

NASA INDONESIA National AIDS Spending Assessment Report



2021-2022

Executive Summary

Indonesia, with a population of 230 million, faces significant challenges in managing HIV/AIDS. Since the discovery of HIV in 1987, Indonesia has reported approximately 526,841 cases by 2022. While 77% of individuals with HIV are aware of their status, only 40% receive treatment, and just 16% achieve viral load suppression after six months. HIV prevalence is concentrated in key populations, including men who have sex with men (MSM), female sex workers (FSW), injecting drug users (IDUs), and transgender individuals (Waria). Indonesia is classified as an endemic concentrated country. The government is actively addressing HIV through policies like the National Medium-Term Development Plan 2020-2024, aiming to reduce HIV incidence.

The **National AIDS Spending Assessment (NASA)** for 2021 and 2022 highlights the financial landscape of Indonesia's HIV response, showing trends in spending, domestic and international funding sources, and expenditure categories.

Key NASA Findings (2021-2022):

- 1. **Expenditure Trends**: HIV spending showed an upward trend from 2010 to 2022 but stagnated in the last four years. In 2021, spending decreased to USD 153.2 million but slightly recovered to USD 156.9 million in 2022.
- 2. **Funding Gaps**: Current funding covers only 48% of projected needs, indicating a significant shortfall in meeting fast-track goals.
- 3. **Domestic vs. International Funding**: Domestic funding has increased over the years, constituting 77% of HIV funding in 2021 and 70% in 2022. International funding, primarily from multilateral organizations and bilateral aid (e.g., The Global Fund and PEPFAR), continues to play a crucial role.
- 4. **Domestic Contributions**: Government sources were the largest domestic contributors, followed by social security institutions, with contributions from other public entities like the Indonesian Red Cross (PMI) also increasing.
- 5. **International Contributions**: In 2022, bilateral aid rose, while multilateral contributions decreased slightly. The Global Fund remained a significant source of funding.
- 6. **Funding Mechanisms**: Government schemes were the primary mechanism for HIV service access, though their share slightly declined, while mandatory health insurance and non-profit organization schemes increased.
- 7. **Spending Categories**: Treatment and care expenditure dropped from 66.9% to 52.3%, partly due to the strategic use of previously stockpiled antiretroviral therapy (ART). Meanwhile, HIV testing and counseling (HTC) spending increased.
- 8. **Prevention Efforts**: Consistently around 10% of total spending was allocated to HIV prevention, with 80% directed toward the Five Pillars of Prevention.
- 9. **Program Enablers**: Spending on program enablers and system strengthening increased from 6% in 2021 to 12.5% in 2022.

10. **Beneficiary Populations**: Most HIV expenditure was directed toward people living with HIV (PLHIV), with key populations receiving increased funding in 2022.

Recommendations:

- 1. Address Funding Shortfalls: Increase resource allocation to cover the remaining 52% of unmet HIV program needs, particularly in prevention for key and vulnerable populations.
- 2. **Improve Coordination**: Enhance government coordination and partnerships across sectors, focusing on HIV prevention, treatment, gender issues, and reducing discrimination.
- 3. **Secure Additional Funding**: Reduce reliance on external sources by securing more domestic funding for HIV/AIDS programs.
- 4. **Utilize NASA Data for Resource Allocation**: Use NASA data to inform a comprehensive funding strategy balancing central and regional government contributions.
- 5. **Explore Future Areas**: Expand NASA to include Community-Led Organizations (CLOs), out-of-pocket expenses, private sector involvement, and alternative financing mechanisms.
- 6. Advocacy and Analysis: Integrate NASA findings with other tools like resource estimation and equity analyses to strengthen advocacy efforts at the community and sub-national levels.

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List of Abbreviations/Acronyms/Terms

Abbreviation	Full Form
5Ps	Five Pillars of Prevention
AGYW	Adolescent Girls and Young Women
AEM	Asian Epidemic Model
AIDS	Acquired Immunodeficiency Syndrome
ARV	Antiretroviral
ASC	AIDS Spending Category
ASEAN	Association of Southeast Asian Nations
DAK	Special Allocation Funds (Dana Alokasi Khusus)
FE	Financing Entity
FAP	Financing Agent-Purchaser
FS	Financing Sources
FSW	Female Sex Workers
GAM	Global AIDS Monitoring
GEDSI	Gender Equality, Disability, and Social Inclusion
GF	Global Fund
HIV	Human Immunodeficiency Virus
HTC	HIV Testing and Counseling
IBBS	Integrated Biological and Behavioral Survey
IDR	Indonesian Rupiah
IDUs	Injecting Drug Users
JKN	National Health Insurance (Jaminan Kesehatan Nasional)
КРА	Provincial/District AIDS Commissions
КР	Key Populations
LKB	Sustainable HIV and IMS Comprehensive Services
МОН	Ministry of Health
MSM	Men who have Sex with Men
N/A	Not Applicable
NASA	National AIDS Spending Assessment
NAP	National Action Plan
PEP	Post-exposure Prophylaxis
PEPFAR	Presidential Emergency Plan for AIDS Relief
PLHIV	People Living with HIV/AIDS
PMI	Palang Merah Indonesia (Indonesian Red Cross)
PS	Service Provider
REV	Revenue
SCH	Scheme
SI	Strategic Information
SPM	Minimum Service Standards
STIS	Sexually Transmitted Infections
ТВ	Tuberculosis
UNDP	United Nations Development Programme
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNICEF	United Nations Children's Fund
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
UNODC	United Nations Office on Drugs and Crime

UNIFEM	United Nations Development Fund for Women
USD	United States Dollar
VMMC	Voluntary Medical Male Circumcision

1 Introduction

1.1 HIV/AIDS Epidemic in Indonesia

Indonesia, with a population of 230 million people, faces unique challenges related to HIV/AIDS. Since its discovery in 1987, the cumulative number of reported HIV cases in Indonesia until 2022 has reached an estimated 526,841 cases (1). Out of this total, the number of people living with HIV who are aware of their status is 403,390 (77%), while those currently receiving treatment amount to 163,010 (40%). Unfortunately, Indonesia also encounters obstacles in the provision of antiretroviral treatment (ARV) (1). From the number of people living with HIV currently undergoing ARV treatment who underwent viral load testing in 2022, a minimum of 25,626 individuals (16%) achieved viral load suppression after 6 months of ARV treatment (1). Low coverage of HIV/AIDS treatment in Indonesia is hindered by various factors such as family support, age, education, income, and duration in ARV programs. Stigma significantly obstructs access to treatment, causing individuals to feel isolated within their communities. This stigma is pervasive across family, community, institutional, and media levels, leading to internalized negative perceptions. (2) (3)

34 provinces in Indonesia have furnished the HIV/AIDS report until June 2022. Out of the 514 regencies/cities across the nation, a total of 503 have documented HIV/AIDS cases until June 2022 (1). However, during the January to June 2022 period, only 466 regencies/cities from this total reported instances of HIV/AIDS (1). Notably, 11 regencies/cities have yet to report HIV/AIDS cases, including Sabang City (Aceh), Alor and Central Sumba (East Nusa Tenggara), Sangihe Islands and Sisu Tagulangan Biaro Islands (North Sulawesi), North Buton and North Konawe (Southeast Sulawesi), Taliabu Islands (North Maluku), Maybrat and Arfak Mountains (West Papua), and Nduga (Papua) (1). Within these 34 provinces, the five provinces with the highest HIV numbers are West Java, Central Java, East Java, DKI Jakarta, and Banten (1).



Figure 1 Distribution of PLHIV (People with HIV AIDS) Projection in 2021

The country of Indonesia is categorized as an endemic concentrated country where HIV cases are high among high-risk populations, namely Men who have Sex with Men (MSM), Female Sex Workers (FSW), Injecting Drug Users (IDUs), and Waria (transgender individuals). According to the Integrated Biological and Behavioral Survey (IBBS) report in 2018, the HIV prevalence in Indonesia varies significantly among populations, with rates of 25.8% among MSM, 28.8% among IDUs, 24.8% among the Waria population, and 5.3% among FSW. Meanwhile, for the general population, based on data from the Asian Epidemic Model (AEM) modeling, the HIV incidence rate in Indonesia for the year 2022 is reported at 0.09%, which is lower than the targeted rate for 2022, set at 0.19%. (2)

1.2 Indonesian Response to HIV AIDS Management

The response has been in progress since the identification of the first case. In 1987, the Department of Health established the National AIDS Committee, presided over by the General Director of Infectious Disease Control and Environmental Health (3). Subsequently, in 1994, Presidential Decree No. 36/1994 was enacted to institute AIDS commissions at the national, provincial, and regency levels. The National AIDS Management Commission, led by the Coordinating Minister of People's Welfare, formulated the National AIDS Management Strategy and a five-year work plan spanning from 1994 to 1998 (3). Within this framework, various international development partners extended support to Indonesia's efforts in addressing HIV and AIDS. Subsequent to this plan, several ministries issued directives pertaining to HIV prevention and control (3).

In 2001, Indonesia affirmed its commitment to addressing AIDS by signing the "Declaration of Commitment on AIDS" during the United Nations General Assembly's Special Session on AIDS (UNGASS). To intensify efforts against HIV/AIDS in Indonesia, the Sentani Commitment was endorsed in 2004 by various dignitaries, including the Coordinating Minister of People's Welfare, Minister of Health, Minister of Home Affairs, Minister of Social Affairs, Minister of Religious Affairs, Chairman of the National Family Planning Coordinating Board, Chairman of the IX Commission of the House of Representatives, and governors/representatives from six provinces: Riau, Jakarta, West Java, East Java, Bali, and Papua – known to be severely affected by the epidemic (3).

Indonesia's commitment extends globally and regionally in HIV/AIDS management. In 2011, at the 19th ASEAN Summit in Bali, Indonesia, along with nine other ASEAN member countries, pledged to achieve the "3 zeros" – zero new HIV infections, zero discrimination, and zero HIV-related deaths (4). At the global level, Indonesia committed politically to the UN's target of achieving antiretroviral (ARV) treatment coverage for 15 million people by 2015 (2)

In June 2016, the United Nations General Assembly emphasized the urgent need for a fast-track response to end AIDS by 2030, aiming to achieve specific pillars by 2020, including reducing new HIV infections and AIDS-related deaths globally and eliminating stigma and discrimination related to HIV (5). In 2016, Indonesia underwent a policy change in HIV/AIDS management,

transferring the Secretariat of the National AIDS Management Commission to the General Directorate of Disease Prevention and Control, Ministry of Health, through Presidential Regulation No. 124 of 2016 (6).

In 2018, the government issued Government Regulation No. 2 of 2018, supporting the "fast track initiative 90-90-90" in regions, establishing Minimum Service Standards (SPM). This regulation mandates decentralized health services as a basic service for Central and Regional Governments. Health services for those at risk of HIV infection are one of the 12 indicators of Health SPM, subject to the quality and type of basic services outlined in the Ministry of Health Regulation No. 4 of 2019 concerning Technical Standards for Fulfilling Basic Service Quality in the Health Sector SPM.

In the year 2020, the Ministry of Health formulated the National Action Plan (NAP) for AIDS management spanning from 2020 to 2024. Aligned with the global 95-95-95 strategy, the National Program for the Prevention and Control of HIV/AIDS and STIs in Indonesia incorporates the NAP, which establishes specific targets for the given period. These targets encompass ensuring that 90% of People Living with HIV (PLHIV) are aware of their status, 70% of PLHIV have access to Antiretroviral Therapy (ART), and 75% of PLHIV undergo viral load testing. The NAP extends its focus beyond HIV to include Sexually Transmitted Infections (STIs), to achieve a syphilis incidence rate of 0.8 per 1000 population by the year 2024. The NAP is structured around six key strategies:

- 1. Strengthening commitment from relevant ministries/agencies at the central, provincial, and district/city levels.
- 2. Increasing and broadening community access to comprehensive and high-quality screening, diagnostic, and treatment services for HIV/AIDS and STIs.
- 3. Reinforcing data-driven and accountable prevention and control programs for HIV/AIDS and STIs.
- 4. Enhancing partnerships and community involvement, encompassing private entities, businesses, and other multisectoral contributions at both national and international levels.
- 5. Developing innovative programs aligned with government policies.
- 6. Strengthening program management through vigilant monitoring, evaluation, and followup. (2)

1.3 Response and Projection Achievement

Since the first case was discovered, the Indonesian government has consistently demonstrated political commitment, established normative policies, and implemented operational policies at both national and sub-national levels.HIV/AIDS management has been a national agenda, at least 33 policies related to HIV/AIDS management have been issued from 2004 until 2020. In the

National Medium- In the Term Development Plan (RPJMN) 2020-2024, the government has set a commendable commitment to reduce the HIV incidence rate among 1,000 residents who are not infected with HIV. The target of achieving a rate of 0.18 by 2024 reflects a proactive approach toward public health.

The Indonesian government is making efforts to combat HIV/AIDS through acceleration programs, which include: (1) expanding HIV/AIDS and IMS service coverage via Sustainable HIV and IMS Comprehensive Services (LKB), and (2) strengthening the national health system to support the implementation of these comprehensive services. Nevertheless, obstacles persist in achieving the fast track goals of reducing HIV infections, AIDS-related deaths, and combating stigma (2). It is estimated that there were 543.100 people living with HIV (*PLHIV*) in 2020. (6) HIV prevalence in Indonesia categorized as concentrated epidemic (high in key population) with overall prevalence is 0,26% on in the adult population above 15 years old except in Tanah Papua higher as much as 1,8% where the prevalence in non key population is shown higher compared to non Papua islands based on AIDS Epidemic Modelling (AEM). (6) (7)



Figure 2 Estimation and Projection of the Number of PLHIV 15 Years Old and Above in Indonesia in 2005-2024

HIV stigma and discrimination are the main challenges globally faced by *PLHIV* including in Indonesia. HIV AIDS Asia Pacific Research Statistical Data Information Resources AIDS Data Hub reported that the discrimination level against PLHIV reached 62.2% in 2020. (8) Indonesian status to achieve zero discrimination is still very lagging. The same report states that no laws and policies are providing a conducive environment for preventing the criminalization of sex workers, sex with the same gender, maintaining the center of injecting drug users, and other criminalizing behaviors linked to HIV transmission risk. (8) For example, The new Indonesian Penal Code (KUHP) that signed on last December 2022 introduces provisions aimed at criminalizing behaviors linked to HIV transmission risk, such as sexual relations outside marriage, sex work, indecent acts, drug offenses, and the display of contraceptive devices. However, these measures are unlikely to effectively change risky behaviors or contribute positively to public health efforts related to HIV/AIDS. Criminalizing such behaviors may further stigmatize people living with HIV/AIDS (PLHIV) and discourage them from seeking essential healthcare and support, potentially undermining broader public health initiatives aimed at prevention, treatment, and care for PLHIV in Indonesia. (11) (12)

Fauk, Nelsensius Klau, et al (9) carried out a qualitative study about discrimination against *PLHIV* in Yogyakarta and Belu, Indonesia. The findings show that *PLHIV* experiences stigma and discrimination in all settings, including within family and by community members, and within healthcare settings by the health professional. A lack of knowledge about HIV, fear of contracting the virus, societal perceptions, and moral judgments about HIV and those living with it (PLHIV) are seen as factors that facilitate or drive stigma and discrimination against PLHIV. (9)



Figure 3 Global Map of Discrimination against PLHIV



Figure 4 Discrimination Score of in Indonesia

1.4 NASA Rationalization 2020-2021

Conducting a National AIDS Spending Assessment (NASA) in Indonesia serves as a fundamental initiative to optimize the allocation of financial resources dedicated to HIV interventions. Through a meticulous examination of current spending patterns, policymakers can pinpoint areas where resources may be either overutilized or underutilized. This optimization ensures that funds are channeled towards interventions that exhibit the highest impact, thereby maximizing the overall effectiveness of the national HIV response.

Additionally, NASA facilitates the identification of any potential funding gaps in Indonesia's HIV interventions. A thorough understanding of these gaps is vital to ensuring that all facets of the HIV response receive adequate funding. This knowledge allows policymakers to strategically allocate additional resources where they are most needed, addressing disparities and ensuring that no population is left underserved, or intervention is neglected.

Indonesia's commitment to global HIV targets, including the 95-95-95 strategy set by UNAIDS, underscores the importance of aligning national efforts with international goals. NASA enables an assessment of progress towards these targets by evaluating the financial investments made in achieving them. This information is crucial to ensure that Indonesia's national efforts are in line with international commitments, and thus contribute to the global initiative to end the HIV epidemic.

1.5 Health Funding Landscape in Indonesia

Healthcare funding in Indonesia is derived from a combination of public, international and private sources. The government dedicates a substantial portion of its budget to the health sector, underscoring its commitment to enhancing healthcare infrastructure, the workforce, and service delivery. The decentralized nature of health financing entails contributions from both national and sub-national levels, ensuring a more detailed and localized approach to the allocation of resources. (10) (11)

Crucial to health funding are social health insurance programs, notably the National Health Insurance (JKN), which play a pivotal role in contributing to overall health funding. JKN is designed to achieve universal coverage, aiming to diminish financial barriers and foster equitable access to healthcare services. Additionally, collaborations with international donors and non-governmental organizations contribute supplementary funding, particularly targeting specific health challenges such as infectious diseases. (10) (11)

The funding landscape for Indonesia's health sector is fragmented. The enactment of Law No.22/1999 granted subnational governments, particularly at the district level, increased autonomy in budget generation and allocation. Consequently, funds from the national government predominantly flow into BPJS-K (the implementing agency for JKN). Allocations also extend to hospitals managed by the Ministry of Health (MOH), subnational government transfers, and priority health programs. (10) (11)

Subnational governments are mandated to allocate a minimum of 10% of their annual budgets to cover health-related expenses. This allocation encompasses service delivery for key priority programs, support for specific public facilities, and subsidies to facilitate the economically disadvantaged in accessing JKN. Funds directed to BPJS-K are subsequently disbursed through various provider payment mechanisms, including case-based group, monthly capitation, and fee-for-service payments, encompassing both public and private healthcare providers. (10) (11)

1.6 HIV/AIDS Funding Landscape in Indonesia

The financing of HIV/AIDS initiatives in Indonesia relies on diverse funding sources, including contributions from the government, international institutions, and donor partners. The following outlines various facets of HIV/AIDS financing in Indonesia:

Within its health budget, the Indonesian government designates funds for HIV/AIDS programs that approximately 0.2% of health budget. (16) (17) These funds support a range of initiatives, encompassing prevention, treatment, and assistance for individuals living with HIV/AIDS. This funding stream is often intertwined with broader health programs.

To address HIV/AIDS challenges, Indonesia receives financial backing from various international organizations and donor partners. Entities like the Presidential Emergency Plan for AIDS Relief (PEPFAR (), Global Fund, and UNAIDS play a pivotal role in extending service coverage, strengthening prevention initiatives, and delivering treatment to those affected.

The National Health Insurance Program (JKN) contributes to HIV/AIDS financing by covering an array of health services, including those related to HIV/AIDS. JKN offers services PLHIV, encompassing counseling, HIV testing, essential vaccinations, treatment for sexually transmitted infections (STIs), as well as specialized care such as pregnancy-related HIV testing, CD4 and viral load testing, and management of opportunistic infections under the INA-CBGs package. This ensures broader accessibility for the population in need without subjecting them to excessive financial burdens. (10) (11)

Government funding for HIV/AIDS and STI control can originate from the State Revenue and Expenditure Budget (APBN), Regional Revenue and Expenditure Budget (APBD), and other sources as stipulated by existing laws and regulations. The Central Government backs funding from the central APBN budget to support logistics provision and capacity building. APBN allocations also extend through Decentralization Funds to Provincial Health Offices, covering operational expenses such as data validation, technical guidance, monitoring evaluations, mobile HIV and STI testing, as well as facilitating training and On the Job Training (OJT). Furthermore, APBN resources are directed via Special Allocation Funds (*Dana Alokasi Khusus/DAK*), serving both physical and non-physical purposes. The central government consistently promotes regional funding through APBD and village funds to sustain programs and foster ownership of HIV/AIDS and STI control initiatives.

1.7 NASA Goals 2021-2022

The National AIDS Spending Assessment (NASA) is a tool/method introduced by UNAIDS Geneva to evaluate a nation's dedication to addressing a global epidemic, such as HIV and AIDS. NASA provides essential information to decision-makers by addressing fundamental questions: Who contributes funding? Who oversees fund management? Who delivers the resources? What specific activities or services are provided? Who benefits? It traces the flow of resources in the HIV response, starting from their origin and extending to the beneficiary population. NASA is structured to extract details on HIV/AIDS program expenditures based on key components:

- 1. Mapping the overall spending on HIV and AIDS interventions in 2020 and 2021 from diverse sources (financial entity, revenue, and financial agent).
- 2. Mapping the expenditure on HIV and AIDS interventions in 2020 and 2021 by expenditure category (ASC).
- 3. Identifying the beneficiaries and analyzing expenses by each beneficiary in 2020 and 2021.
- 4. Identifying the service provider and analyzing expenses by each provider in 2020 and 2021.
- 5. Mapping the production factors of each ASC in 2020 and 2021.

2 Study Design and Methodology

2.1 The Scope of NASA

NASA (National AIDS Spending Assessment) is a thorough and systematic method for tracking the flow of resources dedicated to the AIDS response, from the source through various agents and providers, to the final beneficiaries. The NASA framework uses globally recognized standardized methods and definitions, which are more detailed than, but compatible with, the System of Health Accounts (SHA).

The primary goal of NASA is to gather, organize, process, analyze, and utilize data on HIV expenditures. NASA helps answer several key questions:

- Who finances HIV services and who consolidates these funds?
- What funding schemes are employed?
- Who is responsible for purchasing HIV services?
- What mechanisms (insurance/schemes) facilitate payment?
- Who are the providers of these services?
- What services are being provided, and what are the associated costs?
- Who benefits from the spending?
- What are the main cost drivers and production factors related to HIV?

In the context of Indonesia, NASA can provide critical evidence to aid in the planning and financing of HIV services. It can identify potential financial gaps, thereby mobilizing additional resources. When combined with epidemiological and programmatic data, NASA can pinpoint inefficiencies and ensure that expenditures are targeted at the most affected population groups and geographic areas with the greatest needs. This ensures that resources are directed towards interventions with the highest potential impact, helping to address the specific challenges faced in Indonesia's diverse regions.

The National AIDS Spending Assessment (NASA), , was developed by UNAIDS to support countries in the implementation of HIV/AIDS programs by identifying the sources and amounts of funds spent for executing programs related to HIV and AIDS. The outcomes of NASA in one country can be compared to another using international standards, utilizing categories of expenditure and standard classification based on fund sources, funding agencies, program activities, functions, cost components, and beneficiaries.

The expenditure on HIV and AIDS is classified based on NASA guidelines has consistently used the same classification for sources, agents until beneficiaries.

NASA encompassed the financial years 2021 and 2022, adhering to a two-year limitation, as stipulated by NASA guidelines recommending the incorporation of 2 to 4 financial years. The scope of Indonesia's NASA initiative extends to both national and sub-national (provincial and district) levels, aligning data collection and presentation with the programmatic disaggregation outlined in NASA guidelines.

For international dissemination and comparability, NASA utilized both the Indonesia Rupiah (IDR) and the US Dollar. Conforming to NASA guidelines, all variables were tracked, and in cases of data availability challenges, NASA will resort to estimation, trend analysis, and verbal communication to determine the relevant categories.

The variables monitored by NASA include 8 categories:

1. The funding entity (FE)

In the NASA Classification, Financing Entities (FE) are pivotal sources or pools of funds dedicated to financing HIV services, encompassing a broad spectrum of entities from both public and private sectors, domestically and internationally. These entities play a crucial role, especially in countries where the HIV response is heavily reliant on donor support or where there are few management entities to oversee the allocation of funds. Public entities include governmental bodies at various levels—central, state/provincial, and local/municipal—alongside social security institutions and other public sectors not elsewhere classified (n.e.c.). Domestic private entities encompass domestic corporations, households, and not-for-profit institutions, each contributing to the overall financial ecosystem supporting HIV services.

International entities, which are critical in supplementing domestic efforts, are categorized into bilateral aid governments, multilateral organizations, and international not-for-profit organizations and foundations. Bilateral aid governments include countries such as the USA, UK, and Australia, which provide direct financial support to recipient countries. Multilateral organizations, like the WHO, World Bank, UN agencies, and The Global Fund, pool resources from various donors to facilitate a coordinated response to HIV. Additionally, international not-for-profit organizations and foundations, including the Bill and Melinda Gates Foundation and Médecins Sans Frontières, significantly contribute to the funding landscape. International for-profit organizations, such as multinational pharmaceutical and biotechnology companies, also play a role, alongside other financial entities not classified elsewhere.

2. The revenue (REV)

In the NASA Classification, The revenue (REV) encompasses various sources of funds allocated for HIV-related purposes, categorized based on their origin and nature. Key types include government domestic revenue, such as reimbursable loans for HIV programs, and foreign transfers distributed by the government, which are originally sourced from international grants and donations. Social insurance contributions from employers and individuals for health insurance benefits, compulsory prepayments like mandatory private insurance premiums, and voluntary prepayments from individuals and entities for private insurance also fall under this classification. Additionally, other domestic revenues from voluntary transfers not specified in other categories, and direct foreign transfers, which include grants and in-kind aid from foreign entities, are included.

3. The financing scheme (SCH)

In the NASA classification, "SCH" refers to health care financing schemes, which are the main types of financing arrangements through which people obtain health services. These include both direct payments by households and third-party financing arrangements, governed by specific rules for participation, entitlement, and revenue pooling. Key categories include government schemes and compulsory contributory health care schemes, which ensure access to basic health care for the entire society or specific vulnerable groups. This encompasses government-operated schemes, social health insurance, compulsory private insurance, and compulsory medical savings accounts. Voluntary payment schemes are also included, such as voluntary health insurance and not-for-profit organization schemes, which are financed through donations and are discretionary in participation and benefit entitlement.

Additionally, household out-of-pocket payments, external non-resident schemes, and other compulsory and voluntary schemes form part of the SCH classification. Out-of-pocket payments are direct payments made by households for health services, including cost-sharing with third-party payers. External schemes involve financial arrangements managed by non-resident entities, such as foreign aid agencies and international organizations, which collect and pool resources abroad to purchase health care goods and services for residents.

4. The financing agent-purchaser (FAP)

In NASA's classification code, Financial and Purchasing Agents (FAP) refer to entities that mobilize financial resources from various sources and allocate these funds to pay for or purchase health care or other services and goods. These entities directly purchase from providers or act as intermediaries, ensuring that resources are directed towards fulfilling specific needs through the provision of commodities, which may include both services and goods. The classification is detailed, covering a broad range of public and private sector agents, from central government ministries to international organizations and private corporations.

The classification code includes several subcategories to specify different types of public sector entities (e.g., ministries of health, education, social development) at various levels (central, state, local), as well as public social security, government employee insurance programs, and parastatal organizations. In the private sector, it includes private social security, employer insurance programs, insurance enterprises, households' out-of-pocket payments, and not-forprofit institutions. Furthermore, it encompasses international purchasing organizations, which may include bilateral agencies, multilateral agencies, and international not-for-profit organizations and foundations, as well as projects within universities and international for-profit organizations.

5. The Service provider (PS)

In NASA Classification, The service providers (PS) are how HIV spending based on organization who are providing HIV-related goods and services. PS.01 includes Public Sector Providers, encompassing governmental entities engaged in HIV responses such as hospitals, ambulatory care centers, mental health facilities, laboratories, blood banks, pharmacies, traditional care providers, schools, training facilities, foster homes, orphanages, research institutions, and various government departments (e.g., health, education, social development). These organizations play a crucial role in the national HIV response, offering a wide range of services from medical care to advocacy and research.

PS.02 includes Non-profit Providers, distinguishing between non-faith-based and faith-based organizations, which offer HIV-related services without seeking profits. Non-profit providers include hospitals, ambulatory care centers, mental health facilities, laboratories, blood banks, pharmacies, traditional care providers, schools, training facilities, foster homes, orphanages, research institutions, self-help organizations, and civil society groups. PS.03 covers Bilateral, Multilateral Entities, International NGOs, and Foundations that operate within a country, contributing through financing, technical assistance, and managing HIV interventions.

6. The function/intervention (ASC)

The ASC (AIDS Spending Category) in NASA classification explain expenditures for HIV interventions into distinct activities. For example under ASC.01 Prevention, the framework delineates specific pillars and strategies aimed at reducing HIV transmission. ASC.01.01 focuses on prevention efforts for adolescent girls and young women (AGYW) and their male partners in high HIV prevalence settings through initiatives like condom promotion, youth-friendly sexual and reproductive health (SRH) services, behavior change communication (BCC), economic empowerment programs, and other tailored activities. ASC.01.01 also addresses key populations such as sex workers, MSM, TG, PWID, and prisoners, providing dedicated programmatic activities including condom distribution, VMMC programs, and Pre-Exposure Prophylaxis (PrEP). Meanwhile, ASC.01.02 encompasses broader prevention endeavors like preventing vertical HIV transmission, community mobilization, and wellness programs in the workplace, ensuring comprehensive coverage across diverse population groups and epidemiological contexts.

7. The cost components (factors of production, PF)

In the NASA Classification, the Production Factor (PF) explains cost components spent on services/activities on HIV intervention or program. PF.01 covers both current direct and indirect expenditures, with a focus on Personnel Costs (PF.01.01), which include salaries, fringe benefits, and incentives for Direct Service Providers engaged in HIV service delivery, as well as Program Management Personnel involved in administrative functions. PF.01 also includes categories like Operational and Program Management Expenses (PF.01.02), Medical Products and Supplies (PF.01.03) such as pharmaceuticals, Contracted External Services (PF.01.04), and Capital

Expenditures (PF.02) like buildings and vehicles. Indirect Costs (PF.01.10) encompass expenses not directly linked to specific program activities.

8. The Beneficiaries Population (BP)

The Beneficiaries Population (BP) n the NASA Classification refers to Beneficiary Populations, which are explicitly identified groups intended to benefit from specific program activities. The identification of BP aims to quantify resources allocated to these populations as part of service delivery within programmatic interventions. This classification ensures that expenditures are attributed according to the intended recipients of services, regardless of their effectiveness or coverage. For instance, if services aimed at the general population also reach key populations (KP), expenditures should be attributed to the general population unless explicitly targeted otherwise. The BP classification does not define populations based on characteristics like mostat-risk or priority status but focuses on identifying the primary intended beneficiaries of program expenditures based on implementation strategies and service delivery points.

9. The Service Delivery Mod (SDM)

In the NASA Classification, Service Delivery Modalities (SDM) encompass a variety of approaches used to deliver services within HIV programs. These methods include facility-based services offered at healthcare facilities or specific locations, as well as home and community-based services delivered directly to beneficiaries in their homes or local communities. There are also cases where a specific SDM does not apply, typically for activities that do not fit into any predefined category. Modalities not disaggregated refer to delivery methods that cannot be easily classified, while modalities n.e.c. include additional delivery approaches not explicitly outlined in the classification.

2.2 Study Sample and Area

In the data collection process for program expenditure information related to HIV/AIDS initiatives, a mixed approach was utilized. At the national level, the data collection aimed to encompass all relevant ministries, institutions, donor organizations, and NGOs involved in HIV/AIDS programs nationwide. This approach sought to provide a comprehensive view of expenditures across different types of stakeholders without employing a sampling technique, effectively treating it as a census for these entities.

Simultaneously, at the sub-national level, including provinces, the data collection utilized a combination of census and snowball sampling methods. Initially, the Association of Health Offices in Indonesia (ADINKES) facilitated the identification of relevant institutions involved in HIV programs. This identification process ensured that all key stakeholders, particularly Provincial and District Health Offices, and Provincial/District AIDS Commissions (KPA), were included in the data collection efforts. Subsequently, a snowball sampling approach may have

been employed to further identify and include other relevant stakeholders within the provinces, ensuring comprehensive coverage of HIV/AIDS program expenditures at the sub-national level.

2.3 Data Collection and Processing

The gathered data encompasses program expenditure information at the national level, sourced from entities such as ministries and institutions, donor organizations, and NGOs dedicated to addressing HIV/AIDS issues nationwide. Simultaneously, sub-national data was compiled from all provinces, including details from Provincial and District Regional Working Units (SKPD), specifically those associated with health offices and the Provincial/District AIDS Commissions (KPA).

The data collection process began following the national workshop training facilitated by the Ministry of Health in May 2023. This workshop, conducted in collaboration with ADINKES, aimed to disseminate the NASA concept and outline the data collection process. Representatives from various national and sub-national agencies participated in this workshop, during which the results of NASA 2020-2021 were also presented.

The participatory data collection process involves collaboration among organizations, government entities, ministries, and institutions at both national and sub-national levels. ADINKES coordinates this data collection effort, utilizing a straightforward form to identify the sources of funds, designations, total expenditures, implementers, and targets or beneficiaries of the activities. The NASA Team then converts these inputs into Data Collection Tools (DCT) as recommended in the NAA Guideline. In NASA 2023, a total of 6,588 transactions were recorded from 822 institutions involved in reporting.

To ensure the precision and reliability of the collected data on HIV/AIDS program expenditures, rigorous processes, including data triangulation and thorough data cleaning and consolidation procedures, were implemented. Upon data input, verification involved multiple stages of grouping and validating to confirm the accuracy and consistency of the report with the given classification. This meticulous process also aimed to eliminate any instances of double counting. Notably, expenditures sourced from the Global Fund (GF) and sub-national sources were intentionally excluded to avoid duplication, thereby mitigating the risk of double counting in GF-sourced national reports. Triangulation was employed by cross-referencing or scrutinizing data from various sources and reviewing published documents and information.

The analysis method applied to NASA data includes univariate data analysis and simple crosstabulation, utilizing RTT software and MS Excel as complementary tools to delineate expenditure patterns for HIV/AIDS intervention in Indonesia. This mapping process aims to identify the nine variables mentioned above. The cross-tabulation is also done for simple bivariate analysis to explore and explain relationships between two variables. It is strongly recommended to run a few bivariate analyses, including FS x SCH, FE x FAP, FE x ASC, PS x ASC, SDM x ASC, each ASC x FE, BP x FE, PF x FE, and BP x AS. In contrast to previous NASA iterations, NASA 2022 has successfully involved all provinces in Indonesia, resulting in a more accurate identification of spending related to HIV/AIDS treatment. This is particularly evident through the National Health Insurance (JKN) and the Indonesia Red Cross (PMI). A total of 205 regencies/cities and 35 provinces have reported expenditures related to HIV/AIDS, showcasing a comprehensive coverage in comparison to earlier NASA assessments.

2.5. Assumptions and Limitations

- 1. Expenditures are recorded in Indonesian Rupiah, with a conversion rate of IDR 14,853 to the US Dollar. This rate is US Dollar (USD) To Indonesian Rupiah (IDR) Exchange Rate History for March 29, 2022. (18)
- 2. In cases where detailed information on the beneficiaries of program expenditures was unavailable, a strong correlation based on ASC was chosen. For example, costs related to governance and sustainability were assumed to benefit non-targeted beneficiaries.
- 3. Despite the provision of simple data collection forms, some organizations reported their spending using their report format, making it challenging to identify the flow of resource from the sources to the beneficiaries of the spending.
- 4. In 2023, a new NASA standard was implemented, mandating detailed information from the financing entity down to the production cost of each transaction. Unfortunately, the provided information was insufficient, necessitating assumptions where production factors were unknown, leading to their classification under Current direct and indirect expenditures.
- 5. NASA 2023 differs from NASA 2021 in several key aspects. In 2021, NASA used a simpler category system in the GAM Report template. A notable change is in the ASC classification: in 2021, HIV testing was categorized under prevention, but in 2023, it stands as a separate category. Additionally, TB spending in NASA 2023 is now integrated into the care and treatment category. These changes have two main impacts. First, it requires adapting data grouping to align with the actual NASA classifications. Second, it affects the comparison of ASC categories between NASA 2021 (covering 2019 and 2020) and NASA 2023 due to the different grouping methods used.

3 Results and Discussion

3.1 Trends in HIV Expenditure in Indonesia

The trend in HIV expenditure in Indonesia from 2010 to 2022 shows a general upward trajectory with stagnation in the last four years (Figure 5). In 2010, total spending, which included both domestic and international contributions, was around 68.1 million USD. This gradually increased, peaking at approximately 191.5 million USD in 2014. Afterward, spending fluctuated, reaching another high point of 177.4 million USD in 2016. However, from 2018 onwards, the expenditure remained relatively stagnant. By 2021, it slightly decreased to 153.2 million USD, followed by a modest recovery to 156.9 million USD in 2022.



Figure 5 Total HIV expenditure in Indonesia (USD, 2010 – 2022)

Figures 6 and 7 provide a breakdown of domestic and international HIV expenditure in Indonesia. In 2021, domestic sources contributed 77% (153.2 million USD) or 118.52 million USD of the total expenditure, with funding coming from government sources such as APBN and APBD, national health insurance, and other public resources like zakat and household contributions, while international contributions accounted for the remaining 23% (34.68 million USD).

In 2022, domestic spending represented 70% (156.9 million USD) or 109.33 million USD of the total expenditure, while international contributions increased to 30% (47.55 million USD). Although the domestic share decreased slightly from 2021, the balance between domestic and international funding remained stable overall.

When examining the period from 2010 to 2022, there is a clear trend toward increased domestic spending on HIV. In 2010, domestic sources accounted for only 39% (68.08 million USD) or 26.72 million USD of total HIV expenditure, while international contributions made up 61% (41.37

million USD). Over the years, the share of domestic funding steadily increased, peaking at 76% (191.53 million USD) or 145.25 million USD in 2014. Despite some fluctuations, the overall trend points to growing national responsibility and investment. By 2022, domestic sources consistently made up the majority of HIV expenditure, highlighting the government's increasing role in tackling the epidemic.



Figure 6 Expenditure on HIV 2015 to 2022 based on Financing Entity (%)



Figure 7 HIV Spending by Financing Entities (USD, 2015 – 2022)

Despite this upward trend, the mobilization of local resources remains crucial for addressing HIV/AIDS in Indonesia. Bridging the gap between public and international spending, as well as

meeting the available and necessary funding, demands sustained and coordinated efforts from all stakeholders (international and domestic) to achieve the goal of ending AIDS by 2030 (12). The Ministry of Health Regulation of the Republic of Indonesia Number 23 of 2022 underscores the specific duties and responsibilities of the central government, provincial government, and regency/city government, including allocating funds for the implementation of various HIV/AIDS control and management efforts. (17)

3.3 Geographic distribution of HIV expenditure in Indonesia

Table 1 illustrates the HIV expenditure for 2021 and 2022, categorized by national and subnational levels, with sub-national data clustered by Indonesia's six largest islands. The national level had the highest HIV spending in both years, accounting for 83.4% in 2021 and 81.1% in 2022, while sub-national spending represented 16.6% in 2021 and increased slightly to 18.9% in 2022.

In 2021, the sub-national category saw the largest expenditures in Java (9.2%), followed by Sumatra (2.9%), and Bali Nusa (1.7%). By 2022, Java continued to lead with 11.4% of the sub-national HIV spending, followed by Sumatra (3.2%) and Kalimantan (1.3%). This data highlights Java's dominance in HIV spending, reflecting the region's high HIV burden. Among Indonesia's 34 provinces, the five provinces with the highest HIV rates—West Java, Central Java, East Java, DKI Jakarta, and Banten (1) — are all located in the Java region.

The sub-national data is derived from 35 provinces and 205 districts/cities, with local governments contributing significantly to HIV/AIDS activities funded by both national (DAK) and local (APBD) sources. Additionally, organizations such as the Red Cross (PMI) and NGOs receive contributions from households and other domestic sources. Local government agencies, including the health, education, and social services departments, as well as PUSKESMAS and village governments, also report on HIV expenditures. Institutions such as BAZNAS and the Red Cross (PMI) report expenditures across various provinces.

Location	2021	%	2022	%
SND National Spending	127,719,537	83.4%	127,256,542	81.1%
Sub National	25,482,317	16.6%	29,625,816	18.9%
SND.01 Sumatera	4,402,076	2.9%	5,015,160	3.2%
SND.02 Jawa	14,041,981	9.2%	17,926,663	11.4%
SND.03 Kalimantan	1,755,629	1.1%	1,980,763	1.3%
SND.04 Sulawesi	2,515,926	1.6%	1,931,731	1.2%
SND.05 Irian	151,038	0.1%	344,996	0.2%
SND.06 Bali Nusa	2,615,667	1.7%	2,426,500	1.5%
Total	153,201,854	100%	156,882,359	100%

Table 1 HIV Spending by Location (USD, 2021 - 2022)

3.4 Total HIV spending by Financing Entities

FUNDING ENTITY	2,021	%	2022	%
Domestic Fund	118,519,521	77.36%	109,332,214	69.69%
FE.01.01 Governmental	87,631,872	57.20%	65,444,807	41.72%
FE.01.02 Social security institutions	23,869,517	15.58%	28,043,074	17.88%
FE.01.99 Other public n.e.c.	6,226,109	4.06%	14,780,057	9.42%
FE.02.01 Domestic corporations	249,574	0.16%	394,976	0.25%
FE.02.02 Households	363,040	0.24%	495,121	0.32%
FE.02.03 Domestic not-for-profi				
institutions	179,408	0.12%	174,180	0.11%
International Funding	34,682,334	22.64%	47,550,144	30.31%
FE.03.01 Governments providing				
bilateral aid	12,102,613	7.90%	17,543,333	11.18%
FE.03.02 Multilateral Organizations	21,697,417	14.16%	29,509,168	18.81%
FE.03.03 International not-for-profi				
organizations and foundations	882,304	0.58%	497,643	0.32%
TOTAL	153,201,854	100%	156,882,359	100%

Table 2 HIV Spending by Financing Entities (USD, 2021-2022)

In both 2021 and 2022, Indonesia's HIV expenditure demonstrated a considerable reliance on domestic funding sources. In 2021, domestic contributions accounted for 77.4% of the total expenditure, amounting to approximately 118.5 million USD, while in 2022, this proportion decreased to 69.69%, totaling around 109.3 million USD. Governmental contributions were the largest among domestic financing entities, comprising 57.20% in 2021 and 41.7% in 2022. Social security institutions also played a significant role, contributing 15.6% and 17.9% in 2021 and 2022, respectively. The social security institutions represent JKN funds, which finance HIV treatment categorized under the ICD-10 code B20, referring to "Human Immunodeficiency Virus [HIV] disease."

Other public entities not elsewhere classified increased their contributions significantly from 4% in 2021 to 9.4% in 2022, with PMI (Palang Merah Indonesia) being a notable contributor. PMI, or the Indonesian Red Cross, typically funds its blood screening activities through various sources, including government funding, private donations, and service fees. These funding sources enable PMI to carry out its blood screening activities effectively and ensure the safety of the blood supply in Indonesia. (14)

Domestic not-for-profit institutions saw a slight decrease in funding, with expenditures changing from 0.12% (179,408 USD) in 2021 to 0.11% (174,180 USD) in 2022. PKBI, the Indonesian Family Planning Association, is one example of such an NGO, focusing on reproductive health and sexual education. PKBI's mission is to advance and ensure access to reproductive health services, education, and information for individuals and families across the nation. (15)

The current NASA identified household contributions for HIV programs, which increased from 0.24% (363,040 USD) in 2021 to 0.32% (495,121 USD) in 2022. BAZNAS (the National Zakat Agency) plays a significant role through zakat contributions to support HIV programs. Zakat, an obligatory act of charity in Islam and one of the Five Pillars, serves as a means of redistributing wealth to aid those in need. BAZNAS serves as the institutional body responsible for collecting and distributing zakat funds in accordance with Islamic principles, which, in this context, are earmarked to support AIDS programs. (16) Other financing entities identified include domestic corporations, whose contributions increased from 0.16% (249,574 USD) in 2021 to 0.25% (394,976 USD) in 2022.

International financing entities made a comparatively smaller contribution to Indonesia's HIV expenditure in both years compared to domestic sources. In 2021, international financing entities accounted for 22.6% of the total spending, amounting to 34.7 million USD, and increased to 30.3% in 2022, totaling approximately 47.5 million USD. In both years, multilateral organizations emerged as the principal international financing entities, making significant contributions—14.1% of the total HIV spending in 2021 and 18.8% in 2022. This was followed by governmental bilateral aid from entities like PEPFAR, representing 7.9% of the total expenditure in 2021, which then rose to 11.2% in 2022. Non-profit international organizations and

foundations made only marginal contributions to HIV spending, accounting for 0.58% in 2021 and 0.32% in 2022, respectively.



Figure 8 Public Financing entities of HIV in Indonesia (USD, 2021 - 2022)

In 2021, the central government was the predominant source of public HIV spending, contributing 80% (70.04 million USD) of the total, while the state/provincial government accounted for 20.1% (17.59 million USD). However, in 2022, there was a significant shift in contributions, with the central government's share decreasing to 65.3% (42.73 million USD) and the state/provincial government's share rising to 34.7% (22.72 million USD). The substantial contribution from the central government in 2021 was primarily due to large-scale procurement of antiretroviral drugs (ARV), totaling 53.09 million USD, which included various types such as Tenofovir 300 mg + Lamivudine 300 mg + Dolutegravir 50 mg and others, with an average quantity of 25 million pieces; this procurement in 2021 was about three times the amount procured in 2022, as there were ARV stocks from 2021 that were only consumed in 2022.

DETAIL INTERNATIONAL FUNDING ENTITY	2021	%	2022	%
FE.03.01 Governments providing bilateral aid	12,102,613	34.90%	17,543,333	36.89%
FE.03.01.30 Government of United States	12,102,613	34.90%	17,543,333	36.89%
FE.03.02 Multilateral Organizations	21,697,417	62.56%	29,509,168	62.06%
FE.03.02.04 International Labour Organization (ILO)	269,613	0.78%	160,667	0.34%
FE.03.02.07 The Global Fund to Fight AIDS, Tuberculosis and	17,662,836	50.93%	25,042,254	52.66%
Malaria				
FE.03.02.08 UNAIDS Secretariat	2,869,462	8.27%	3,525,074	7.41%
FE.03.02.09 United Nations Children's Fund (UNICEF)	352,608	1.02%	418,972	0.88%
FE.03.02.10 United Nations Development Fund for Womer	322,440	0.93%	125,190	0.26%
(UNIFEM)				
FE.03.02.11 United Nations Development Programme (UNDP)	38,495	0.11%	15,808	0.03%
FE.03.02.13 United Nations High Commissioner for Refugees	11,590	0.03%	17,669	0.04%
(UNHCR)				
FE.03.02.16 United Nations Office on Drugs and Crime	95,045	0.27%	104,795	0.22%
(UNODC)				
FE.03.02.17 United Nations Population Fund (UNFPA)	75,327	0.22%	98,739	0.21%
FE.03.03 International not-for-profit organizations and	882,304	2.54%	497,643	1.05%
foundations				
FE.03.03.99 Other International not-for-profit organizations	882,304	2.54%	497,643	1.05%
and foundations n.e.c.				
Total International Funding	34,682,334	100%	47,550,144	100%

Table 3 International Financing Entities of HIV in Indonesia (USD, 2021 - 2022)

The findings reveal noteworthy trends in HIV spending by international entities between 2021 and 2022. In 2021, bilateral aid constituted 25.4% (12,102,613 USD) of the total international funding, notably from the Government of the United States through PEPFAR. Meanwhile, multilateral organizations accounted for the majority, at 74.6% (35,452,117 USD), with significant contributions from key entities such as The Global Fund, which contributed 50.0% (17,662,836 USD). However, by 2022, bilateral aid increased significantly by 45.2% (17,543,333 USD), with the Government of the United States maintaining its contribution share. Conversely, multilateral organizations' share decreased to 62.1% (29,509,168 USD), with notable reductions seen in contributions from various entities like The Global Fund to Fight AIDS, Tuberculosis, and Malaria (52.7% - 25,042,254 USD). International not-for-profit organizations and foundations also saw a decline by more than half between 2021 and 2022.

3.5 Total HIV Expenditure by The Revenue

REVENUE	2021	%	2022	%
REV.01.01 Internal transfers and grants	93,648,650	61.1%	79,507,365	50.7%
non-profit organization financing schemes	209,332	0.1%	717,499	0.5%
REV.03.98 Social insurance contributions not disaggregated	23,869,517	15.6%	28,043,074	17.9%
REV.06.03 Other revenues from non-profit institutions n.e.c	363,040	0.2%	394,976	0.3%
REV.06.01 Other revenues from households n.e.c.	249,574	0.2%	495,121	0.3%
REV.06.02 Other revenues from corporations n.e.c.	179,408	0.1%	174,180	0.1%
REV.07.01 Direct foreign financial transfers	34,682,334	22.6%	47,550,144	30.3%
Total	153,201,854	100%	156,882,359	100%

Table 4 HIV Expenditure based on The Revenue (USD, 2021-2022)

The analysis of HIV expenditures highlights significant funding trends for the years 2021 and 2022 on the revenue. In 2021, the total HIV expenditure was 153,201,854 USD. This funding primarily came from three sources: 61.1% from internal transfers and grants, which amounted to 93,648,650 USD; 15.6% from social insurance contributions, totaling 23,869,517 USD; and 22.6% from direct foreign financial transfers, which equated to 34,682,334 USD.

By 2022, total expenditure saw a slight increase to 156,882,359 USD. The composition of funding sources shifted, with internal transfers and grants contributing 50.7% of the revenue at 79,507,365 USD. Meanwhile, social insurance contributions increased to 17.9%, or 28,043,074 USD, and direct foreign financial transfers rose to 30.3%, amounting to 47,550,144 USD.

3.6 Total HIV Expenditure by Financing Scheme

Table 5 HIV Expenditure by Financing Scheme (USD, 2021 - 2022)

Financing Scheme	2021	%	2022	%
SCH.01.01 Government schemes	103,260,761	67.4%	96,294,868	61.4%
SCH.01.02 Compulsory contributory health	23,869,517	15.6%	28,043,634	17.9%
insurance schemes				
SCH.02.02 Not-for-profit organisation schemes	25,822,002	16.9%	32,292,802	20.6%
SCH.02.03 For-profit enterprise schemes	249,574	0.2%	174,180	0.1%
SCH.04.02 Voluntary schemes (non-resident)		0.0%	76,875	0.0%

TOTAL	153,201,854	100%	156,882,359	100%

In Indonesia, the funding structure for HIV expenditure during 2021 and 2022 highlights a diverse range of financial schemes (SCH) through which beneficiaries can access their HIV services. During 2021, government schemes absorbed the largest share, accounting for 72.7% of the total expenditure, approximately 149.6 million USD. This share slightly declined to 69.3% in 2022, amounting to about 137.1 million USD. Compulsory contributory health insurance schemes also showed a notable increase, absorbing 11.6% in 2021 and rising to 14.2% in 2022, which translates to roughly 23.9 million USD and 28 million USD, respectively. Not-for-profit organization schemes maintained a consistent share, absorbing 15.6% of the total expenditure in 2021 and 16.4% in 2022, with figures around 32.03 million USD and 32.4 million USD, respectively. For-profit enterprise schemes absorbed minimal amounts, accounting for only 0.1% in 2021 and 0.1% in 2022, approximately 249,574 USD and 174,180 USD, respectively.

3.7 HIV expenditure by Financing Agent and Purchaser in Indonesia

Financial Agent	2021	%	2022	%
Public Sector				
FAP.01.01 Territorial governments	102,537,067	66.93%	89,365,909	56.96%
FAP.01.02 Public social security	23,869,517	15.58%	28,043,074	17.88%
Private Sector				
FAP.02.05 Not-for-profit institutions	9,786,962	6.39%	17,078,213	10.89%
FAP.02.06 Corporations	249,574	0.16%	174,180	0.11%
International Sector				
FAP.03.03 International not-for-profit				
organizations and foundations	4,034,582	2.63%	4,180,007	2.66%
FAP.03.02 Multilateral agencies				
managing external resources	12,102,613	7.90%	17,543,333	11.18%
FAP.03.05 International for-profit				
organizations	621,539	0.41%	497,643	0.32%
TOTAL	153,201,854	100%	156,882,359	100%

Table 6 HIV expenditure based on Financing Agent and Purchaser (FAP) (USD, 2021 -2022)

Table 6 displays the distribution of HIV expenditure disaggregated by financing agents and purchasers for 2021 and 2022. In 2021, the bulk of HIV funding was overseen by the public sector, with territorial governments handling 66.9% of the total expenditure, amounting to 102,537,067 USD. Public social security administered 15.6%, equating to 23,869,517 USD. However, in 2022, there was a notable decline in the proportion of expenditure controlled by territorial governments, which dropped to 57% (or 89,365,909 USD), a decrease of 10%. In contrast, public social security saw a marginal increase to 17.9% (or 28,043,074 USD), attributed to increased spending by the social security institution that governs the JKN funds and finances HIV treatment classified under the ICD-10 code B20.

Within the private sector, both not-for-profit institutions and corporations directed HIV program funds across the two years. Not-for-profit institutions accounted for 6.4% of the expenditure in 2021, experiencing a notable rise to 10.9% in 2022, reflecting an increase of 1%. Similarly, corporations oversaw a minimal share, comprising 0.2% of expenditure in 2021 and decreasing slightly to 0.1% in 2022.

On an international scale, there was a noteworthy increase in the allocation of funds by international not-for-profit organizations and foundations, rising from 7.9% in 2021 to 11.2% in 2022. Additionally, multilateral agencies overseeing external resources accounted for 2.6% in 2021, slightly increasing to 2.7% in 2022.



3.8 Total HIV Expenditure by AIDS Spending Category

Figure 9 HIV expenditure based on Spending Category (ASC) (USD, 2021 -2022)

Figure 9 shows the distribution of expenditure allocation to HIV/AIDS across various HIV expenditure spending categories (ASC) in 2021 and 2022. In 2021, the largest portion of expenditure, comprising 66.9%, was directed towards HIV care and treatment, amounting to

approximately 102.5 million USD. However, there was a significant decrease in the share allocated to this category in 2022, dropping to 52.3% of total expenditure, equivalent to around 82.1 million USD. This decrease was due to reduced demand for antiretroviral drugs (ARVs) in 2022, resulting from surplus stock carried over from 2021.

Conversely, there was a substantial increase in funding for HIV testing and counseling (HTC), rising from 12.9% in 2021 to 21.1% in 2022, with expenditures of 19.7 million USD and 33.1 million USD, respectively. Prevention initiatives remained relatively stable at 11.4% in 2021 and 11.8% in 2022, with expenditure figures of 17.5 million USD and 18.5 million USD, respectively.

The increased funding for HTC, leading to a decline in prevention efforts or overlaps in services, indicates a focus on test-and-treat initiatives and evaluating healthcare services in preventing and controlling HIV/AIDS and PIMS. The 2020-2024 performance indicators stated in the NAP HIV/AIDS 2020-2024 highlight the gap in identified PLHIV (People Living with HIV). There are significant gaps in HIV testing; according to the 2018-2019 STBP (Survei Terpadu Biologis dan Perilaku or), 72% of transgender individuals, 59% of MSM (Men who have Sex with Men), 42% of FSW (Female Sex Workers), and 67.3% of clients utilized HIV testing services, while only 7.8% of clients had ever taken an HIV test. Testing service utilization remains particularly low among clients of FSW. (8)

The distribution of resource allocation for ASC during 2021 and 2022 is considered suboptimal for effective intervention efforts. The estimated actual needs for implementing six HIV/AIDS Prevention and Control strategies amounted to 320 million USD in 2021 and 329 million USD in 2022. This indicates that the current available funding only covers two-thirds of the actual needs. According to the HIV/AIDS National Action Plan (NAP) of Indonesia, Strategy 2 on testing requires at least 48 million USD in both 2021 and 2022. (8)

Based on the prevention roadmap for 2025, significant investment growth is required in three critical areas: primary HIV prevention, HIV testing and treatment, and community support. Globally, for low- and middle-income countries, evidence-based prevention funding needs to nearly double, increasing from 5.3 billion USD per year in 2019 to 9.5 billion USD in 2025. Investment in HIV testing and treatment needs to increase by 18%, reaching 10.1 billion USD by 2025. Although a 35% increase is anticipated in individuals receiving HIV treatment, the efficiency benefits from commodity price decreases and service delivery costs are expected to reduce the overall expenditure. (24)

Partnerships and community participation, especially to reduce stigma and discrimination in society as outlined in the NAP, require 15.8 million USD in 2021 and 16.1 million USD in 2022. Meanwhile, according to current NASA data, ASC.05 Social Enablers received 3.2 million USD (1.6%) in 2021 and 3 million USD (1.5%) in 2022. (8)

Lastly, funding for communities in low- and middle-income countries should rise from 1.3 billion USD in 2019 to 3.1 billion USD in 2025, constituting 11% of the total resource needs. This investment should focus on removing legal and policy barriers to HIV services, halting the criminalization of key populations, providing legal education and support to people living with

HIV and key populations facing rights violations, and contributing to efforts to achieve gender equality. (17)

3.8.1 Spending on HIV prevention activities

Total spending on HIV prevention in 2021 and 2022 are consistently represented one tenth of total spending (17.5 million USD or 11.4% and 18.8 million USD or 11.8%). However, approximately 80% of prevention spending went towards the Five Pillars of Prevention each year, which include high-impact interventions. The remaining percentage was shared among other prevention initiatives such as PMTCT (Prevention of Mother-to-Child Transmission), SBCC (Social and Behavioral Change Communication), community mobilization, programmatic activities for vulnerable populations, prevention for children and youth, and prevention of HIV transmission aimed at people living with HIV (PLHIV) (see Table 7). The Five Pillars of HIV Prevention represent a comprehensive strategic framework aimed at reducing the transmission and spread of HIV/AIDS, encompassing various program activities targeting adolescent girls and young women (AGYW), key populations, voluntary medical male circumcision (VMMC), condom distribution, and PrEP (pre-exposure prophylaxis).

Detail Prevention Category	2021	%	2022	%
ASC.01.01 Five Pillars of Prevention	13,618,524	77.87%	15,258,816	82.45%
ASC.01.01.01.03 Behaviour change communication (BCC) as par	-	0.00%	41,382	0.22%
of programmes for AGYW and their male partners - only i				
earmarked HIV funds are spent				
ASC.01.01.01.98 Programmatic activities for AGYW no	28,105	0.16%	30,345	0.16%
disaggregated by type				
ASC.01.01.02.01 Programmatic activities for sex workers and	2,989,792	17.10%	2,621,938	14.17%
their clients				
ASC.01.01.02.02 Programmatic activities for gay men and other	2,229,713	12.75%	3,882,320	20.98%
men who have sex with men (MSM)				
ASC.01.01.02.03 Programmatic activities for Transgenders (TG)	409,682	2.34%	775,793	4.19%
ASC.01.01.02.04 Programmatic activities for People who Injec	67,513	0.39%	90,388	0.49%
Drugs (PWID) including harm reduction programmes				
ASC.01.01.02.05 Programmatic activities for inmates o	85,215	0.49%	73,461	0.40%
correctional facilities or pre-trial detention centres (prisoners)				
ASC.01.01.02.98 Services for key populations not dissagregated	7,808,504	44.65%	7,071,452	38.21%
(exclusively for the five populations here described)		0.000/	200.045	4 530/
ASC.01.01.03.98 Condom activities (for HIV prevention) no	-	0.00%	290,645	1.57%
disaggregated		0.000/	201.002	2.000/
ASC.01.01.05.98 PrEP not alsoggregated by key population	-	0.00%	381,092	2.06%
ASC.01.02 Other Prevention activities	3,869,535	22.13%	3,247,591	17.55%
ASC.01.02.01 Prevention of vertical transmission of HIV infection				
(PMTCT)	105,670	0.60%	181,592	0.98%
ASC.01.02.02 Social and behavioural communication for change				
(SBCC) for populations other than key populations	62,902	0.36%	48,553	0.26%
ASC.01.02.04 Programmatic activities for vulnerable and	740,570	4.23%	1,227,368	6.63%

Table 7 AIDS Spending based on Detail Prevention Category (USD, 2021-2022)

accessible populations				
ASC.01.02.05 Prevention for children and youth (excluding for				
AGYW in countries with high HIV prevalence)	2,831,833	16.19%	1,561,442	8.44%
ASC.01.02.06 Prevention of HIV transmission aimed at people				
living with HIV and their partners (including sero-discordant				
couples)	18,970	0.11%	11,184	0.06%
ASC.01.02.07 Prevention and wellness programmes in the				
workplace	108,951	0.62%	157,468	0.85%
ASC.01.02.98 Prevention activities not disaggregated	639	0.00%	56,685	0.31%
ASC.01.02.09 Post-exposure prophylaxis	-	0.00%	3,300	0.02%
Total	17,488,059	100%	18,506,407	100%

Table 7 illustrates the distribution of spending among these Five Pillars of Prevention. Program initiatives for sex workers and their clients experienced a decrease in funding from 3 million USD (17.1% of total prevention expenditure) to 2.6 million USD (14.2% of prevention expenditure) in both 2021 and 2022. Furthermore, resources allocated for program activities targeting gay men and other men who have sex with men (MSM) remained are accounted for 2.2 million USD (12.8%) and raised for almost 4 million USD (21%). Program aims transgenders (TG) spent amounts 409,682 USD (2.3%) in 2021 and 775,793 USD (4.2%) in 2022.

Additionally, about 20% of prevention spending was channeled towards various other prevention activities, mainly for the prevention and treatment of STIs (sexually transmitted infections), with prevention activities for children and adolescents receiving the majority of the spending (see details in Table 7). All other prevention interventions received less than 1% each in both years (for vulnerable and accessible populations, PMTCT, etc.).

3.8.2 HIV testing and counseling (HTC)

Table 8 AIDS Spending based on Detail HIV Testing and Counseling (HCT) Category (USD, 2021-2022)

Detail HCT Spending Category	2021	%	2022	%
ASC.02.01 HIV testing and counselling for sex workers	296,578	1.50%	372,141	1.12%
ASC.02.02 HIV testing and counselling for MSM	1,740	0.01%	2,531	0.01%
ASC.02.03 HIV testing and counselling for TG	11,052	0.06%	185	0.00%
ASC.02.05 HIV testing and counselling for inmates o	10,326	0.05%	64,399	0.19%
correctional and pre-trial facilities				
ASC.02.06 HIV testing and counselling for pregnan	11,838	0.06%	8,646	0.03%
women (part of PMTCT programme)				
ASC.02.08 HIV testing and counselling for vulnerable and		0.00%	14,948	0.05%
accessible populations				
ASC.02.09 Voluntary HIV testing and counselling for		0.00%	51,320	0.15%
general population				
ASC.02.10 Provider initiated testing and counselling (PITC)	895	0.00%	10,851	0.03%
ASC.02.11 HIV screening in blood banks	13,606,036	68.99%	17,030,763	51.43%
ASC.02.98 HIV testing and counselling activities not	5,784,228	29.33%	15,561,887	46.99%
disaggregated				

TOTAL	19,722,693	100%	33,117,671	100%
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HIV testing and counseling (HTC) initiatives are another essential aspect of HIV expenditure, serving diverse target populations and utilizing various strategies. Expenditure for HIV screening in blood banks conducted by the Indonesian Red Cross (PMI) amounted to 13.6 million USD or 69.0% in 2021 and 17.0 million USD or 51.4% in 2022, taking the highest proportion in this category. The second largest expenditures are uncategorized HTC activities, totaling 5.4 million USD or approximately 29.3% in 2021 and 15.6 million USD or 47.0% in 2022. Despite being classified as uncategorized, these HTC activities target key affected populations, including female sex workers (FSW), injection drug users (IDU), transgender individuals (TG), and men who have sex with men (MSM).

3.8.3 HIV Care and Treatment

Detail Care and Treatment Spending Category	2021	%	2022	%
ASC.03.01 Anti-retroviral therapy	63,094,795	61.55%	26,328,973	32.08%
ASC.03.02 Adherence and retention on ART - suppor (including nutrition and transport) and monitoring	1,974,114	1.93%	2,674,862	3.26%
ASC.03.03 Specific ART-related laboratory monitoring	2,499,587	2.44%	1,423,974	1.74%
ASC.03.04 Co-infections and opportunistic infections prevention and treatment for PLHIV and KPs	4,155,272	4.05%	5,808,810	7.08%
ASC.03.98 Care and treatment services no disaggregated	30,742,931	29.99%	45,650,119	55.62%
ASC.03.99 Care and treatment services n.e.c.	43,815	0.04%	181,607	0.22%
TOTAL	102,510,514	100%	82,068,345	100%

Table 9 Detail AIDS Spending Category on Care and Treatment (USD, 2021 and 2022)

Between 2021 and 2022, Indonesia's expenditure on HIV care and treatment demonstrated significant shifts in funding priorities across various categories. Spending on anti-retroviral therapy (ART) decreased markedly from 63.1 million USD (61.6%) in 2021 to 26.3 million USD (32.1%) in 2022. This reduction reflects the strategic use of previously stockpiled ART resources that continued to be utilized in 2022. Additionally, expenditure on the prevention and treatment of co-infections and opportunistic infections increased, rising from 4.2 million USD (4.1%) to 5.8 million USD (7.1%).

Conversely, funding for care and treatment services not disaggregated saw a notable increase, rising from 30.7 million USD (30.0%) to 45.7 million USD (55.6%), making it the largest expenditure category by 2022. This shift suggests a reallocation of resources to address broader and less-specific needs within HIV care. Spending on specific ART-related laboratory monitoring decreased slightly, from 2.5 million USD (2.4%) to 1.4 million USD (1.7%), though it remains an important area. Furthermore, expenditure on adherence and retention on ART grew modestly from 2.0 million USD (1.9%) to 2.7 million USD (3.3%). Spending on care and treatment services not elsewhere classified (n.e.c.) also increased from 43,815 USD (0.04%) to 181,607 USD (0.2%).

3.8.4 Program Enablers and System Strengthening

Overall, the expenditure on HIV program enablers and system strengthening for 2021 and 2022 are 6% and 12.5% of total Spending. In this category, Strategic Planning, Coordination, and Policy Development (ASC.06.01) saw a major allocation of 5.5 million USD (55.3%) in 2021 and 8.7 million USD (44.6%) in 2022. Building Meaningful Engagement for Governance and Policy Reform (ASC.06.02) grew from 35,277 USD (0.4%) in 2021 to 128,300 USD (0.7%) in 2022.

For Program Administration and Management Costs (ASC.06.03), the expenditure increased from 2.0 million USD (20.2%) in 2021 to 6.0 million USD (30.9%) in 2022. Strategic Information (ASC.06.04) was 1.7 million USD (16.8%) in 2021 and 3.8 million USD (19.4%) in 2022. Public Systems Strengthening (ASC.06.05) allocated 249,311 USD (2.5%) in 2021 and 194,908 USD (1.0%) in 2022.

For Community System Strengthening (ASC.06.06), expenditure increased from 460,324 USD (4.7%) in 2021 to 633,593 USD (3.2%) in 2022. Human Resources for Health (above-site programs) (ASC.06.07) saw minimal investment, with 941 USD in 2021 and 32,141 USD (0.2%) in 2022. Lastly, Program Enablers and Systems Strengthening Not Disaggregated (ASC.06.98) amounted to 12,517 USD (0.1%) in 2021 and 5,565 USD (0.03%) in 2022.



Figure 10 Detail AIDS Spending Category on Program Enablers and System Strengthening (USD, 2021 and 2022)

3.8.5 Social Protection, Social Enablers, Development Synergies and Research

The graphs below show the spending on social protection and economic support, social enablers, development synergies, and research, which were generally all small amounts (1% and under from total HIV spending). In both 2021 and 2022, the Social Protection and Economic Support category saw "Other social protection and economic support (non-OVC)" as a significant expenditure. In 2021, the total spending was 152,186 USD, with this category accounting for 135,333 USD (89%). In 2022, total spending increased to 249,640 USD, with "Other social protection and economic support (non-OVC)" and "Social protection for OVC" being the main expenditures.

The Social Enabler category's spending in both years was largely driven by "Human rights programmes" and "Social enablers not disaggregated by type." In 2021, the total spending was 3,192,324 USD, with "Human rights programmes" at 2,097,018 USD (66%) and "Social enablers" at 1,079,892 USD (34%). In 2022, the spending was slightly lower at 3,020,064 USD, with "Social enablers" at 1,870,228 USD (62%) and "Human rights programmes" at 1,067,534 USD (35%).

The Development Synergies category in both years was notably influenced by "Reducing genderbased violence" and "Promote HIV-sensitive, cross-sectoral development." In 2021, the total spending was 125,552 USD, with "Promote HIV-sensitive, cross-sectoral development" at 114,367 USD (91%). In 2022, the spending increased to 204,878 USD, led by "Reducing genderbased violence" at 102,196 USD (50%).

Lastly, the HIV-Related Research category consistently had "Economic research" and "HIV and AIDS-related research activities not disaggregated by type" as significant expenditures. In 2021, the total spending was 541,245 USD, with "Economic research" at 339,173 USD (63%) and "HIV and AIDS-related research activities" at 182,751 USD (34%). In 2022, the total spending rose to 908,999 USD, with "Economic research" at 497,643 USD (55%) and "HIV and AIDS-related research activities" at 497,643 USD (55%) and "HIV and AIDS-related research activities" at 497,643 USD (55%) and "HIV and AIDS-related research activities" at 399,249 USD (45%).



Figure 11 Detail AIDS Spending Category on Social Enablers, social protection and economic support, social enablers, development synergies and research (USD, 2021 and 2022)



3.9 Funding Entity and Spending Categories

Figure 12 Detail AIDS Spending Category (ASC) per Funding Entity (FE) (%, USD, 2021 and 2022)

In Figure 12, the breakdown of HIV expenditure by public, domestic private, and international funding sources shows different patterns and trends for 2021 and 2022. Public funding prioritized Care and Treatment, accounting for 86,235,317 USD (73.3%) in 2021 and 61,959,459 USD (57.2%) in 2022, followed by HCT (HIV Counseling and Testing) at 18,218,331 USD (15.5%) in 2021 and 31,607,527 USD (29.2%) in 2022. Government entities did not emphasize prevention efforts, allocating less than 10% of public funding each year.

In contrast, domestic private funding, though minimal, focused on prevention, dedicating 323,226 USD (40.8%) in 2021 and 357,150 USD (33.6%) in 2022, primarily utilized by local NGOs targeting key populations, vulnerable groups, children, and youth. International funding primarily supported Care and Treatment, contributing 48,310,293 USD (55.4%) in 2021 and 51,287,379 USD (58.0%) in 2022. Significant portions were also allocated to program enablers and systems strengthening, slightly decreasing from 22,572,498 USD (25.9%) in 2021 to 20,133,571 USD (22.8%) in 2022. Prevention efforts accounted for 10,325,221 USD (11.8%) in 2021 and 10,602,657 USD (12.0%) in 2022.

The spending trends for international and private funds were consistent over the two years. However, public funding showed notable shifts, with increased spending on HCT and decreased expenditures on Care and Treatment in 2022. This reduction in Care and Treatment spending was due to lower ART procurement, as these resources were carried over from 2021.

3.10 Total HIV expenditure by Beneficiary Populations in Indonesia

Beneficiary Population	2021	%	2022	%
BP.01 People living with HIV	103,851,340	67.8%	83,272,458	53.1%
BP.02 Key populations	23,170,427	15.1%	31,176,914	19.9%
BP.03 Vulnerable, accessible and other	18,829,002	12.3%	22,224,945	14.2%
target populations				
BP.04 General population	2,892,326	1.9%	1,756,930	1.1%
BP.05 Untargeted interventions	4,413,595	2.9%	18,424,626	11.7%
BP.99 Specific target populations no	45,164	0.0%	26,485	0.0%
classified elsewhere				
Total	153,201,854	100.0%	156,882,359	100.0%

 Table 10 HIV Spending by Beneficiaries Population (USD, % 2021-2022)

Across both 2021 and 2022, the largest portion of HIV expenditure in Indonesia was consistently allocated to people living with HIV (BP.01). In 2021, this category received 136.8 million USD, accounting for 66.5% of the total spending, and in 2022, though reduced, they still received the highest allocation of 115.6 million USD, or 58.5% of the total. Following this, vulnerable, accessible, and other target populations (BP.03) were the second highest recipients in 2021 with 28.1 million USD (13.6%), but in 2022, key populations (BP.02) surpassed them, receiving 32.0 million USD (16.2%) compared to BP.03's 32.4 million USD (16.4%).

The categories receiving the least funding over these two years were the general population (BP.04), untargeted interventions (BP.05), and specific target populations not classified elsewhere (BP.99). The general population received 2.9 million USD (1.9%) in 2021, which decreased to 1.8 million USD (1.1%) in 2022. Untargeted interventions saw a slight decrease from 4.4 million USD (2.9%) in 2021 to 18.4 million USD (11.7%) in 2022. Specific target populations not classified elsewhere received the smallest allocations, falling from 0.045 million USD (0.0%) in 2021 to 0.026 million USD (0.0%) in 2022.

The allocation of prevention funding towards key populations is deemed more economically efficient in concentrated epidemics (18). Globally, the estimated cost of prevention per infection stands at 3,923 USD, whereas the treatment cost per individual is estimated at 4,707 USD. Consequently, prioritizing prevention has the potential to save 784 USD per preventable infection. Emphasizing prevention among key populations (KPs), including men who have sex with men (MSM) offers several benefits: a projected reduction of 5 million cumulative HIV

infections, a decrease of 3.1 million people living with HIV/AIDS (PLHIV), a 40% decline in AIDS mortality rates, and a decrease in HIV prevalence. (18). Nevertheless, modeling results from the AIDS Epidemic Model (AEM) estimates that 70% of PLHIV new infections originate from non-key populations. To address this, targeted efforts will be undertaken at healthcare facilities, particularly focusing on pregnant women, tuberculosis (TB) patients, sexually transmitted infection (STI) sufferers, partners of PLHIV, hepatitis patients, and individuals presenting with signs of compromised immunity. (18)



Figure 13 AIDS Spending based on Detail Funding Entities (two digits) and Beneficiaries (%, 2021 and 2022)

The graph in Figure 13 illustrates the distribution of funding entities (FEs) based on allocations to beneficiary groups in 2021 and 2022. In both years, the largest portion of funding across all FEs was allocated to BP.01 (people living with HIV). Governmental organizations (FE.01.01) provided 62.9 million USD (71.8%) in 2021 and 34.4 million USD (52.1%) in 2022 of their total funding. Social security institutions (FE.01.02) also directed the majority of their contributions to BP.01, with 23.5 million USD (98.7%) in 2021 and 27.1 million USD (96.6%) in 2022. Similarly,

Multilateral Organizations (FE.03.02), such as GF ATM, prioritized BP.01, contributing 39.9 million USD (54%) in 2021 and 38.3 million USD (54%) in 2022.

Key populations (BP.02) received the second-largest allocation from Governmental entities (FE.01.01), which provided 9.6 million USD (11%) in 2021 and 18.6 million USD (28%) in 2022. Multilateral Organizations (FE.03.02) also allocated significant resources to BP.02, with 9.8 million USD (13%) in 2021 and 10.8 million USD (15%) in 2022.

Vulnerable, accessible, and other target populations (BP.03) saw notable allocations from Multilateral Organizations (FE.03.02), receiving 11.8 million USD (16%) in 2021 and 11.5 million USD (16%) in 2022. Other public entities (FE.01.99) also directed substantial funding toward easily accessible populations, with a total of 6.03 million USD allocated for initiatives such as HIV screening in blood donors.

3.11 Total HIV Expenditure by Service Provider 2021 2022

In 2021, HIV spending in Indonesia was primarily driven by governmental organizations, which contributed a total of 173.7 million USD (84%) of the total expenditure. Government service providers made up the largest share of this, with 86.1 million USD (49.5%), followed by public hospitals with 27.1 million USD (15.6%) and public blood banks with 13.4 million USD (7.7%). Non-profit providers accounted for a smaller portion, contributing 27.4 million USD (13.3%). Of this, non-profit non-faith-based providers dominated with 21.4 million USD (99% of the non-profit total), while non-profit faith-based providers contributed only 241,650 USD, highlighting a significant concentration of resources within non-faith-based organizations.

In 2022, there was a slight decline in the total spending by governmental organizations, which decreased to 158.2 million USD (80%). Government service providers saw a substantial drop in their share, contributing 64.4 million USD (40.7%), while public hospitals increased their contribution to 35.5 million USD (22%) and public blood banks to 17.0 million USD (10.7%). Non-profit providers' share of the total HIV expenditure increased to 33.3 million USD (16.9%), showing growth in their role in service provision. Non-profit non-faith-based providers remained dominant in this category, accounting for 32.3 million USD (97%), while non-profit faith-based providers saw a modest rise to 883,071 USD.



Figure 14 HIV Spending by Service Providers (%, 2021 2022)





Figure 15 HIV Spending by Service Delivery Mode (%, 2021 2022)

The overall pattern of HIV spending through the Service Delivery Modality (SDM) remained relatively stable between 2021 and 2022, with a continued focus on facility-based services. In both years, the largest share of funds was consistently allocated to facility-based services that were not disaggregated (SDM.01.98). In 2021, this category accounted for 137.3 million USD, representing 90% of total expenditures, while in 2022, it constituted 133.5 million USD, or 85% of total spending.

Spending on non-applicable services (SDM.03), which cover areas without a specific SDM, increased from 15.9 million USD in 2021 (10% of total spending) to 23.3 million USD in 2022 (15% of total spending). Meanwhile, expenditures on facility-based inpatient services (SDM.01.02) remained minimal, increasing slightly from 2,441 USD in 2021 to 10,090 USD in 2022, though this still represented less than 1% of the overall budget.

3.12 HIV Spending by Production Factors

Production Factor	2021	%	2022	%
PF.01 Current direct and indirec	87,308,234	57.0%	58,366,378	37.2%
expenditures				
PF.98 Production factors not	62,927,266	41.1%	97,612,035	62.2%
disaggregated				
PF.02 Capital expenditures	2,966,355	1.9%	903,946	0.6%
Total	153,201,854	100.0%	156,882,359	100.0%

Table 11 AIDS Spending based on Production Factor in 2021 and 2022

Table 11 depicts the HIV expenditure spending on production factors for the years 2021 and 2022. The proportion of current direct and indirect expenditure was significant, comprising 43.4% of the total expenditure in 2021, which decreased to 31.2% in 2022. These expenditures encompass various costs, including personnel expenses, operational management, procurement of products and medical supplies, training, event logistics, transportation for beneficiaries, and indirect expenses like housing and financial support. Within the medical products and supplies category (PF.01.03), there was a notable decrease from 72,528,262 USD in 2021 to 35,852,200 USD in 2022. Specifically, the purchase of antiretroviral drugs (ARV) totaled 53,091,220 USD from public funds in 2021, significantly higher than the amount in 2022. TB drugs also contributed to medical supplies, with 4,577,475 USD in 2021 and 15,020,212 USD in 2022 from international funding, along with 3,535,270.48 USD in 2021 and 4,223,147.39 USD in 2022 from central government funding.

Capital expenditure only accounted for about 1% during these two years, including for construction, vehicles, and other capital investments. Finally, PF.98 Production factors have become the majority in production factors because this variable is newly implemented in the

Indonesian NASAs, therefore the existing data were not quite adequate as it marks a new approach initiated in the country's NASA reports for 2021 and 2022.

3.2. Comparison of HIV Spending vs Resource Need based on National Action Plan 2020-2024

Comparing NASA with NAP, there remains a significant shortfall in meeting the budget requirements for achieving fast-track goals. The current funding is projected to cover only about 48% of the actual needs (12). To realize the fast-track targets outlined by UNAIDS in 78 low- and middle-income countries, it is estimated that at least 5.5 billion USD is required. The Ministry of Health, as outlined in the National Action Plan (RAN) for HIV/AIDS Prevention and Control and the Integrated Monitoring and Evaluation System (PIMS) in Indonesia for the period 2020-2024 (see Figure 8), estimates that the actual needs for implementing six HIV/AIDS Prevention and Control and Control strategies in 2021 amounted to 320,284,755 USD, increasing to 328,571,455 USD in 2022. This implies that the current available funding only covers almost half of the actual needs (12).



Figure 16 Actual HIV expenditure vs Resource Need based on National Action Plan 2020-2024 (USD, 2020-2022)

4. Conclusion and Recommendation

4.1 Conclusion

- 1 The trend in HIV expenditure in Indonesia from 2010 to 2022 indicates a general upward trajectory, although it stagnated in the last four years. From 2018 onward, expenditure remained relatively stable. By 2021, it slightly decreased to 153.2 million USD, followed by a modest recovery to 156.9 million USD in 2022.
- 2 Comparing NASA with NAP, there remains a significant shortfall in fulfilling the budget requirements necessary for achieving fast-track goals. The current funding is projected to address only about 48% of the actual needs.
- 3 Between 2010 and 2022, Indonesia's HIV expenditure transitioned from 39% (26.72 million USD) domestic and 61% (41.37 million USD) international in 2010 to 77% (118.52 million USD) domestic and 23% (34.68 million USD) international in 2021, and further to 70% (109.33 million USD) domestic and 30% (47.55 million USD) international in 2022, illustrating a trend of increasing domestic investment in addressing the epidemic.
- 4 For domestic funding entities (FE), the largest contributions originated from governmental sources, accounting for 57.20% in 2021 and 41.7% in 2022, followed by social security institutions, which contributed 15.6% and 17.9% in those respective years. Other public entities not elsewhere classified significantly increased their contributions from 4% in 2021 to 9.4% in 2022, with PMI (Palang Merah Indonesia) being a notable contributor through various funding sources, including government support and private donations.
- 5 For international funding entities (FE), in 2021, international funding for Indonesia's HIV program primarily came from multilateral organizations, contributing 35.45 million USD (74.6%), with The Global Fund accounting for 17.66 million USD (50.0%), while bilateral aid, mainly from the U.S. through PEPFAR, represented 12.10 million USD (25.4%); in 2022, bilateral aid rose to 17.54 million USD (45.2%), while multilateral contributions decreased to 29.51 million USD (62.1%), with The Global Fund contributing 25.04 million USD (52.7%), and the share from international non-profit organizations significantly reduced.
- 6 For revenue (REV), between 2021 and 2022, Indonesia's HIV funding pattern shifted as internal transfers and grants declined from 93.65 million USD (61.1%) to 79.51 million USD (50.7%), social insurance contributions increased from 23.87 million USD (15.6%) to 28.04 million USD (17.9%), and foreign financial transfers rose significantly from 34.68 million USD (22.6%) to 47.55 million USD (30.3%).
- 7 In Indonesia, the funding structure for HIV expenditure during 2021 and 2022 showcases a diverse range of financial schemes (SCH) through which beneficiaries can access their HIV services. In 2021, government schemes represented the largest share, comprising approximately 32.03 million USD and 32.4 million USD, respectively. For-profit enterprise schemes made minimal contributions, accounting for only 0.1% in both 2021 and 2022, totaling around 249,574 USD and 174,180 USD, respectively.

- 8 For the financing scheme (SCH), which represents the mechanisms through which citizens access their HIV services, in 2021, government schemes absorbed 72.7% of total expenditure, approximately 149.6 million USD. This share slightly declined to 69.3% in 2022, amounting to about 137.1 million USD. Mandatory health insurance schemes increased from 11.6% in 2021 to 14.2% in 2022. Not-for-profit organization schemes accounted for 15.6% of total expenditure in 2021 and 16.4% in 2022.
- 9 For financing agents-purchasers (FAP), territorial governments played a crucial role. In 2021, the public sector, primarily territorial governments (comprising 66.9% of total HIV funding) and public social security (accounting for 15.60%), functioned as FAP. However, in 2022, territorial government FAPs decreased to 57%, while public social security increased to 17.9%.
- 10 For expenditure categories (ASC) in 2021 and 2022, there was a reduction in treatment and care expenditures from 66.9% to 52.3% of overall spending. From the total treatment and care spending, expenditure on anti-retroviral therapy (ART) significantly decreased from 63.1 million USD (61.6%) in 2021 to 26.3 million USD (32.1%) in 2022. This reduction reflects the strategic use of previously stockpiled ART resources that continued to be utilized in 2022.
- 11 Still in ASC, there was an increase in HIV testing and counseling (HTC) from 12.9% to 21.1% of total spending from 2021 to 2022. Of the total HTC spending, amounts were 13.6 million USD or 69.0% in 2021 and 17.0 million USD or 51.4% in 2022, primarily sourced from blood bank screenings by PMI.
- 12 Total spending on HIV prevention in 2021 and 2022 consistently represented one-tenth of total spending (17.5 million USD or 11.4% and 18.8 million USD or 11.8%). However, approximately 80% of prevention spending was allocated to the Five Pillars of Prevention each year.
- 13 The overall expenditure on HIV program enablers and system strengthening constituted 6% of total spending in 2021 and 12.5% in 2022, with Strategic Planning, Coordination, and Policy Development (ASC.06.01) receiving significant allocations of 5.5 million USD (55.3%) in 2021 and 8.7 million USD (44.6%) in 2022.
- 14 The spending on social protection and economic support, social enablers, development synergies, and research, which were generally all small amounts (1% and under from total HIV spending). In both 2021 and 2022
- 15 Comparing the FE and the ASC from 2021 to 2022 reveals distinct trends among funding sources. Public funding primarily targeted Care and Treatment, accounting for 73.3% in 2021 and 57.2% in 2022, while HCT funding saw a significant increase. Domestic private funding, though minimal, focused on prevention efforts, allocating 40.8% in 2021 and 33.6% in 2022. International funding also prioritized Care and Treatment, constituting 55.4% in 2021 and 58.0% in 2022, with considerable investments in program enablers and prevention efforts.
- 16 For beneficiary populations (BP), in both 2021 and 2022, the largest share of Indonesia's HIV expenditure was directed toward people living with HIV, receiving 136.8 million USD (66.5%) in 2021 and 115.6 million USD (58.5%) in 2022. Vulnerable, accessible, and other target populations (BP.03) were the second highest recipients in 2021, receiving 28.1 million USD

(13.6%); however, in 2022, key populations (BP.02) surpassed them, receiving 32.0 million USD (16.2%) compared to BP.03's 32.4 million USD (16.4%).

- 17 Comparing the FE and the BP for 2021 and 2022, the largest funding allocations across FE were directed toward people living with HIV (BP.01), with governmental organizations, social security institutions, and multilateral organizations collectively prioritizing this group, while key populations (BP.02) received substantial support, particularly from governmental entities and multilateral organizations.
- 18 While public and international sources contribute the most to PLHIV, the proportion received by key populations from international sources is slightly higher than from public funding, while the vulnerable population's funding remained relatively stable across both sources.
- 19 In regards to service providers (PS), in both 2021 and 2022, governmental organizations were the primary service providers for HIV spending in Indonesia, although their share declined over time, while public hospitals and blood banks increased their contributions.
- 20 The pattern of HIV spending through the service delivery modality (SDM) remained consistent from 2021 to 2022, with the majority of funds continually allocated to facility-based services that were not disaggregated.
- 21 For production factors (PF), in 2021 and 2022, the majority of HIV expenditure on production factors was allocated to current direct and indirect expenditures, which included substantial costs for personnel, operational management, and procurement of medical products, with a notable drop in spending on medical supplies, particularly antiretroviral drugs (ARV).

4.2 Recommendations

- Recommendations include addressing the possible shortfall in meeting fast-track goals for HIV/AIDS in Indonesia from 2021 to 2022, with only 48% of projected needs covered by current funding, necessitating increased allocation. Furthermore, strategic resource allocation towards prevention initiatives targeting key populations and vulnerable groups is crucial for a more balanced and effective approach in combating HIV/AIDS.
- 2. It is advocated to effectively allocate public funds for AIDS management within Ministry of Institutions, involving the reactivation of coordination functions based on the 2020-2024 National Action Plan (RAN) strategy, aiming to enhance partnerships and community engagement across various sectors. Despite the important focus on HIV/AIDS prevention and treatment revealed in the 2023 NASA report, efforts should also expand to address gender, social protection, and create a supportive environment to reduce discrimination since these areas are currently receiving significant support from international funding.
- 3. The Central Government is encouraged to further secure funding for the HIV and AIDS program, thus further reducing dependence on external sources.
- 4. Utilizing NASA data to better understand the funding landscape for HIV/AIDS programs in Indonesia is essential, contributing towards a comprehensive resource allocation plan

balancing responsibilities between central and regional governments, and diversifying contributions from various sources including external partners and social security schemes.

- 5. Further exploration in future NASA reports should include Community Lead Organizations (CLOs), Out-of-Pocket expenses, involvement of the private sector, and more detailed production factors, while networking to gather additional information on areas such as alternative financing for CLOs including social contracting.
- 6. When seeking insights from NASA, the focus should be on addressing specific concerns identified for improvement, integrating with other tools like resource estimation and efficiency and equity analyses to benefit communities, Key Populations (KPs), and subnational levels for advocacy endeavors.

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