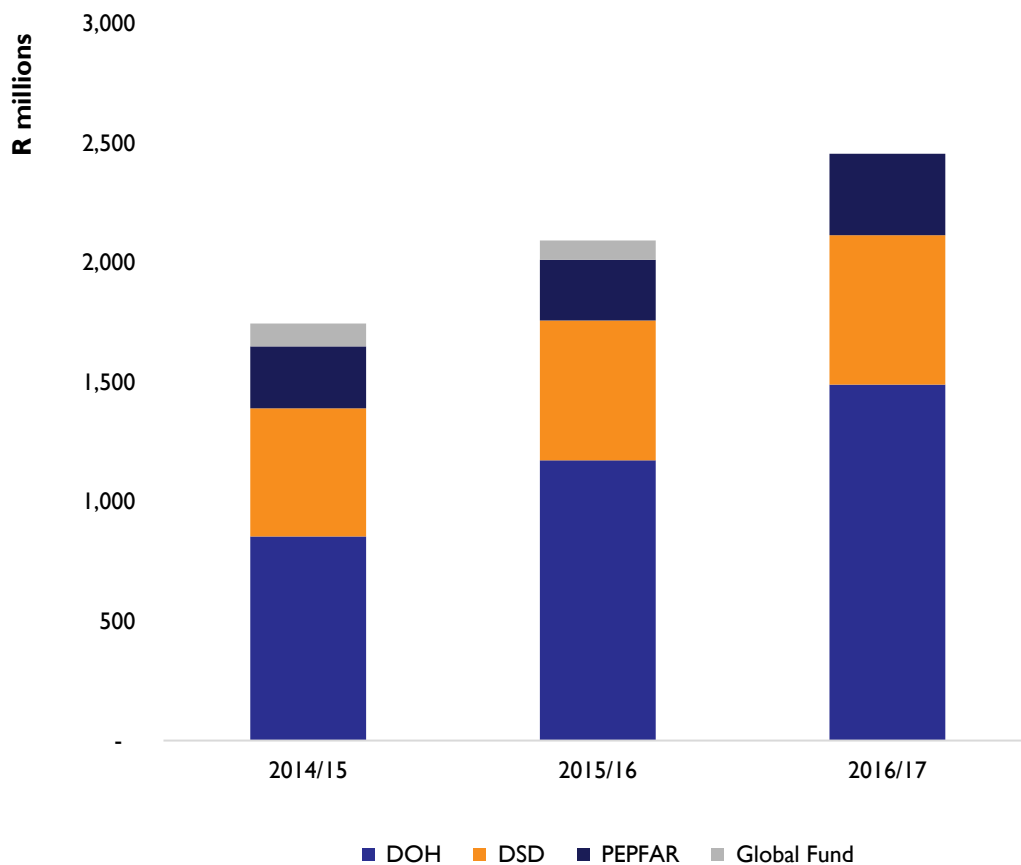


### 3.3.6.6 Home-based care

#### **HBC spending by funder**

After ART, HBC consumes the highest proportion of HIV-related expenditure. In 2016/17 the DOH contributed the largest portion, 61%, followed by the DSD (25%) and PEPFAR (14%). The Global Fund did not fund HBC in 2016/17, due to the new grant priorities. Each funder had slightly different HBC activities, with the DSD's including interventions for vulnerable families and children. The HBC programme grew each year over the three-year period, primarily driven by the increase in DOH expenditures each year.

Figure 28: Total spending on HBC by funder (2014/15–2016/17, R millions)

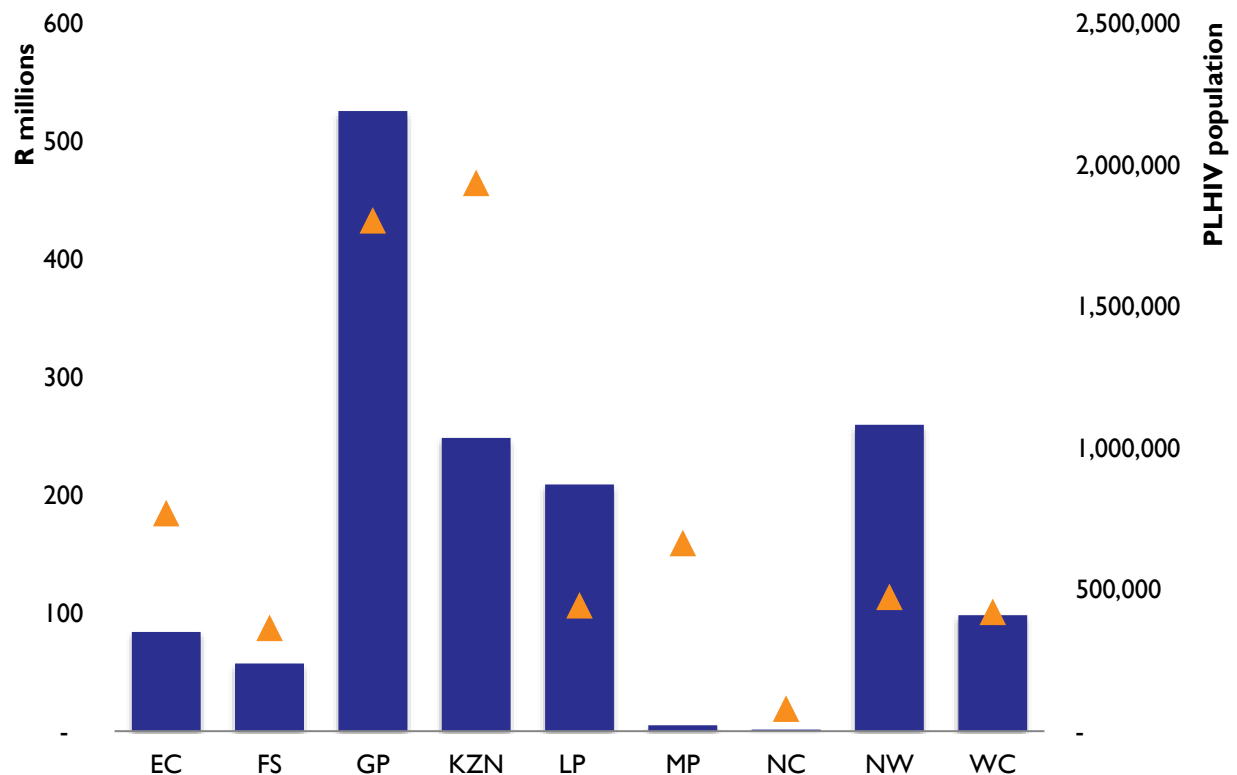


### DOH spending on HBC across provinces

There was significant variation amongst PDOH HBC spending in 2016/17. GP was the largest spender followed by NW and KZN. EC and FS spent the least.

There was a certain extent of non-alignment with the provincial HIV burden. For example, despite a high HIV burden and a community programme called Operations Sukuma Sakhe (OSS), KNZ spent less than provinces like GP and NW, which spent more despite a lower burden. Despite a sizeable PLHIV population, MP reported little spending labelled as HBC which could be a coding issue.

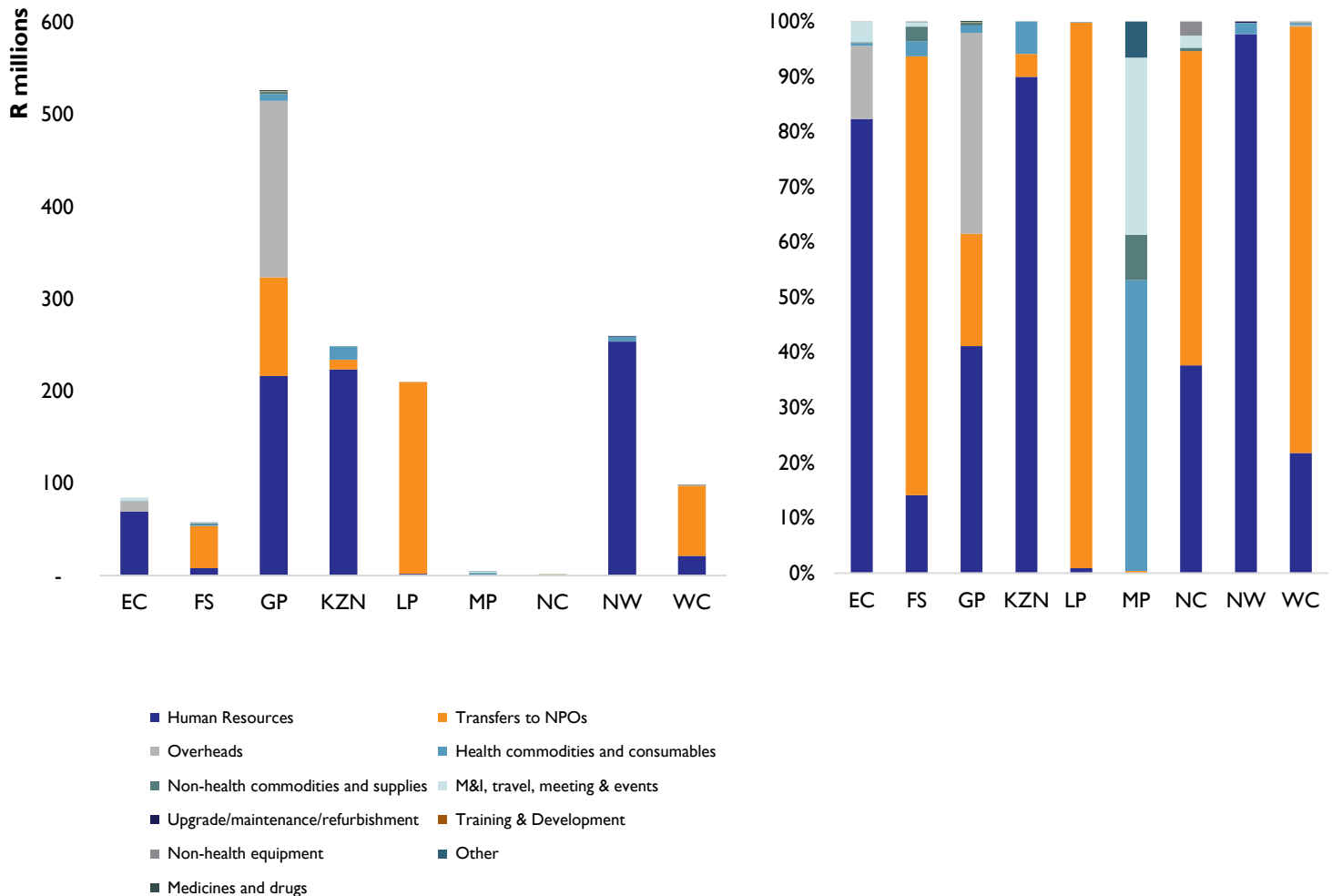
Figure 29: DOH spending on HBC by province (2016/17, R millions)



### HBC spending by cost category

The cost category breakdown showed that in EC, KZN and NW, human resources consumed over 80% of HBC programme expenditure, and around 40% of GP's expenditure (Figure 30). In FS, LP, NC and WC, transfers to NPOs formed the largest share of spending indicating these provinces mostly outsourced their HBC activities. In MP, over 50% of HBC spending was for health commodities and consumables, which was a departure from the patterns in other provinces.

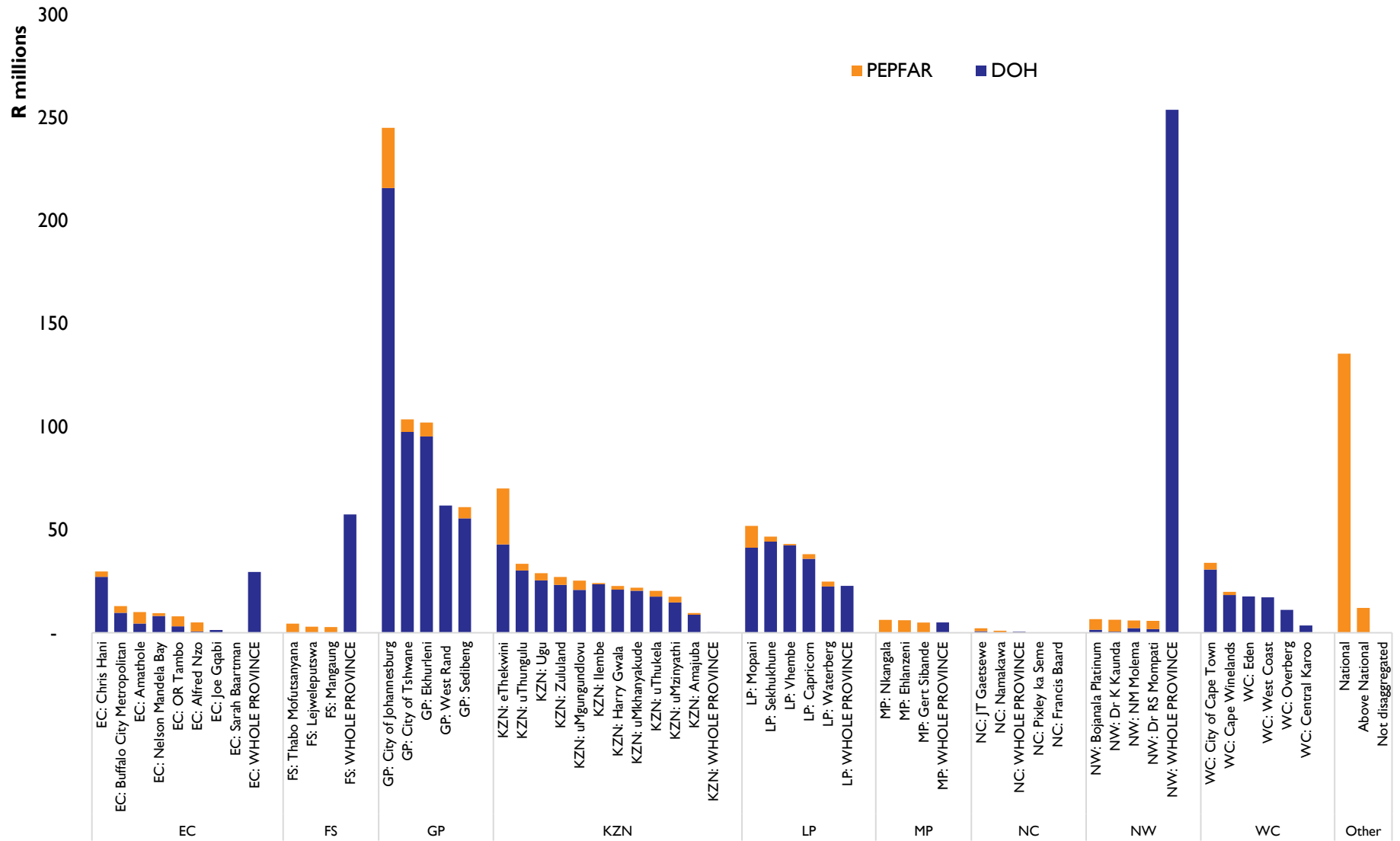
Figure 30: DOH HBC spending by cost category in absolute (2016/17, R millions) (left) and proportional (2016/17, %) (right) terms by province



### HBC spending by district (DOH and PEPFAR)

In 2016/17, the DSD spent an estimated R626 million on HIV-related community services to children and families, which unfortunately could not be disaggregated by district, and hence is not reflected in figure 31. Regarding the DOH and PEPFAR spending, the figure shows distribution across the districts with a peak of DOH spending in Johannesburg.

Figure 31: DOH and PEPFAR HBC spending by district (2016/17, R millions)



### 3.3.6.7 Regional Training Centres and other training activities

#### **DOH spending on training centres**

DOH Regional Training Centre (RTC) spending increased by 35% between 2014/15 and 2015/16 and then decreased by 32% in 2016/17 (to slightly less than in 2014/15) (Table 8), given a shift in priorities because trainings were not necessarily the best value for the spending.

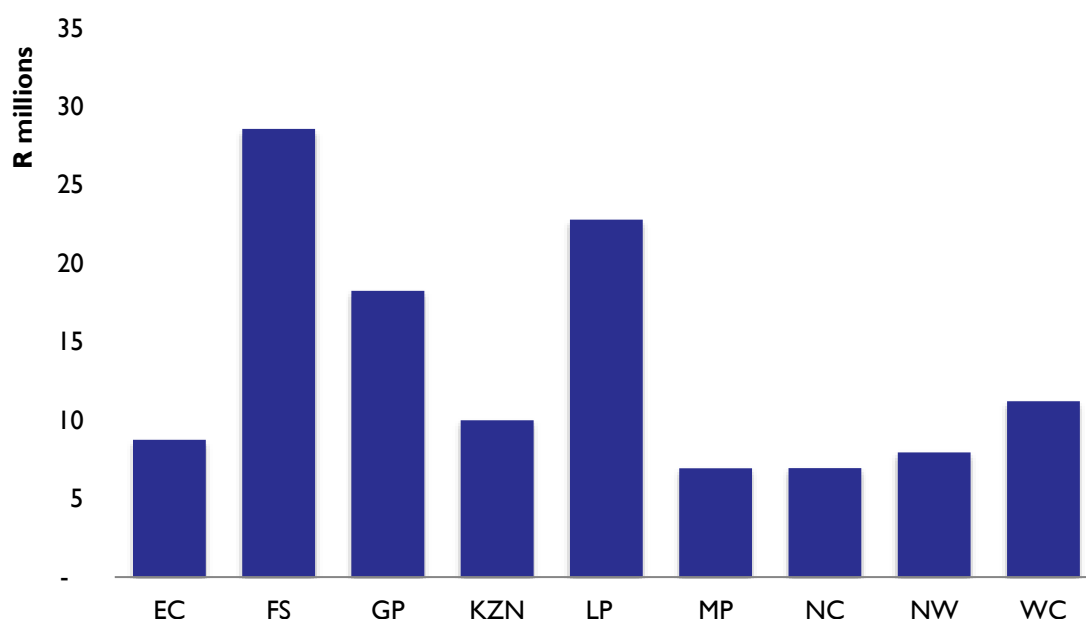
Table 8: DOH spending on RTC (2014/15–2016/17, R)

	2014/15	2015/16	2016/17
DOH	130,658,785	177,489,488	121,424,165

#### **DOH spending on RTC across provinces**

Amongst PDOHs, FS had the largest RTC expenditures (R28 million) followed by LP and GP (R22 million and R18 million respectively) in 2016/17. The remaining PDOH expenditures on RTC fell within the same range of around R10 million. It is difficult to ascertain the adequacy or provincial comparability of these amounts as the RTC output indicators, which cover training of different cadres, vary significantly.

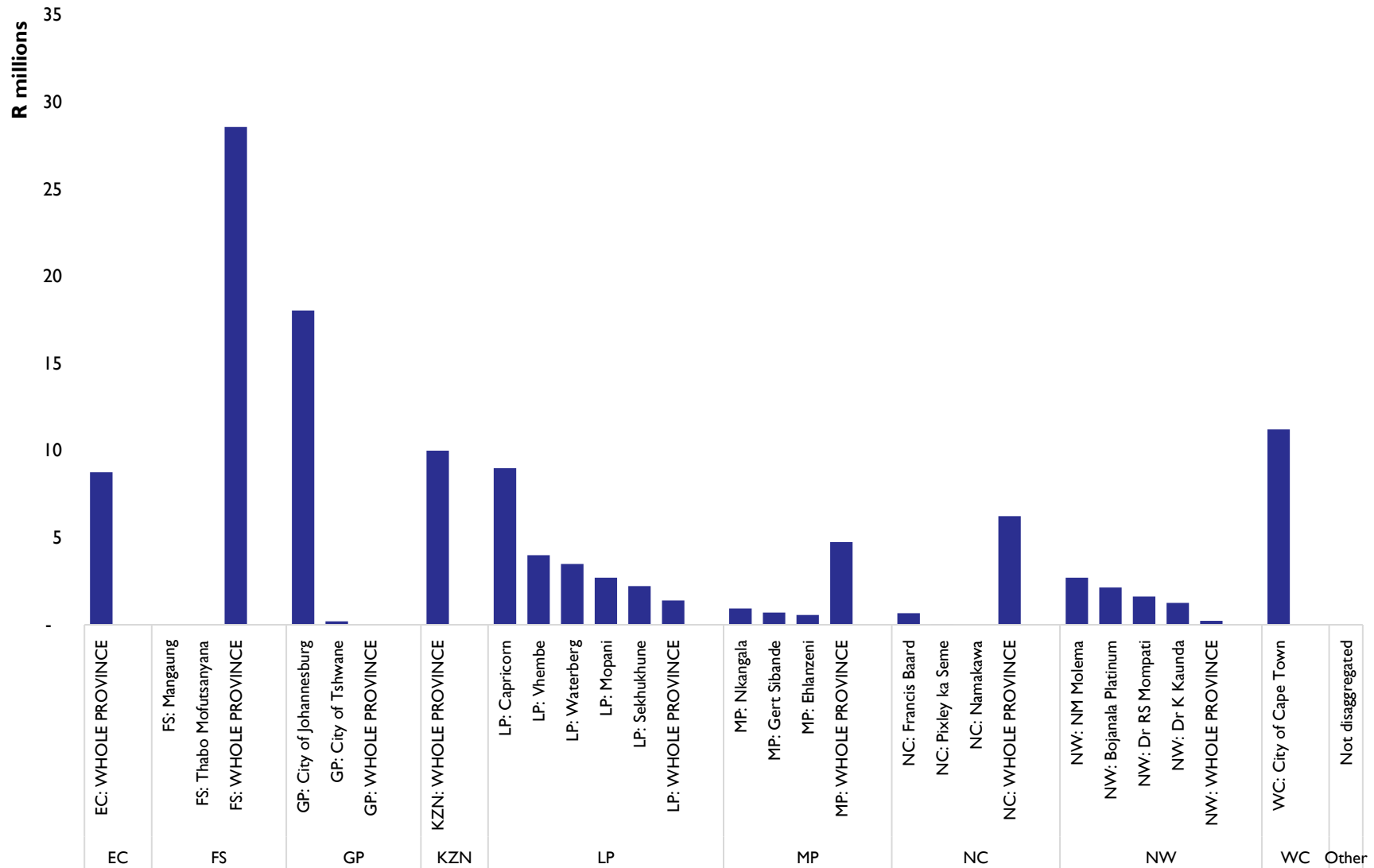
Figure 32: DOH RTC spending by province (2016/17, R millions)



#### **DOH spending on RTC by district**

DOH's RTC spending in 2016/17 was highest in Johannesburg followed by Cape Town (Figure 33). EC, FS, KZN and to some extent MP and NC coded their RTC expenditures to the whole province.

Figure 33: DOH spending on RTC by district (2016/17, R millions)

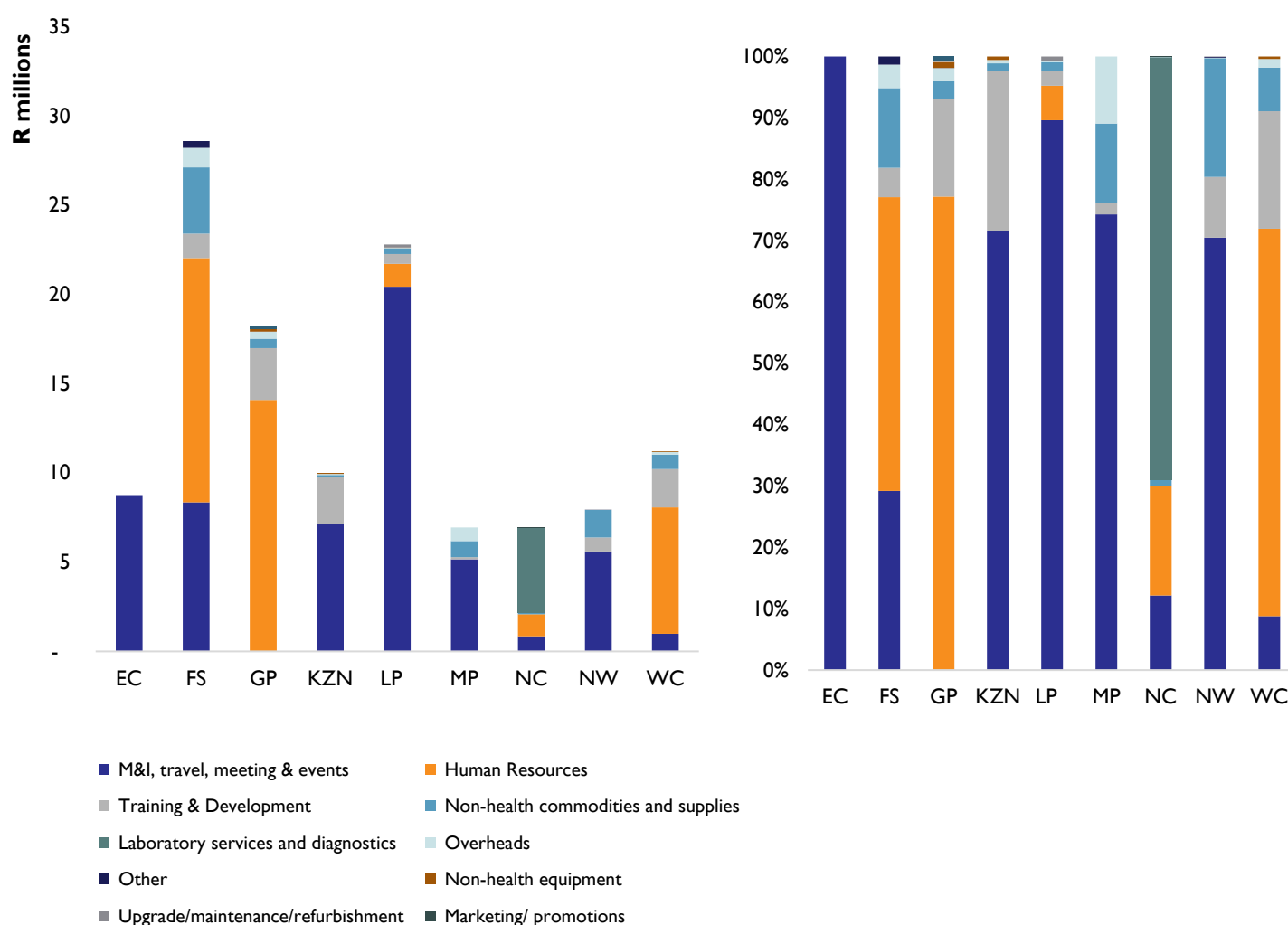


Whilst this lack of breakdown could be a labelling issue, it is also possible that in these provinces RTC spending indeed took place at the provincial level—major cost drivers were conferences and human resources, expenditures which were likely to have occurred at the PDOH level. LP and NW, however, reported district-level RTC spending.

### RTC spending by cost category

In 2016/17 the “conference rates, catering, travel and subsistence” category, representing the key inputs to training, was the biggest cost driver for RTC in most provinces (EC, KZN, LP, MP and NW). In FS, GP and WC, human resources formed the largest share of RTC spending and may have been payments made to contracted training organisations. NC was an exception—laboratory services and diagnostics (70%) drove RTC spending there, or this might have been incorrect labelling in BAS.

Figure 34: DOH RTC spending by cost category in absolute amounts (2016/17, R millions) (left) and proportionally (2016/17, %) (right) by province



### 3.3.7 Change in DOH spending through PEPFAR's reprioritisation

In 2016/17, PEPFAR implemented decisions made during the COP15 planning which included redirecting support to NDOH and PDOH services in the 27 highest-burden districts of South Africa<sup>24</sup>. To understand the financial implications of the reprioritisation, we looked at the change in spending between FY 2015/16 and 2016/17, for both DOH and PEPFAR in the 27 priority districts (Figure 35) and the remaining transition districts (Figure 36).

In the priority districts, there was an increase in both DOH and PEPFAR spending except in the districts of Harry Gwala (KZN) and Ehlanzeni (MP) where PEPFAR spending decreased slightly. In the remaining transition districts, where PEPFAR's spending increased or fell nominally, the DOH sustained its response through increased spending (Figure 36). In a handful of districts DOH spending decreased, although marginally: ZF Mgcawu, Namakawa and JT Gaetsewe (NC), Vhembe (LP) and Joe Gqabi (EC).

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<sup>24</sup> PEPFAR. 2017. South Africa Country Operational Plan 2017 (COP17) Strategic Direction Summary (SDS) <https://za.usembassy.gov/wp-content/uploads/sites/19/2017/03/SA-PEPFAR-COP-2017-Strategic-Directions-Summary-final-draft-16-March-2017-Public-Version.pdf>

Figure 35: Change in DOH and PEPFAR spending in PEPFAR priority districts between 2015/16 and 2016/17

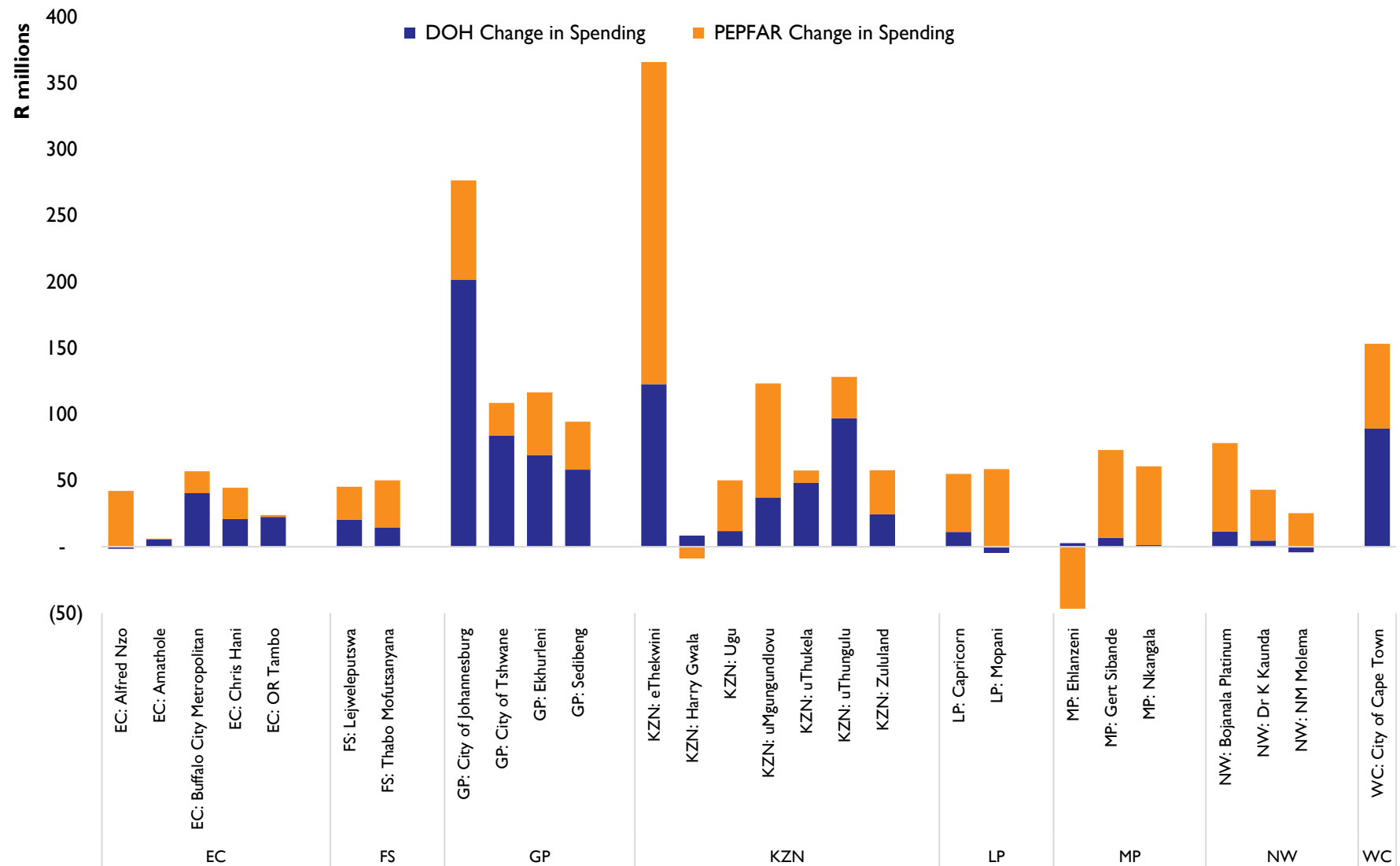
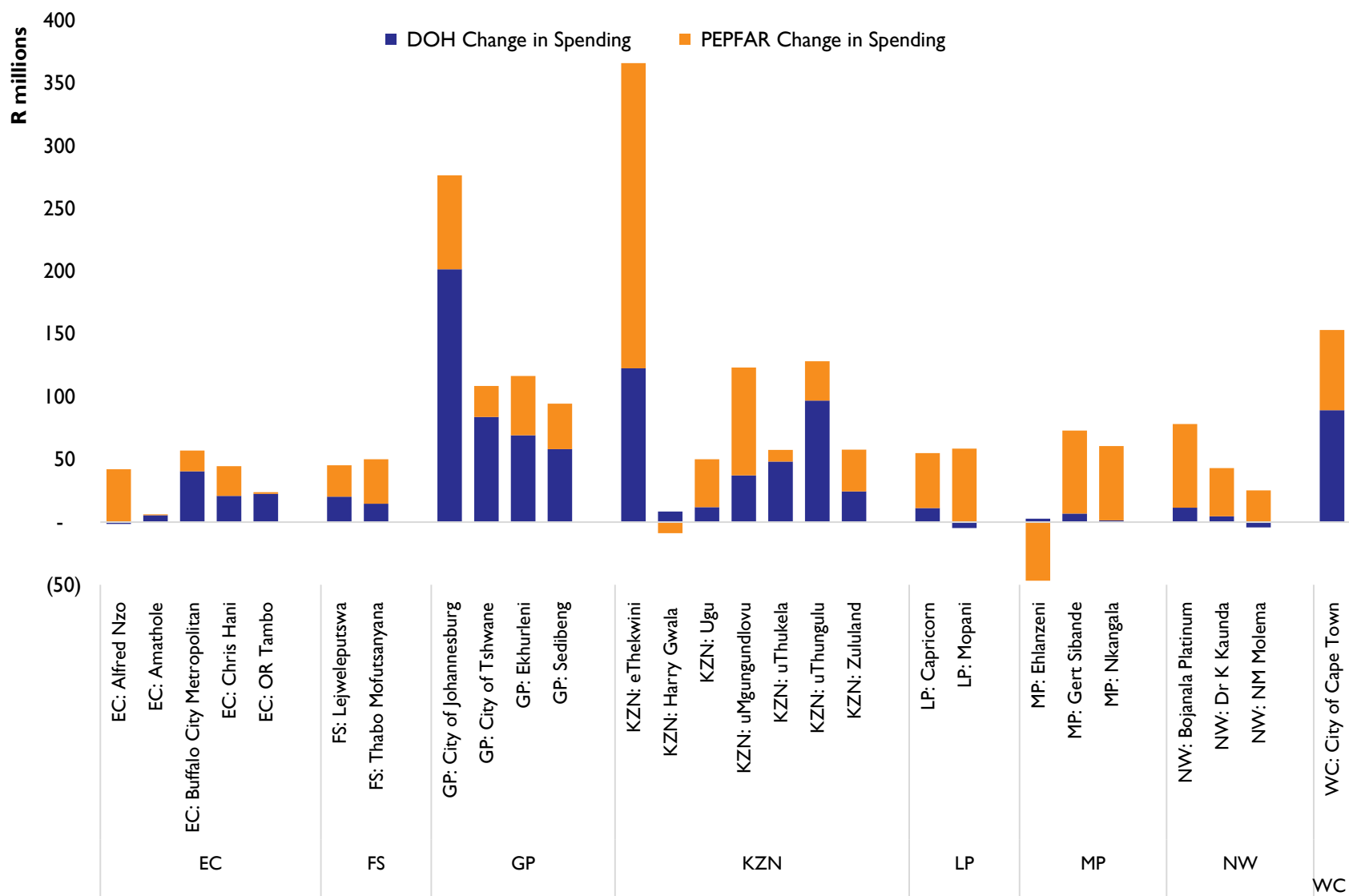


Figure 36: Change in DOH and PEPFAR spending in PEPFAR transition districts between 2015/16 and 2016/17



### 3.3.8 HIV spending by Department of Social Development

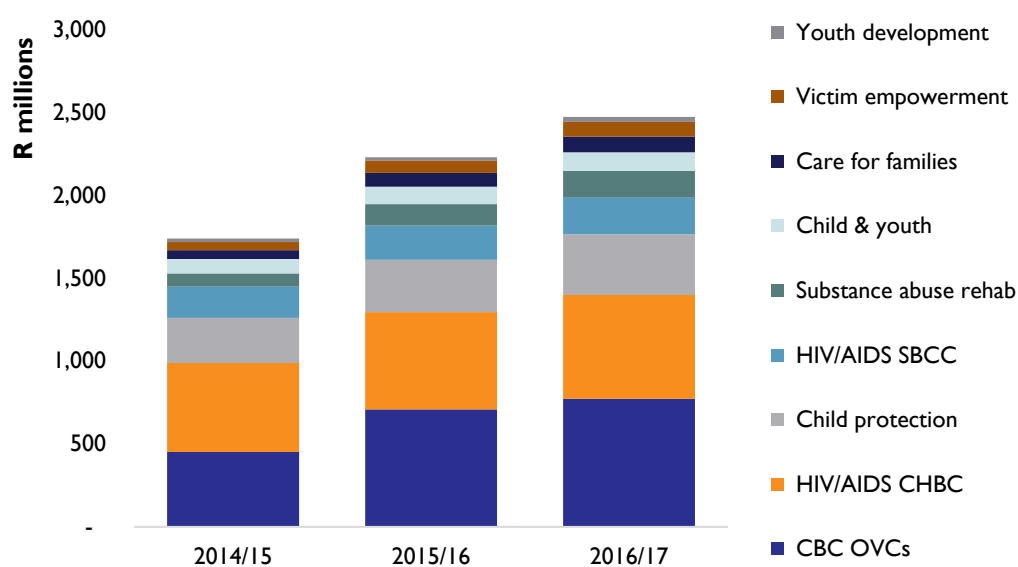
The DSD has an HIV sub-programme as well as other sub-programmes which contribute towards the prevention of HIV or mitigation of its impacts. Assumptions about the share of these programmes that apply to HIV are shown in Table 9. These are based on discussions with national-level DSD programme managers and new NSP priorities.

**Table 9: Proportional shares of DSD sub-programmes that were assumed to be HIV-related**

DSD Sub-Programme	% attributed to HIV	BAS crosswalked activity
HIV/ AIDS	100%	74% as CHBC 26% as SBCC
Community-based care services (CBS) for children	100%	Orphans and vulnerable children
Care and services to families	20%	Care and support
Victim empowerment	20%	Gender-based violence prevention/gender empowerment
Substance abuse, prevention and rehabilitation	20%	Substance abuse prevention
Child care and protection	20%	Orphans and vulnerable children
Child and youth care	10%	Youth
Youth development	10%	Youth

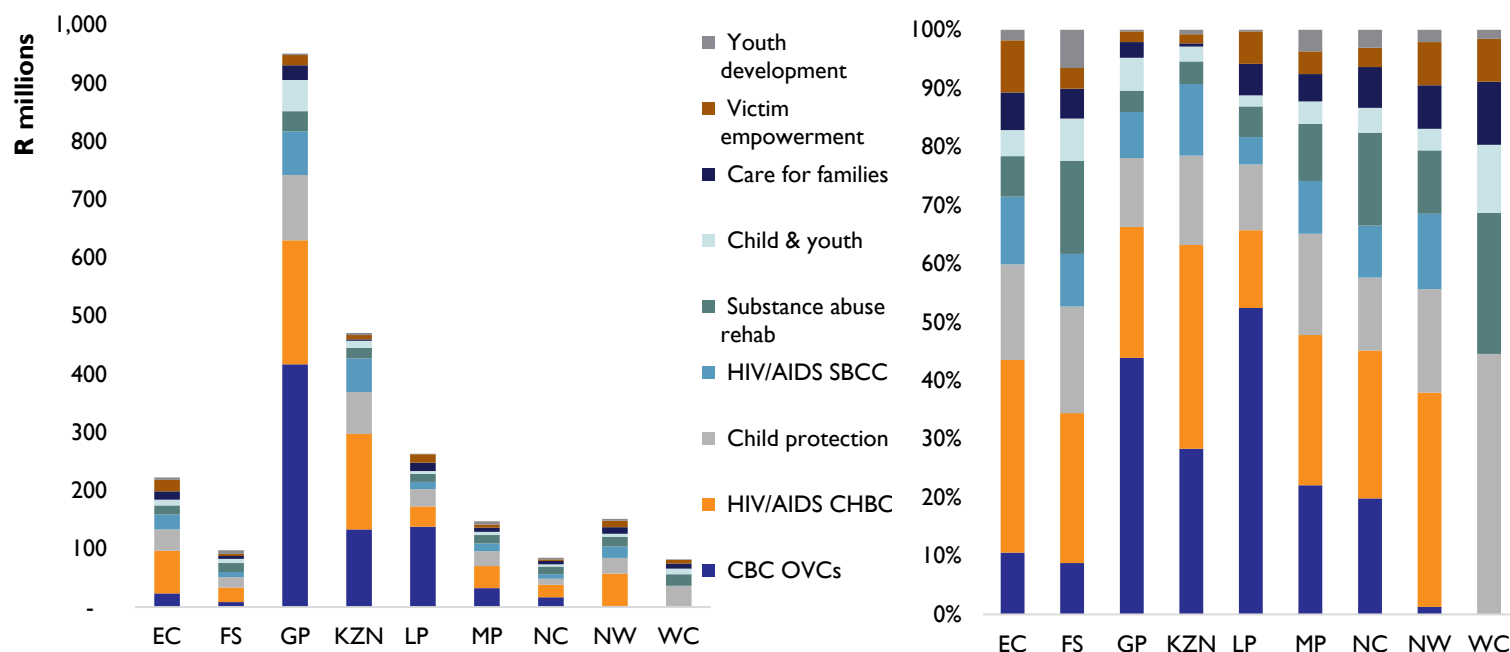
Applying these assumptions to the DSD's sub-programme spending, the total DSD HIV-related spending was found to have increased over the three-year period, from R1.7 million in 2014/15 to R2.2 million in 2015/16 and R2.5 million in 2016/17 (Figure 37).

**Figure 37: DSD HIV-related spending (2014/15–2016/17, R millions)**



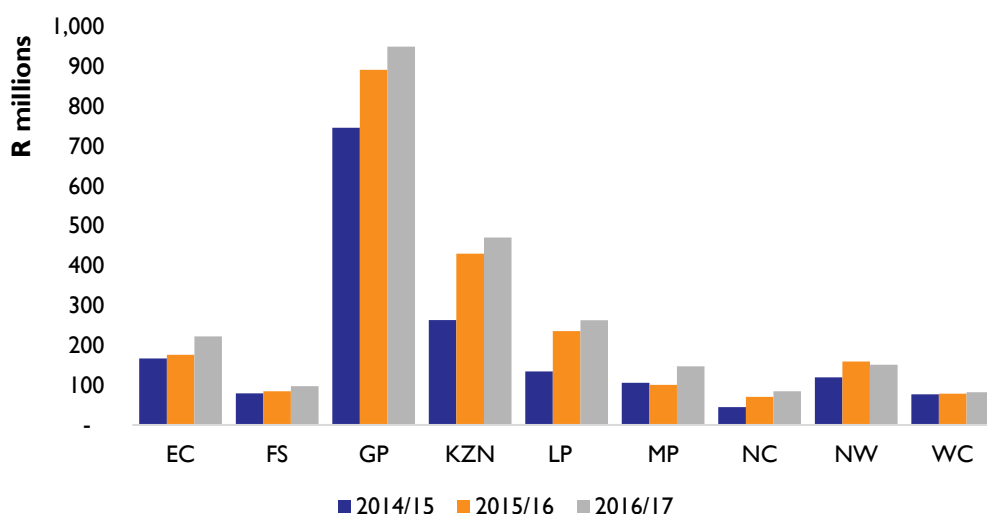
The assumptions in Table 9 were applied to the provincial DSD budgetary allocations and are shown in Figure 38. GP had the highest HIV-related spending and WC the lowest in 2016/17, where they also do not have an HIV-specific sub-programme. Since each provincial DSD has discretion to allocate their voted funding according to their perceived need, it is difficult to explain the provincial variation without detailed discussion with each province.

Figure 38: Provincial DSD HIV-related spending per sub-programme (2016/17, R millions) (left) and proportionally (2016/17, %) (right)



Provincial trends across the three-year period (Figure 39), showed that DSD's HIV-related spending increased across all provinces, except in MP which experienced a decrease between 2014/15 and 2015/16 and NW where spending fell between 2015/16 and 2016/17.

Figure 39: Trends in PDSD HIV-related spending (2014/15–2016/17, R millions)



### 3.3.9 HIV spending by Department of Basic Education

The DBE receives and spends an HIV CG for life skills that covers a range of activities, including a curriculum for young people in schools, training and development, as well as some C&S activities for vulnerable children. The BAS records did not provide the activity details of the grant expenditure; hence, assumptions were applied based on the CG Framework directions for the DBE for each year<sup>25</sup> (Table 10), to every provincial CG allocation. Therefore, variations between provincial interventions were not be measured.

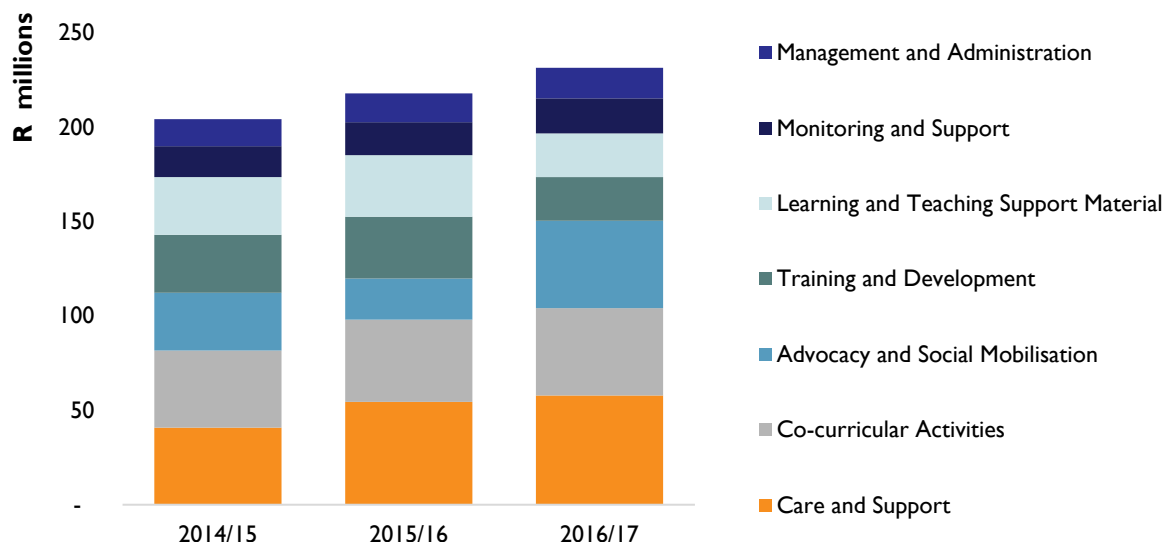
Table 10: DBE's HIV and AIDS Life Skills CG by key intervention (%)

DBE Programme Area	% of Life Skills Grant		
	2014/15	2015/16	2016/17
Training and Development	15%	15%	10%
Co-curricular Activities	20%	20%	20%
Care and Support	20%	25%	25%
Learning and Teaching Support Material	15%	15%	10%
Advocacy and Social Mobilisation	15%	10%	20%
Monitoring and Support	8%	8%	8%
Management and Administration	7%	7%	7%
Total	100%	100%	100%

Source: CG Framework (Life Skills CG): 2014, 2015, 2016.

The total DBE CG amounts increased over the three-year period, from R204 million in 2014/15 to R217 million in 2015/16 and R231 million in 2016/17 (Figure 40).

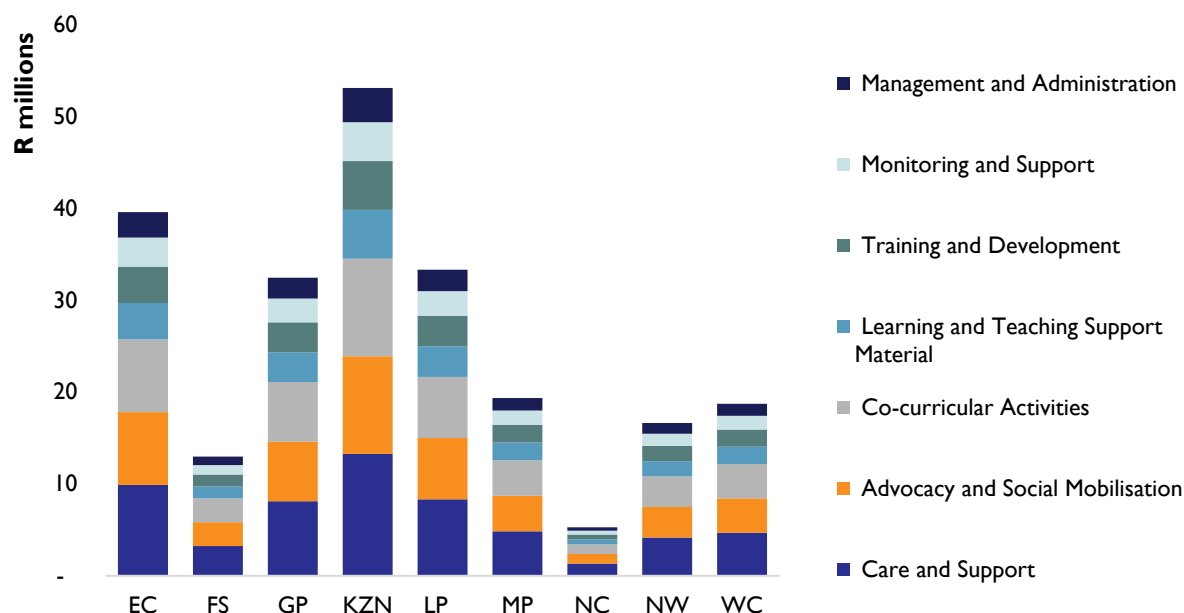
Figure 40: DBE HIV Life Skills CG (2014/15-2016/17, R millions)



<sup>25</sup> DBE's HIV/AIDS and Life Skills CG provides normative guidelines to the provinces around allocation of the funds across the programme areas, but ultimately each province decides how to allocate based on its priorities.

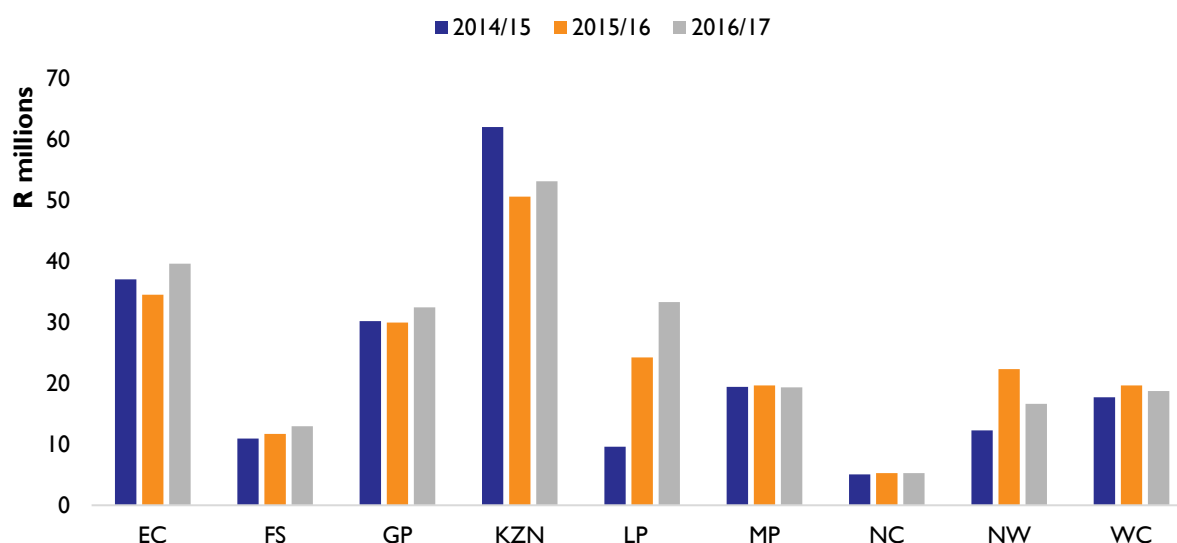
The split of the DBE CG between provinces is shown in Figure 41, indicating that KZN had the highest spending whilst NC had the lowest, commensurate with both their population size and their HIV prevalence rates.

Figure 41: PDBE HIV Life Skills CG spending by intervention (2016/17, R millions)



Across the three years, spending dramatically increased in LP and consistently increased in FS, but remained stagnant in MP, WC and NC, and fluctuated in the other provinces (Figure 42).

Figure 42: Trends in PDBE HIV Life Skills CG spending (2014/15–2016/17, R millions)



### 3.4 Expenditure on TB in South Africa

South Africa ranks sixth amongst 30 high-burden TB countries in terms of absolute number of cases and highest TB incidence, with an estimated incidence of 834 cases per 100 000 population<sup>26</sup>. HIV-TB co-infection poses an added burden, with 57% of TB patients (new and relapsed) in 2015 being HIV positive (of those with known HIV status). In addition, an estimated 2.1% and 4.6% of new and retreatment cases, respectively, were infected with multi-drug-resistant TB (MDR-TB)<sup>27</sup>, and South Africa faces a high burden of extensively drug-resistant TB (XDR-TB), low treatment success and high rates of loss to follow-up<sup>28</sup>. The National TB Programme Strategic Plan outlines the gains and challenges that the country has made and continues to face (Box 1).

#### **Box 1.** **Key TB gains and challenges**

“South Africa has made considerable gains in its control of TB. The South African government has many of the key elements of a successful TB control programme in place, including significant resource allocation, rapid technology introduction, valuable research outputs, a strong policy environment and bold political support. South Africa has invested substantially in its TB programme, demonstrated by its allocation of one of the highest proportions of domestic funding in developing countries. As a result, South Africa is heading towards an 85% treatment success rate for drug-sensitive TB (DS-TB). The country is a leader in scaling up Xpert MTB/RIF as the first test for TB, implementing preventive therapy for people living with HIV – South Africa is the country in which the highest proportion of people living with HIV (PLWHIV) are receiving TB preventive treatment – and using new drugs to treat DR-TB”.

Source: NDOH National TB Programme Strategic Plan: 2017-2021.

With the increasing allocations to, and expenditure on TB, we see the continuing commitment of the SAG to allocate resources to the TB response and to improve the monitoring of their use and impact. This analysis (for 2014/15 to 2016/17) found improved labelling of TB spending in the BAS records compared to the analysis done for 2011/12 to 2013/14<sup>29</sup>, which was forced to estimate the spending on TB outpatient treatment because of poor BAS labelling. This improvement is particularly important with the expansion of the DOH HIV conditional grant to include TB interventions, now known as the DOH Comprehensive HIV and TB CG.

<sup>26</sup> National Department of Health. 2017. South African National Tuberculosis Programme (NTP) Strategic Plan: 2017-2021. Draft Document.

<sup>27</sup> National Institute for Communicable Diseases. 2016. South Africa Tuberculosis Drug Resistance Survey 2012-14.

<sup>28</sup> World Health Organisation. 2016. Global TB Report 2016.

<sup>29</sup> Guthrie, T. et al. 2015. Consolidated spending on HIV and TB in South Africa (2011/12-2013/14). Results for Development.

Section 3.4.1 presents the findings of our expenditure tracking on TB for the period 2014/15–2016/17 where, as mentioned earlier, we did not use estimations of the outpatient TB treatment as done previously but relied only on the BAS coded spending. This explains the seemingly declining spending on TB between 2013/14 (previous report) and 2014/15 (presented below), which is probably due to some combination of over-estimation in the previous period and under-representation in the current period, rather than an actual reduction.

For example, the NW PDOH did not have any TB spending labelled in their BAS records, not even under TB hospitals, but they did have 16,762 TB patients in 2016/17. In the previous report, we estimated their spending by applying a unit cost to their number of patients. Here this was not done, so only BAS TB-coded expenditure is reported. We hope in future iterations that the coding of TB expenditure in the BAS financial records, especially the outpatient treatment in clinics, will improve across the provinces.

### 3.4.1 Total TB spending over the three years by source and by geographic location

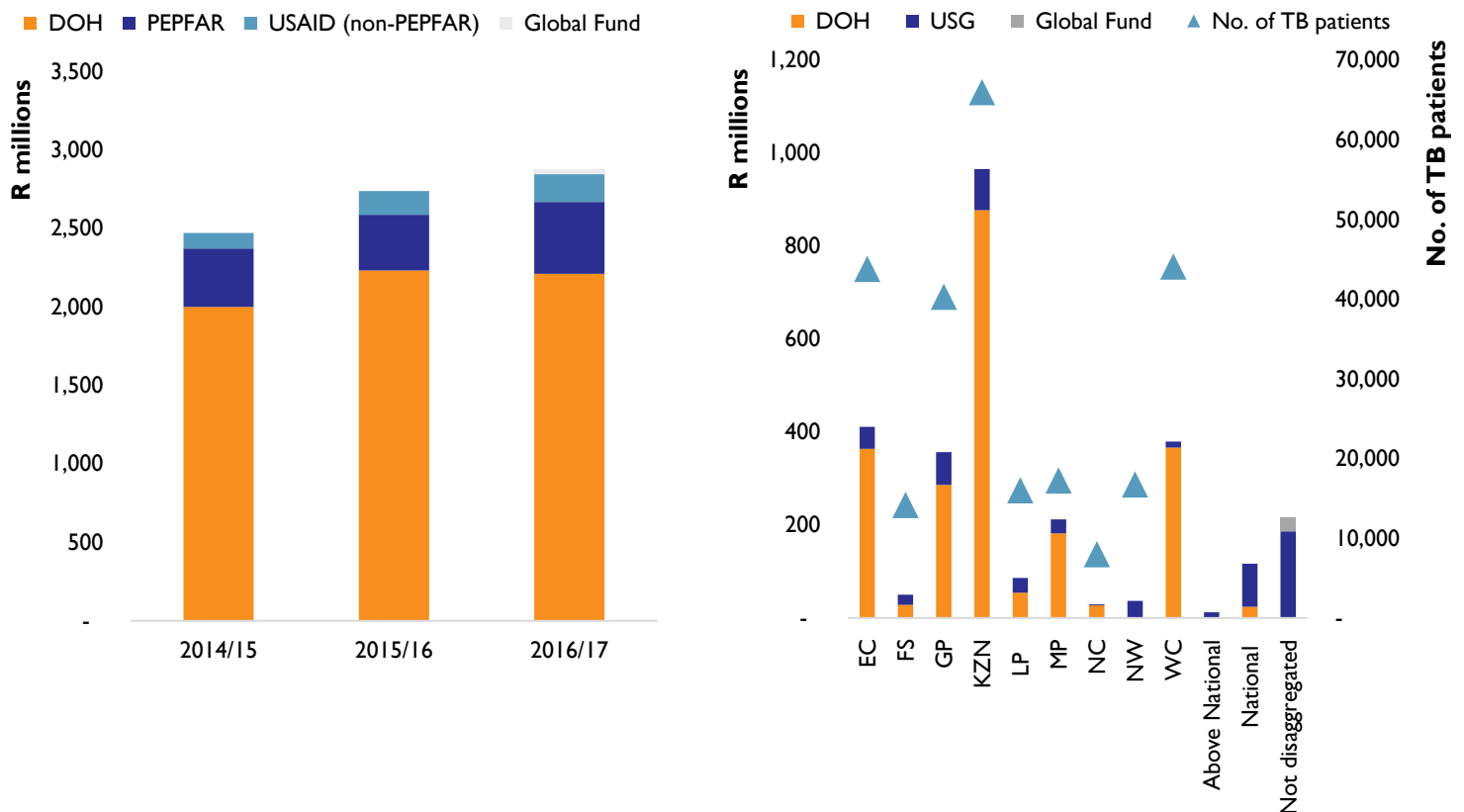
The total reported spending on TB increased by 16% between 2014/15 and 2016/17, from R 2.47 billion to R 2.87 billion. In 2016/17 the largest portion (77%) came from the DOH public voted and some CG budget. This was followed by the PEPFAR contributions at 16%, which assumed that 25% of the PEPFAR facility-based care, treatment and support (FBCTS) spending went towards TB/HIV, (as suggested by their programme managers). The additional USAID TB funding, not via the PEPFAR mechanism, formed an important 6%. We suggest that PEPFAR and USAID improve the labelling of the spending on their TB activities for greater accuracy and detail.

Table 11: Sources of funding for TB in South Africa (2014/15–2016/17, R)

Source of Funding	2014/15	2015/16	2016/17	% in 2016/17
SAG (via DOH)	2,000,290,066	2,232,045,814	2,211,493,732	77%
PEPFAR	371,744,170	355,306,384	457,127,297	16%
USAID (non-PEPFAR)	98,748,000	151,440,000	176,520,000	6%
Global Fund	-	-	29,528,376	1%
Total TB funding	2,470,782,236	2,738,792,198	2,874,669,405	100%

Regarding the Global Fund contribution, in 2014/15 and 2015/16 (the last two years of the previous Global Fund grant), there were no TB-specific interventions, but there were many TB/HIV activities captured under the HIV disease area (explained in section 2.4). In the new Global Fund grant, there are specific TB interventions, although the spending in the first year (2016/17) was low, only 1% of total TB spending. The Global Fund spending could not be disaggregated by geography, as shown in Figure 43, and the other sources varied greatly across the provinces, possibly related to their numbers of TB patients. However, the variation in the quality of capturing TB spending across the provincial DOHs also affects the analysis and its interpretation.

Figure 43: TB spending by funder (2014/15–2016/17, R millions) (left) and by province with number of TB patients (2016/17, R millions) (right)



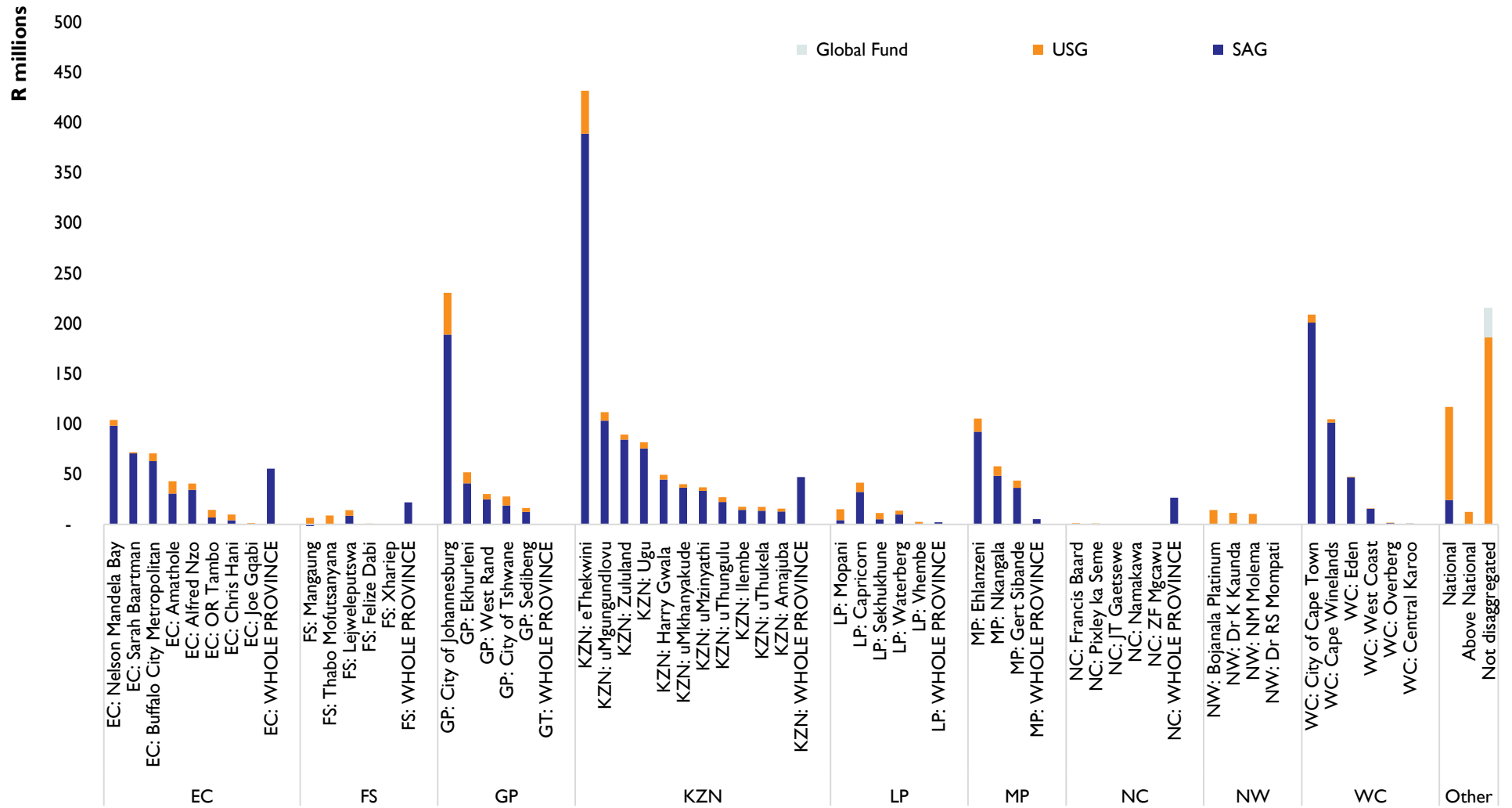
Notes: Number of patients includes both drug-sensitive and MDR TB cases. TB-related Global Fund spending in 2014/15 and 2015/16 is classified as TB/HIV integrative spending within the HIV totals. The NW PDOH did not label its TB spending as TB or MDR in any of the BAS variables. Refer to Annex 46 for TB case numbers from the NDOH.

KZN's spending on TB in 2016/17 was more than double the next highest spender, EC, followed closely by WC and GP. However, the number of TB patients in KZN was not double the numbers in the other provinces, which implies that either KZN was spending more per patient, or that it more consistently captured its TB-related spending than did other provinces, making comparisons and efficiency conclusions difficult. In addition, the burden of drug-resistant TB (DR-TB) is not the same in each province, and this affects the average cost per patient per annum, since MDR/XDR-TB treatment costs around 20 times as much as drug-sensitive TB (DS-TB) treatment (per patient month of treatment)<sup>30</sup>. The spending per patient analysis presented in section 3.4.4 shows interesting provincial variations.

Figure 44 indicates the spread of TB spending across districts, reflecting the burden of disease in the metros, with eThekweni (KZN) with the greatest spending, followed by the City of Johannesburg (GP), Cape Town (WC), Nelson Mandela (EC) and Ehlalzeneni (MP). The USAID TB spending outside of the PEPFAR mechanism could not be disaggregated by geography, whilst most of the PEPFAR TB funding was disaggregated. The latter appears to also have been targeting the metros with the highest burden, and with a significant portion at the national level, for management and technical support interventions.

<sup>30</sup> According to the costing done by the TB Think Tank for the NTP, 2017.

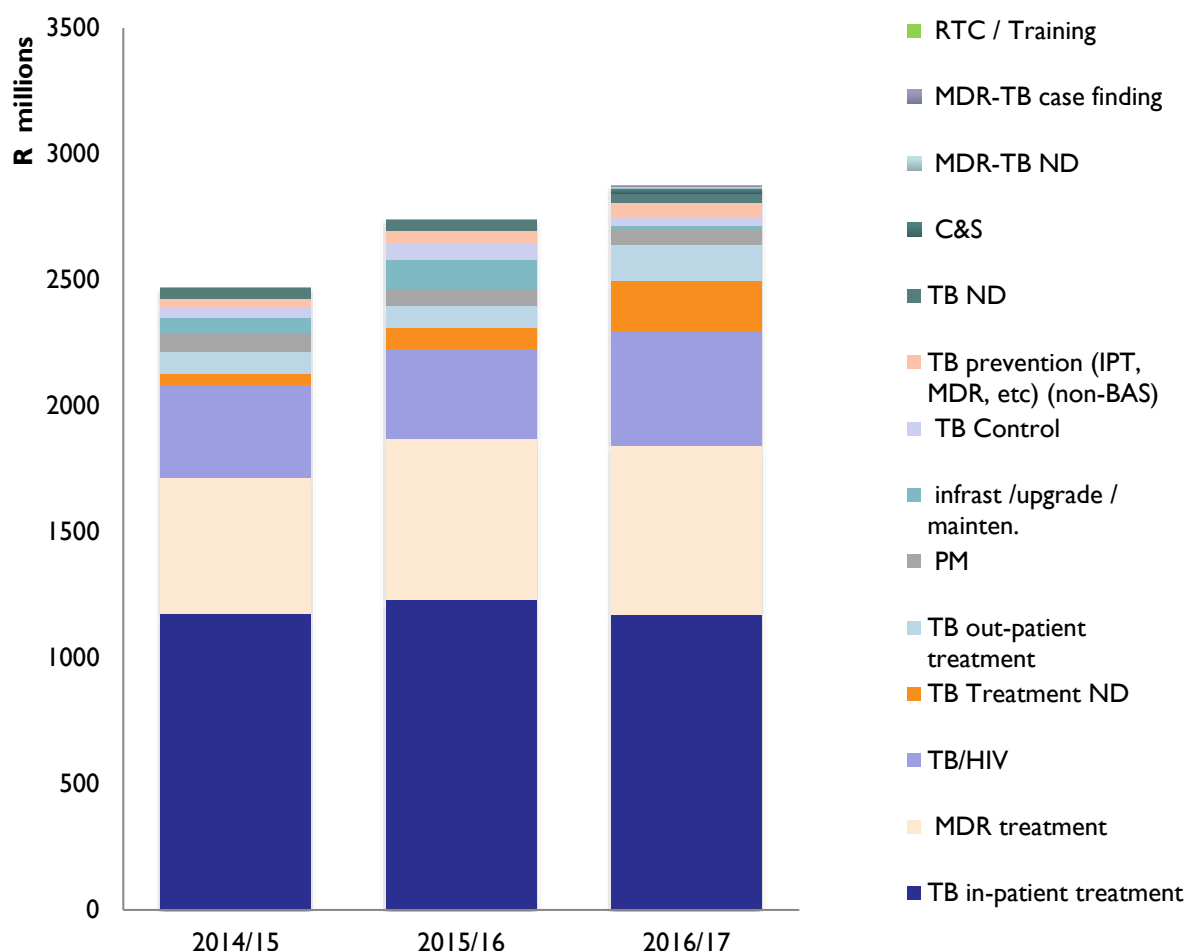
Figure 44: TB spending across the districts, by source of funding (2016/17, R millions)



### 3.4.2 TB spending by intervention

The bulk of the TB spending in South Africa is via the DOH and focused mostly on DS-TB and DR-TB treatment<sup>31</sup>, whilst the prevention efforts were funded mostly by PEPFAR, and MDR-TB case finding and C&S mostly by the Global Fund. The largest portion of DOH spending was captured under hospitals in the BAS records, and hence labelled as 'TB inpatient treatment' (Figure 45). However, based on discussions with the NDOH, these included the medicines for outpatients at the clinics in the hospitals' service areas and hence would have included some outpatient TB treatment as well. Note that the DOH TB/HIV integration efforts, including TB/HIV testing, were captured under HIV disease, presented in section 3.3.1 and not here.

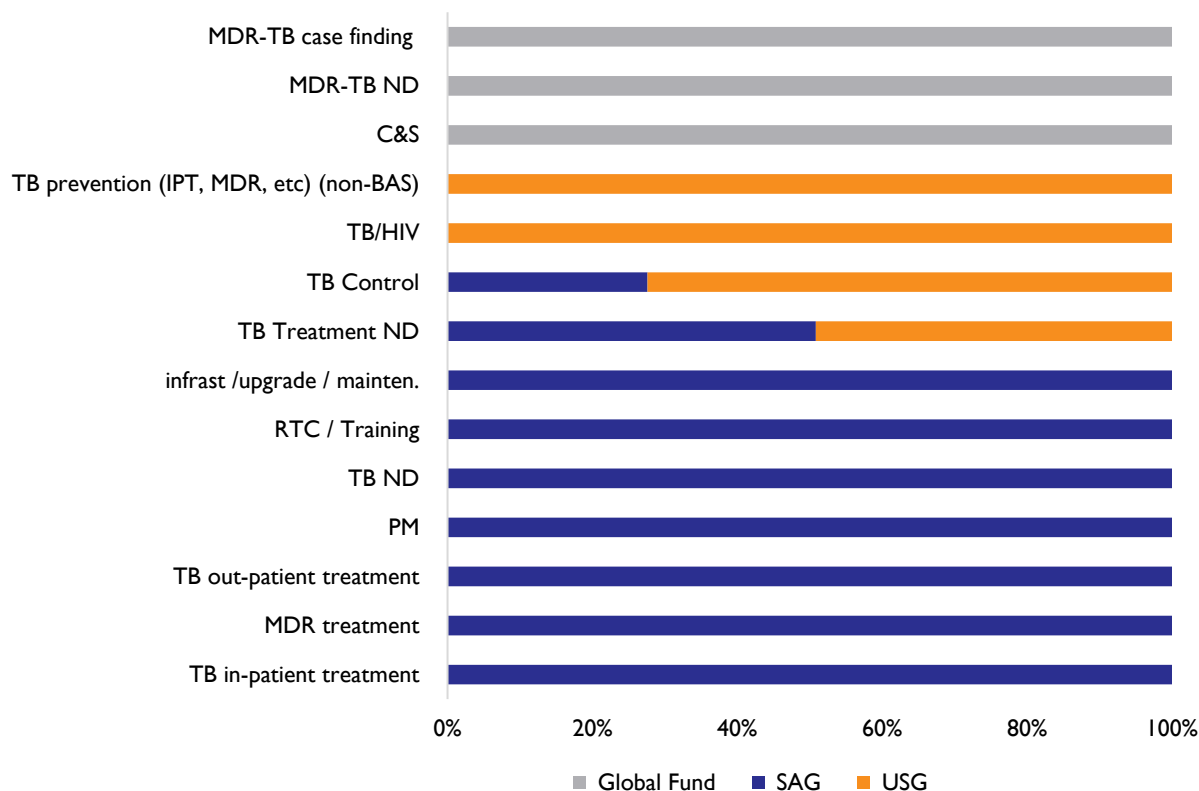
Figure 45: Total DOH TB spending by intervention (2014/15-2016/17, R millions)



<sup>31</sup> DS-TB is a form of TB in which the bacteria and thus the patient does not respond to the first line of medication whereas DR-TB is when the bacteria becomes resistant to the drugs used to treat TB.  
<https://www.cdc.gov/tb/topic/drtb/default.htm>

The USG funding for TB/HIV interventions was captured under the TB disease category because it pays for activities related to TB case finding, awareness raising and prevention, and some treatment interventions. However, these treatment interventions were not for medication or direct treatment delivery but rather for technical support efforts, according to the USAID TB programme manager. The SAG funded most of the DS- and DR-TB treatment, but with limited spending labelled as TB prevention, apart from 'TB control,' which may have related to infection control in facilities. The DOH personnel at health facilities would have also spent time on TB screening and case finding, but these salary costs would probably not have been labelled as TB-specific, hence under-estimating the public spending on prevention, case finding, screening and diagnosis.

Figure 46: Proportional TB intervention spending by source of funding (2016/17, %)



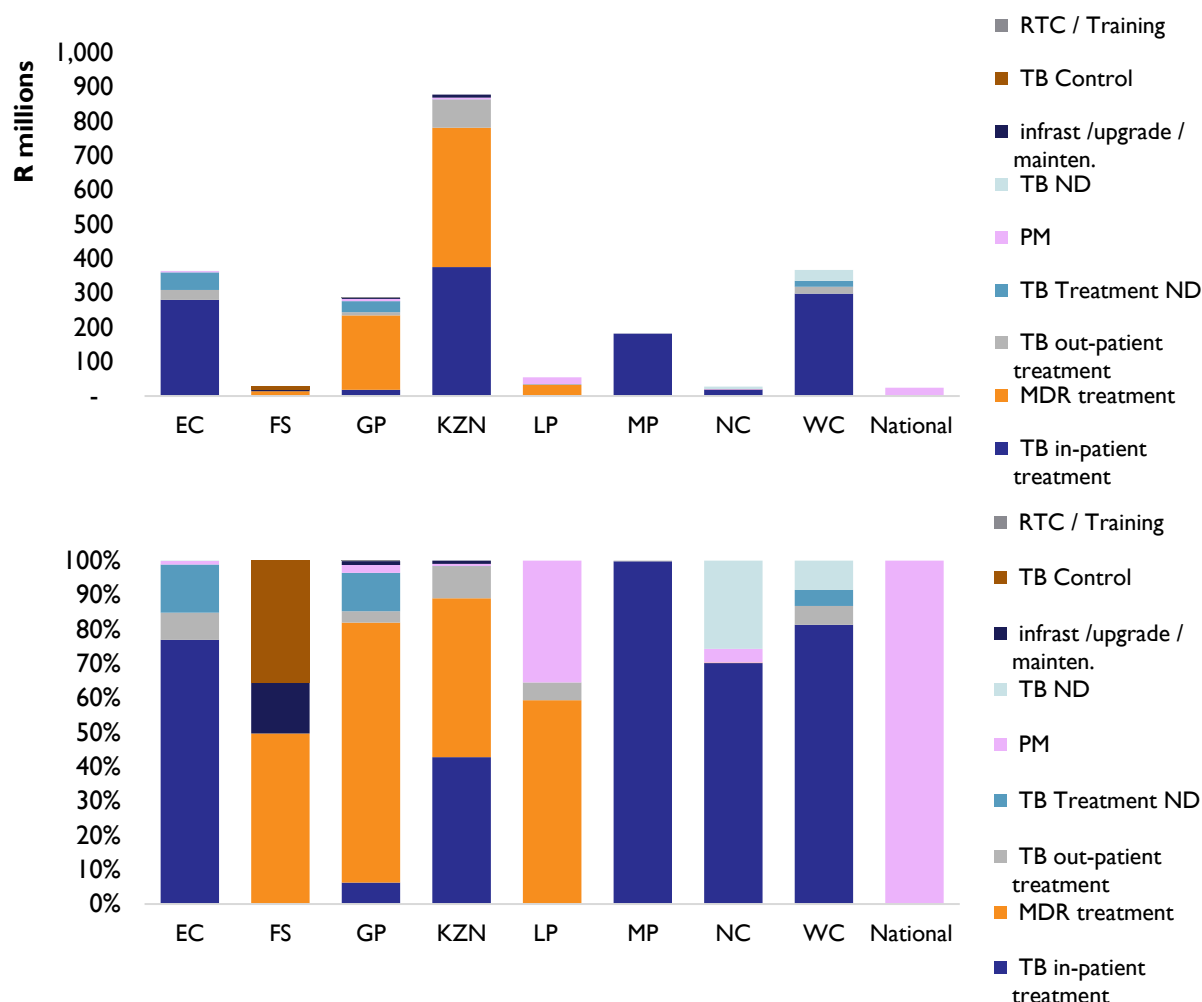
### 3.4.3 DOH spending on TB

Analysis of DOH spending on TB by intervention (Figure 47) found that KZN and GP reported a large amount spent on MDR, as was coded in their BAS records. There were also significant amounts labelled to TB hospitals, labelled as 'TB inpatient treatment'. However, as explained above, this spending probably included some costs of outpatient DS-TB medication in clinics whose cost centre was the closest hospital. This makes it difficult to distinguish the correct spending on outpatient from the inpatient spending in the BAS records.

This issue appeared to be especially prominent in the recorded spending for EC, MP and WC. The not-disaggregated amounts (TB ND and TB treatment ND) may also have included outpatient treatment spending. Therefore, it is likely that this analysis of BAS has *under-estimated the outpatient and over-estimated the inpatient spending on TB*. This is supported by the DOH unit of spending on DS-TB (R1,390 per patient per year) being lower than the anticipated cost (R1,787 per patient per year), while the

DOH DR-TB unit of spend (R151,578 average annual per patient) was higher than expected annual average cost (R119,782)<sup>32</sup>. These units of spending exclude spending infrastructural and TB control.

Figure 47: Spending on TB interventions by PDOHs and NDOH in absolute amounts (2016/17, R millions) (top) and proportional amounts (2016/17, %) (bottom)



Note: NW PDOH did not label its TB spending as TB or MDR in any of the BAS variables not shown in this figure.

Although the aggregate TB spending in FS and LP was very low, more than half of it was labelled as 'MDR-treatment', with FS spending around 10% on infrastructural development, and the remaining 35% on TB control. The rest of LP's TB spending (40%) was labelled as programme management. As would be expected, all TB spending at the national level was for programme management, but nominally it was only a small amount. Surprisingly, NW province had no labelled TB spending in its DOH BAS records, despite having 16,762 TB patients in 2016/17 according to the NDOH TB register (data provided by NDOH). This should not be interpreted as NW having no spending on TB, but rather that it was embedded in the province's health budget (either primary or in hospitals), and not labelled as TB in BAS.

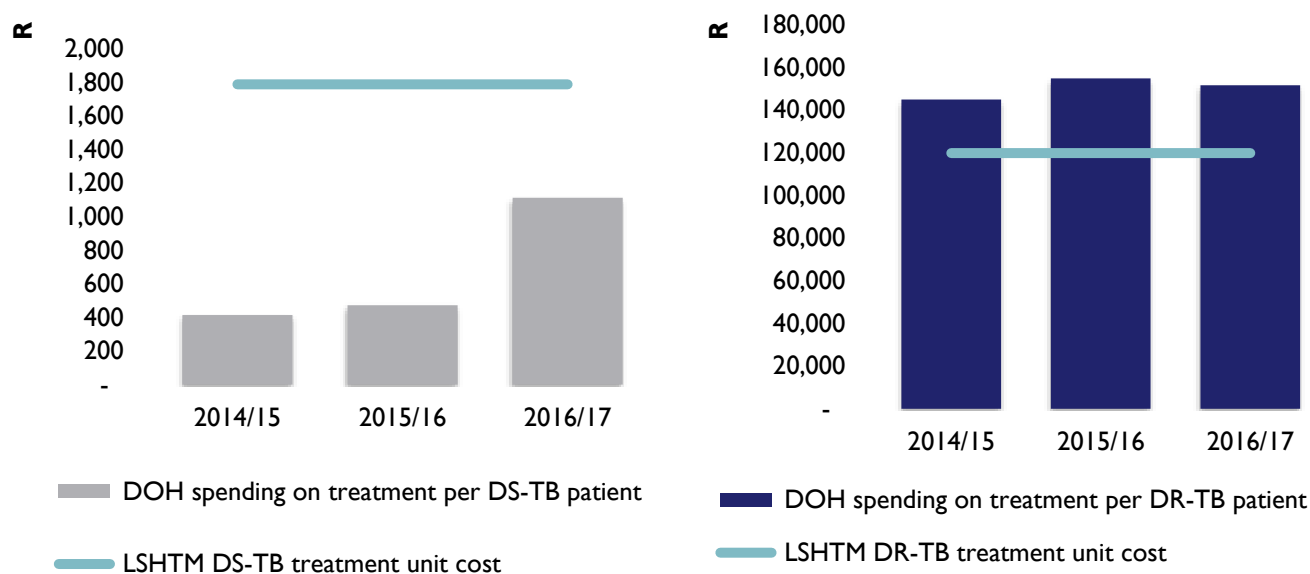
<sup>32</sup> TB Think Tank, Department of Health, London School of Hygiene and Tropical Medicine. 2017. Costing of the South African National TB Plan 2017-2021. Pretoria, South Africa.

### 3.4.4 PDOH TB spending per TB patient

Because of the range in the provinces' completeness of captured TB spending in the BAS records, the provincial spending per TB patient shows wide variation, which therefore should not be assumed to reflect in-/efficiencies. As noted above, NW province had no TB spending labelled in its DOH BAS records, whilst KZN appeared to more consistently and thoroughly capture its TB spending. In addition, EC and WC did not label any spending as MDR-TB yet they had a significant number of MDR-TB patients. For WC, this may have been due to the progress that the WC DOH has made in decentralising their MDR treatment. At the same time, FS labelled all its TB spending as MDR, yet it had a significant number of DS-TB patients.

In addition, because some outpatient spending was probably labelled to the hospital (shown as in-patient spending in section 3.4.3), it is difficult to accurately estimate units of expenditure per DS- and DR-TB patient. With these data limitations in mind, Figure 48 compares our calculated average annual units of expenditure with unit costs estimated for the NTP.

Figure 48: DOH annual unit of spending per DS- and DR-TB patient compared to estimated unit cost (2014/15–2016/17, R)



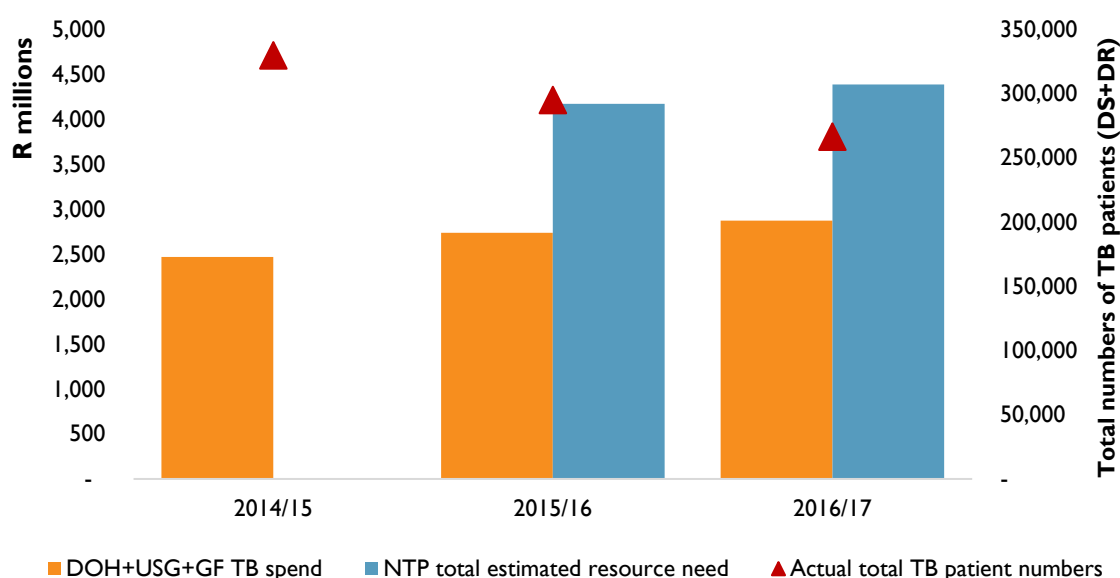
Notes: NW PDOH did not label any spending as TB related in any of the BAS variables. NC, FS and LP under-coded what should have been identifiable TB expenditures, while in all provinces a share of TB spending was embedded in PHC and therefore not identifiable as TB related. These embedded costs might be reflected in the difference between the units of spending and the estimated unit costs.

### 3.4.5 TB spending versus National TB Programme Strategic Plan cost estimates

Combining TB spending from the DOH, USG (both PEPFAR and USAID) and Global Fund provides the total amount spent on all TB-related activities, as described in section 3.4.1. To ascertain if this total spending was adequate, Figure 49 compares the actual spending with the estimated cost of the TB response in 2015 and 2016, as modelled by the TB Think Tank for the two years prior to the new National TB Plan (NTP). Even with the additional donor funding, there appeared to have been a funding gap in these two years.

However, this gap may not have been felt for the treatment of diagnosed patients but rather for the broader range of activities included and costed in the NTP. For example, the NTP included expanded efforts to enhance case finding, contact tracing and reducing loss to follow-up, as well as isoniazid preventive therapy (IPT, prior to the move towards 3HP<sup>33</sup>). These activities were not captured under the BAS TB activities, and some of the TB/HIV integrated activities may have been captured under HIV in section 3.3.1.

Figure 49: TB spending compared to the estimated resources needed for the NTP (2014/15–2016/17, R millions)



Note: TB patient numbers pertain to calendar years 2014, 2015, and 2016.

Figure 49 should be interpreted with caution because, as explained above, the capturing of the TB outpatient spending was not well coded in BAS, with some (of unknown scale) not having been captured at all because it was embedded in the DOH health care spending (district and hospital costs), such as in NW. In addition, TB medication may not have been consistently labelled as 'anti-TB meds' in the cost category classification. These are aspects of the financial capturing that occur at district and provincial levels that should be improved to enhance future monitoring of TB spending.

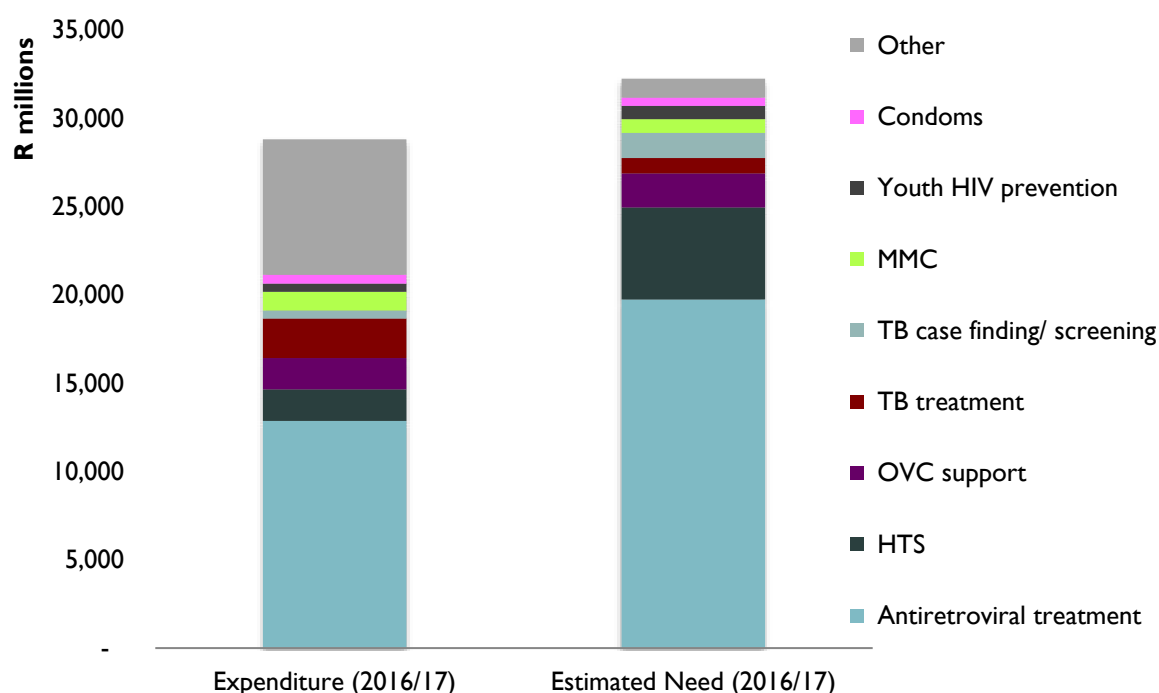
<sup>33</sup> Weekly rifapentine/isoniazid for 3 months.

### 3.5 Comparison of HIV and TB spending with the National Strategic Plan (NSP) cost estimates

To ascertain if our HIV and TB spending has been in line with our policy priorities and was allocatively efficient, we first compared expenditure estimates for 2016/17 with the resource needs estimates for the previous National Strategic Plan for HIV, STIs and TB (2012-2016)<sup>34</sup> or old NSP.

It was found that in 2016/17 the spending was more or less in line with those estimates, except for two major variances: 1) the spending on ART was far below the estimated costs (34% less) which we suspect was due to the higher costs of ARVs at the time of costing the old NSP, and 2) the spending on TB treatment was greater than estimated (2.5 fold more) which we suspect was due to the fact that MDR-TB treatment was not included in the old NSP and the numbers of DS-TB patients might also have been underestimated at the time. Overall, the spending appeared to be about 11% less than the estimated need, mostly driven by the lower-than-expected ART spending.

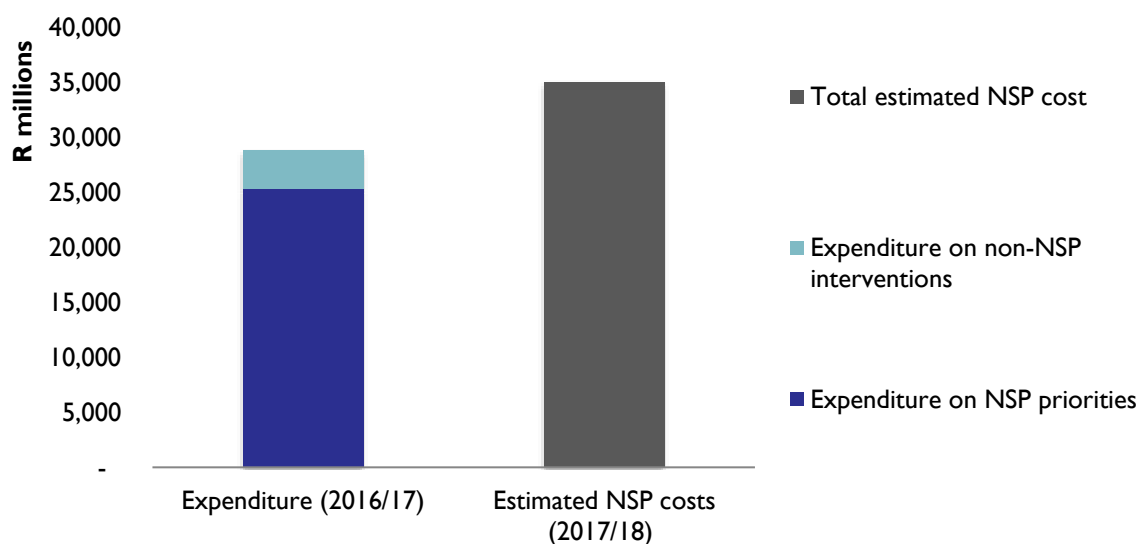
Figure 50: Comparison of the HIV and TB spending in 2016/17 with the cost estimates of the previous NSP (2012/13–2016/17, R millions)



Secondly, we compared the spending in 2016/17 with the cost estimates for 2017 found in the new NSP (for 2017–2022), and found that the spending would need to increase by an overall 22% to meet the resources needed in 2017. About 12% of spending in 2016/17 was on interventions not specifically prioritised in the new NSP, which may have been due to the new focus of the new policy document.

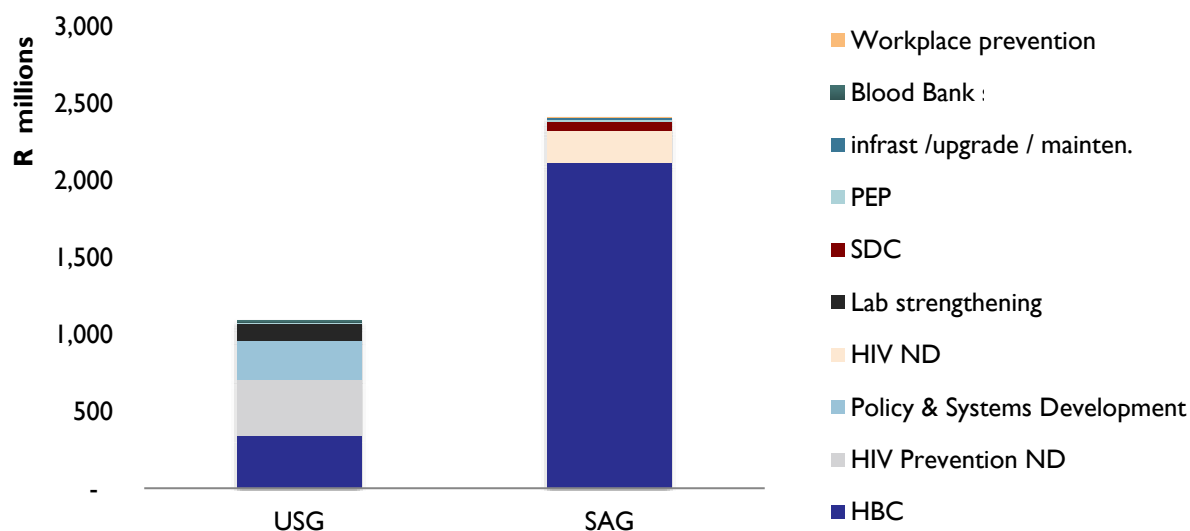
<sup>34</sup> SANAC, 2011. National Strategic Plan for HIV, TB and STI's 2012-2016.

Figure 51: Actual HIV and TB expenditure (2016/17, R billions) and the NSP estimated costs (2017/18, R millions)



Taking a closer look at the 12% which went to non-NSP priorities, Figure 52 indicates that most of these funds were domestic (SAG) and were for HBC with a small amount for step-down-care (SDC). The USG funding was also for some HBC, as well as laboratory strengthening, policy and systems strengthening and some prevention spending which could not be disaggregated and so may well have been for NSP priorities.

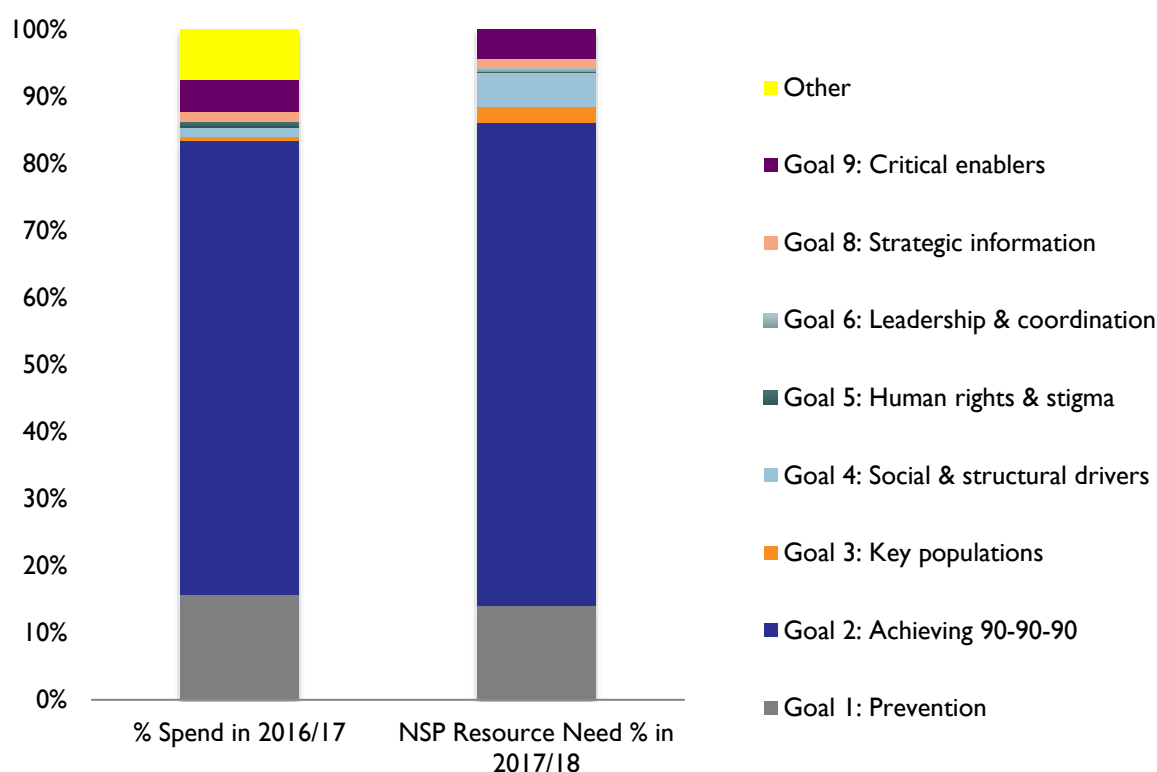
Figure 52: Expenditure not directed towards NSP priorities (2016/17, R millions)



Note: SDC is gradually being phased out of the DOH CG.

Examining the proportional spending per NSP goal, the proportional allocations in 2016/17 were in line with those anticipated for 2017/18, showing that South Africa is on the right path in terms of allocating according to the new NSP priorities. The largest variance was for Goal 2 (treatment oriented), which had proportionally less spending than costed (68% versus 72%), but this was probably due to the anticipated scale-up of treatment coverage in 2017/18 to reach the 90-90-90 targets which would require additional resources (and were planned for in the NDOH CG for 2017/18). The spending on Goal 3 (key population interventions) was proportionally less (1% versus 2%) and for structural drivers (Goal 4) was only 1% versus 5%. However, the latter may have been because our expenditure tracking probably missed structural drivers' spending that was not specifically labelled for HIV or TB, such as strengthening data systems and economic empowerment efforts. However, the spending on the critical enablers (Goal 9) was slightly higher proportionally (5% versus 4%) than the cost estimates anticipated.

Figure 53: Proportional spending by NSP goal versus NSP prioritisation (2016/17–2017/18, %)



Note: the NSP does not include resource needs estimates for Goal 7: Mobilise resources and maximise efficiencies to support the achievement of NSP Goals and ensure a sustainable response.

## 4. SUMMARY AND CONCLUSIONS

The SAG and its development partners have indeed mounted a formidable response to the world's largest HIV epidemic and the persistent burden of TB. To effectively plan and steward the health system, the SAG routinely monitors the performance of the response to HIV and TB, including in relation to expenditure. Analysis of spending, including trends in sources, levels, geographic and programmatic distribution, and cost drivers can help policymakers assess whether resources are reaching priority populations and interventions, identify potential opportunities to improve allocative and technical efficiency, and stimulate more productive dialogue at multiple levels of the system.

This review of HIV and TB expenditure in South Africa is an input to policy, planning and management processes within and amongst spheres of government and between government and development partners. The data have been especially useful to national and provincial programme managers as they perform their oversight functions, leading to improved spending of available resources. With 53 annexes, it also serves as an authoritative reference document detailing levels and trends in HIV and TB spending by the three main funders of the disease responses: the SAG, the USG primarily via PEPFAR and the Global Fund. The findings have informed South Africa's report to the UNAIDS Global AIDS Monitor, as well as the new funding request to the Global Fund.

Through an important process of capacity building and technical support provided by Results for Development (R4D), via USAID's Health Finance and Governance Project (HFG), a consortium produced this analysis, including officials from the NDOH and researchers from the Centre for Economic Governance and Accountability in Africa (CEGAA)<sup>35</sup>, Health Economics and Epidemiology Research Office (HE<sup>2</sup>RO)<sup>36</sup>, led by R4D<sup>37</sup>. Other agencies provided essential data or funding (or both), including the DBE and DSD, USAID and the Global Fund.

The consortium sought not only to update available analysis but also to institutionalise capacity within the government as well as South African research organisations to compile, analyse and interpret available expenditure data and use it in relevant forums. Accordingly, the research process included a series of collaborative training workshops, inclusive consultations with key stakeholders, and concurrent development, led by HE<sup>2</sup>RO, of an Excel-based tool that can search, summarise and code HIV- and TB-related transactions in the SAG's public BAS.

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<sup>35</sup> <http://www.cegaa.org/>

<sup>36</sup> <http://www.heroza.org/>

<sup>37</sup> <http://www.r4d.org/>

This review builds on previous analyses of HIV and TB spending, most recently those conducted as inputs to South Africa's HIV and TB Investment Case<sup>38,39</sup> which covered FYs 2011/12 through 2013/14.

This iteration of analysis has answered the following questions:

1. How much was spent on HIV and TB by the three main funders (SAG, USG and Global Fund) during FYs 2014/15 through 2016/17?
2. How was spending distributed across geographies and interventions?
3. Which cost categories drove spending?
4. How did spending and outcomes compare across provinces for the key HIV programmes?
5. How did government spending change during the PEPFAR 'pivot' to focus investment in 27 of South Africa's 52 districts?
6. How does the spending according to interventions compare with the newly costed NSP?
7. What financial and epidemiological data challenges limit analysis and interpretation?

## 4.1 Key findings

This review has included dozens of spending estimates at the national, provincial and district levels for three funders of the two multifaceted and interconnected disease responses. A selection of headline findings is summarised here.

**The SAG continued to lead the scale-up of South Africa's HIV and TB responses.** Combined spending across the SAG, USG and Global Fund increased from R22.5 million in FY 2014/15 to R28.8 million in 2016/17, reflecting average annual growth of 13% over the three years and sustaining steady growth since 2003/04. In 2016/17 the SAG accounted for 76% of total spending—66% by the DOH, 9% by the DSD and nearly 1% by the DBE—followed by the USG (22%) and Global Fund (3%) (**Error! Reference source not found.**). South Africa continues to stand out amongst countries with substantial HIV burdens for domestically financing most of the response.

**CGs, especially the DOH's Comprehensive HIV, AIDS, and TB CG, were the most important financing mechanism for the HIV response.** In 2016/17, the DOH CG channelled 90% of total DOH spending on HIV and 59% of the overall spending on HIV. Only 5% of DOH HIV spending was financed from provincial DOHs' voted funds, and only in MP, GP and WC did voted funds account for 8–12% of DOH spending on HIV. All DBE spending on HIV came from the department's HIV and AIDS Life Skills CG. In contrast, DSD spending on HIV came entirely from voted funds, which accounted for 13% of domestic HIV spending in 2016/17 when including their efforts to address the social and structural drivers of HIV such as substance-abuse, gender-based violence and economic underdevelopment.

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<sup>38</sup> Department of Health, South Africa, and South African National AIDS Council (SANAC). 2016. South African HIV and TB Investment Case. Pretoria: SANAC. <http://sanac.org.za/2016/03/22/investment-case-report/>

<sup>39</sup> Guthrie, T., Ryckman, T., Soe-Lin, S., Hecht, R. 2015. Consolidated Spending on HIV and TB in South Africa (2011/12–2013/14). Washington, DC: Results for Development Institute. <https://www.r4d.org/resources/analysis-consolidated-spending-hiv-tb-south-africa/>

**Donor commitment to combatting HIV and TB in South Africa remained strong despite long-run expectations of declining support.** Support from the USG, mainly through PEPFAR, grew over the three years from R4,219 million in 2014/15 to R6,015 million in 2016/17<sup>40</sup>. The USG held steady as the source of about one fifth of HIV and TB spending, a modest increase in share compared to the previous three-year period. Meanwhile, after Global Fund spending increased from R865 million in 2014/15 to R1,533 in 2015/16, their contribution dropped to R806 million in 2016/17. This mainly reflects sluggish spending in the first year of a new three-year grant. Importantly, the new Global Fund grant will amount to R4.3 billion<sup>41</sup> for 2016–2018, compared to roughly R3 billion spent from the 2013–2015 grant.

**Within the HIV response, government leadership was most pronounced for treatment-related activities, whilst donors drove significant shares of spending in prevention.** In 2016/17, South Africa domestically financed 83% of HIV treatment costs and 67% of C&S activities. In contrast, the SAG financed only around half of prevention and investments in programme enablers, and array of policy, advocacy and health system strengthening interventions (**Error! Reference source not found.**). Activities for which donors provided the majority of financing in 2016/17, included HTS, PMTCT, MMC, PEP, and outreach to key populations. These interventions could be especially vulnerable to significant reductions in external funding for HIV.

**ART drove most of South Africa's HIV spending.** Spending on ART increased from R9,807 million in 2014/15 to R12,863 million in 2016/17, reflecting the steady increase of PLHIV on treatment—at the end of 2016/17, nearly 4 million PLHIV remained in care. In 2016/17, ART accounted for nearly half of overall HIV spending and ranged from 50% to 80% of the provincial DOH HIV spending. The next biggest areas of spending were HBC (9%), HTS (7%), orphan and vulnerable children (7%) and MMC (4%).

**TB spending continued to rise thanks to growing domestic and donor financing for the disease.** Combined TB spending increased from R2,652 million in 2014/15 to R3,147 in 2016/17. On average, spending grew 8% annually over the three years. The SAG (via DOH) accounted for 79% of total TB spending, with the USG contributing 20% (nearly 15% through PEPFAR and 6% through separate USAID funding). The Global Fund contributed R30 million in 2016/17, less than 1% of total TB spending, in addition to spending on TB/HIV integrated efforts that were included in the HIV spending total. Whilst modest, this reflects the Global Fund's increased commitment to combatting TB in South Africa. Like for HIV, TB spending was concentrated in metropolitan areas, reflecting the geographic distribution of disease burden—Johannesburg, eThekweni and Cape Town accounted for about one third of TB spending.

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<sup>40</sup>The US dollar value of PEPFAR's contribution actually decreased from 2014/15 to 2015/16, but the Rand value increased due to weakening of the Rand relative to the US dollar during that period.

<sup>41</sup>This amount is equivalent to the US\$ 324 million committed by the Global Fund, based on an exchange rate of R13.25 per US dollar used by the Global Fund's Local Fund Authority in the approved budget for the 2016–2018 grants, provided by SANAC.

**TB spending was harder capture than HIV.** Most domestic spending on TB was financed from provinces' voted funds, with some CG funds. The voted funds are less reliably coded in the BAS than the CG funds. Consequently, increasing TB funding via the DOH's Comprehensive HIV, AIDS and TB CG should lead to better tracking of the SAG's TB spending. Additionally, the actual TB spending was probably higher than captured here because only SAG expenditure specifically recorded as TB-related in the BAS could be identified. Promisingly, coding of TB spending by provincial voted funds appears to be improving. Finally, disaggregated TB spending, including by geography and programme area, is especially hard to characterise and interpret, suggesting the need for further improved coding of TB expenditures in BAS.

**Sub-national analysis of HIV spending is more feasible than ever, although some constraints persist.** This review offers the most detailed analysis available of combined district-level spending on HIV. Improvements in the geographic disaggregation of expenditure data were key. Moreover, TB spending was not examined by district in previous reviews. Nonetheless, certain features of all three funders' data still limited the sub-national analysis:

- Several PDOHs did not comprehensively code their spending to districts, in some cases leaving substantial portions of expenditure in 'whole province' categories;
- PEPFAR's expenditure data only differentiated between national- and district-level spending, meaning all support to provincial functions was lumped together with PEPFAR's national spending, and;
- The Global Fund did not track its expenditure by geography, so disaggregating its spending data would have required intensive dialogue with each PR merely to generate rough estimates of provincial and district splits.

**With some exceptions, HIV spending was roughly distributed according to district-level disease burden.** KZN and GP, the highest-burden provinces, spent the most on HIV. Eight metropolitan areas account for over a quarter of the spending (26%), reflecting the concentration of PLHIV in major cities like Johannesburg, eThekweni, Tshwane, and Cape Town. Combined DOH and PEPFAR spending was spread across districts roughly in accordance with the estimated numbers of PLHIV, though estimating district-level spending remains challenging (see previous paragraph) and the district PLHIV estimates were also somewhat uncertain and evolving.

## 4.2 Conclusions

**Expenditure data help policymakers better match funding allocations to priorities.** Detailed analysis of spending patterns helps the SAG and development partners to compare their plans and budgets with actual spending and, when combined with outcome and population data, to measure efficiency and equity. The data also equip government officials to make and defend sometimes controversial decisions to reallocate funds across geographies or interventions.

**Consolidated analysis of domestic and donor spending enables better joint planning, including for an eventual transition away from donor support.** The breakdown of SAG, USG and Global Fund contributions in this review should focus attention on particularly donor-dependent interventions that make critical contributions to epidemic control. Like many other countries, South Africa relies heavily on development partners to finance key outreach, prevention and advocacy activities, as well as those aimed at addressing social and economic structural drivers of the epidemics. Transitioning these activities to domestic ownership will require additional domestic resource mobilisation as well as new institutional arrangements (e.g., co-financing across sectors), purchasing mechanisms and monitoring systems to ensure funds are used efficiently, effectively and equitably.

**Routine expenditure review facilitates programme management and enables real-time adjustments based on dialogue between national and sub-national actors.** This study builds directly upon quarterly and annual CG reviews, during which national, provincial and district officials interrogate programmatic and expenditure data to understand performance and jointly address any areas of concern. The study process helped FIN-CAP to deepen analytical skills that they immediately deployed to help provinces to improve their generation and use of high-quality expenditure data, leading to significant quality improvements in the HIV CG quarterly financial reports. Most provincial financial managers also requested FIN-CAP to provide training and technical support to district managers. Prior to FIN-CAP's involvement, the NDOH had to expend considerable effort to cross-check provincial reports with their own analysis of BAS records and work with provinces to address discrepancies. Insights from FIN-CAP's engagement with provincial and district officials also enriched interpretation of the multi-year expenditure trends presented in this study.

**Champions of performance-based purchasing in South Africa should draw lessons and encouragement from the HIV response.** This expenditure analysis shows the value of the CGs that account for the bulk of HIV spending in terms of their detailed and accurate BAS data that are linked to outputs. The CG Framework and oversight process constitute South Africa's important performance-linked contracting system for government-financed health services. The model of using funds mobilised and pooled by the national sphere to pay for services delivered by health providers instead of inputs (e.g. labour and commodities) is, in a sense, a microcosm of the vision set forth in the recently introduced National Health Insurance Bill<sup>42</sup>. In fact, the SAG is already taking steps to ensure robust planning and oversight to other facets of primary health care—for example, the 2018 Division of Revenue Act introduced to the Comprehensive HIV, AIDS and TB CG, a component for community outreach services, a key element of NDOH's primary health care strategy. This echoes earlier proposals for extending the grant framework to include more primary care services as an interim step towards integrating HIV financing into the proposed National Health Insurance Fund<sup>43</sup>.

## 4.3 Looking ahead

This report contributes to the growing body of evidence on the magnitude, composition and trends of HIV and TB spending in South Africa. Data and analysis assembled during the study have already informed important management and planning processes, including the NDOH's routine CG reviews, the SAG's annual submission for UNAIDS Global AIDS Monitoring report, negotiations over PEPFAR's COP for 2018 and preparation of South Africa's new funding request to the Global Fund for 2019–2021.

The report also marks an important capacity milestone. Besides generating the detailed methods and findings documented here, the consortium organised multiple skills exchanges that bolstered all partners' capacity to undertake this work in South Africa and beyond. The process also yielded a tool for automated data extraction and analysis, which is already being used by the NDOH for its quarterly review of provincial HIV spending.

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<sup>42</sup> Government Gazette No. 41725 of 21 June 2018.

<sup>43</sup> Chaitkin, M., Guthrie, T., Hariharan, N., Ishtiaq, A., Kamath, A., Blanchet, N.J., and Hecht, R. 2016. HIV Financing Integration in South Africa: Policy Scenarios and Feasibility Analysis. Pretoria: UNAIDS. <http://www.r4d.org/resources/hiv-financing-integration-south-africa-policy-scenarios-feasibility-analysis/>



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# ANNEXES

Annex 1: Total spending on HIV and TB by SAG, USG and Global Fund by focus and year (2014/15–2016/17, R)

Disease	2014/15	2015/16	2016/17
TB/HIV	925,917,646	1,066,030,488	1,170,219,249
TB	2,099,038,066	2,383,485,814	2,417,542,108
HIV	19,447,186,071	22,360,086,597	25,226,455,822
Total	22,472,141,783	25,809,602,900	28,814,217,180

Annex 2: Total HIV and TB spending by source (2014/15–2016/17, R)

Source	2014/15	2015/16	2016/17	Total
SAG	17,289,357,554	19,395,406,135	21,816,004,531	58,500,768,220
DOH	15,347,049,654	16,949,291,335	19,113,846,546	51,410,187,535
DBE	204,174,000	217,835,000	231,393,000	653,402,000
DSD	1,738,133,900	2,228,279,800	2,470,764,985	6,437,178,685
USG	4,317,524,736	4,881,400,108	6,191,720,026	15,390,644,869
PEPFAR	4,218,776,736	4,729,960,108	6,015,200,026	14,963,936,869
USAID (non-PEPFAR)	98,748,000	151,440,000	176,520,000	426,708,000
Global Fund	865,259,493	1,532,796,657	806,492,623	3,204,548,773
Total	22,472,141,783	25,809,602,900	28,814,217,180	77,095,961,863

Annex 3: Funder share of total HIV and TB spending (2014/15–2016/17, %)

Source	2014/15	2015/16	2016/17
Global Fund	4%	6%	3%
USG	19%	19%	21%
DOH	68%	66%	66%
DSD	8%	9%	9%
DBE	1%	1%	1%

Annex 4: Total HIV spending by source (2014/15-2016/17, R)

Source	2014/15	2015/16	2016/17	Total
SAG	15,289,067,489	17,163,360,321	19,604,510,799	52,056,938,609
DOH	13,346,759,589	14,717,245,521	16,902,352,814	44,966,357,924
DSD	1,738,133,900	2,228,279,800	2,470,764,985	6,437,178,685
DBE	204,174,000	217,835,000	231,393,000	653,402,000
PEPFAR	3,847,032,565	4,374,653,724	5,558,072,729	13,779,759,018
Global Fund	865,259,493	1,532,796,657	776,964,247	3,175,020,397
Total	20,001,359,547	23,070,810,701	25,939,547,775	69,011,718,024

Annex 5: Funders relative contribution to HIV intervention categories (2016/17, %)

	Treatment	Prevention	Programme Enablers	Care & Support
Global Fund	2%	6%	12%	0%
USG	15%	41%	34%	33%
SAG	83%	54%	54%	67%

Annex 6: HIV expenditure by funder and activity (2016/17, R)

	Global Fund	USG	SAG	Total
<b>Treatment</b>				
ART	155,384,037	1,375,377,759	11,332,638,341	12,863,400,137
HBC	-	341,241,365	2,115,951,271	2,457,192,636
HIV Treatment ND	2,162,656	-	24,724,572	26,887,229
Palliative/hospice care	-	-	10,871,893	10,871,893
SDC	-	-	58,790,497	58,790,497
TB/HIV	118,502,136	-	594,589,816	713,091,953
Adherence (non-BAS)	42,490,677	-	-	42,490,677
HTS	-	966,020,895	823,680,530	1,789,701,425
<b>Prevention</b>				
Condoms	-	5,194,910	503,274,918	508,469,828
HIV Prevention ND	-	367,608,907	459,617	368,068,524
HPV	-	-	195,823,479	195,823,479
MMC	-	758,121,218	303,163,487	1,061,284,705
PEP	-	10,011,526	9,430,650	19,442,176
PMTCT	-	290,834,633	274,637,229	565,471,862
STI	-	-	4,408,718	4,408,718
Workplace prevention	-	-	1,563,109	1,563,109
Youth	88,315,993	-	373,160,076	461,476,069
HTA/SW	43,511,992	31,345,515	79,363,065	154,220,572
Blood Bank spending (non-BAS)	-	11,757,926	-	11,757,926
Key Pop (non-BAS)	71,159,010	66,008,609	-	137,167,619
SBCC	10,698,640	-	292,070,145	302,768,785
<b>Enablers</b>				
ACSM	15,020,775	-	5,096,979	20,117,754
PE: Lab (Non BAS)	-	106,098,761	-	106,098,761
PM	112,322,018	-	721,941,233	834,263,251
Policy & Systems Development	-	253,874,615	-	253,874,615
Surveillance (Non BAS)	-	131,460,750	-	131,460,750
PE: Community Capacity/ Inst. strengthening (non-BAS)	27,082,218	-	-	27,082,218
Research, surveys (non-BAS)	41,191,722	-	-	41,191,722
RTC/Training	-	-	121,424,165	121,424,165
M&E/HIS	15,655,934	208,419,476	-	224,075,409
GBV/gender empowerment	-	-	88,496,600	88,496,600
Substance abuse prevention	-	-	161,639,400	161,639,400
HSS: PSM	32,910,331	-	-	32,910,331

	Global Fund	USG	SAG	Total
<b>Care and Support</b>				
C&S	-	-	156,985,405	156,985,405
OVC	-	634,695,865	1,139,078,709	1,773,774,575
Infrast/upgrade/mainten.	-	-	8,780	8,780
<b>Other</b>				
HIV ND	556,107	-	211,154,029	211,710,136
Query	-	-	84,084	84,084
Total	776,964,247	5,558,072,729	19,604,510,799	25,939,547,775

#### Annex 7: DOH spending by budget mechanism (2016/17, R)

	HIV CG	Voted funds	Accelerating HIV Prevention & Management	Other Public Funds	Total
EC	1,695,109,252	17,938,072	-	110,492	1,713,157,816
FS	1,014,360,649	15,973,464	-	-	1,030,334,113
GP	3,267,239,173	367,891,802	-	4,741,683	3,639,872,658
KZN	4,247,331,724	289,134,115	-	13,016,926	4,549,482,765
LP	1,170,424,157	15,994,603	-	21,975,449	1,208,394,209
MP	1,032,055,000	87,989,846	-	-	1,120,044,846
NC	413,216,195	1,150,799	-	12,969,330	427,336,324
NW	1,137,971,000	(236,301)	-	12,542,000	1,150,276,699
WC	1,256,732,769	167,070,678	-	-	1,423,803,447
National	-	4,446,218	405,166,106	230,037,613	639,649,937
Total	15,234,439,918	967,353,296	405,166,106	295,393,494	16,902,352,814

## Annex 2: Combined PDOH HIV spending by sub-programme (2014/15–2016/17, R)

	2014/15	2015/16	2016/17	Total
ART	8,394,641,583	9,774,318,656	11,309,303,276	29,478,263,515
HBC	854,637,523	1,173,092,447	1,490,374,511	3,518,104,481
HTS	752,838,446	831,868,799	823,680,530	2,408,387,775
PM	575,579,957	598,792,847	700,784,015	1,875,156,820
TB/HIV	528,276,058	668,044,137	594,589,816	1,790,910,011
Condoms	237,986,730	279,920,625	372,769,058	890,676,413
PMTCT	227,556,687	241,719,083	274,637,229	743,913,000
MMC	207,223,038	201,086,861	303,163,487	711,473,386
HIV ND	505,319,799	73,749,743	71,158,757	650,228,299
RTC/Training	130,658,785	177,489,488	121,424,165	429,572,438
HTA/SW	67,534,578	85,896,656	79,363,065	232,794,300
SDC	122,415,260	50,200,036	58,790,497	231,405,793
HIV Treatment ND	35,431,453	51,021,419	24,724,572	111,177,444
Palliative/hospice care	20,930,083	6,474,803	10,871,893	38,276,779
PEP	12,033,631	9,640,575	9,430,650	31,104,856
Workplace prevention	4,139,826	4,860,644	1,563,109	10,563,579
STI	3,262,779	2,781,204	4,408,718	10,452,702
ACSM	518,945	1,366,899	5,096,979	6,982,823
HPV	-	238,834	5,831,931	6,070,765
HIV Prevention ND	654,795	458,739	459,617	1,573,151
C&S	557,772	148,010	184,136	889,918
infrastructure/upgrade /maintenance	136,901	34,975	8,780	180,656
Query	-	(24,000)	84,084	60,084
Total	12,682,334,629	14,233,181,480	16,262,702,877	43,178,218,987

Note: this table includes CG and voted funds.

Annex 9: PDOH HIV sub-programme spending, CG and voted funds (2016/17, R)

	EC	FS	GP	KZN	LP	MP	NC	NW	WC	Total
ART	1,336,884,709	689,536,536	2,482,575,771	3,361,233,775	703,112,618	903,282,211	234,488,543	634,474,186	963,714,928	11,309,303,276
HBC	84,152,778	57,425,946	526,099,406	248,790,017	209,237,800	4,993,381	1,317,592	259,906,121	98,451,469	1,490,374,511
HTS	25,146,852	48,616,285	159,835,926	366,536,330	66,373,770	55,906,270	2,564,568	35,203,397	63,497,133	823,680,530
PM	46,003,392	37,444,741	189,911,007	67,893,170	74,120,820	14,817,519	112,768,805	101,145,158	56,679,405	700,784,015
TB/HIV	128,309,319	64,337,509	79,954,337	119,371,621	39,924,453	24,681,218	35,087,911	54,839,265	48,084,184	594,589,816
Condoms	49,255,461	23,732,738	104,383,125	40,583,677	52,830,747	12,235,481	7,369,967	21,954,550	60,423,312	372,769,058
MMC	22,124,760	60,403,459	39,778,421	109,457,215	5,773,786	30,876,043	1,713,872	16,829,759	16,206,173	303,163,487
PMTCT	9,095,936	9,972,667	1,357,989	202,273,843	8,789,461	5,292,912	1,158,109	1,916,111	34,780,200	274,637,229
RTC/Training	8,754,471	28,584,334	18,250,243	9,996,281	22,790,860	6,940,362	6,948,637	7,943,989	11,214,989	121,424,165
HTA/SW	2,136,133	-	12,874,224	17,598,869	19,673,214	11,759,745	1,551,667	2,966,083	10,803,129	79,363,065
HIV ND	32,214	293,637	-	-	-	44,151,576	14,122,797	12,558,534	-	71,158,757
SDC	-	-	-	-	25	-	-	-	58,790,472	58,790,497
HIV Treatment ND	-	6,309,471	5,121,350	36,722	5,690,586	-	7,569,443	(3,000)	-	24,724,572
Palliative/ hospice care	-	-	10,871,893	-	-	-	-	-	-	10,871,893
PEP	1,252,794	2,902,181	2,953,411	-	76,069	11,150	534,449	542,545	1,158,052	9,430,650
HPV	-	-	4,398,218	1,302,529	-	-	131,184	-	-	5,831,931
ACSM	-	-	-	-	-	5,096,979	-	-	-	5,096,979
STI	-	-	-	4,408,718	-	-	-	-	-	4,408,718
Workplace prevention	-	-	1,563,109	-	-	-	-	-	-	1,563,109
HIV Prevention ND	-	459,617	-	-	-	-	-	-	-	459,617
C&S	-	314,994	(130,857)	-	-	-	-	-	-	184,136
Query	8,998	-	75,086	-	-	-	-	-	-	84,084
Infrast/upgrade/ mainten.	-	-	-	-	-	-	8,780	-	-	8,780
Total	1,713,157,816	1,030,334,113	3,639,872,658	4,549,482,765	1,208,394,209	1,120,044,846	427,336,324	1,150,276,699	1,423,803,447	16,262,702,877

Annex 10: DOH HIV spending and number of PLHIV by province (2016/17, R)

	HIV Expenditure	PLHIV population	% of total expenditure	% PLHIV of total PLHIV population
EC	1,713,157,816	770,703	10%	11%
FS	1,030,334,113	365,136	6%	5%
GP	3,639,872,658	1,805,816	22%	26%
KZN	4,549,482,765	1,938,323	27%	28%
LP	1,208,394,209	445,097	7%	6%
MP	1,120,044,846	665,041	7%	10%
NC	427,336,324	79,657	3%	1%
NW	1,150,276,699	474,748	7%	7%
WC	1,423,803,447	421,752	8%	6%
National	639,649,937		4%	
Total	16,902,352,814	6,966,273	100%	

Annex 11: HIV expenditure by district and funder, with PLHIV population (2016/17, R)

District	DOH	PEPFAR	Global Fund	PLHIV Population
EC: Buffalo City Metropolitan	152,863,305	73,581,623	-	103,173
EC: OR Tambo	138,515,909	75,671,036	-	178,204
EC: Nelson Mandela Bay	147,788,338	44,757,023	-	106,070
EC: Amathole	83,234,607	68,267,549	-	96,786
EC: Chris Hani	96,821,392	57,394,901	-	100,575
EC: Alfred Nzo	52,621,756	66,865,085	-	103,224
EC: Sarah Baartman	61,828,751	6,463,654	-	40,030
EC: Joe Gqabi	42,156,435	3,937,234	-	42,641
EC: WHOLE PROVINCE	937,325,145	-	-	
FS: Thabo Mofutsanyana	68,684,463	77,658,524	-	114,722
FS: Lejweleputswa	37,568,263	66,030,168	-	102,689
FS: Mangaung	51,243,599	46,917,693	-	80,226
FS: Felize Dabi	45,124,329	11,135,539	-	53,436
FS: Xhariep	29,217,086	1,644,663	-	14,063
FS: WHOLE PROVINCE	798,492,198	-	-	
GP: City of Johannesburg	1,459,081,072	445,499,920	-	638,683
GP: Ekurhuleni	802,469,581	178,962,746	-	507,096
GP: City of Tshwane	685,911,434	165,584,136	-	380,703
GP: Sedibeng	345,871,154	76,001,997	-	168,672
GP: West Rand	346,274,745	34,188,524	-	110,662
GT: WHOLE PROVINCE	3,695	-	-	

District	DOH	PEPFAR	Global Fund	PLHIV Population
KZN: eThekweni	933,820,829	429,130,147	-	621,411
KZN: uMgungundlovu	348,226,887	204,515,928	-	226,236
KZN: uThungulu	368,464,029	81,026,684	-	172,960
KZN: Ugu	316,378,081	87,394,442	-	139,233
KZN: Zululand	288,252,913	72,728,364	-	171,640
KZN: uMkhanyakude	300,604,875	50,478,421	-	115,688
KZN: uThukela	257,746,228	43,889,496	-	118,150
KZN: uMzinyathi	256,776,442	33,393,691	-	93,166
KZN: Ilembe	242,770,842	22,609,667	-	105,906
KZN: Harry Gwala	176,400,210	38,404,562	-	87,579
KZN: Amajuba	145,175,113	27,004,386	-	86,354
KZN: WHOLE PROVINCE	914,866,316	-	-	
LP: Capricorn	409,976,440	107,897,928	-	107,728
LP: Mopani	97,547,306	122,060,401	-	114,449
LP: Sekhukhune	99,511,614	46,198,204	-	81,708
LP: Vhembe	107,575,501	18,097,708	-	74,704
LP: Waterberg	77,244,699	46,011,786	-	66,508
LP: WHOLE PROVINCE	416,538,650	-	-	
MP: Gert Sibande	37,534,998	151,836,224	-	196,950
MP: Ehlanzeni	46,820,720	134,324,132	-	307,654
MP: Nkangala	31,726,396	106,366,207	-	160,437
MP: WHOLE PROVINCE	1,003,962,732	-	-	
NC: Francis Baard	73,565,020	4,323,546	-	33,351
NC: JT Gaetsewe	40,665,737	6,808,950	-	20,328
NC: Pixley ka Seme	33,176,450	4,400,906	-	10,191
NC: ZF Mgcawu	33,746,760	1,388,176	-	13,165
NC: Namakwa	11,814,945	2,980,830	-	2,622
NC: WHOLE PROVINCE	234,367,411	-	-	
NW: Bojanala Platinum	64,767,773	150,685,164	-	219,823
NW: Dr K Kaunda	61,315,112	89,933,279	-	95,770
NW: NM Molema	56,022,684	82,698,654	-	105,640
NW: Dr RS Mompoti	39,976,177	13,275,994	-	53,515
NW: WHOLE PROVINCE	928,193,872	-	-	
WC: City of Cape Town	935,807,064	169,872,753	-	300,424
WC: Cape Winelands	155,154,429	23,038,928	-	48,348
WC: Eden	136,149,141	3,706,681	-	38,886
WC: West Coast	91,449,386	6,277,545	-	19,683
WC: Overberg	75,718,379	2,125,343	-	12,569
WC: Central Karoo	29,525,047	1,010,022	-	1,842

District	DOH	PEPFAR	Global Fund	PLHIV Population
National	639,634,774	1,218,091,464	-	
Above National	-	369,918,603	-	
Not disaggregated by district	283,573	83,605,499	776,964,247	
Total	16,902,352,814	5,558,072,729	776,964,247	6,966,273

#### Annex 12: NDOH HIV sub-programme spending (2016/17, R)

NDOH Programme Area	Total Expenditure
HPV	189,991,548
HIV ND	139,995,272
Condoms	130,505,860
SBCC	72,272,905
C&S	62,392,069
ART	23,335,065
PM	21,157,218
Total	639,649,937

#### Annex 13: NDOH HIV cost category spending (2016/17, R)

HIV cost category	Total Expenditure
Transfers to NPOs	151,375,974
Condoms	130,505,860
Vaccines (for HPV)	119,795,929
Overheads	113,858,800
Human Resources	62,884,109
Other	24,841,963
Travel, M&I, meeting & events	15,952,012
Donations	14,370,000
Non-health commodities and supplies	2,352,704
Non-health equipment	1,772,227
Marketing/ promotions	1,094,790
Health commodities and consumables	845,386
Other	182
Total	639,649,937

**Annex 14: Combined DOH, Global Fund and PEPFAR spending on ART and number of patients remaining in care (2014/15–2016/17, R)**

	2014/15	2015/16	2016/17	Total
DOH	8,394,641,583	9,802,530,952	11,332,638,341	29,529,810,877
PEPFAR	1,135,017,980	1,072,455,846	1,375,377,759	3,582,851,584
Global Fund	277,189,101	751,735,957	155,384,037	1,184,309,095
ART patients RIC	3,076,680	3,408,551	3,826,622	

**Annex 15: DOH total ART spending with number of patients remaining in care, PLHIV, and DOH spending per person on ART and per PLHIV (2016/17, R)**

	Total	# of ART patients RIC	Spending per person on ART	PLHIV population	ART spending per PLHIV
EC	1,336,884,709	414,733	3,223	770,703	1,735
FS	689,536,536	215,354	3,202	365,136	1,888
GP	2,482,575,771	823,170	3,016	1,805,816	1,375
KZN	3,361,233,775	1,181,706	2,844	1,938,323	1,734
LP	703,112,618	305,421	2,302	445,097	1,580
MP	903,282,211	377,288	2,394	665,041	1,358
NC	234,488,543	55,163	4,251	79,657	2,944
NW	634,474,186	222,856	2,847	474,748	1,336
WC	963,714,928	230,931	4,173	421,752	2,285
National	23,335,065				
Total	11,332,638,341	3,826,622	R2,962	6,966,273	1,627

**Annex 16: PDOH ART spending by cost category and province (2016/17, R)**

<b>Cost Category</b>	<b>EC</b>	<b>FS</b>	<b>GP</b>	<b>KZN</b>	<b>LP</b>	<b>MP</b>	<b>NC</b>	<b>NW</b>	<b>WC</b>	<b>Total</b>
Meds: ARVs	633,195,823	332,815,242	1,434,793,596	1,616,230,071	361,530,830	547,256,535	94,744,563	273,788,765	293,143,816	5,587,499,243
Human Resources	502,014,332	231,631,044	523,212,007	1,011,898,207	172,356,648	120,934,593	70,222,262	180,645,131	393,514,535	3,206,428,760
Laboratory services and diagnostics	171,049,630	104,956,232	503,535,190	652,975,736	118,023,329	158,925,335	46,617,036	131,264,228	75,482,269	1,962,828,985
Transfers to Municipalities	-	-	-	40,000,000	-	-	-	-	176,059,000	216,059,000
Non-health commodities and supplies	2,417,010	10,979,469	10,839,922	4,728,919	30,093,045	421,575	19,453,793	7,562,370	3,936,517	90,432,621
Other	-	-	13,685	-	-	70,263,331	-	-	-	70,277,016
Overheads	383,605	6,294,512	23,443	136,641	13,247	-	406,914	22,161,494	21,416,937	50,836,794
Medicines and drugs	3,664,491	25,493	7,148,060	30,177,791	-	-	-	173,791	-	41,189,626
Transfers to NPOs	-	-	-	1,166,990	13,999,776	13,000,000	-	6,482,409	-	34,649,175
Health equipment	21,903,246	-	-	-	1,634,896	-	44,599	705,352	-	24,288,093
Non-health equipment	493,866	956,193	469,700	-	4,411,050	-	-	2,200,184	-	8,530,992
Travel, M&I, meeting & events	435,016	1,873,927	107,331	36,442	324,678	149,861	1,206,283	2,269,942	92,936	6,496,416
Vaccines (for HPV)	-	-	-	1,346,928	-	-	-	2,685,110	-	4,032,038
Upgrade/maintenance/refurbishment	954,650	4,425	-	-	401,000	-	56,932	1,785,733	-	3,202,739
Health commodities and consumables	373,040	-	2,432,837	2,536,049	324,120	(7,669,021)	1,736,161	2,749,677	-	2,482,862
Training & Development	-	-	-	-	-	-	-	-	68,917	68,917
<b>Total</b>	<b>1,336,884,709</b>	<b>689,536,536</b>	<b>2,482,575,771</b>	<b>3,361,233,775</b>	<b>703,112,618</b>	<b>903,282,211</b>	<b>234,488,543</b>	<b>634,474,186</b>	<b>963,714,928</b>	<b>11,309,303,276</b>

Annex 17: ART spending by funder and district, with PLHIV population (2016/17, R)

District	DOH	Global Fund	PEPFAR	PLHIV Population
EC: Buffalo City Metropolitan	129,933,477	-	23,401,397	103,173
EC: Nelson Mandela Bay	129,906,010	-	17,248,605	106,070
EC: OR Tambo	120,573,263	-	22,833,279	178,204
EC: Amathole	71,343,962	-	37,250,585	96,786
EC: Chris Hani	58,682,332	-	17,160,052	100,575
EC: Alfred Nzo	45,623,958	-	18,446,621	103,224
EC: Sarah Baartman	58,214,691	-	3,613,974	40,030
EC: Joe Gqabi	34,755,910	-	2,101,996	42,641
EC: WHOLE PROVINCE	687,848,926	-	-	
FS: Thabo Mofutsanyana	68,055,159	-	26,657,899	114,722
FS: Mangaung	51,295,686	-	19,235,753	80,226
FS: Lejweleputswa	32,567,055	-	16,572,715	102,689
FS: Felize Dabi	43,924,718	-	2,239,705	53,436
FS: Xhariep	29,061,833	-	819,814	14,063
FS: WHOLE PROVINCE	464,627,910	-	-	
GP: City of Johannesburg	863,981,980	-	125,016,182	638,683
GP: Ekurhuleni	627,064,294	-	32,879,678	507,096
GP: City of Tshwane	517,020,208	-	26,708,695	380,703
GP: Sedibeng	243,729,024	-	11,522,714	168,672
GP: West Rand	230,764,246	-	15,664,438	110,662
GP: WHOLE PROVINCE	2,335	-	-	
KZN: eThekweni	733,319,420	-	128,376,074	621,411
KZN: uThungulu	267,370,143	-	14,159,804	172,960
KZN: uMgungundlovu	253,426,959	-	25,575,700	226,236
KZN: Ugu	226,862,731	-	18,591,897	139,233
KZN: uMkhanyakude	216,615,704	-	10,439,584	115,688
KZN: Zululand	203,176,980	-	14,987,418	171,640
KZN: uMzinyathi	199,007,832	-	10,386,440	93,166
KZN: uThukela	195,780,847	-	11,859,534	118,150
KZN: Ilembe	172,144,580	-	9,268,838	105,906
KZN: Harry Gwala	113,955,306	-	14,175,897	87,579
KZN: Amajuba	100,530,816	-	8,291,851	86,354
KZN: WHOLE PROVINCE	679,042,456	-	-	
LP: Capricorn	177,826,267	-	27,557,660	107,728
LP: Mopani	36,635,743	-	32,199,981	114,449
LP: Sekhukhune	42,599,177	-	18,586,687	81,708
LP: Vhembe	48,028,142	-	5,289,489	74,704
LP: Waterberg	31,690,713	-	11,796,562	66,508
LP: WHOLE PROVINCE	366,332,576	-	-	

District	DOH	Global Fund	PEPFAR	PLHIV Population
MP: Ehlanzeni	41,036,892	-	39,258,833	307,654
MP: Gert Sibande	33,392,587	-	21,862,992	196,950
MP: Nkangala	23,360,936	-	28,615,137	160,437
MP: WHOLE PROVINCE	805,491,796	-	-	
NC: Francis Baard	26,274,276	-	1,606,784	33,351
NC: Pixley ka Seme	13,572,827	-	2,461,931	10,191
NC: JT Gaetsewe	8,342,457	-	1,307,890	20,328
NC: ZF Mgcawu	3,477,128	-	456,280	13,165
NC: Namakawa	1,503,852	-	433,280	2,622
NC: WHOLE PROVINCE	181,318,002	-	-	
NW: Bojanala Platinum	40,806,213	-	43,066,739	219,823
NW: Dr K Kaunda	40,294,548	-	34,368,590	95,770
NW: NM Molema	36,928,459	-	31,450,913	105,640
NW: Dr RS Mompoti	28,395,472	-	1,992,228	53,515
NW: WHOLE PROVINCE	488,074,955	-	-	
WC: City of Cape Town	660,992,063	-	24,116,359	300,424
WC: Cape Winelands	103,363,244	-	10,130,943	48,348
WC: Eden	86,209,751	-	1,306,921	38,886
WC: Overberg	45,028,258	-	1,267,287	12,569
WC: Central Karoo	14,874,951	-	435,638	1,842
WC: West Coast	53,246,663	-	1,306,913	19,683
National	23,335,065	-	277,984,266	
Above National	-	-	37,373,212	
ND	(5,421)	155,384,037	33,657,105	
Total	11,332,638,341	155,384,037	1,375,377,759	

#### Annex 18: DOH and PEPFAR spending on Condom programme (2014/15–2016/17, R)

	2014/15	2015/16	2016/17	Total
DOH	447,208,088	355,456,870	503,274,918	1,305,939,876
PEPFAR	1,873,217	4,504,886	5,194,910	11,573,013
Total	449,081,305	359,961,756	508,469,828	1,317,512,889

**Annex 19: DOH spending on Condom programme and spending per condom distributed  
(male and female) (2016/17, R)**

	<b>Total Expenditure</b>	<b>No. of Male Condoms distributed</b>	<b>No. of Female Condoms distributed</b>	<b>Total Condoms Distributed</b>	<b>Average spending per Condom Distributed (M&amp;F)</b>
EC	49,255,461	119,498,754	2,621,399	122,120,153	0.40
FS	23,732,738	41,693,200	1,162,105	42,855,305	0.55
GP	104,383,125	196,062,536	6,888,638	202,951,174	0.51
KZN	40,583,677	185,574,089	6,146,887	191,720,976	0.21
LP	52,830,747	123,436,695	2,532,077	125,968,772	0.42
MP	12,235,481	77,703,335	1,981,572	79,684,907	0.15
NC	7,369,967	9,036,023	275,190	9,311,213	0.79
NW	21,954,550	49,500,617	1,151,524	50,652,141	0.43
WC	60,423,312	113,993,168	3,259,413	117,252,581	0.52
National	130,505,860				
Total	503,274,918	916,498,417	26,018,805	942,517,222	

Note: This table shows the total condom programme spending (not only on the commodities).

**Annex 20: DOH spending on male condoms and spending per male condom distributed  
(2016/17, R)**

	<b>Total Expenditure</b>	<b>No. of Male Condoms distributed</b>	<b>Spending per Male Condom distributed</b>
EC	34,531,329	119,498,754	0.29
FS	14,488,231	41,693,200	0.35
GP	81,397,248	196,062,536	0.42
KZN	25,342,675	185,574,089	0.14
LP	37,407,785	123,436,695	0.30
MP	8,158,754	77,703,335	0.10
NC	7,171,344	9,036,023	0.79
NW	12,806,395	49,500,617	0.26
WC	43,665,114	113,993,168	0.38
National	111,938,946	-	
Total	376,907,823	916,498,417	0.41

Note: This table shows only the spending on the commodities (male condoms).

**Annex 21: DOH spending on female condoms and spending per female condom distributed  
(2016/17, R)**

Province	Total Expenditure	Number of Female Condoms distributed	Spending per Female Condom distributed
EC	9,551,786	2,621,399	3.64
FS	6,977,477	1,162,105	6.00
GP	22,985,877	6,888,638	3.34
KZN	15,241,001	6,146,887	2.48
LP	12,989,142	2,532,077	5.13
MP	2,090,536	1,981,572	1.05
NC	-	275,190	-
NW	9,057,677	1,151,524	7.87
WC	15,853,147	3,259,413	4.86
National	18,566,914		
Total	113,313,557	26,018,805	4.36

Note: This table shows only the spending on the commodities (female condoms).

**Annex 22: MMC spending by funder (2014/15–2016/17, R)**

	2014/15	2015/16	2016/17	Total
DOH	207,223,038	201,086,861	303,163,487	<b>711,473,386</b>
Global Fund	27,567,156	22,732,969	-	<b>50,300,125</b>
PEPFAR	572,396,308	770,800,015	758,121,218	<b>2,101,317,541</b>
Total	807,186,502	994,619,844	1,061,284,705	<b>2,863,091,051</b>
MMC performed	501,127	465,341	415,114	

**Annex 23: DOH spending on MMC and DOH spending per circumcision performed  
(2016/17, R)**

Province	Conditional Grants	Voted Funds	Total	# of MMC Performed	Spending per circumcision
EC	22,124,760	-	22,124,760	12,366	1,789
FS	60,403,459	-	60,403,459	30,884	1,956
GP	39,778,421	-	39,778,421	112,994	352
KZN	109,481,559	(24,344)	109,457,215	122,132	896
LP	5,773,786	-	5,773,786	56,041	103
MP	30,853,482	22,561	30,876,043	38,262	807
NC	1,708,537	5,335	1,713,872	2,504	684
NW	16,829,759	-	16,829,759	28,244	596
WC	16,206,173	-	16,206,173	11,687	1,387
Total	303,159,935	3,552	303,163,487	415,114	730

**Annex 24: DOH condom programme spending by cost category (2016/17, R)**

Cost category	EC	FS	GP	KZN	LP	MP	NC	NW	WC	National	Total
Condoms	44,083,116	21,465,708	104,383,125	40,583,677	50,396,926	10,249,290	7,171,344	21,864,072	59,518,261	130,505,860	490,221,380
Health equipment	5,147,535	-	-	-	-	-	-	-	-	-	5,147,535
Overheads	-	-	-	-	91,747	1,973,143	-	-	217,941	-	2,282,831
Human Resources	-	1,219,025	-	-	770,507	-	-	-	-	-	1,989,532
Health commodities & consumables	-	1,046,753	-	-	188,865	-	-	69,988	464,111	-	1,769,716
Non-health equipment	24,810	-	-	-	1,289,586	-	-	-	-	-	1,314,396
Transfers to NPOs	-	-	-	-	-	-	-	-	223,000	-	223,000
Upgrade/maintenance/refurbishment	-	-	-	-	-	-	191,200	-	-	-	191,200
M&I, travel, meeting & events	-	1,252	-	-	79,917	13,048	7,422	-	-	-	101,638
Marketing/promotions	-	-	-	-	-	-	-	20,490	-	-	20,490
Non-health commodities & supplies	-	-	-	-	13,200	-	-	-	-	-	13,200
<b>Total</b>	<b>49,255,461</b>	<b>23,732,738</b>	<b>104,383,125</b>	<b>40,583,677</b>	<b>52,830,747</b>	<b>12,235,481</b>	<b>7,369,967</b>	<b>21,954,550</b>	<b>60,423,312</b>	<b>130,505,860</b>	<b>503,274,918</b>

**Annex 25: DOH MMC spending by cost category (2016/17, R)**

Cost category	EC	FS	GP	KZN	LP	MP	NC	NW	WC	Total
Human resources	13,706,197	-	30,446,777	46,181,317	-	150,486	28,155	-	15,274,503	105,787,435
Overheads	2,931,410	36,329,962	-	8,578,000	5,676,000	13,614,545	1,602	-	-	67,131,518
Non-health equipment	97,072	23,980,856	145,623	31,200,000	-	-	-	238,462	-	55,662,013
Health commodities and consumables	217,129	-	2,004,557	20,116,328	-	(150,704)	1,060,920	13,926,828	845,352	38,020,410
Transfers to NPOs	-	-	6,180,000	-	-	16,807,000	35,000	-	-	23,022,000
Non-health commodities and supplies	811,555	52,611	-	3,312,308	75,940	1,482	317,704	-	62,853	4,634,453
Health equipment	1,900,429	-	219,450	67,478	-	-	-	2,269,751	-	4,457,108
M&I, travel, meeting & events	2,351,120	40,030	12,603	1,784	21,846	54,526	267,527	-	23,464	2,772,900
Medicines and drugs	109,848	-	769,411	-	-	-	-	-	-	879,259
Other	-	-	-	-	-	398,708	-	-	-	398,708
Upgrade/maintenance/refurbishment	-	-	-	-	-	-	-	394,720	-	394,720
Marketing/ promotions	-	-	-	-	-	-	2,964	-	-	2,964
<b>Total</b>	<b>22,124,760</b>	<b>60,403,459</b>	<b>39,778,421</b>	<b>109,457,215</b>	<b>5,773,786</b>	<b>30,876,043</b>	<b>1,713,872</b>	<b>16,829,759</b>	<b>16,206,173</b>	<b>303,163,487</b>

**Annex 26: DOH and PEPFAR spending on MMC by district (2016/17, R)**

<b>District</b>	<b>DOH</b>	<b>PEPFAR</b>	<b>Total</b>
EC: OR Tambo	2,703,386	6,712,743	9,416,129
EC: Buffalo City Metropolitan	-	6,848,631	6,848,631
EC: Alfred Nzo	2,207,549	3,236,012	5,443,561
EC: Nelson Mandela Bay	200,546	4,142,222	4,342,768
EC: Joe Gqabi	2,462,678	16,519	2,479,198
EC: Sarah Baartman	534,543	190,865	725,408
EC: Amathole	13,253	8,252	21,505
EC: Chris Hani	7,800	12,386	20,186
EC: WHOLE PROVINCE	13,995,004	-	13,995,004
FS: Thabo Mofutsanyana	-	10,162,624	10,162,624
FS: Lejweleputswa	-	9,902,360	9,902,360
FS: Felize Dabi	-	6,036,160	6,036,160
FS: Mangaung	-	5,614,302	5,614,302
FS: Xhariep	-	307,248	307,248
FS: WHOLE PROVINCE	60,403,459	-	60,403,459
GP: City of Johannesburg	18,061,005	77,787,200	95,848,205
GP: Ekurhuleni	7,235,523	50,626,591	57,862,114
GP: City of Tshwane	4,954,949	35,431,220	40,386,169
GP: Sedibeng	6,274,699	13,197,880	19,472,579
GP: West Rand	3,252,245	11,844,932	15,097,177
KZN: eThekweni	6,958,173	58,088,379	65,046,552
KZN: uMgungundlovu	9,988,072	17,363,398	27,351,470
KZN: Zululand	4,306,898	16,725,750	21,032,648
KZN: uThungulu	2,324,964	11,637,865	13,962,830
KZN: uThukela	3,860,257	9,447,147	13,307,404
KZN: uMzinyathi	6,827,854	3,595,594	10,423,448
KZN: uMkhanyakude	4,612,990	4,320,065	8,933,055
KZN: Harry Gwala	3,014,391	4,550,376	7,564,766
KZN: Amajuba	2,848,095	4,697,082	7,545,176
KZN: Ugu	1,869,576	5,328,477	7,198,053
KZN: Ilembe	3,102,633	2,213,502	5,316,135
KZN: WHOLE PROVINCE	59,743,311	-	59,743,311
LP: Capricorn	5,773,786	19,542,707	25,316,493
LP: Mopani	-	21,640,434	21,640,434
LP: Waterberg	-	14,098,684	14,098,684
LP: Vhembe	-	7,173,364	7,173,364
LP: Sekhukhune	-	655,860	655,860
MP: Ehlanzeni	153,427	31,977,979	32,131,406
MP: Gert Sibande	-	18,602,712	18,602,712
MP: Nkangala	-	13,460,923	13,460,923
MP: WHOLE PROVINCE	30,722,615	-	30,722,615

District	DOH	PEPFAR	Total
NC: Francis Baard	773,008	1,002,692	1,775,700
NC: JT Gaetsewe	351,619	498,642	850,261
NC: Pixley ka Seme	342,844	62,944	405,788
NC: ZF Mgcawu	157,622	107,692	265,314
NC: Namakawa	60,624	62,944	123,568
NC: WHOLE PROVINCE	28,155	-	28,155
NW: Bojanala Platinum	6,064,484	20,688,374	26,752,858
NW: NM Molema	3,318,542	13,333,813	16,652,355
NW: Dr K Kaunda	5,880,463	8,617,734	14,498,197
NW: Dr RS Mompoti	1,566,270	1,241,328	2,807,598
WC: City of Cape Town	4,620,530	21,862,137	26,482,667
WC: West Coast	2,791,634	2,785,686	5,577,320
WC: Eden	3,329,581	1,494,639	4,824,220
WC: Cape Winelands	2,179,197	1,103,279	3,282,477
WC: Overberg	2,162,077	320,899	2,482,975
WC: Central Karoo	1,123,154	206,455	1,329,608
National	-	101,284,166	101,284,166
Above National	-	26,300,957	26,300,957
Not disaggregated by district	-	49,948,393	49,948,393
Total	303,163,487	758,121,218	1,061,284,705

#### Annex 27: HTS spending by funder and HIV tests performed (2014/15–2016/17, R)

	2014/15	2015/16	2016/17	Total
DOH	752,838,446	831,868,799	823,680,530	2,408,387,775
PEPFAR	295,912,195	442,790,295	966,020,895	1,704,723,385
Global Fund	19,167,626	170,496,954	-	189,664,580
Total	1,067,918,267	1,445,156,048	1,789,701,425	4,302,775,741
HIV test client (5 years and older incl ANC)	10,382,601	12,259,679	13,891,793	

**Annex 28: DOH HTS sub-programme spending by province, number of HIV tests, PLHIV population and unit expenditure per test (2016/17, R)**

<b>Province</b>	<b>Total Expenditure</b>	<b># tested (including antenatal)</b>	<b>Spending per HIV test performed</b>	<b>PLHIV Population</b>	<b>HTS spending per PLHIV</b>
EC	25,146,852	1,874,793	13	770,703	33
FS	48,616,285	559,788	87	365,136	133
GP	159,835,926	2,928,131	55	1,805,816	89
KZN	366,536,330	3,062,693	120	1,938,323	189
LP	66,373,770	1,993,689	33	445,097	149
MP	55,906,270	1,029,350	54	665,041	84
NC	2,564,568	276,094	9	79,657	32
NW	35,203,397	829,303	42	474,748	74
WC	63,497,133	1,337,952	47	421,752	151
<b>Total</b>	<b>823,680,530</b>	<b>13,891,793</b>	<b>59</b>	<b>6,966,273</b>	<b>118</b>

Note: This table includes all the spending on the HTS sub-programme, not only the commodities (test kits).

Annex 29: DOH HTS spending by cost category (2016/17, R)

Cost category	EC	FS	GP	KZN	LP	MP	NC	NW	WC	Total
Human resources	10,376,438	33,007,342	7,727,428	336,520,015	918,201	-	1,226,080	27,378,841	-	417,154,346
Transfers to NPOs	-	2,778,457	61,137,377	-	50,838,930	47,917,179	-	-	49,332,382	212,004,324
Laboratory services and diagnostics	13,047,478	7,634,623	36,855,418	29,764,133	14,481,560	6,638,115	1,198,346	5,935,060	14,160,664	129,715,397
Overheads	-	4,774,550	50,743,395	6,610	-	-	-	1,803,979	-	57,328,534
Medicines and drugs	-	-	1,897,662	6,699	-	-	-	-	4,088	1,908,449
Travel, M&I, meeting & events	1,532,130	16,460	75,167	1,234	135,079	2,886	129,743	-	-	1,892,700
Other	-	-	10,405	-	-	1,444,593	-	-	-	1,454,998
Non-health commodities and supplies	90,976	405,347	548,038	219,964	-	-	10,399	735	-	1,275,458
Health commodities and consumables	99,830	-	741,952	2,022	-	(96,503)	-	66,570	-	813,871
Vaccines	-	-	99,083	15,653	-	-	-	-	-	114,736
Non-health equipment	-	-	-	-	-	-	-	18,211	-	18,211
Training & Development	-	(494)	-	-	-	-	-	-	-	(494)
Total	25,146,852	48,616,285	159,835,926	366,536,330	66,373,770	55,906,270	2,564,568	35,203,397	63,497,133	823,680,530

**Annex 30: DOH and PEPFAR HTS spending by district (2016/17, R)**

<b>District</b>	<b>DOH</b>	<b>PEPFAR</b>	<b>Total</b>
EC: Alfred Nzo	20,576	28,030,210	28,050,786
EC: Amathole	1,069,834	8,554,177	9,624,010
EC: Buffalo City Metropolitan	3,932,754	22,057,520	25,990,274
EC: Chris Hani	12,698	7,740,434	7,753,132
EC: Joe Gqabi	113,900	369,471	483,371
EC: Nelson Mandela Bay	2,181,720	7,323,214	9,504,934
EC: OR Tambo	1,136,186	18,165,246	19,301,432
EC: Sarah Baartman	126,416	796,591	923,007
EC: WHOLE PROVINCE	16,552,768	-	16,552,768
FS: Felize Dabi	-	703,499	703,499
FS: Lejweleputswa	-	8,172,961	8,172,961
FS: Mangaung	-	7,010,431	7,010,431
FS: Thabo Mofutsanyana	-	8,754,329	8,754,329
FS: Xhariep	-	370,729	370,729
FS: WHOLE PROVINCE	48,616,285	-	48,616,285
GP: City of Johannesburg	55,653,495	82,276,310	137,929,805
GP: City of Tshwane	27,961,452	37,231,199	65,192,651
GP: Ekurhuleni	35,669,098	26,701,835	62,370,933
GP: Sedibeng	20,017,621	28,224,158	48,241,779
GP: West Rand	20,531,364	4,001,226	24,532,590
KZN: Amajuba	19,397,996	2,486,971	21,884,968
KZN: eThekweni	72,847,153	66,651,324	139,498,477
KZN: Harry Gwala	24,296,445	7,555,738	31,852,184
KZN: Ilembe	24,982,620	2,072,518	27,055,137
KZN: Ugu	42,164,003	31,569,487	73,733,490
KZN: uMgungundlovu	33,606,822	30,921,503	64,528,325
KZN: uMkhanyakude	33,436,834	3,160,819	36,597,653
KZN: uMzinyathi	22,376,829	5,572,633	27,949,461
KZN: uThukela	21,649,237	6,761,155	28,410,392
KZN: uThungulu	36,003,181	31,125,612	67,128,793
KZN: Zululand	35,405,210	21,176,139	56,581,349
KZN: WHOLE PROVINCE	370,001	-	370,001
LP: Capricorn	53,022,830	22,589,078	75,611,907
LP: Mopani	-	25,294,865	25,294,865
LP: Sekhukhune	-	6,359,402	6,359,402
LP: Vhembe	-	1,916,528	1,916,528
LP: Waterberg	-	9,903,641	9,903,641
LP: WHOLE PROVINCE	13,350,940	-	13,350,940

District	DOH	PEPFAR	Total
MP: Ehlanzeni	-	22,167,578	22,167,578
MP: Gert Sibande	5,076	57,010,589	57,015,665
MP: Nkangala	-	24,102,445	24,102,445
MP: WHOLE PROVINCE	55,901,193	-	55,901,193
NC: Francis Baard	408,136	643,779	1,051,916
NC: JT Gaetsewe	85,501	526,162	611,663
NC: Namakawa	-	983,710	983,710
NC: Pixley ka Seme	78,481	1,184,427	1,262,909
NC: ZF Mgcawu	12,866	563,437	576,303
NC: WHOLE PROVINCE	1,979,583	-	1,979,583
NW: Bojanala Platinum	66,570	28,163,983	28,230,553
NW: Dr K Kaunda	8,353	24,262,422	24,270,776
NW: Dr RS Mompoti	-	5,165,421	5,165,421
NW: NM Molema	9,857	12,879,635	12,889,493
NW: WHOLE PROVINCE	35,118,616	-	35,118,616
WC: Cape Winelands	7,938,306	7,919,235	15,857,541
WC: Central Karoo	1,968,166	204,704	2,172,870
WC: City of Cape Town	35,491,140	57,904,225	93,395,365
WC: Eden	7,647,001	614,120	8,261,121
WC: Overberg	4,688,451	409,383	5,097,834
WC: West Coast	5,764,070	1,834,021	7,598,091
Above National	-	10,789,979	10,789,979
National	-	137,090,688	137,090,688
Not disaggregated by district	2,895	-	2,895
Total	823,680,530	966,020,895	1,789,701,425

Annex 31: HBC spending by funder (2014/15–2016/17, R)

	2014/15	2015/16	2016/17	Total
DOH	854,637,523	1,173,092,447	1,490,374,511	3,518,104,481
DSD	536,122,600	585,987,500	625,576,760	1,747,686,860
Global Fund	95,590,680	80,849,560	-	176,440,239
PEPFAR	259,621,963	253,880,321	341,241,365	854,743,649
Total	1,745,972,765	2,093,809,828	2,457,192,636	6,296,975,229

Annex 32: PDOH and PDSD spending on HBC by province (2016/17, R)

Province	DOH spending	DSD spending	Total
EC	84,152,778	73,71,740	157,524,518
FS	57,425,946	25,020,880	82,446,826
GP	526,099,406	213,067,460	739,166,866
KZN	248,790,017	164,257,800	413,047,817
LP	209,237,800	35,025,680	244,263,480
MP	4,993,381	37,890,220	42,883,601
NC	1,317,592	21,402,280	22,719,872
NW	259,906,121	55,540,700	315,446,821
WC	98,451,469	-	98,451,469
Total	1,490,374,511	625,576,760	2,115,951,271

**Annex 33: PDOH HBC spending by cost category and province (2016/17, R)**

<b>Cost category</b>	<b>EC</b>	<b>FS</b>	<b>GP</b>	<b>KZN</b>	<b>LP</b>	<b>MP</b>	<b>NC</b>	<b>NW</b>	<b>WC</b>	<b>Total</b>
Human Resources	69,285,953	8,113,400	216,532,942	223,793,429	1,931,930	-	496,110	253,918,964	21,430,653	795,503,382
Transfers to NPOs	-	45,646,434	107,046,617	10,286,927	208,046,523	20,345	750,600	-	76,104,329	447,901,775
Overheads	11,137,108	20,388	191,431,456	-	-	-	-	-	243,700	202,832,652
Health commodities and consumables	401,055	1,572,194	7,131,738	14,706,254	-	2,632,214	-	5,221,694	369,800	32,034,950
Non-health commodities and supplies	173,966	1,515,513	2,906,184	2,354	208,754	410,000	7,953	92,241	119,144	5,436,109
Travel, M&I, meeting & events	3,096,396	477,728	272,637	1,052	(290,990)	1,602,609	28,948	-	69,543	5,257,924
Upgrade/maintenance/ refurbishment	-	4,706	-	-	-	-	-	656,543	31,056	692,305
Training & Development	-	-	544,900	-	-	-	-	-	25,574	570,474
Non-health equipment	58,300	60,247	196,662	-	-	-	33,982	16,678	57,671	423,540
Other	-	-	2,597	-	-	328,213	-	-	-	330,810
Medicines and drugs	-	-	33,672	-	-	-	-	-	-	33,672
Marketing/ promotions	-	15,336	-	-	(658,416)	-	-	-	-	(643,081)
<b>Total</b>	<b>84,152,778</b>	<b>57,425,946</b>	<b>526,099,406</b>	<b>248,790,017</b>	<b>209,237,800</b>	<b>4,993,381</b>	<b>1,317,592</b>	<b>259,906,121</b>	<b>98,451,469</b>	<b>1,490,374,511</b>

**Annex 34: DOH, DSD and PEPFAR HBC spending by district (2016/17, R)**

<b>District</b>	<b>DOH</b>	<b>DSD</b>	<b>PEPFAR</b>	<b>Total</b>
EC: Chris Hani	27,122,260	-	2,615,447	29,737,707
EC: Buffalo City Metropolitan	9,672,353	-	3,263,487	12,935,840
EC: Amathole	4,507,958	-	5,554,639	10,062,597
EC: Nelson Mandela Bay	8,155,722	-	1,338,934	9,494,656
EC: OR Tambo	3,147,429	-	4,824,605	7,972,033
EC: Alfred Nzo	635,188	-	4,354,797	4,989,985
EC: Joe Gqabi	1,360,225	-	-	1,360,225
EC: Sarah Baartman	54,002	-	176,343	230,346
EC: WHOLE PROVINCE	29,497,640	-	-	29,497,640
FS: Thabo Mofutsanyana	-	-	4,424,427	4,424,427
FS: Lejweleputswa	-	-	2,920,696	2,920,696
FS: Mangaung	-	-	2,789,067	2,789,067
FS: WHOLE PROVINCE	57,425,946	-	-	57,425,946
GP: City of Johannesburg	215,964,616	-	29,183,475	245,148,092
GP: City of Tshwane	97,504,518	-	6,117,932	103,622,450
GP: Ekurhuleni	95,325,111	-	6,738,154	102,063,265
GP: West Rand	61,747,255	-	-	61,747,255
GP: Sedibeng	55,555,148	-	5,435,863	60,991,011
KZN: eThekweni	42,873,651	-	27,182,849	70,056,500
KZN: uThungulu	30,247,152	-	3,238,136	33,485,288
KZN: Ugu	25,419,489	-	3,500,948	28,920,437
KZN: Zululand	23,248,355	-	3,824,425	27,072,780
KZN: uMgungundlovu	20,821,158	-	4,491,627	25,312,785
KZN: Ilembe	23,529,512	-	590,562	24,120,074
KZN: Harry Gwala	20,933,662	-	1,767,068	22,700,729
KZN: uMkhanyakude	20,396,089	-	1,509,825	21,905,914
KZN: uThukela	17,560,961	-	2,773,899	20,334,860
KZN: uMzinyathi	14,734,676	-	2,776,245	17,510,921
KZN: Amajuba	8,729,065	-	820,312	9,549,377
KZN: WHOLE PROVINCE	296,246	-	-	296,246
LP: Mopani	41,295,160	-	10,568,560	51,863,720
LP: Sekhukhune	44,254,290	-	2,393,713	46,648,002
LP: Vhembe	42,503,977	-	612,907	43,116,884
LP: Capricorn	35,918,887	-	2,224,053	38,142,939
LP: Waterberg	22,469,781	-	2,341,555	24,811,336
LP: WHOLE PROVINCE	22,795,706	-	-	22,795,706

District	DOH	DSD	PEPFAR	Total
MP: Nkangala	-	-	6,273,175	6,273,175
MP: Ehlanzeni	-	-	6,062,708	6,062,708
MP: Gert Sibande	-	-	4,952,939	4,952,939
MP: WHOLE PROVINCE	4,993,381	-	-	4,993,381
NC: JT Gaetsewe	750,600	-	1,420,442	2,171,042
NC: Namakawa	4,805	-	976,370	981,175
NC: WHOLE PROVINCE	496,110	-	-	496,110
NC: Pixley ka Seme	378	-	147,983	148,360
NC: Francis Baard	65,700	-	-	65,700
NW: Bojanala Platinum	1,469,349	-	5,114,692	6,584,042
NW: Dr K Kaunda	578,974	-	5,712,427	6,291,401
NW: NM Molema	2,204,502	-	3,751,759	5,956,261
NW: Dr RS Mompoti	1,734,331	-	4,058,321	5,792,652
NW: WHOLE PROVINCE	253,919,864	-	-	253,919,864
WC: City of Cape Town	30,712,100	-	3,269,369	33,981,469
WC: Cape Winelands	18,301,130	-	1,591,828	19,892,958
WC: Eden	17,622,575	-	-	17,622,575
WC: West Coast	17,192,449	-	-	17,192,449
WC: Overberg	11,079,251	-	-	11,079,251
WC: Central Karoo	3,543,963	-	-	3,543,963
National	-	-	135,527,088	135,527,088
Above National	-	-	12,027,715	12,027,715
Not disaggregated by district	1,857	625,576,760	-	625,578,617
Total	1,490,374,511	625,576,760	341,241,365	2,457,192,636

#### Annex 35: DOH spending on Regional Training Centres (Training) (2016/17, R)

Province	Total Expenditure
EC	8,754,471
FS	28,584,334
GP	18,250,243
KZN	9,996,281
LP	22,790,860
MP	6,940,362
NC	6,948,637
NW	7,943,989
WC	11,214,989
Total	121,424,165

**Annex 36: Regional Training Centre (Training) cost category spending (2016/17, R)**

<b>Cost category</b>	<b>EC</b>	<b>FS</b>	<b>GP</b>	<b>KZN</b>	<b>LP</b>	<b>MP</b>	<b>NC</b>	<b>NW</b>	<b>WC</b>	<b>Total</b>
Travel, M&I, meeting & events	8,754,471	8,352,151	10,318	7,157,618	20,426,461	5,155,371	845,782	5,597,799	986,117	57,286,089
Human resources	-	13,680,515	14,075,600	-	1,276,686	-	1,234,432	-	7,081,623	37,348,856
Training & Development	-	1,365,006	2,901,493	2,607,236	556,776	127,439	-	787,225	2,148,094	10,493,269
Non-health commodities and supplies	-	3,715,089	526,488	119,160	324,190	899,486	73,630	1,538,787	798,209	7,995,040
Laboratory services and diagnostics	-	-	-	-	-	-	4,784,089	-	-	4,784,089
Overheads	-	1,089,933	389,633	55,715	21,794	758,065	6,295	4,604	154,829	2,480,870
Other	-	381,640	6,738	-	-	-	-	11,250	-	399,628
Non-health equipment	-	-	174,036	56,552	19,410	-	-	-	46,116	296,115
Upgrade/maintenance/refurbishment	-	-	11,651	-	165,542	-	-	4,325	-	181,517
Query	-	-	154,285	-	-	-	-	-	-	154,285
Marketing/ promotions	-	-	-	-	-	-	4,409	-	-	4,409
<b>Total</b>	<b>8,754,471</b>	<b>28,584,334</b>	<b>18,250,243</b>	<b>9,996,281</b>	<b>22,790,860</b>	<b>6,940,362</b>	<b>6,948,637</b>	<b>7,943,989</b>	<b>11,214,989</b>	<b>121,424,165</b>

Annex 37: Provincial DSD HIV-related Sub-programmed Spending per province (2016/17, R)

Province	HIV/ AIDS (100%)	Community based care services for children (100%)	Care and services to families (20%)	Victim empowerment (GBV 20%)	Substance abuse, prevention and rehabilitation (20%)	Child Care and Protection (20%)	Child and Youth Care (10%)	Youth Development (10%)	Total DSD HIV-related spending per province
EC	99,151,000	23,527,000	14,322,000	19,833,800	15,441,600	36,413,800	9,950,400	4,017,400	222,657,000
FS	33,812,000	8,587,000	5,013,000	3,444,000	15,529,400	17,779,200	7,072,200	6,370,000	97,606,800
GP	287,929,000	417,054,000	25,456,400	17,422,800	34,630,000	112,120,109	53,636,524	2,507,752	950,756,585
KZN	221,970,000	133,326,000	2,575,200	7,369,000	18,201,600	71,827,400	11,961,400	3,588,600	470,819,200
LP	47,332,000	138,000,000	14,162,800	14,638,400	13,838,200	29,650,000	4,992,200	698,800	263,312,400
MP	51,203,000	32,554,000	6,902,400	5,734,000	14,364,800	25,554,200	5,687,200	5,420,600	147,420,200
NW	75,055,000	1,946,000	11,254,600	11,222,600	16,451,200	26,846,000	5,597,100	3,171,000	151,543,500
NC	28,922,000	16,787,000	5,892,600	2,806,800	13,402,000	10,561,800	3,655,100	2,589,300	84,616,600
WC	-	-	8,830,200	6,025,200	19,780,600	36,545,200	9,579,500	1,272,000	82,032,700
Total	845,374,000	771,781,000	94,409,200	88,496,600	161,639,400	367,297,709	112,131,624	29,635,452	2,470,764,985

Annex 38: DBE HIV Life Skills CG (2014/15–2016/17, R)

DBE HIV CG Programmes	2014/15	2015/16	2016/17
Training and Development	30,626,100	32,675,250	23,139,300
Co-curricular Activities	40,834,800	43,567,000	46,278,600
Care and Support	40,834,800	54,458,750	57,848,250
Learning and Teaching Support Material	30,626,100	32,675,250	23,139,300
Advocacy and Social Mobilisation	30,626,100	21,783,500	46,278,600
Monitoring and Support	16,333,920	17,426,800	18,511,440
Management and Administration	14,292,180	15,248,450	16,197,510
Total	204,174,000	217,835,000	231,393,000

Annex 39: DBE Life Skills CG spending by province (2016/17, R)

Province	Training and Development	Co-curricular Activities	Care and Support	Learning and Teaching Support Material	Advocacy and Social Mobilisation	Monitoring and Support	Management and Administration	Total PDDB Lifeskills CG spending
EC	3,959,100	7,918,200	9,897,750	3,959,100	7,918,200	3,167,280	2,771,370	39,591,000
FS	1,296,700	2,593,400	3,241,750	1,296,700	2,593,400	1,037,360	907,690	12,967,000
GP	3,244,900	6,489,800	8,112,250	3,244,900	6,489,800	2,595,920	2,271,430	32,449,000
KZN	5,309,600	10,619,200	13,274,000	5,309,600	10,619,200	4,247,680	3,716,720	53,096,000
LP	3,331,000	6,662,000	8,327,500	3,331,000	6,662,000	2,664,800	2,331,700	33,310,000
MP	1,934,200	3,868,400	4,835,500	1,934,200	3,868,400	1,547,360	1,353,940	19,342,000
NC	528,100	1,056,200	1,320,250	528,100	1,056,200	422,480	369,670	5,281,000
NW	1,662,900	3,325,800	4,157,250	1,662,900	3,325,800	1,330,320	1,164,030	16,629,000
WC	1,872,800	3,745,600	4,682,000	1,872,800	3,745,600	1,498,240	1,310,960	18,728,000

Annex 40: TB spending by funder and province, with number of TB patients (2016/17, R)

	SAG	USG	Global Fund	TB patients (DS + DR TB)
EC	364,074,659	47,336,052	-	43,833
FS	28,363,990	21,841,962	-	14,190
GP	286,321,705	70,597,235	-	40,330
KZN	877,565,781	88,704,346	-	66,019
LP	54,363,497	31,810,127	-	16,033
MP	182,245,128	29,912,321	-	17,258
NC	27,305,972	2,088,722	-	8,005
NW	-	36,959,490	-	16,762
WC	366,927,474	12,843,453	-	44,119
Above National	-	12,457,737	-	
National	24,325,525	92,661,422	-	
Not disaggregated by province	-	186,434,430	29,528,376	
Total	2,211,493,732	633,647,297	29,528,376	266,549

Annex 41: TB spending by funder and district (2016/17, R)

District	SAG	USG	Global Fund
EC: Nelson Mandela Bay	98,349,526	5,733,418	-
EC: Sarah Baartman	70,692,990	1,204,658	-
EC: Buffalo City Metropolitan	62,939,723	7,800,466	-
EC: Amathole	30,631,111	12,416,862	-
EC: Alfred Nzo	34,446,833	6,148,874	-
EC: OR Tambo	6,902,530	7,611,093	-
EC: Chris Hani	4,136,535	5,720,017	-
EC: Joe Gqabi	513,415	700,665	-
EC: WHOLE PROVINCE	55,461,996	-	-
FS: Mangaung	(2,174,179)	6,411,918	-
FS: Thabo Mofutsanyana	-	8,885,966	-
FS: Lejweleputswa	8,636,492	5,524,238	-
FS: Felize Dabi	-	746,568	-
FS: Xhariep	-	273,271	-
FS: WHOLE PROVINCE	21,901,677	-	-

District	SAG	USG	Global Fund
GP: City of Johannesburg	188,953,844	41,672,061	-
GP: Ekurhuleni	40,901,622	10,959,893	-
GP: West Rand	24,948,561	5,221,479	-
GP: City of Tshwane	18,884,089	8,902,898	-
GP: Sedibeng	12,426,568	3,840,905	-
GP: WHOLE PROVINCE	178,883	-	-
KZN: eThekweni	389,069,195	42,792,025	-
KZN: uMgungundlovu	103,284,450	8,525,233	-
KZN: Zululand	84,489,230	4,995,806	-
KZN: Ugu	75,601,271	6,197,299	-
KZN: Harry Gwala	44,657,182	4,725,299	-
KZN: uMkhanyakude	36,570,841	3,479,861	-
KZN: uMzinyathi	33,400,200	3,462,147	-
KZN: uThungulu	22,362,536	4,719,935	-
KZN: Ilembe	14,508,542	3,089,613	-
KZN: uThukela	13,547,685	3,953,178	-
KZN: Amajuba	12,892,325	2,763,950	-
KZN: WHOLE PROVINCE	47,182,324	-	-
LP: Mopani	4,286,064	10,733,327	-
LP: Capricorn	32,345,516	9,185,887	-
LP: Sekhukhune	5,138,963	6,195,562	-
LP: Waterberg	9,834,266	3,932,187	-
LP: Vhembe	684,037	1,763,163	-
LP: WHOLE PROVINCE	2,074,650	-	-
MP: Ehlanzeni	92,289,866	13,086,278	-
MP: Nkangala	48,333,653	9,538,379	-
MP: Gert Sibande	36,406,659	7,287,664	-
MP: WHOLE PROVINCE	5,214,949	-	-
NC: Francis Baard	595,553	535,595	-
NC: Pixley ka Seme	75,279	820,644	-
NC: JT Gaetsewe	3,257	435,963	-
NC: Namakwa	41,310	144,427	-
NC: ZF Mgcawu	4,200	152,093	-
NC: WHOLE PROVINCE	26,586,373	-	-

District	SAG	USG	Global Fund
NW: Bojanala Platinum	-	14,355,580	-
NW: Dr K Kaunda	-	11,456,197	-
NW: NM Molema	-	10,483,638	-
NW: Dr RS Mompoti	-	664,076	-
WC: City of Cape Town	200,900,254	8,027,553	-
WC: Cape Winelands	101,417,107	3,376,981	-
WC: Eden	47,027,946	435,640	-
WC: West Coast	15,547,307	435,638	-
WC: Overberg	1,263,350	422,429	-
WC: Central Karoo	771,510	145,213	-
National	24,299,724	92,661,422	-
Above National	-	12,457,737	-
Not disaggregated by district	53,939	186,434,430	29,528,376
Total	2,211,493,732	633,647,297	29,528,376

#### Annex 42: DOH TB spending by intervention (2014/15–2016/17, R)

Interventions	2014/15	2015/16	2016/17	Total
TB in-patient treatment	1,177,521,834	1,230,860,900	1,172,770,349	3,581,153,084
MDR treatment	536,868,286	638,759,307	669,021,306	1,844,648,899
TB out-patient treatment	87,372,035	90,286,450	144,041,487	321,699,972
PM	77,073,152	67,151,372	60,264,585	204,489,108
Infrastructure /upgrade / maintenance	57,052,466	113,381,206	15,816,902	186,250,574
TB ND	43,963,799	43,205,908	38,640,262	125,809,969
TB Treatment ND	-	-	100,443,854	100,443,854
RTC / Training	10,847	406,952	397,254	815,054
Total	2,000,290,066	2,232,045,814	2,211,493,732	6,443,829,611

Annex 43: TB spending by intervention and source (2016/17, R)

Intervention	SAG	USG	Global Fund
TB in-patient treatment	1,172,770,349	-	-
MDR treatment	669,021,306	-	62,763
TB out-patient treatment	144,041,487	-	-
PM	60,264,585	-	-
TB ND	38,640,262	-	-
RTC/Training	397,254	-	-
infrast/upgrade/mainten.	15,816,902	-	-
TB Treatment ND	100,443,854	97,086,000	-
TB Control	10,097,734	26,478,000	-
TB/HIV	-	457,127,297	-
TB prevention (IPT, MDR, etc) (non-BAS)	-	52,956,000	28,844
C&S	-	-	17,209,928
MDR-TB ND	-	-	10,265,690
MDR-TB case finding	-	-	1,961,151
Total	2,211,493,732	633,647,297	29,528,376

Annex 44: DOH spending on TB by intervention and province (2016/17, R)

Intervention	EC	FS	GP	KZN	LP	MP	NC	WC	National	Total
TB in-patient treatment	280,075,005	-	17,933,360	375,369,974	-	181,900,579	19,163,060	298,328,371	-	1,172,770,349
MDR treatment	-	14,084,615	216,785,056	405,838,397	32,271,927	-	41,310	-	-	669,021,306
TB out-patient treatment	28,829,551	-	9,464,990	82,507,206	2,802,666	344,550	-	20,092,525	-	144,041,487
TB Treatment ND	51,108,397	-	31,927,995	193,557	-	-	-	17,213,905	-	100,443,854
PM	3,739,833	-	6,593,836	5,233,400	19,288,904	-	1,083,087	-	24,325,525	60,264,585
TB ND	321,874	-	7,200	-	-	-	7,018,515	31,292,673	-	38,640,262
infrast /upgrade / mainten.	-	4,181,641	3,212,014	8,423,247	-	-	-	-	-	15,816,902
TB Control	-	10,097,734	-	-	-	-	-	-	-	10,097,734
RTC / Training	-	-	397,254	-	-	-	-	-	-	397,254
Total	364,074,659	28,363,990	286,321,705	877,565,781	54,363,497	182,245,128	27,305,972	366,927,474	24,325,525	2,211,493,732

Annex 45: TB spending compared to the estimated resources needed for the NTP (2014/15–2016/17, R)

	2014/15	2015/16	2016/17
DOH TB spend	2,000,290,066	2,232,045,814	2,211,493,732
DOH+USG+GF TB spend	2,470,782,236	2,738,792,198	2,874,669,405
NTP total estimated resource need	N/A	4,173,053,811	4,388,531,881
Potential TB funding gap	(563,949,045)	(240,109,736)	(173,455,688)

## Annex 46: Drug sensitive (DS) and drug resistant (DR) TB cases treated in SA

### 2014 DS-TB Case Registration

Province	PTB	EPTB	Cohort 2014
Eastern Cape	49,696	3,038	52,734
Free State	15,543	2,041	17,584
Gauteng	40,845	6,150	46,995
KwaZulu-Natal	78,169	13,213	91,382
Limpopo	15,069	2,286	17,355
Mpumalanga	17,309	1,511	18,820
North West	19,106	1,653	20,759
Northern Cape	8,635	366	9,001
Western Cape	38,615	4,948	43,563
South Africa	282,987	35,206	318,193

### 2015 DS-TB Case Registration

Province	PTB	EPTB	Cohort 2015
Eastern Cape	43,639	2 675	46 314
Free State	14,311	1 583	15 894
Gauteng	38,673	5 124	43 797
KwaZulu-Natal	62,903	10 369	73 272
Limpopo	14,876	2 136	17 012
Mpumalanga	15,778	1 246	17 024
North West	17,616	1 961	19 577
Northern Cape	7,326	304	7 630
Western Cape	38,227	4 338	42 565
South Africa	253,349	29 736	283 085

### 2016 DS-TB Case Registration

Province	PTB	EPTB	Cohort 2016
Eastern Cape	39 144	2 508	41 652
Free State	12 399	1 294	13 693
Gauteng	34 198	4 601	38 799
KwaZulu-Natal	53 117	9 599	62 716
Limpopo	13 443	2 137	15 580
Mpumalanga	14 804	1 480	16 284
North West	14 635	1 451	16 086
Northern Cape	7 309	236	7 545
Western Cape	38 139	4 208	42 347
South Africa	227 188	27 514	254 702

### 2014 DS-TB Case Registration

Province	Cohort (2014)	RR	MDR-TB	XDR-TB
Eastern Cape	1 813	650	1 163	271
Free State	592	437	155	25
Gauteng	1 090	534	556	17
KwaZulu-Natal	3 965	2 106	1 859	129
Limpopo	516	372	144	1
Mpumalanga	1 094	801	293	15
North West	543	416	127	1
Northern Cape	337	182	155	29
Western Cape	1 758	618	1 140	150
South Africa	11 708	6 116	5 592	638

### 2015 DS-TB Case Registration

Province	Cohort (2015)	RR	MDR-TB	XDR-TB
Eastern Cape	2 103	762	1 341	305
Free State	478	350	128	12
Gauteng	1 468	847	621	54
KwaZulu-Natal	3 605	1 661	1 944	158
Limpopo	483	357	126	7
Mpumalanga	1 085	635	450	48
North West	598	493	105	5
Northern Cape	509	279	230	25
Western Cape	1 620	583	1 037	130
South Africa	11 949	5 967	5 982	744

### 2016 DS-TB Case Registration

Province	Cohort (2016)	RR	MDR-TB	XDR-TB
Eastern Cape	2 181	890	1 154	137
Free State	497	301	186	10
Gauteng	1 531	951	537	43
KwaZulu-Natal	3 303	1 389	1 808	106
Limpopo	453	300	144	9
Mpumalanga	974	591	358	25
North West	676	469	194	13
Northern Cape	460	263	188	9
Western Cape	1 772	586	1 108	78
South Africa	11 847	5 740	5 677	430

**Annex 47: Comparison of the HIV and TB spending in 2016/17 with cost estimates of the previous NSP (2012/13–2016/17) for 2016/17 (R millions)**

	<b>Actual expenditure</b>	<b>Estimated NSP need</b>
HTS	1,790	5,217
TB case finding/ screening	459	1,418
TB treatment	2,232	869
Antiretroviral treatment	12,863	19,737
OVC support	1,774	1,930
Condoms	508	469
MMC	1,061	781
Youth HIV prevention	461	756
Other	7,665	1,070
<b>Total</b>	<b>28,814</b>	<b>32,248</b>

**Annex 48: Comparison of HIV and TB expenditure in 2016/17 with the new NSP estimated costs for 2017/18 (R)**

	<b>Actual expenditure (2016/17, R)</b>	<b>Estimated NSP need (2017/18, R)</b>
Expenditure on NSP priorities	25,309,809,034	
Expenditure on non-NSP interventions	3,504,324,062	
<b>Total</b>	<b>28,814,133,096</b>	<b>35,063,823,345</b>

**Annex 49: Expenditure not directed towards NSP priorities (2016/17, R)**

	<b>Global Fund</b>	<b>USG</b>	<b>SAG</b>	<b>Total Actual Spend (2016/17)</b>
HBC	-	341,241,365	2,115,951,271	2,457,192,636
HIV Prevention ND	-	367,608,907	459,617	368,068,524
Policy & Systems Development	-	253,874,615	-	253,874,615
HIV ND	556,107	-	211,154,029	211,710,136
Lab strengthening	-	106,098,761	-	106,098,761
SDC	-	-	58,790,497	58,790,497
PEP	-	10,011,526	9,430,650	19,442,176
infrast /upgrade / mainten.	-	-	15,825,682	15,825,682
Blood Bank spending (non-BAS)	-	11,757,926	-	11,757,926
Workplace prevention	-	-	1,563,109	1,563,109
<b>Total non-NSP</b>	<b>556,107</b>	<b>1,090,593,100</b>	<b>2,413,174,855</b>	<b>3,504,324,062</b>

**Annex 50: Spending by NSP goal in 2016/17 versus NSP resource need in 2017/18  
(R and % of total)**

<b>NSP goal</b>	<b>Actual Expenditure in 2016/17</b>	<b>(% of total)</b>	<b>NSP Resource Need in 2017/18</b>	<b>(% of total)</b>
1: Accelerate prevention to reduce new HIV, TB and STI infections.	4,523,173,131	16%	4,912,089,928	14%
2: Reduce morbidity and mortality by providing treatment, care and adherence support for all.	19,502,380,654	68%	25,271,689,177	72%
3: Reach all key and vulnerable populations with comprehensive, customised and targeted interventions.	174,195,334	1%	849,866,375	2%
4: Address the social and structural drivers of HIV, TB and STI infections, including human rights	406,745,795	1%	1,799,531,031	5%
5: Ground the response to HIV, TB and STIs in human rights principles and approaches	253,874,615	1%	18,362,757	0%
6: Leadership & coordination		0%	279,017,892	1%
8: Strengthen strategic information to drive progress towards achievement of NSP goals.	396,727,882	1%	374,116,648	1%
9: Critical enablers to maximise the reach and impact of South Africa's response to HIV, TB and STIs	1,372,146,125	5%	1,559,149,537	4%
Other	2,184,973,644	8%		0%
<i>HIV ND</i>	211,710,136			
<i>Non-NSP</i>	1,934,539,162			
<i>Query</i>	84,084			
<i>TB ND</i>	38,640,262			
<b>Total</b>	<b>28,814,217,180</b>	<b>100%</b>	<b>35,063,823,345</b>	<b>100%</b>

### Annex 51: NDOH PLHIV estimates (provided by USAID)

District	# of PLHIV	District	# of PLHIV
EC: Alfred Nzo	103,224	LP: Capricorn	107,728
EC: Amathole	96,786	LP: Mopani	114,449
EC: Buffalo City Metropolitan	103,173	LP: Vhembe	74,704
EC: Chris Hani	100,575	LP: Waterberg	66,508
EC: Sarah Baartman	40,030	LP: Sekhukhune	81,708
EC: Joe Gqabi	42,641		
EC: Nelson Mandela Bay	106,070	MP: Ehlanzeni	307,654
EC: OR Tambo	178,204	MP: Gert Sibande	196,950
		MP: Nkangala	160,437
FS: Fezile Dabi	53,436	NC: Francis Baard	33,351
FS: Lejweleputswa	102,689	NC: JT Gaetsweewe	20,328
FS: Mangaung	80,226	NC: Namakwa	2,622
FS: Xhariep	14,063	NC: Pixley ka Seme	10,191
FS: Thabo Mofutsanyana	114,722	NC: ZF Mgcawu	13,165
GP: Ekurhuleni	507,096	NW: Bojanala Platinum	219,823
GP: City of Johannesburg	638,683	NW: Dr K Kaunda	95,770
GP: Sedibeng	168,672	NW: NM Molema	105,640
GP: City of Tshwane	380,703	NW: Dr RS Mompoti	53,515
GP: West Rand	110,662		
KZN: Amajuba	110,662	WC: City of Cape Town	300,424
KZN: eThekweni	621,411	WC: Cape Winelands	48,348
KZN: iLembe	105,906	WC: Central Karoo	1,842
KZN: Ugu	139,233	WC: Eden	38,886
KZN: uMgungundlovu	226,236	WC: Overberg	12,569
KZN: uMkhanyakude	115,688	WC: West Coast	19,683
KZN: uMzinyathi	93,166		
KZN: uThukela	118,150		
KZN: uThungulu	172,960		
KZN: Zululand	171,640		
KZN: Sisonke	87,579		

Annex 52: BAS common codes crosswalked to the six classification sets

BAS Code	SA IC categories	NASA Categories	SHA Categories	New NSP Sub--objective	New NSP Objective	New NSP Goal
ACSM	SE.2. Laws, policies and practices	ASC.07.01 Advocacy and strategic communication	HC.6.1. Information, education and counseling programmes	9.2.1 Social enabler 1: Focus on social and behaviour change communication (SBCC) to ensure social mobilisation and increasing awareness	9.2 Social enablers	9 Critical enablers to maximise the reach and impact of South Africa's response to HIV, TB and STIs
Adherence (non-BAS)	I.4. Treatment Adherence	ASC.04.09 Supervision of personnel and patient tracking	HC.6.1. Information, education and counseling programmes	2.1.3 90% of all people receiving ART are virally suppressed (5.5 million people, including children)	2.1 Implement the 90-90-90 Strategy for HIV	2 Reduce morbidity and mortality by providing treatment, care and adherence support for all.
ART	I.1-3. ART (incl. pre-ART, HB treatment, nurse-initiated and managed ART, NIMART)	ASC.02.01.03.98 Antiretroviral therapy not disaggregated (ND) neither by age nor by line of treatment	HC.1.3.1. Curative outpatient care: ART	2.1.2 90% of all people with diagnosed HIV infection receive sustained ART (6.1 million people, including children)	2.1 Implement the 90-90-90 Strategy for HIV	2 Reduce morbidity and mortality by providing treatment, care and adherence support for all.
ART	I.1-3. ART (incl. pre-ART, HB treatment, NIMART)	ASC.02.01.03.98 Antiretroviral therapy ND neither by age nor by line of treatment	HC.1.3.1. Curative outpatient care: ART	2.1.2 90% of all people with diagnosed HIV infection receive sustained ART (6.1 million people, including children)	2.1 Implement the 90-90-90 Strategy for HIV	2 Reduce morbidity and mortality by providing treatment, care and adherence support for all.
Blood Bank spending (non-BAS)	PE.5. Blood safety	ASC.01.19 Blood safety	Non National Health Accounts (NHA) category	Non-NSP	Non-NSP	Non-NSP

BAS Code	SA IC categories	NASA Categories	SHA Categories	New NSP Sub--objective	New NSP Objective	New NSP Goal
C&S	I.nd. Care and treatment (C&T) ND	ASC.02.98 Care and treatment services ND by intervention	HC.I.nec. Unspecified curative care	3.2.3 Increase the provision of rehabilitation, comprehensive psychosocial support and mental health services for people living with and affected by HIV and TB	3.2 To provide an enabling environment to increase access to health services by key and vulnerable populations	3 Reach all key and vulnerable populations with comprehensive, customised and targeted interventions.
CE: Political commitment (non-BAS)	SE.I. Political commitment and advocacy	ASC.07.01-.99 Enabling environment	Non NHA category	Non-NSP	Non-NSP	Non-NSP
Condoms	3. Comprehensive Condom Programming	ASC.01.13 Public and commercial sector male condom provision	HC.5.1.3 Pharmaceuticals and other medical non-durable good: condoms	1.1.1 Implement targeted combination prevention services tailored to setting and population	1.1 Reduce new HIV infections to less than 100 000 by 2022 through combination prevention interventions	1 Accelerate prevention to reduce new HIV, TB and STI infections.
Gender-based violence (GBV) / gender empowerment	SE.9. Gender equality/GBV	ASC.07.05 Programmes to reduce GBV	Non NHA category	4.2.1 Increase access to provision of services for all survivors of sexual and gender-based violence	4.2 Increase access to and provision of services for all survivors of sexual and gender-based violence in the 27 priority districts by 2022	4 Address the social and structural drivers of HIV, TB and STI infections, including human rights
HBC	I.nec. HBC (non SA IC)	ASC.02.01.09 Home-based care	HC.3.4. Home-based long-term care (health)	2.1.3 90% of all people receiving ART are virally suppressed (5.5 million people, including children)	2.1 Implement the 90-90-90 Strategy for HIV	2 Reduce morbidity and mortality by providing treatment, care and adherence support for all.

BAS Code	SA IC categories	NASA Categories	SHA Categories	New NSP Sub--objective	New NSP Objective	New NSP Goal
HIV ND	All other HIV ND	ASC.98 HIV ND	HC.1.nec. Unspecified curative care	HIV ND	HIV ND	HIV ND
HIV PM (CDC)	PE.3. Management and incentives	ASC.04.01 Planning, coordination and programme management	HC.7.1.1. Planning & Management	9.1.4 Health system enabler 4: Programme management, planning, co-ordination and oversight	9.1 Health system enablers	9 Critical enablers to maximise the reach and impact of South Africa's response to HIV, TB and STIs
HIV PM (Global Fund)	PE.3. Management and incentives	ASC.04.01 Planning, coordination and programme management	HC.7.1.1. Planning & Management	9.1.4 Health system enabler 4: Programme management, planning, co-ordination and oversight	9.1 Health system enablers	9 Critical enablers to maximise the reach and impact of South Africa's response to HIV, TB and STIs
HIV Treatment ND	I.nd. C&T ND	ASC.02.98 Care and treatment services ND by intervention	HC.1.nec. Unspecified curative care	HIV treatment ND	2.1 Implement the 90-90-90 Strategy for HIV	2 Reduce morbidity and mortality by providing treatment, care and adherence support for all.
HPV	HPV (non SA IC)	HPV (non NASA)	HC.6.nec. Unspecified preventive care	1.2.2 Scale up and maintain high levels of HPV vaccination in 9-13 years target age group	1.2 Significantly reduce T. pallidum, gonorrhoea and chlamydia infection, to achieve the virtual elimination of congenital syphilis, and maintain high coverage of HPV vaccination.	1 Accelerate prevention to reduce new HIV, TB and STI infections.



BAS Code	SA IC categories	NASA Categories	SHA Categories	New NSP Sub--objective	New NSP Objective	New NSP Goal
HTA / SW	4.1. Key pops: CSWs	ASC.01.08.01-.98 Programmatic interventions for sex workers and their clients ND by type	HC.6.3. Early disease detection programmes	1.1.1 Implement targeted combination prevention services tailored to setting and population	1.1 Reduce new HIV infections to less than 100 000 by 2022 through combination prevention interventions	1 Accelerate prevention to reduce new HIV, TB and STI infections.
HTS	6. HCT	ASC.01.03 Voluntary counselling and testing (VCT) & ASC.02.01.01 Provider- initiated testing and counselling (PITC)	HC.6.3. Early disease detection programmes	2.1.2 90% of all people with diagnosed HIV infection receive sustained ART (6.1 million people, including children)	2.1 Implement the 90-90-90 Strategy for HIV	2 Reduce morbidity and mortality by providing treatment, care and adherence support for all.
Inmates HIV/TB programmes	4.3. Key pops: Inmates	ASC.01.04.99 Other programmatic interventions for vulnerable and accessible populations not elsewhere classified (n.e.c.)	HC.6.3. Early disease detection programmes	1.1.1 Implement targeted combination prevention services tailored to setting and population	1.1 Reduce new HIV infections to less than 100 000 by 2022 through combination prevention interventions	1 Accelerate prevention to reduce new HIV, TB and STI infections.
Key Pop (men who have sex with men, MSM) (non-BAS)	4.nd. Key Pop ND.	ASC.1.09.98 Programmatic interventions for MSM ND by type	Non SHA category	3.2.1 Enable increased access to health services through differentiated service delivery approaches that are tailored for the populations served	3.2 To provide an enabling environment to increase access to health services by key and vulnerable populations	3 Reach all key and vulnerable populations with comprehensive, customised and targeted interventions.

BAS Code	SA IC categories	NASA Categories	SHA Categories	New NSP Sub--objective	New NSP Objective	New NSP Goal
Key Pop (non-BAS)	4.nd. Key Pop ND.	ASC.01.04.98 Programmatic interventions for vulnerable and accessible population ND by type	HC.6.3. Early disease detection programmes	4.1.1 Reduce risky behaviour through the implementation of programmes that build resilience of individuals, parents and families	4.1 Implement social and behaviour change programmes to address key drivers of the epidemic and build social cohesion	4 Address the social and structural drivers of HIV, TB and STI infections, including human rights
Key Pop (people who inject drugs, PWID) (non-BAS)	4.nd. Key Pop ND.	ASC.1.10.98 Programmatic interventions for injecting drug users ND by type	Non SHA category	3.2.1 Enable increased access to health services through differentiated service delivery approaches that are tailored for the populations served	3.2 To provide an enabling environment to increase access to health services by key and vulnerable populations	3 Reach all key and vulnerable populations with comprehensive, customised and targeted interventions.
Monitoring & Evaluation (M&E) / Health Information System (HIS)	PE.1. Network connectivity and HIS	ASC.04.03 M&E	HC.7.1.2. M&E)	8.1.1 Optimise routinely collected strategic health information for data utilisation	8.1 Optimise routinely collected strategic health information for data utilisation	8 Strengthen strategic information to drive progress towards achievement of NSP goals.
MDR community care (non-BAS)	9.1. TB treatment services	ASC.02.01.02.02 Opportunistic infections' outpatient treatment (TB)	HC.1.3. Curative outpatient care	2.3.3 Treat successfully at least 90% of those diagnosed with TB (and 75% for those with DR TB)	2.3 Implement the 90-90-90 Strategy for TB	2 Reduce morbidity and mortality by providing treatment, care and adherence support for all.
MDR diagnosis (non-BAS)	TB case finding	ASC.02.02.01 Opportunistic infections' treatment	HC.6.3. Early disease detection programmes	2.3.3 Treat successfully at least 90% of those diagnosed with TB (and 75% for those with DR TB)	2.3 Implement the 90-90-90 Strategy for TB	2 Reduce morbidity and mortality by providing treatment, care and adherence support for all.

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MDR ND (non-BAS)	9.1. TB treatment services	ASC.02.02.01 Opportunistic infections' treatment	HC.1.1. Curative inpatient care	2.3.3 Treat successfully at least 90% of those diagnosed with TB (and 75% for those with DR TB)	2.3 Implement the 90-90-90 Strategy for TB	2 Reduce morbidity and mortality by providing treatment, care and adherence support for all.
MDR treatment	9.1. TB treatment services	ASC.02.01.02.02 OI outpatient treatment (TB)	HC.1.3. Curative outpatient care	2.3.3 Treat successfully at least 90% of those diagnosed with TB (and 75% for those with DR TB)	2.3 Implement the 90-90-90 Strategy for TB	2 Reduce morbidity and mortality by providing treatment, care and adherence support for all.
MMC	2. MMC	ASC.01.18 Male circumcision	HC.6.5.4.1. Disease control programmes: MMC	1.1.1 Implement targeted combination prevention services tailored to setting and population	1.1 Reduce new HIV infections to less than 100 000 by 2022 through combination prevention interventions	1 Accelerate prevention to reduce new HIV, TB and STI infections.
Nutrition	I.nd. C&T ND	ASC.02.98 Care and treatment services ND by intervention	HC.1.nec. Unspecified curative care	2.1.2 90% of all people with diagnosed HIV infection receive sustained ART (6.1 million people, including children)	2.1 Implement the 90-90-90 Strategy for HIV	2 Reduce morbidity and mortality by providing treatment, care and adherence support for all.
OVC	SE.II. OVC	ASC.03.01-.99 OVC services	Non NHA category	Non-NSP	Non-NSP	Non-NSP
Palliative / hospice care	I.nec. Palliative Care (non SA IC)	ASC.02.02.02 Inpatient palliative care & ASC.02.01.08 Outpatient palliative care	HC.3.1. Inpatient long-term care (health)	2.1.2 90% of all people with diagnosed HIV infection receive sustained ART (6.1 million people, including children)	2.1 Implement the 90-90-90 Strategy for HIV	2 Reduce morbidity and mortality by providing treatment, care and adherence support for all.

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PE: Community Capacity/ Inst. strengthening (non-BAS)	PE.2. Community-centred design & delivery	ASC.07.03 AIDS-specific institutional development	Non NHA category	Non-NSP	Non-NSP	Non-NSP
PE: Lab (non-BAS)	HSS: lab strengthening (non SA IC)	ASC.04.10.1 Upgrading laboratory infrastructure and new equipment	HC.4.1. Laboratory services	Non-NSP	Non-NSP	Non-NSP
PE: Pharmacovigilance	1.1-3. ART (incl. pre-ART, HB treatment, NIMART)	ASC.04.06 HIV drug-resistance surveillance	Non NHA category	8.3.1 Develop the national surveillance system to generate periodic estimates of HIV, TB and STI measures in the general population and in key and vulnerable populations	8.3 Further develop the national surveillance system to generate periodic estimates of HIV, TB and STI measures in the general population and in key and vulnerable populations	8 Strengthen strategic information to drive progress towards achievement of NSP goals.
PE: SCM (non-BAS)	HSS: SCM (non SA IC)	ASC.04.07 Drug supply systems	Non SHA category	9.1.2 Health system enabler 2: Strengthen procurement, supply chain and information systems	9.1 Health system enablers	9 Critical enablers to maximise the reach and impact of South Africa's response to HIV, TB and STIs
PEP	8.1. Prevention: PEP	ASC.01.22.01-.99 Post-exposure prophylaxis	HC.6.3. Early disease detection programmes	4.2.2 Provide support for survivors of sexual assault.	4.2 Increase access to and provision of services for all survivors of sexual and gender-based violence in the 27 priority districts by 2022	4 Address the social and structural drivers of HIV, TB and STI infections, including human rights

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PM	PE.3. Management and incentives	ASC.04.01 Planning, coordination and programme management	HC.7.1.1. Planning & Management	9.1.4 Health system enabler 4: Programme management, planning, co-ordination and oversight	9.1 Health system enablers	9 Critical enablers to maximise the reach and impact of South Africa's response to HIV, TB and STIs
PMTCT	5. PMTCT	ASC.01.17.98 PMTCT ND by intervention	HC.6.3. Early disease detection programmes	1.1.4 Provide targeted services to prevent MTCT of HIV and syphilis in the prenatal and postnatal period	1.1 Reduce new HIV infections to less than 100 000 by 2022 through combination prevention interventions	1 Accelerate prevention to reduce new HIV, TB and STI infections.
Policy & Systems Development	SE.2. Laws, policies and practices	ASC.04.01 Planning, coordination and programme management	Non NHA category	5.3.2: Monitor and reform laws, regulations and policies relating to HIV and TB	5.3 Promote an environment that enables and protects human and legal rights and prevents stigma and discrimination	5 Ground the response to HIV, TB and STIs in human rights principles and approaches
Policy & Systems Development	SE.2. Laws, policies and practices	ASC.04.01 Planning, coordination and programme management	Non NHA category	5.3.2: Monitor and reform laws, regulations and policies relating to HIV and TB	5.3 Promote an environment that enables and protects human and legal rights and prevents stigma and discrimination	5 Ground the response to HIV, TB and STIs in human rights principles and approaches
Policy and systems development (Global Fund)	SE.2. Laws, policies and practices	ASC.04.01 Planning, coordination and programme management	Non NHA category	5.3.2: Monitor and reform laws, regulations and policies relating to HIV and TB	5.3 Promote an environment that enables and protects human and legal rights and prevents stigma and discrimination	5 Ground the response to HIV, TB and STIs in human rights principles and approaches

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Prevention ND	8.nd. Prevention ND (non SA IC)	ASC.01.98 Prevention activities ND by intervention	HC.6.nec. Unspecified preventive care	HIV prevention ND	1.1 Reduce new HIV infections to less than 100 000 by 2022 through combination prevention interventions	1 Accelerate prevention to reduce new HIV, TB and STI infections.
Research, surveys (non-BAS)	PE.4. Research & innovation	ASC.08.01-.99 HIV and AIDS-related research activities	HKR.4. Research and development	8.4.1 Strengthen strategic research activities to create validated evidence for innovation, improved efficiency and enhanced impact	8.4 Strengthen strategic research activities to create validated evidence for innovation, improved efficiency and enhanced impact	8 Strengthen strategic information to drive progress towards achievement of NSP goals.
RTC / Training	PE.nec. Training (non SA IC)	ASC.05.03 Training	HKR.5. Education and training of HR	9.1.3 Health system enabler 3: Ensure that there are sufficient, appropriately trained human resources where they are needed	9.1 Health system enablers	9 Critical enablers to maximise the reach and impact of South Africa's response to HIV, TB and STIs
SBCC	7. SBCC	ASC.01.01.98 Communication for Social and behavioural change ND by type	HC.6.1. Information, education & counseling programmes	9.2.1 Social enabler 1: Focus on social and behaviour change communication (SBCC) to ensure social mobilisation and increasing awareness	9.2 Social enablers	9 Critical enablers to maximise the reach and impact of South Africa's response to HIV, TB and STIs

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SBCC	7. SBCC	ASC.01.01.98 Communication for SBCC ND by type	HC.6.1. Information, education & counseling programmes	9.2.1 Social enabler 1: Focus on SBCC to ensure social mobilisation and increasing awareness	9.2 Social enablers	9 Critical enablers to maximise the reach and impact of South Africa's response to HIV, TB and STIs
SDC	1.nec. SDC (non SA IC)	ASC.02.01.09 Home-based care	HC.3.4. Home-based long-term care (health)	2.1.2 90% of all people with diagnosed HIV infection receive sustained ART (6.1 million people, including children)	2.1 Implement the 90-90-90 Strategy for HIV	2 Reduce morbidity and mortality by providing treatment, care and adherence support for all.
Sexually transmitted infections (STIs)	8.3. STI syndromic management	ASC.01.16 Prevention, diagnosis and treatment of STIs	HC.6.3. Early disease detection programmes	2.2.1 Increase detection and treatment of asymptomatic STIs by 50% in key/ priority population groups	2.2 Improve STI detection, diagnosis and treatment	2 Reduce morbidity and mortality by providing treatment, care and adherence support for all.
Substance abuse prevention	SE.6. Alcohol reduction programmes	ASC.07.01-.99 Enabling environment	Non NHA category	4.4.1 Improve the policy for harm reduction for substance and alcohol abuse and its implementation.	4.4 Implement and scale up a package of harm reduction interventions for alcohol and substance use in all districts	4 Address the social and structural drivers of HIV, TB and STIs, including human rights
Surveillance (non-BAS)	PE.1. Network connectivity and information systems	ASC.04.05 Serological-surveillance (serosurveillance)	HC.6.5. Epidemiological surveillance & risk & disease control programmes	8.3.1 Develop the national surveillance system to generate periodic estimates of HIV, TB and STI measures in the general population and in key and vulnerable populations	8.3 Further develop the national surveillance system to generate periodic estimates of HIV, TB and STI measures in the general population and in key and vulnerable populations	8 Strengthen strategic information to drive progress towards achievement of NSP goals.

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TB Control	9.5-6. TB Preventive therapy, IPT	ASC.02.01.02.01 OI outpatient prophylaxis (IPT)	HC.6.3. Early disease detection programmes	TB prevention ND	1.3 Reduce TB incidence by at least 30%, from 834/100,000 population in 2015 to less than 584/100,000 by 2022.	1 Accelerate prevention to reduce new HIV, TB and STI infections.
TB control	TB case finding	ASC.02.01.02.02 OI outpatient treatment (TB)	HC.6.3. Early disease detection programmes	2.3.1 Find 90% of all TB cases and place them on appropriate treatment	2.3 Implement the 90-90-90 Strategy for TB	2 Reduce morbidity and mortality by providing treatment, care and adherence support for all.
TB Control (Global Fund)	9.5-6. TB Preventive therapy, IPT	ASC.02.01.02.01 OI outpatient prophylaxis (IPT)	HC.6.3. Early disease detection programmes	TB prevention ND	1.3 Reduce TB incidence by at least 30%, from 834/100,000 population in 2015 to less than 584/100,000 by 2022.	1 Accelerate prevention to reduce new HIV, TB and STI infections.
TB Diagnostics	TB control	ASC.02.01.02.02 OI outpatient treatment (TB)	HC.6.3. Early disease detection programmes	2.3.1 Find 90% of all TB cases and place them on appropriate treatment	2.3 Implement the 90-90-90 Strategy for TB	2 Reduce morbidity and mortality by providing treatment, care and adherence support for all.
TB infrast /upgrade / mainten.	Infrastructure development (non SA IC)	ASC.4.10.2 Construction of new health centres (or upgrade)	Capital investment	Non-NSP	Non-NSP	Non-NSP
TB inpatient treatment	9.1. TB treatment services	ASC.02.01.02.02 OI outpatient treatment (TB)	HC.1.1. Curative inpatient care	2.3.1 Find 90% of all TB cases and place them on appropriate treatment	2.3 Implement the 90-90-90 Strategy for TB	2 Reduce morbidity and mortality by providing treatment, care and adherence support for all.

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TB ND	9.nd. TB ND	ASC.02.01.02.98 OI outpatient prophylaxis and treatment ND by type (for TB mostly)	HC.1.nec. Unspecified curative care	TB ND	TB ND	TB ND
TB outpatient treatment	9.1. TB treatment services	ASC.02.01.02.02 OI outpatient treatment (TB)	HC.1.3. Curative outpatient care	2.3.1 Find 90% of all TB cases and place them on appropriate treatment	2.3 Implement the 90-90-90 Strategy for TB	2 Reduce morbidity and mortality by providing treatment, care and adherence support for all.
TB PM	PE.3. Management and incentives	ASC.04.01 Planning, coordination and programme management	HC.7.1.1. Planning & Management	9.1.4 Health system enabler 4: Programme management, planning, co-ordination and oversight	9.1 Health system enablers	9 Critical enablers to maximise the reach and impact of South Africa's response to HIV, TB and STIs
TB PM (CDC)	PE.3. Management and incentives	ASC.04.01 Planning, coordination and programme management	HC.7.1.1. Planning & Management	9.1.4 Health system enabler 4: Programme management, planning, co-ordination and oversight	9.1 Health system enablers	9 Critical enablers to maximise the reach and impact of South Africa's response to HIV, TB and STIs
TB PM (Global Fund)	PE.3. Management and incentives	ASC.04.01 Planning, coordination and programme management	HC.7.1.1. Planning & Management	9.1.4 Health system enabler 4: Programme management, planning, co-ordination and oversight	9.1 Health system enablers	9 Critical enablers to maximise the reach and impact of South Africa's response to HIV, TB and STIs
TB prevention (IPT, MDR, etc.) (non-BAS)	9.5-6. TB Preventive therapy, IPT	ASC.02.01.02.01 OI outpatient prophylaxis (IPT)	HC.6.3. Early disease detection programmes	TB treatment ND	2.3 Implement the 90-90-90 Strategy for TB	2 Reduce morbidity and mortality by providing treatment, care and adherence support for all.
TB treatment ND	9.1. TB treatment services	ASC.02.01.02.02 OI outpatient treatment (TB)	HC.1.nec. Unspecified curative care	2.3.3 Treat successfully at least 90% of those diagnosed with TB (and 75% for those with DR TB)	2.3 Implement the 90-90-90 Strategy for TB	2 Reduce morbidity and mortality by providing treatment, care and adherence support for all.

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TB/HIV	9.nec. TB/HIV Integration (non SA IC)	TB/HIV Integration (non NASA)	HC.6.3. Early disease detection programmes	1.1.1 Implement targeted combination prevention services tailored to setting and population	1.1 Reduce new HIV infections to less than 100 000 by 2022 through combination prevention interventions	1 Accelerate prevention to reduce new HIV, TB and STI infections.
Ward-based Outreach Team (WBOT)	1.nec. HBC (non SA IC)	ASC.02.01.09 Home-based care	HC.3.4. Home-based long-term care (health)	2.1.2 90% of all people with diagnosed HIV infection receive sustained ART (6.1 million people, including children)	2.1 Implement the 90-90-90 Strategy for HIV	2 Reduce morbidity and mortality by providing treatment, care and adherence support for all.
Workplace prevention	PE.10. Employer practices	ASC.01.11.01-99 Programmatic interventions in the workplace	Non NHA category	1.1.1 Implement targeted combination prevention services tailored to setting and population	1.1 Reduce new HIV infections to less than 100 000 by 2022 through combination prevention interventions	1 Accelerate prevention to reduce new HIV, TB and STI infections.
Youth	4.nec. Other Key Pops: Youth	ASC.01.05 Prevention –youth in school & ASC.01.06 Prevention –youth out-of-school	Non NHA category	1.1.2 Provide sensitive and age-appropriate sexual and reproductive health services (SRH) and comprehensive sexuality education (CSE)	1.1 Reduce new HIV infections to less than 100 000 by 2022 through combination prevention interventions	1 Accelerate prevention to reduce new HIV, TB and STI infections.







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