



HP+ POLICY Brief

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Updated Resource Requirements for Sustainable Financing of the HIV Response in Indonesia

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Introduction

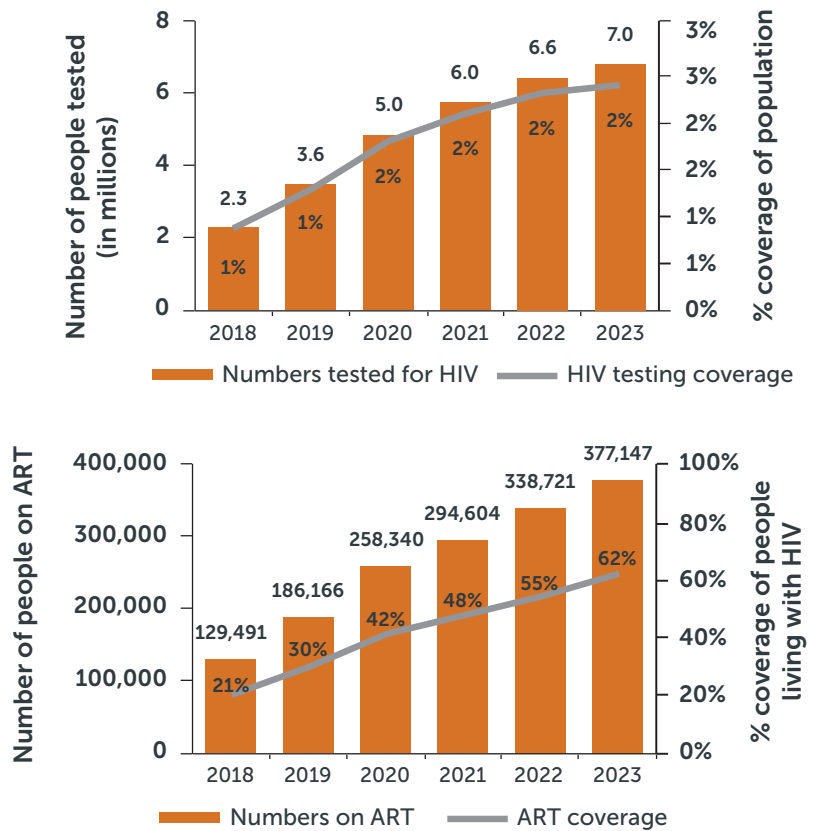
The government of Indonesia has committed to combating the country’s HIV epidemic by strengthening policy frameworks and adopting fast-track targets geared at accelerating progress toward achieving epidemic control. In the context of these national HIV policy and programmatic changes, understanding total costs, accounting for a heterogenous epidemic and costs of service delivery across provinces, is essential to plan and advocate for HIV funding. To support these efforts, this analysis calculated a comprehensive resource needs estimate, accounting for such variations and projecting costs of HIV service delivery from 2018–2023.

Background

The fast-track strategy aims to rapidly increase coverage of key HIV interventions from current low levels (Figure 1). Just 12.4% of people living with HIV were receiving antiretroviral therapy (ART) as of late 2016, yet the country aims to achieve a goal of 81% of all people living with HIV receiving ART by 2030. To achieve its ambitious targets, the government of Indonesia plans to roll out a test-and-start policy for ART beginning in 2018. As part of the fast-track strategy, the government has prioritized three packages of interventions according to district classification, and is focusing on improved case-finding, linkage to treatment upon diagnosis, and adherence to medication regimens.

As Indonesia embarks upon rapid scale-up in HIV service delivery, it faces transitions away from external funding and technical assistance support for HIV within the next five to ten years. While the majority (57%) of Indonesia’s HIV response has been financed by domestic sources, many activities for HIV prevention and key

Figure 1: HIV Testing and ART Scale-Up



populations remain entirely funded by external sources. Further, Indonesia pays some of the highest prices for HIV commodities in its peer group of lower-middle-income countries in Asia, particularly for antiretroviral drugs (ARVs) and viral load testing reagents. This is a fact that the country is attempting to address through revised procurement processes and price negotiations with suppliers.

As a result of these major changes, up-to-date and detailed estimates of financial resources are required to enable the government and its partners to achieve national HIV goals, especially mobilizing additional domestic resources and improving efficiency. To this end, the Sub-Directorate for HIV/AIDS and STI in the Directorate of Communicable Diseases of the Ministry of Health, Government of Indonesia, with technical assistance from the Health Policy Plus (HP+) project, funded by the U.S. Agency for International Development (USAID) and the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), projected HIV service delivery costs from 2018 to 2023 at national and provincial levels, taking into account updated policies, targets, and revised unit costs. This analysis improves upon previous cost analyses by generating province-specific unit costs and targets that reflect differences in the HIV epidemic across geographies. It was paired with an analysis of financing options from central and local government as well as national health insurance (summarized in a separate document).

Methods

We estimated facility staff, overhead, and commodity costs to conduct key population outreach, condom distribution, testing and treatment of sexually transmitted diseases (STIs), needle and syringe exchange programs, methadone treatment, HIV testing services, and HIV treatment, including laboratory monitoring. We estimated costs by province, year, intervention, and cost category. National coverage targets used in the costing align with existing fast-track targets to 2020; based on consultations with civil society organizations and the MOH regarding scale-up plans, we extrapolated targets from 2020 to 2023. Targets were disaggregated to the provincial level based on past trends in numbers reached by province, population sizes by province, and district prioritization plans.

This cost analysis builds upon existing secondary data on HIV service delivery costs, including a 2015 study conducted by the Joint United Nations Programme on HIV and AIDS (UNAIDS), a World Bank activity-based costing of select HIV services, and latest commodity price data and scenarios from the MOH (Sucahya and Nadjib, 2015; World Bank, 2016). The costing assumes that Indonesia will fully roll out routine viral load testing. We developed unique multipliers for each province and intervention, with stakeholder input, to generate province-specific unit costs. The multipliers are based on provincial variation across four main factors that account for cost differences between provinces (Box 1). We also estimated

Box 1. Factors for Province-Specific Multipliers

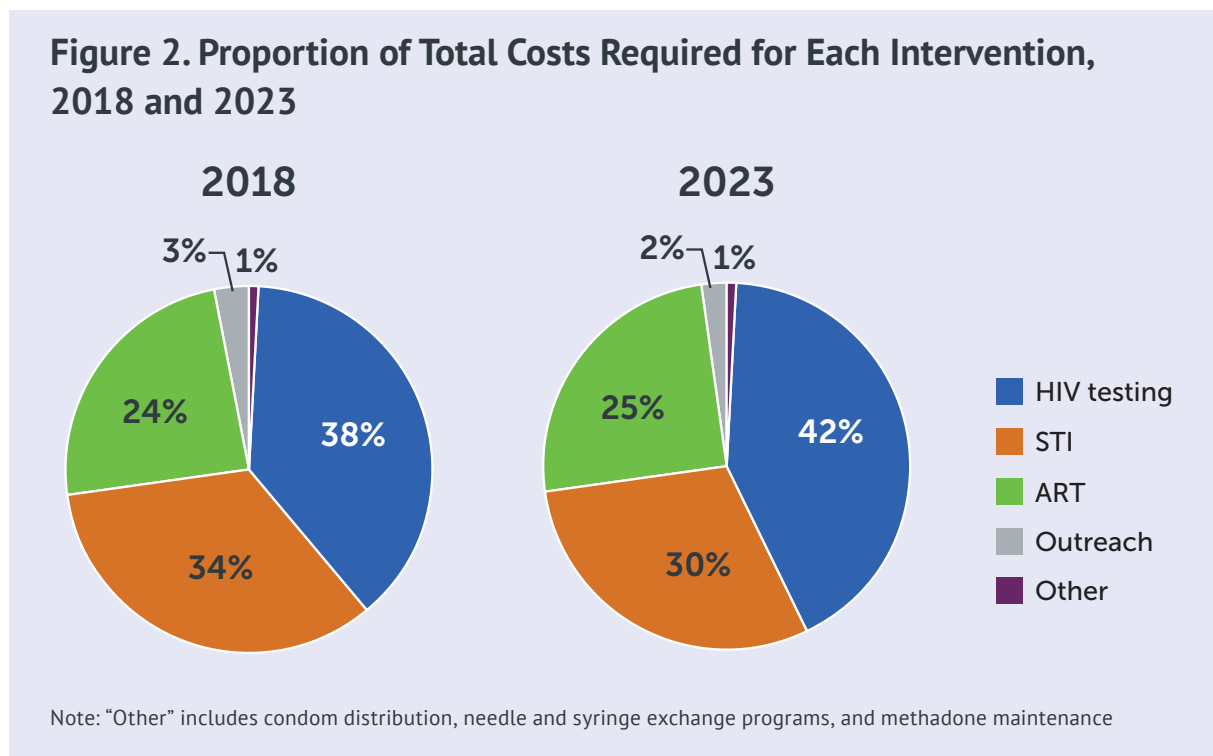
- **Difficulty reaching each key population** (men who have sex with men, female sex workers, transgender individuals (*waria*), and people who inject drugs). *Source: expert opinion*
- **Cost of living.** *Source: 2015 Badan Pusat Statistik data*
- **External funding priorities.** *Source: 2018-2020 Global Fund funding request*
- **Proportion of services delivered at primary healthcare vs. hospital levels.** *Source: 2016 MOH data*

the potential cost savings from reduced prices for ARVs and viral load reagents. Costs are presented in constant 2017 Indonesian rupiah (IDR).

How do HIV resource requirements change over time?

The analysis found that total financing needs for HIV service delivery will more than double between 2018 and 2023, increasing from IDR 4.2 trillion to IDR 11.6 trillion (US\$300 million to US\$830 million). HIV testing will be the highest cost intervention across all years due to the large number of individuals targeted for testing under the current testing strategy (which includes testing all pregnant women for HIV by 2023). Only a minority of the testing volume is based on active case-finding. HIV testing costs could be reduced in the future if Indonesia scales-up more efficient testing strategies, such as index testing, or new service delivery models for key population outreach and testing that improve testing yields.¹

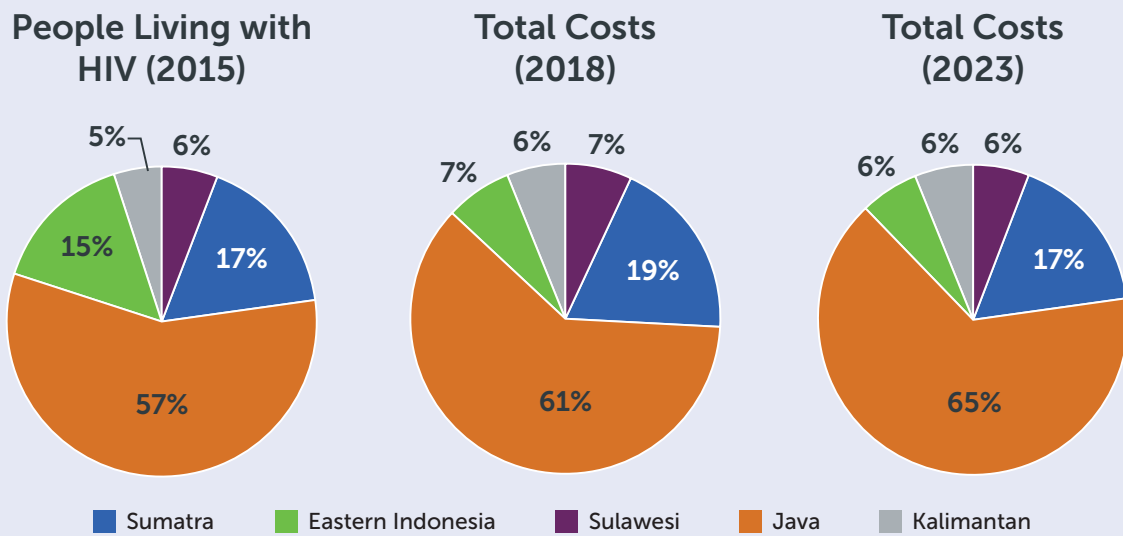
ART costs account for about a quarter of total resource requirements each year (Figure 2). Although the cost to treat one person per year is very high in Indonesia, ART does not comprise the majority of resource needs. Coverage of people living with HIV and numbers reached will remain relatively low compared to other interventions included in the analysis. HIV prevention intervention costs will increase over time, but at a less rapid rate than HIV testing and treatment. As a result, HIV prevention activities as a proportion of total HIV resource requirements will decline, from about 38% in 2018 to just one-third in 2023.



DKI Jakarta, which includes some of the highest unit costs per intervention and numbers reached, is the province that needs the most financial resources to reach fast-track targets. Costs in DKI Jakarta will increase significantly between 2018 and 2023, from IDR 7.8 billion to IDR 36.8 billion (US\$0.55 million to US\$2.6 million). The next highest-cost provinces include West Java, East Java, and Central Java; these four provinces will account for over half (55%) of total HIV service delivery costs in 2023 (Figure 3).

¹ HP+ did not advise on testing strategy.

Figure 3: People Living with HIV and Total Costs, by Island Group



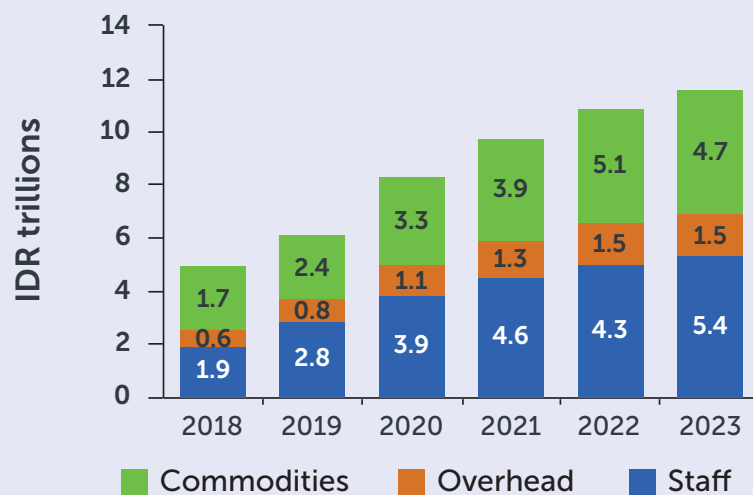
Note: "Other" includes condom distribution, needle and syringe exchange programs, and methadone maintenance

What are the cost drivers in the HIV response?

Staff costs, including clinical and administrative personnel and peer educator costs, is the highest-cost category across all years (Figure 4). Commodity costs, 96% of which are currently funded by the government of Indonesia, will account for 40% of total costs in all years. ARVs are driving this cost; they represent 55% of total commodity costs in 2023. If Indonesia is able to reduce ARV prices by 30% starting in 2019, the country would save IDR 2.3 trillion (US\$164 million) from 2019 to 2023. The cost

savings in 2019 alone (IDR 0.3 trillion/US\$21 million) would allow an additional 79,785 people living with HIV to receive ARVs that year. Further savings of IDR 0.6 trillion (US\$43 million) could be achieved between 2019 and 2023 if Indonesia is able to reduce the price of Abbott viral load reagents by 70% per test—an option currently being explored by the MOH.

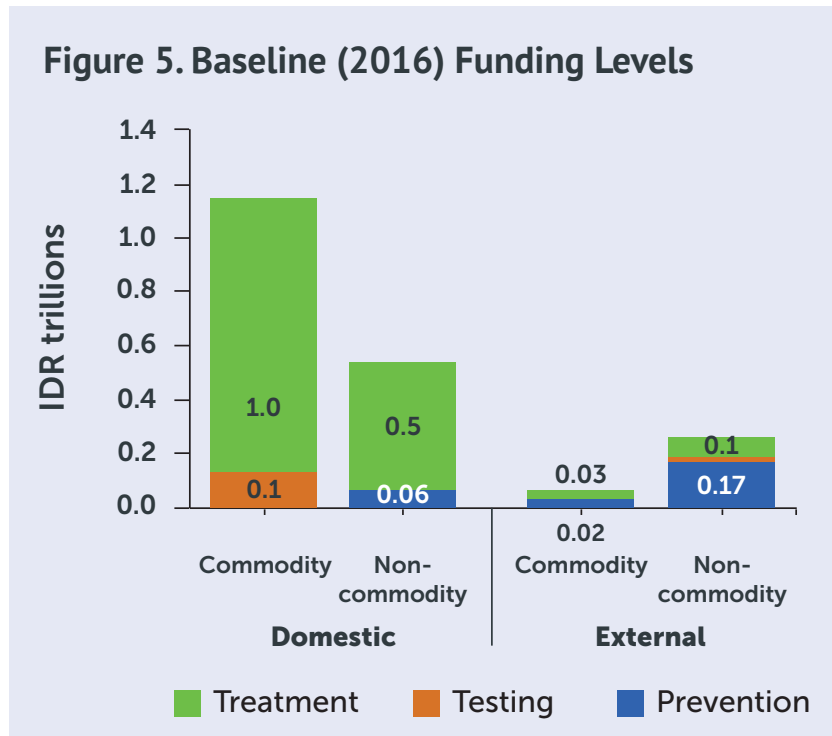
Figure 4. Annual Costs by Cost Category



Note: Staff costs include the salary costs for health workers to deliver HIV interventions. Overhead costs include the cost of facility utilities, meetings, trainings, and transportation.

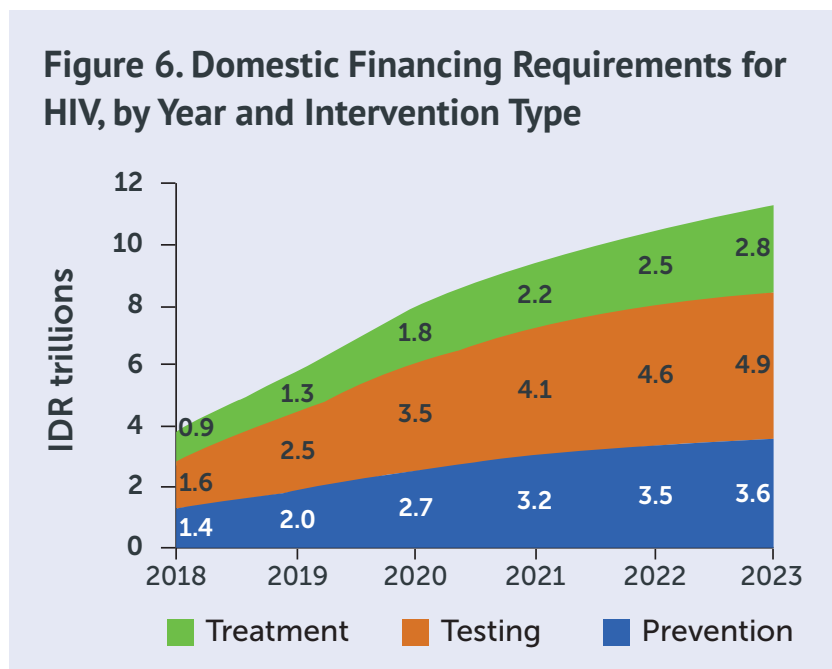
What are the financing sources for these costs, and are they sustainable?

Across government of Indonesia and external resources in 2016, nearly IDR 2 trillion (US\$143 million) was spent on HIV service delivery on costs included in our analysis, for which financing sources and levels are known² (Figure 5). The government represents 84% of this spending. The vast majority of known government HIV spending (89%) was on ART. External financing of HIV service delivery, on the other hand, was primarily spent on prevention (63%).



Assuming external financing levels and commodity pricing remain constant at 2016 levels from 2018 to 2023, the government of Indonesia and other domestic sources will need to spend IDR 11.3 trillion (US\$808 million) on HIV service delivery by 2023 (Figure 6). This requirement will be lower if the government is successful at securing lower prices for ARVs and viral load reagents.

Currently, some HIV interventions are covered under existing domestic mechanisms. For example, STI testing and treatment costs, which will account for 31% of domestic spending requirements in 2023, are currently covered for national health insurance scheme *Jaminan Kesehatan Nasional* (JKN) members (74% of the population as of late April 2018). The government will need to explore alternative financing



mechanisms for covering costs of activities currently conducted by civil society organizations and funded primarily through external sources, particularly key population outreach and

² Baseline government of Indonesia and donor spending on STI testing and treatment, needle and syringe exchange programs, and methadone treatment is unknown.

condom distribution. HIV testing, which accounts for the largest share of domestic financing needs for HIV, is currently funded through a mix of Indonesian government, external, and JKN funding. Further integration of HIV testing and treatment (which will represent another quarter of domestic HIV financing requirements in 2023) may help to ensure the sustainability of the country's HIV response.

Discussion and Recommendations

Given the projected increase in costs required to meet Indonesia's ambitious HIV goals, the government of Indonesia will need to increase domestic funding for HIV through central and local government allocations, and, possibly, through additional integration of HIV into the JKN benefits package. Additional analyses on domestic funding options for HIV service delivery are available in an accompanying brief, *Options to Finance the Rapid Scale-Up of the HIV Response in Indonesia: The Role of JKN and Local Governments* (Prabhakaran et al., 2018). Government spending on HIV also needs to be more efficient. By improving HIV testing strategies, securing reduced prices for ARVs and viral load reagents, and undertaking other efforts, the government should be able to provide more HIV services with the resources that are currently available. To maximize the health impacts of its spending, the government should also increase investment in the most cost-effective interventions, particularly for prevention. To guide domestic HIV financing decisions, the following is recommended:

- **Consider revision of targets** once the Integrated Biological and Behavioral Survey (IBBS) is completed to reflect updated population size and HIV burden estimates by province, and differentiate identification strategies based on provincial epidemiological context
- **Develop a comprehensive strategy** for domestic financing of HIV prevention services and commodities, including a national condom strategy that considers how HIV can leverage existing government and private sector condom procurement processes and distribution channels for reproductive health
- **Finalize an HIV laboratory strategy** to optimize diagnostic approaches for specific populations and geographies and plan for scale-up in use of GeneXpert for HIV viral load monitoring

This analysis is limited by a lack of recent, facility-based costing data in Indonesia. As a result, it does not estimate resource requirements for above-site activities, such as program monitoring and evaluation or supportive supervision—meaning that the costs and funding gap estimates presented here are likely an underestimate of actual numbers. In response to these limitations, HP+ recommends conducting a facility-based costing study to improve upon existing unit cost estimates by intervention and level of care. We also recommend that national HIV cost estimates be routinely updated to take into account new information and changing policies, targets, and costs. As the government of Indonesia finalizes its revised treatment guidelines, which may include the introduction of new, lower-cost ARV regimens, national HIV resource requirements estimates should be updated. More detailed analyses are also needed to estimate resource requirements for HIV by district that take into account district targets and prioritization plans to inform budgeting for HIV at the local government level.

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