HIV EXPENDITURE IN MONGOLIA (2017-2021)

Background. Mongolia, with around 3.3 million inhabitants, has made notable progress towards its goals in treatment, but yet remains not on target in HIV detection. While among estimated 630 people living with HIV only 287 are diagnosed, 89 percent of those (254) were on antiretroviral therapy in 2022[1].

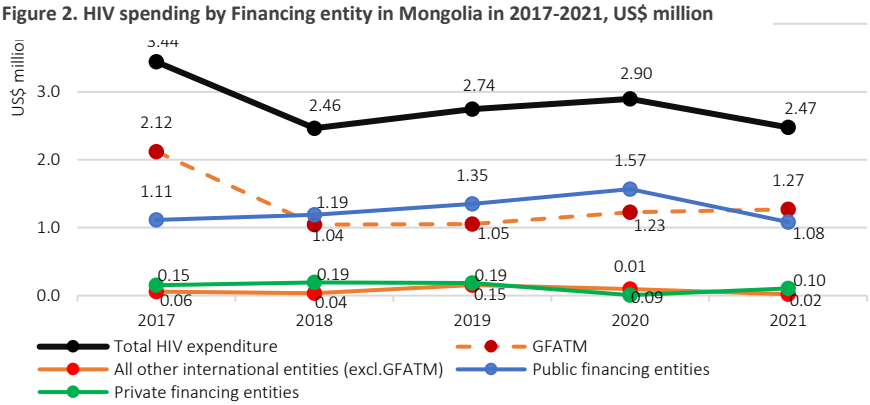
Figure 1. Key targets and achievements in Mongolia

Key targets and achievements for Mongolia	
Key targets	current progress (as of 2022)
95% of PLHIV are diagnosed by 2025	not on track: **45%** of PLHIV are diagnosed in 2022
95% of diagnosed PLHIV on treatment by 2025	not on track: **89%** of diagnosed PLHIV are on treatment
95% of people on treatment with viral suppression by 2025	not on track: **94%** of PLHIV on treatment achieve viral suppression
90% reduction in new HIV infections by 2030 compared to 2010	not on track **24%** reduction between 2010 and 2022
90% reduction in AIDS-related deaths by 2030 compared to 2010	not on track **50%** increase between 2010 and 2022

While Mongolia reports a <0.1% of country-wide HIV prevalence[2], Key populations are at higher risk of HIV infections, with 5.6% HIV prevalence among men who have sex with men[3] and 5.4% among transgender individuals[4]. New infections remain below 100 annually, showing a 24% reduction in 2022 compared to 2010, however it is estimated that almost two-third of the new cases are concentrated among men who have sex with men[5]. Considering the concentrated nature of the country's HIV epidemic and the limited resources available for the HIV response, it is imperative that efforts are concentrated on prioritized interventions with enhanced programmatic and allocative efficiencies. A focused and efficient HIV response can be steered by a thorough understanding of current HIV expenditure, resource flow, and financing architecture.

Findings. The third National Spending Assessment (NASA) from 2017-2021, led by Mongolia's Ministry of Health and National Centre for Communicable Diseases (NCCD), sheds light on HIV spending trends.

Figure 2. HIV spending by Financing entity in Mongolia in 2017-2021, US$ million



According to the NASA, Mongolia's HIV spending varied from US$3.4 million in 2017 to US$2.5 million in 2021[6] (Figure 2).

In its application for funding from The Global Fund to Fight HIV/AIDS, TB and Malaria[7] the country has committed to secure

[1] Mongolia country factsheet (accessed on 10 January, 2024). Available at: https://www.aidsdatahub.org/country-profiles/mongolia
[2] Mongolia factsheet. Available at: https://www.aidsdatahub.org/sites/default/files/resource/mongolia-data-book-2022-en.pdf
[3] Unpublished preliminary result of HIV AND SYPHILIS SURVEILLANCE SURVEY REPORT, 2022
[4] HIV and syphilis surveillance survey report, 2019. Ulaanbaatar: School of Public Health of Mongolian National University of Medical Sciences (MNUMS) and National Centre for Communicable Disease (NCCD); 2019
[5] Analyses for impact, efficiency, and sustainability of priority key population HIV services in Asia: Mongolia, 2023 (unpublished OPTIMA report) citing the Extended plan for the implementation of the National Program on Communicable Diseases Prevention and Control Ulaanbaatar: Ministry of Health, Government of Mongolia; 2020.
[6] Unpublished report: National AIDS Spending Assessment in Mongolia, 2017-2021.
[7] MNG-C-MOH Strengthening Of HIV And Tuberculosis ("TB") National Systems Of Prevention, Treatment, Care And Support In The Republic Of Mongolia (grant cycle 2) is an active grant (as of January 2024).

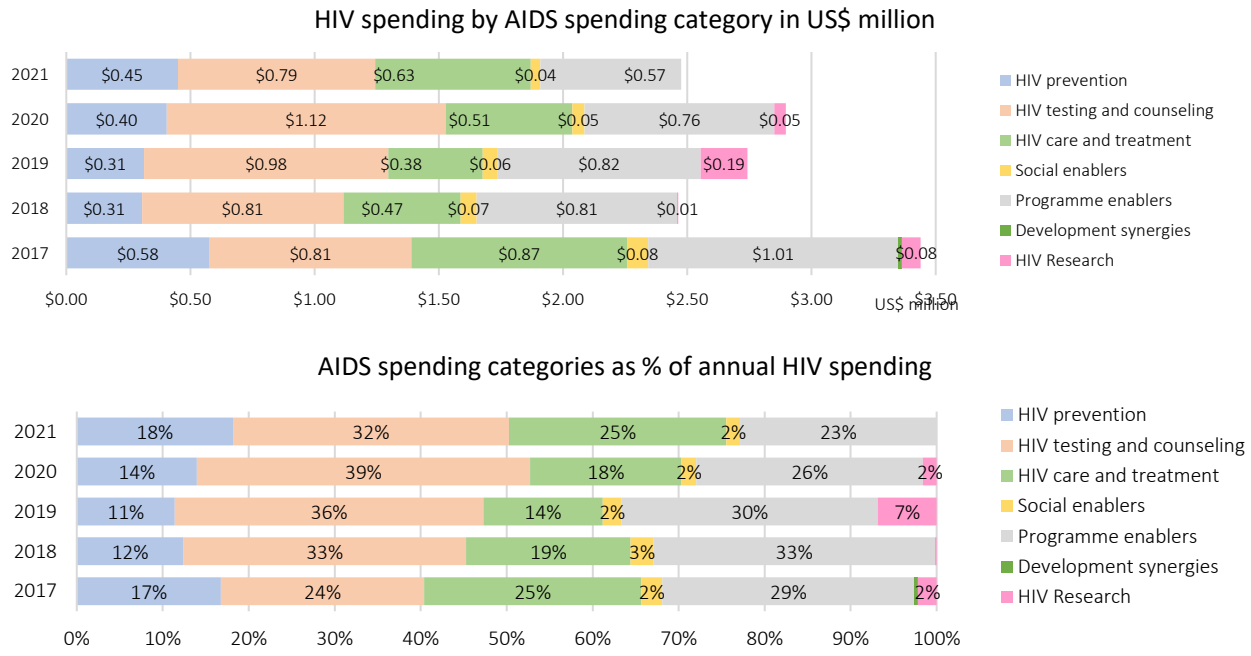
US$1 million from the government revenues[8] and, as suggested by the NASA findings, fulfilled that commitment providing US$1.08 million in 2021 through government schemes and US$0.1 million from the private sector via social health insurance arrangements. Social health insurance (SHI), that includes both public (as transfers to the SHI scheme on behalf of specific populations) and private financing entities (as a share of payroll tax paid by employers and employees), covered 20% of the total HIV response in 2021, and this share will expand with the evolution of this financing scheme. The roadmap laid out in The State Policy on Health 2017–2026[9], coupled with the Action Plan for Implementation of the State Policy on Health (Health Sector Master Plan), 2020–2026, indicates that already in 2023, Mongolia's Health Insurance General Office (HIGO), acting as the single purchaser of healthcare services from all public and eligible private providers, was overseeing both government and social health insurance schemes. This encompassed the financial resources directed towards the implementation of the HIV response.

Private corporations showed already modest philanthropic interest in supporting HIV projects in 2017-2020, but reported no such expenditure in 2021. NASA lacks the analysis of HIV-related out-of-pocket expenditure, particularly beyond the scope of the social health insurance scheme. The available data is confined to the costs associated with certain HIV tests, specifically those incurred by populations falling under specific testing requirements such as "Study and work abroad," "Foreigners," and "Mongolians from abroad," who are obligated to bear these expenses individually.

The Global Fund funded 40-60% of annual HIV expenditure during 2017 and 2021. However, there was a decline in the resources available in the grant cycle initiated in 2018, causing financial vulnerability particularly for HIV prevention services among key populations. Expenditure from public sector financing entities rose by 41% in 2020 but decreased by 31% in 2021 likely due to COVID-19, impacting HIV testing demand.

Besides the details of the origins of the HIV expenditure, NASA allows, among other, for the programmatic analysis of the HIV spending through its classification of the AIDS spending categories.

Figure 3. HIV spending in Mongolia by AIDS Spending Category in 2017-2021 (US$ million, %)



Spending towards HIV testing and counseling programme in Mongolia was increasing gradually and by 2020 it represented 39% of total HIV spending; in 2021, however, it experienced a dramatic slowdown due to COVID-19 from US$1.12 million in 2020 to US$0.79 million in the following year.

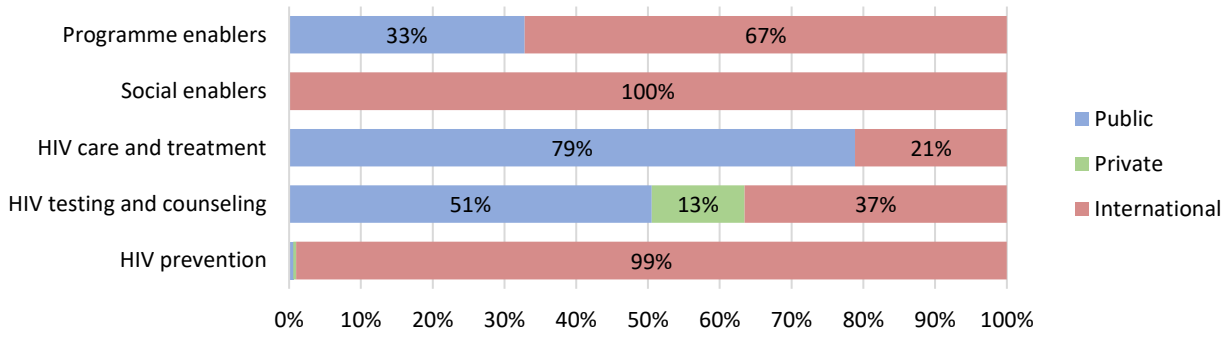
[8] Financial Gap Overview: HIV Funding Landscape Table as part of the country's application for funding to The Global Fund
[9] Government of Mongolia, Ministry of Health. 2020. Order of the Minister of Health A/103. Ulaanbaatar

NASA provides a unique opportunity to deconstruct programs and interventions into distinct cost components, known as production factors. In the case of Mongolia's HTC program (ASC.02 HIV testing and counseling), the predominant production factor is the HIV test, a crucial commodity and a significant cost driver of overall HIV expenditure. In 2021, the projected spending on HIV tests totalled US$0.53 million, constituting 66% of the estimated expenditure for the HTC program and 22% of Mongolia's total HIV expenditure for that year[10]. The cost per HIV test and the testing algorithm adopted by the country are two crucial ingredients in both NASA and resource needs estimates, as they have the potential to significantly influence the outcomes of both assessments.

Over US$0.5 million was spent on HIV care and treatment in 2020, representing 18% of the total country's expenditure on HIV, and in 2021 it increased to US$0.63 million, comprising 25% of the overall HIV spending (Figure 3).

These programmatic areas, HIV testing and HIV care and treatment, exhibit lower dependence on donors compared to others, with nearly 37% of HIV testing expenditure in 2021 being sourced from international funding, while HIV care and treatment share from international organizations was even lower at 21% (Figure 4). Private financing entities, households as employees and corporations as employers, financed 13% of the spending on HIV testing in 2021 through the public social health insurance scheme via payroll contributions.

Figure 4. HIV spending by AIDS Spending Category and Financing Entity in 2021, %



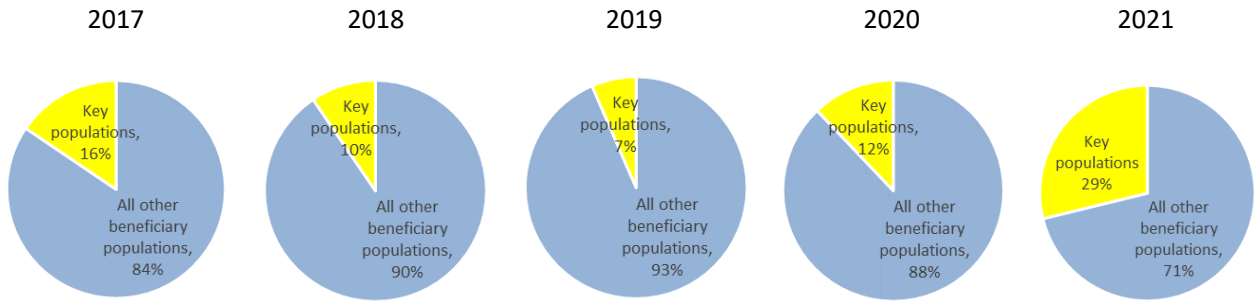
According to NASA findings, spending on HIV prevention was in decline since 2017 (from US$0.58 million in 2017 to US$0.31 million in 2018 and 2019) but started showing the signs of recovery in 2020 and 2021, when it reached US$0.40 and US$0.45 million correspondingly. In 2021 HIV prevention represented 18% of the total HIV expenditure in Mongolia (Figure 3). It remains a highly donor-dependent programmatic area, especially in 2021 when 99% of all HIV preventive services were funded by international organizations (Figure 4).

Expenditure on programme enablers and systems strengthening - strategic coordination, policy and planning, above-facility level administration, and strategic information – although in decline, remain an important part of the Mongolia's HIV spending profile, amounting to US$1.01 million in 2017, which almost half in the course of the assessment years to reach US$0.57 million, representing 23% of the country's HIV expenditure in 2021 (Figure 3). In 2021, two-thirds of spending on programme enablers came from international financing sources (Figure 4). Social enablers, essential for the HIV response, decreased in nominal terms from US$0.08 million in 2017 to US$0.04 million in 2021, maintaining 2% of total HIV spending over the years, and all of its funding came from the international financers in 2021 (Figure 3 and Figure 4).

NASA provides an additional dimension of analysis by allowing a breakdown of HIV spending according to beneficiary populations, with a specific emphasis on key populations (KP). Expenditure on HIV prevention and testing and counselling activities targeting KP, totalled over $713 thousand in 2021, experiencing a significant rise compared to the previous level of US$350.7 thousand in 2020. Notably, the expenditure directed at KP accounted for 29% of the total 2021 HIV resources, marking the highest proportion observed throughout the assessment period in both absolute and relative terms when compared to previous years (Figure 5).

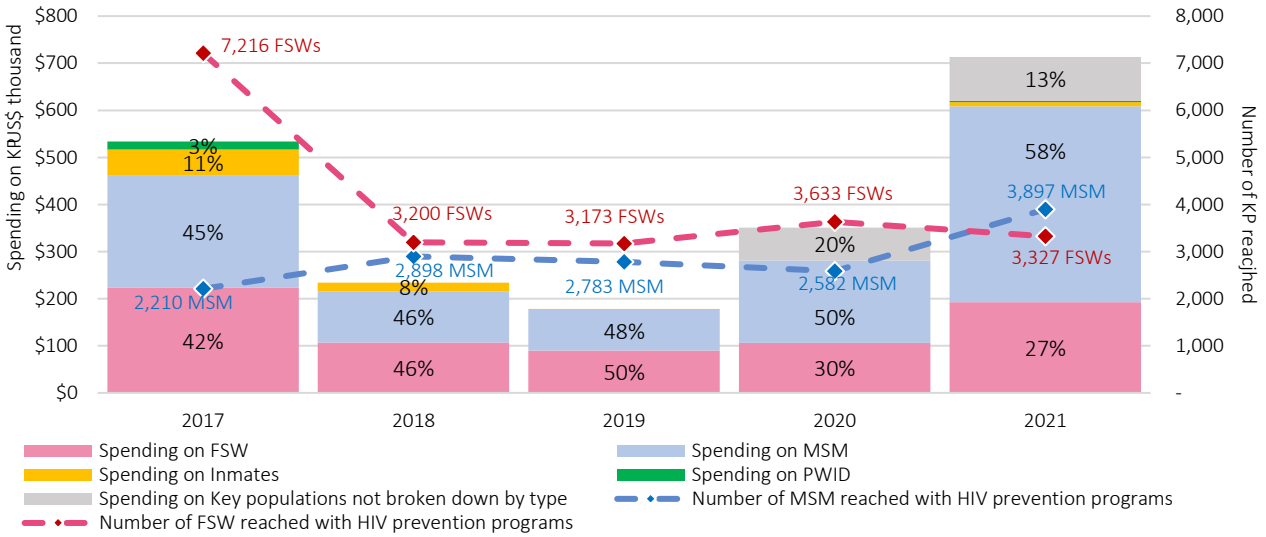
[10] Unpublished report: National AIDS Spending Assessment in Mongolia, 2017-2021.

Figure 5. Expenditure on key populations[11] as a share of total HIV expenditure in Mongolia in 2017-2021, %



All KP-specific interventions in Mongolia are exclusively funded by the Global Fund, and the decrease in their funding in 2018 and 2019 is reflected in the low numbers of MSM and FSWs reached in these years, highlighting their vulnerability to fluctuating external funding (Figure 6).

Figure 6. HIV spending on Key populations[12] (US$ thousand) vs Key populations reached with HIV prevention and testing



The majority of resources for KP in 2021, boosted by the Global Fund's multi-country grant "Sustainability of HIV Services for Key Populations in Asia (SKPA)"[13], were spent on the interventions for men who have sex with men (58%), followed by those directed to female sex workers (27%) (Figure 6). The increased expenditure resulted in better service coverage among MSM population in 2021 - a 50% increase in MSM reached with HIV prevention programme from 2020. HIV prevention spending targeting MSM includes expenses on pre-exposure prophylaxis (PrEP), which amounted to US$12,105 in 2020 and $45,376 in 2021[14]. PrEP was exclusively funded by the Global Fund.

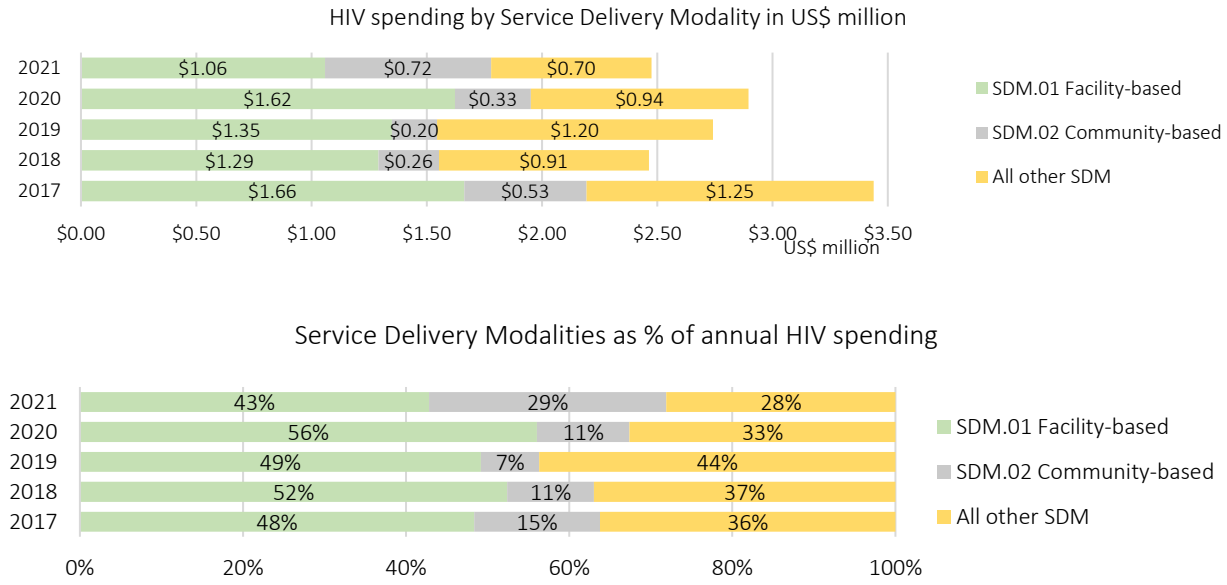
Challenges arise in expenditure record-keeping when services cater to multiple KP simultaneously, making it difficult to accurately split expenditures among them. This complexity is reflected in the most recent NASA round, where financial records and data collection forms lacked specific details concerning transgender individuals as beneficiaries of the HIV program. Given the recent data highlighting the disproportionate burden of HIV among transgender women, it becomes essential to enhance the tracking of expenditures specifically allocated to this population for more accurate and targeted resource allocation.

The service delivery modality of Mongolia's HIV response over the period 2017 to 2021 was prominently characterized by facility-based service delivery, wherein around half of the HIV spending was channelled through

[11] Spending targeting key populations includes ASC.01 HIV prevention and ASC.02 HIV testing and counselling
[12] Expenditure on key populations in this graph includes ASC.01 HIV prevention and ASC.02 HIV testing and counselling
[13] The Sustainability of HIV Services for Key Populations in Asia (SKPA) Program is a Global Fund funded Multi Country Grant program being implemented in eight countries.
[14] Unpublished report: National AIDS Spending Assessment in Mongolia, 2017-2021.:

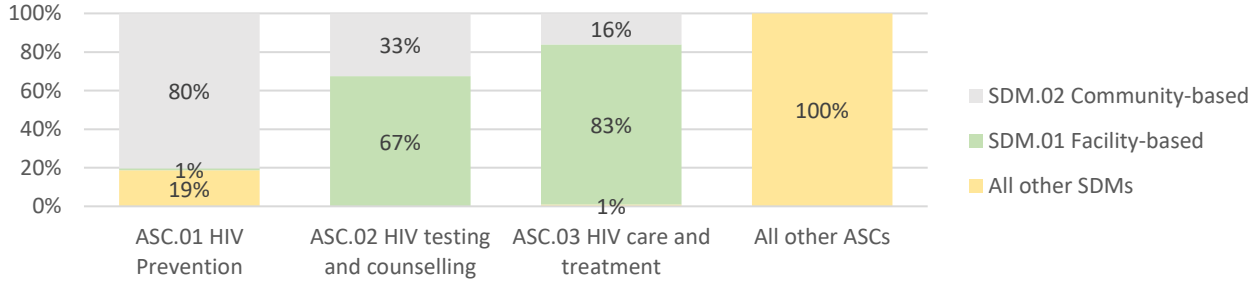
facility-based services, predominantly outpatient in nature (Figure 7). However, delivery through community-based services, including outreach programs and community centre initiatives, began to increase from 2019 (7%) to 29% of the overall HIV response in 2021.

Figure 7. Service Delivery Modalities (SDM) of the HIV response in Mongolia in 2017-2021[15] (US$ million, %)



In 2021, community-based delivery of HIV care and treatment services represented 16% of all spending on HIV care and treatment, focusing on adherence and retention on antiretroviral therapy (ART) for high-risk PLHIV (Figure 8). Additionally, HIV prevention was predominantly (80%) community-based in 2021, while only one third of HIV testing and counselling expenditure were delivered through community-based modalities. This shift reflects evolving dynamics in healthcare delivery, emphasizing the growing role of community-centred approaches in Mongolia. Regulatory and policy barriers, however, pose challenges to expanding service provision beyond healthcare facilities[16].

Figure 8. Service Delivery Modalities (SDM) of the selected AIDS Spending Categories (ASC), 2021



Conclusions. NASA provides policymakers with crucial insights into the volume and structure of HIV spending. In Mongolia, NASA has underscored gaps in spending for key populations, particularly transgender women, a heavy reliance on a single external funding source – The Global Fund, and a deficiency in publicly-funded focused HIV prevention and testing. The public sector's service provision is predominantly facility-based, potentially hindering effective outreach to those at the highest risk of HIV infection. Importantly, NASA observed an increase in community-based service delivery, especially in HIV prevention, primarily supported by the Global Fund.

[15] "All other SDM" includes SDM.03 Non-applicable, SDM.98 Modalities not disaggregated and SDM.99 Modalities not elsewhere classified

[16] MONGOLIA: Sustainability and Transition Readiness Assessment and Work Plan for TB and HIV, 16 December 2020; Pharos Global Health Advisors for the Mongolia Ministry of Health Transition Working Group and the Global Fund

The challenges related to the quality and completeness of data persist, impeding a comprehensive analysis of the HIV response from all perspectives. Furthermore, the lack of specific research on HIV-related out-of-pocket expenditures and lack of detailed financial records to enable the estimation of the shared health system costs, limits the comprehensiveness of the resource tracking exercise. The introduction of the social health insurance scheme, while potentially enhancing financing and implementation arrangements for numerous HIV services, could present a challenge in acquiring and analysing HIV expenditure data in the future, unless all claims include the diagnosis / disease code. Given the importance of this data for policymakers, there is an urgent need for increased efforts in generating, extracting, and analysing such information.

NASA represents just one aspect of the knowledge essential for constructing and executing a comprehensive and efficient HIV response. Precise and relevant resource needs estimates play a foundational role in gaining a nuanced understanding of the financial gap and identifying the programmatic areas encountering significant challenges. Policymakers must attentively address each phase of planning in the HIV response, ranging from establishing reliable epidemiological baseline estimates to delineating achievable targets and accurately calculating the required resources to meet them.

The absence of reliable resource needs estimates in Mongolia hinders the analysis of the financial gap and its specifics, underscoring the need for precise, realistic, and data-driven estimates to optimize resource allocation. This optimization is crucial for effective national planning and the attainment of impactful, measurable outcomes.

The triangulation of the NASA findings with other relevant research is key for supporting policy decisions. While NASA highlights prevailing trends in HIV expenditure, the country has employed OPTIMA to estimate resource needs for optimized HIV outcomes and program priorities. The OPTIMA tool recommends augmenting PrEP funding, specifically among men who have sex with men and transgender women, an intervention that NASA found received only US$12,105 in 2020 and US$45,376 in 2021 from one source – The Global Fund. Both OPTIMA and NASA underscore the necessity for increased investment in existing HIV prevention, including PrEP, and testing programs for key populations, with a specific emphasis on community-based service delivery.

Policy recommendations.

1. Support inclusion of private non-profit service providers in social health insurance:

- Remove regulatory barriers that deter private non-profit service providers, especially those actively engaged in community-based service delivery, from accessing financing through the social health insurance scheme.
- Encourage a more inclusive approach that accommodates diverse service providers to enhance the reach and effectiveness of HIV interventions.

2. Enhance data quality and granularity in resource tracking:

- Invest in improving the quality and granularity of data collected in NASA, addressing gaps related to transgender populations, shared health system costs, and providing detailed insights into HIV test prices.
- Recognize the need to better understand HIV-related out-of-pocket expenditure and its financial impact on vulnerable households and key populations.
- Conduct research and analysis of the financial burden of HIV on individuals and communities, to inform policies and design interventions to minimize economic barriers to HIV care.

3. Conduct comprehensive RNE exercise to analyse resource requirements to achieve Ending AIDS targets:

- Undertake a thorough RNE exercise to precisely determine the funding requirements necessary to achieve the Ending AIDS targets by 2030.

- This exercise should encompass all critical components of the HIV response, including prevention, testing, treatment, and support services, offering a comprehensive view of the financial landscape required for optimal program outcomes.

4. Adopt innovative algorithms for HIV testing:

- Explore and implement innovative algorithms for HIV testing to enhance efficiency and coverage.

5. Promote and expand HIV prevention, including PrEP interventions among KP:

- Develop targeted strategies to promote and expand PrEP interventions, particularly among men who have sex with men and transgender women.
- Allocate dedicated funding for PrEP programs, leveraging insights from both OPTIMA and NASA to tailor interventions that meet the unique needs of KP communities.
- Incorporate PrEP into the service packages eligible for reimbursement by the Health Insurance General Office within the government or social health insurance scheme, to leverage existing donor dependency.
- Strengthen community-based service delivery models to facilitate PrEP access and uptake among key populations.

Implementing these recommendations will contribute to the optimization of resource allocation, improvement of program effectiveness, and ultimately aid in achieving impactful outcomes in the fight against HIV in Mongolia.