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



August 2018

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USAID's Health Finance and Governance (HFG) project helps to improve health in developing countries by expanding people's access to health care. Led by Abt Associates, the project team works with partner countries to increase their domestic resources for health, manage those precious resources more effectively, and make wise purchasing decisions. The six-year, \$209 million global project is intended to increase the use of both primary and priority health services, including HIV/AIDS, tuberculosis, malaria, and reproductive health services. Designed to fundamentally strengthen health systems, HFG supports countries as they navigate the economic transitions needed to achieve universal health care.

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Office of Health Systems
Bureau for Global Health

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Abt Associates Inc. | 6130 Executive Boulevard | Rockville, Maryland 20853
T: 301.347.5000 | F: 301.652.3916 | www.abtassociates.com

Avenir Health | Broad Branch Associates | Development Alternatives Inc. (DAI) |
| Johns Hopkins Bloomberg School of Public Health (JHSPH) | Results for Development Institute (R4D)
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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 (HE²RO) 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 HE²RO 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 HE²RO, 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 HE²RO 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, HE²RO 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 I. 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 I. 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.

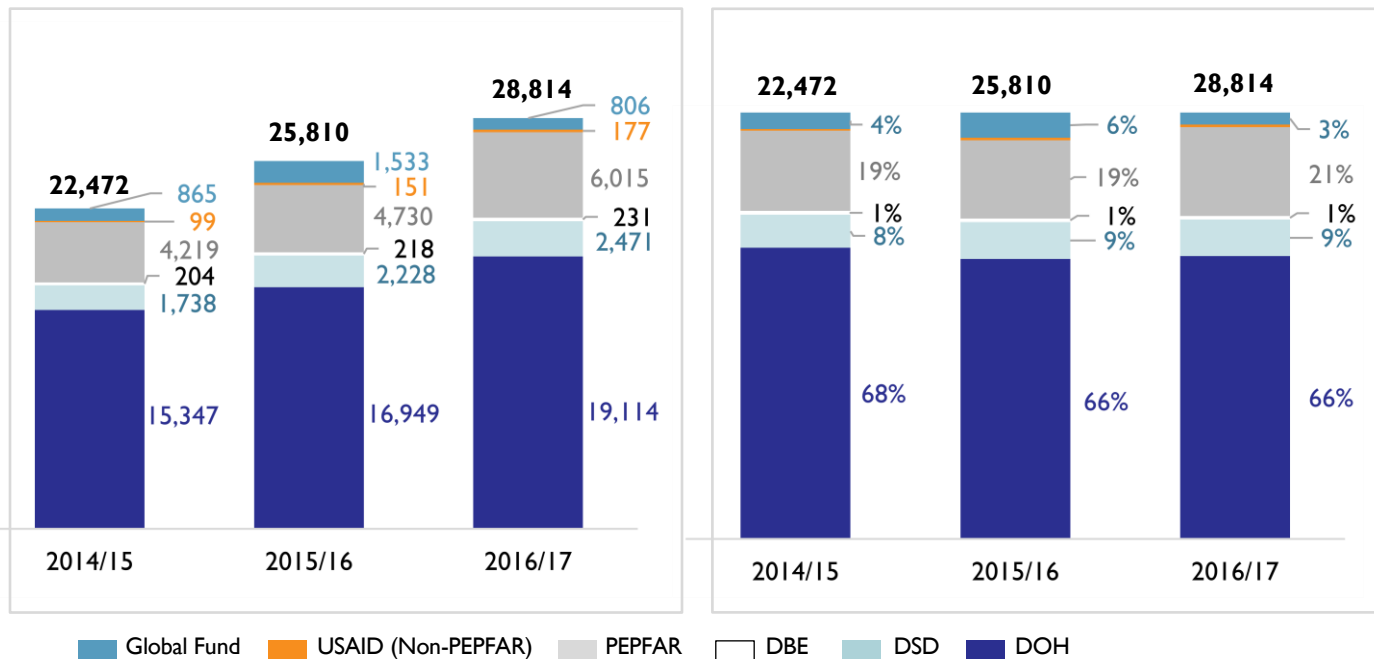
Selected Findings

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 I). 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 2016/17¹. 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

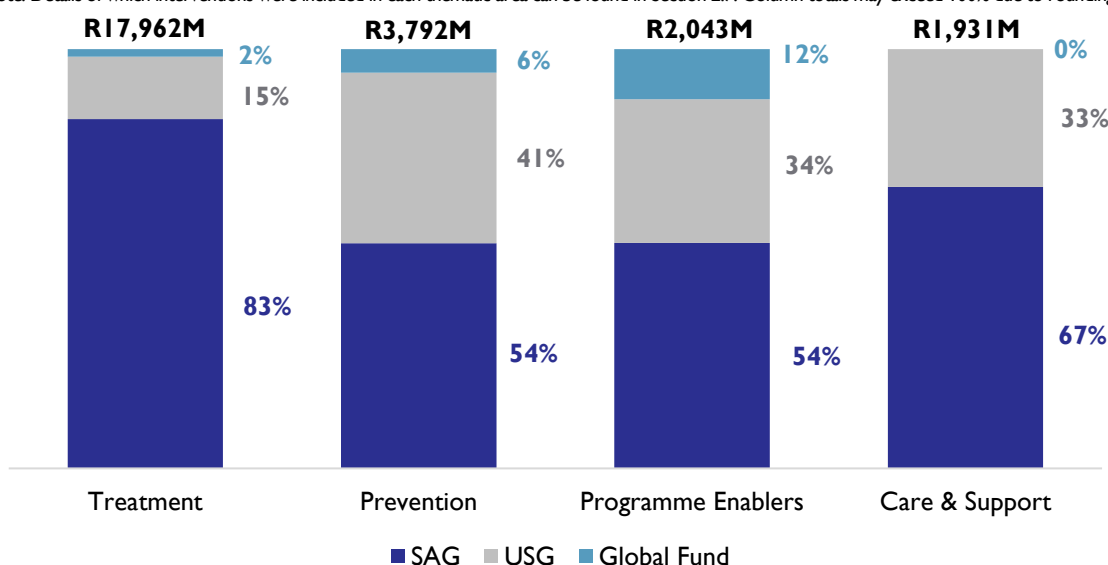
¹ The US dollar value of PEPFAR's contribution decreased from 2014/15 to 2015/16, but the Rand value increased due to weakening of the Rand relative to the US dollar during that period.

sluggish spending in the first year of a new three-year grant. Importantly, the new Global Fund grant will amount to R4.3 billion² 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%).

² 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

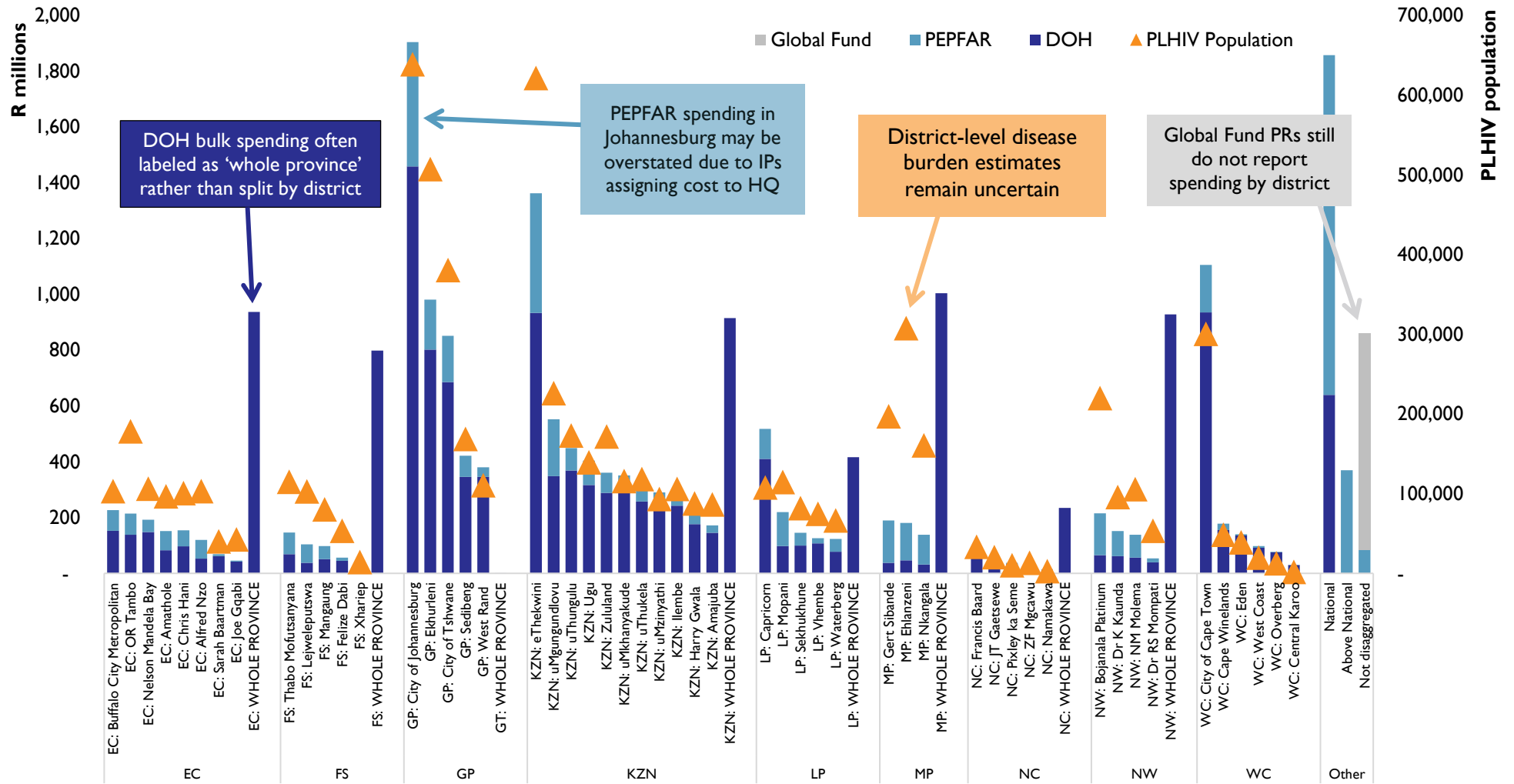
This study broke new ground for district-level analysis and confronted some challenges with respect to data quality and completeness.

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.



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