# National Strategic Plan on HIV and AIDS

## Myanmar

## 2016 - 2020

# FOREWORD

HIV is recognised by the Government of Myanmar as one of the priority public health issuse in Myanmar, alongside other issues such as TB and malaria. Myanmar is one of the 35 countries that account for 90% of new HIV infections globally and one of the six countries in Asia identified by the Joint United Nations Programme on HIV/AIDS (UNAIDS) as a priority for the Global Fast Track Strategy to End the AIDS Epidemic by 2030.

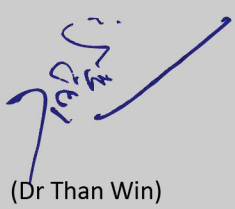
The Myanmar HIV Technical and Strategy Group, under the Myanmar Health Sector Coordinating Committee that is chaired by me, has developed a new National Strategic Plan on HIV and AIDS (third iteration, here after called NSP III) covering a five year period from 2016 to 2020.

As previously has been a best practice model, the NSP III has been developed through a participatory process with stakeholders under the leadership of the National AIDS Programme and with the inclusion of representatives of key populations affected by the HIV epidemic and people living with HIV.

While much progress has been made in responding to HIV in Myanmar there remains key areas that require in-depth review and improvements. The NSP III builds on the political commitment, achievements and successes to date, its focus has been sharpened in line with the latest evidence to have the greatest possible impact on the epidemic and take aim at the ambitious 90–90–90 prevention and treatment targets towards ending the HIV epidemic. NSP III adapts the latest global strategies to the Myanmar context and aims to ensure an effective, impactful and fast-tracked HIV response. Accordingly, the Plan has an increased focus on priority populations and strategic geographic areas, with new service delivery approaches that aim to reach the right people in the right places and get them to health services faster.

This third Plan is also more cost efficient; intensive efforts to reduce costs and identify efficiency gains have resulted in a saving of around US$100 million on its predecessor. Government funding is increasing in this Plan, in particular for HIV treatment, with a view to achieving sustainability. However, to fund the implementation of the Plan, it is critical to mobilize additional financial resources, both domestically and internationally.

I am confident that the NSP III will provide a reference and guide for delivering quality, effective HIV services to those who need them. Last but not least, I would like to express grateful appreciation to all partners who have provided technical and financial assistance to the HIV response in Myanmar. Working together in partnership under the framework of this third National Strategic Plan, we can contribute to Myanmar's vision of Universal Health Coverage and our Sustainable Development Goals to end the HIV epidemic as a public health threat in Myanmar.



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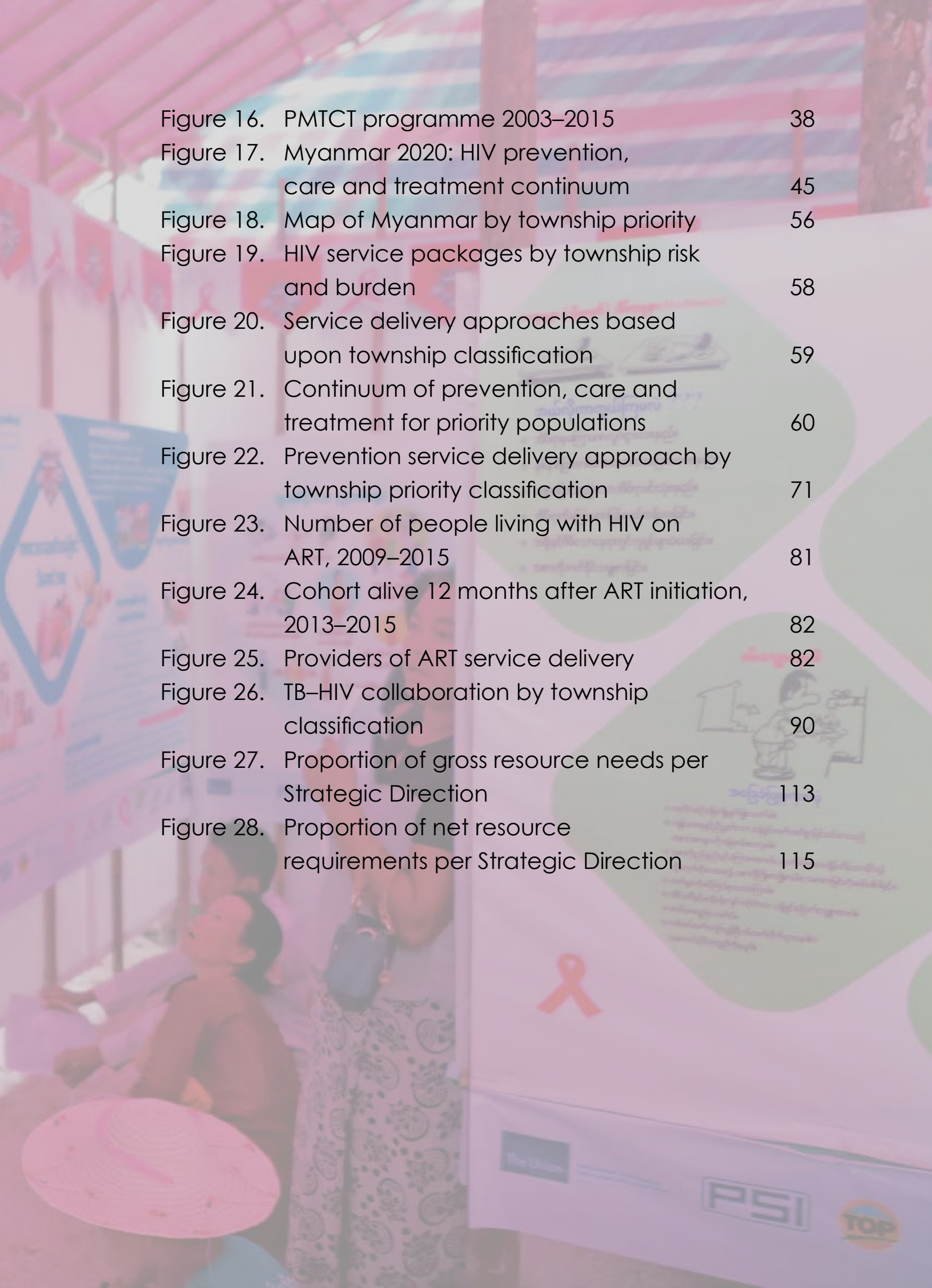

## TABLES

# ACKNOWLEDGEMENTS

The Myanmar's HIV Core Technical and Strategy Group, chaired by Director, Disease Control, Department of Public Health, Ministry of Health and Sports and facilitated by UNAIDS Country Office Myanmar oversaw the production of the National Strategic Plan for HIV 2016-2020.

The HIV Core Technical and Strategy Group appointed a writing team, led by National AIDS Programme, Ministry of Health and Sports and UNAIDS. UNAIDS coordinated the content development and writing of the document with several partners: WHO, US CDC, ICAP, and PSI. A team of consultants, led by Jeanine Bardon, supported the writing team.

Valuable contributions were made by staff of various departments within the Ministry of Health and Sports, local officials, bilateral and multi lateral donors and agencies, development partners, non-governmental organizations and civil society organizations. PLHIV and key population networks participated in every step of the development process starting from the evaluation of the previous NSP and in the numerous consultations held to discuss each strategic direction of the new Strategic Plan.

The HIV Core Technical and Strategy Group extends grateful appreciation to the partners of the National AIDS Programme who participated in the National Strategic Plan consultations and reviewed and commented on drafts of the National Strategic Plan from the following organizations: 3N, 3MDG Fund (funded by Australian Aid, Danida, EU, Sida, SWISSAID, UKAID, USAID), Aye Myanmar, AFXB, Asian Harm Reduction Network, Burnet, Consortium, Global Fund, Health Poverty Action, ICAP, International HIV Alliance, IOM, JICA, Malteser, Medical Action Myanmar, MANA, MBCA, Médecins du Monde, Ministry of Health and Sports, Médecins sans Frontières-Holland, Médecins sans Frontières-Switzerland, Myanmar Drug Users Network, Myanmar Interfaith Network on AIDS, Myanmar MSM Network, Myanmar Positive Group, Myanmar Positive Women Network, Myanmar Red Cross, Myanmar Youth Star, National Health Laboratory, Pyi Gyi Khin, Population Services International, Première Urgence-Aide Médicale International, Pyoe Phin, Sex Workers in Myanmar Network, SARA, Save the Children, The Union, UNAIDS, UNFPA, UNICEF, UNOPS, USAID, US CDC, WFP, and WHO.

The Ministry of Health and Sports is grateful for the generous financial contribution from the 3MDG Fund and the Global Fund, which enabled the numerous stakeholder meetings and workshops of the writing team.

# ACRONYMS


| | |
|---|---|
| 3MDG | Three Millennium Development Goals Fund |
| ADB | Asian Development Bank |
| AEM | AIDS Epidemic Model |
| AIDS | Acquired immuno deficiency syndrome |
| ART | Antiretroviral therapy |
| CBO | Community-based organization |
| CHD | Child Health Development |
| CSS | Community systems strengthening strategy |
| DHIS2 | District Health Information System 2 |
| DIC | Drop-in centre |
| FBO | Faith-based organization |
| FSW | Female sex workers |
| Global Fund | The Global Fund to Fight AIDS, Tuberculosis and Malaria |
| HBV | Hepatitis B virus |
| HCV | Hepatitis C virus |
| HIV | Human immunodeficiency virus |
| HRH | Human resources for health |
| HSS | HIV Sentinel Sero-surveillance |
| HTC | HIV testing and counselling |
| HTS | HIV testing services |
| IBBS | Integrated Bio-Behavioural Surveillance |
| ICAP | ICAP at Columbia University |
| IEC | Information, education, communication |
| IOM | International Organization for Migration |
| IPT | Isoniazid preventive therapy |
| KSC | Key populations service centres |
| LMIS | Logistics Management and Information System |
| M-HSCC | Myanmar Health Sector Coordinating Committee |
| MDG | Millennium Development Goal |
| MMT | Methadone maintenance therapy |
| MNCH | Maternal, newborn and child health |
| MOHS | Ministry of Health and Sports |


| | | | |
|---|---|---|---|
| MOSWRR | Ministry of Social Welfare, Relief and Resettlement | SOP | Standard operating procedures |
| | | SRH | Sexual and reproductive health |
| MRH | Maternal and Reproductive Health | STI | Sexually transmitted infection |
| | | SW | Sex workers |
| MSM | Men who have sex with men | TB | Tuberculosis |
| NAP | National AIDS Programme | TG | Transgender people |
| NFM | New Funding Model | UHC | Universal health coverage |
| NGO | Non-governmental organization | UN | United Nations |
| NHL | National Health Laboratory | UNAIDS | Joint United Nations Programme on HIV/AIDS |
| NSP | National Strategic Plan | | |
| NTP | National TB Programme | UNDP | United Nations Development Programme |
| OVC | Orphans and vulnerable children | | |
| OST | Oral substitution therapy | UNFPA | United Nations Population Fund |
| PLHIV | People living with HIV | UNICEF | United Nations Children's Fund |
| PMTCT | Prevention of mother-to-child transmission of HIV | UNODC | United Nations Office on Drugs and Crime |
| PrEP | Pre-exposure prophylaxis | USAID | United States Agency for International Development |
| PSM | Procurement and supply management | | |
| | | US CDC | United State Center for Disease Control and Prevention |
| PWID | People who inject drugs | | |
| SDG | Sustainable Development Goals | WFP | World Food Programme |
| SMS | Short message service | WHO | World Health Organization |

# EXECUTIVE SUMMARY

The Republic of the Union of Myanmar's National Strategic Plan on HIV/AIDS 2016–2020 is the strategic guide for the country's response to HIV at national, state/regional and local levels. The framework describes the current dynamics of the HIV epidemic and articulates a strategy to optimize investments through a fast track approach with the vision of ending HIV as a public health threat by 2030. Myanmar's third National Strategic Plan (HIV NSP III) issues a call to all partners to front-load investments to close the testing gap and reach the 90–90–90 prevention and treatment targets to protect health for all.

This strategy builds upon Myanmar's political commitment and the achievements of the previous HIV NSP II, and is aligned with the Three Ones principles and guides the country to focus on geographical, population and intervention priorities to ensure the greatest impact. The strategy aims to promote and protect human rights and gender equity particularly for those key populations most affected by the epidemic including people living with HIV, people who inject drugs, men who have sex with men, sex workers, and their intimate partners. The strategy aims to eliminate stigma and discrimination and ensure maximum access to essential HIV services and social protection. Despite significant progress, challenges remain: a large proportion of people living with HIV in Myanmar do not know their HIV status, while stigma and discrimination and late diagnosis present substantial barriers to improving health outcomes. Approximately half of the people living with HIV are still not receiving life-sustaining antiretroviral therapy (ART).

NSP III describes an operational model that prioritizes townships based upon a thorough analysis of the geographical distribution of epidemic burden and those at risk of HIV infection. Three township categories are described with tailored service delivery packages based upon epidemic burden and the opportunity to reduce risk of new infections. NSP III is a highly focused, cost efficient strategy to ensure that the right interventions are implemented in the right places for the right people.

NSP III will support resource development and its allocation to ensure the greatest impact. This strategy will build sustainable partnerships through the public, community

and private sectors to ensure maximum involvement of priority populations and to optimize access to HIV prevention, care and treatment. A significant transition is planned to bolster the Government's leadership role in collaboration with affected communities and in partnership with the NGO, community and private sectors. Innovation will be supported to ensure cost efficiency and effectiveness in the context of available resources.

NSP III will support Myanmar in reaching its sustainable development goals and will support universal access to health through an evidence informed and results oriented approach based upon local epidemic dynamics. It is driven by the vision to end HIV as a public health threat by 2030 and is in line with Myanmar's economic and development goals to ensure prosperity and a greater quality of life for all.

**What's new in NSP III?**

- **Geographic prioritization** through categorization of townships based on epidemic burden and risk of new infections
- **Differentiating service delivery** approaches for high impact, reaching priority populations and expediting their access to services
- **Continuum of HIV prevention, testing, care and treatment services** including partnerships between the public, NGO, community and private sectors
- **Prioritizing integration of services in high burden areas**
- **Transition to increased public sector management, especially of ART**
- **Revised programme costs to ensure savings and cost efficiency gains.**

# A.

# CHANGES IN THE GLOBAL CONTEXT AND IMPLICATIONS FOR MYANMAR

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## Lancet Commission

In June 2015, a diverse group of experts in HIV, health, and development from around the globe came together to investigate how the AIDS response could evolve in a new era of sustainable development, summarized in the Lancet article *Defeating AIDS—advancing global health*. The following recommendations were presented:

1. Urgently escalate AIDS efforts, **get serious about HIV prevention**, and continue **expanding access to treatment**
2. Mobilize more resources, **spend efficiently**, and **emphasize sustainability**
3. Demand **robust accountability**, transparency, and **better data**
4. Forge new paths to **uphold human rights** and address criminalization, stigma, and discrimination
5. Reinforce and **renew leadership and engagement of people living with HIV**
6. **Invest in research and innovation** in all facets of the AIDS response
7. Promote more **inclusive, coherent, and accountable governance** for AIDS and health

## Sustainable Development Goals

In September 2015, the United Nations General Assembly adopted the Resolution 70/1 *Transforming our World: the 2030 Agenda for Sustainable Development*. Building upon the Millennium Development Goals (MDGs), the Sustainable Development Goals (SDGs) commit governments across the globe to an Agenda for 2030 to end poverty, to combat inequalities, to protect human rights and gender equality, and to ensure lasting protection of the planet. The SDGs lay the groundwork for a significant increase in the level of ambition for HIV, moving from the MDG targets on halting and reversing the epidemic to ending the epidemic by 2030.

## UNAIDS: On the Fast-Track to End AIDS

In October 2015, the Joint United Nations Programme on HIV/AIDS (UNAIDS) released its Strategy for 2016–2021 *On the Fast-Track to End AIDS* with an aim to end the AIDS epidemic by 2030 with "**Zero** new infections, **Zero** discrimination and **Zero** AIDS-related deaths". UNAIDS has identified Myanmar as a Fast Track Country with a severe epidemic and Yangon as a key city within the Asia-Pacific region.

The UNAIDS Fast-Track Strategy calls upon the AIDS movement, led by people living with and affected by HIV, to offer a model for a people-centred, rights-based approach to global health and social transformation. The strategy issues a call to front-load investments to close the testing gap and reach the 90–90–90 treatment targets to protect health for all.

Myanmar is committed to five 90's:

- 90% of priority populations including sex workers, men who have sex with men, people who inject drugs, transgender people, prisoners and migrants have access to HIV combination prevention services
- 90% of people living with HIV know their status
- 90% of people living with HIV who know their status receive treatment
- 90% of people living with HIV on treatment have suppressed viral loads
- 90% of people living with HIV, at risk of and affected by HIV report no discrimination, especially in health, education and workplace settings

Ten targets were identified as a requirement to achieve the Strategic Milestones of fewer than 500 000 new HIV infections globally, fewer than 500 000 AIDS-related deaths and the elimination of HIV-related discrimination by 2020.

## World Health Organization (WHO): Guidelines on when to start ART and pre-exposure prophylaxis for HIV

In September 2015, WHO early release treatment guidelines made two key recommendations:

- ART should be initiated in **everyone living with HIV at any CD4 cell count**
- The use of daily oral pre-exposure prophylaxis (PrEP) is recommended as a prevention choice for **people at substantial risk of HIV infection** as part of combination prevention approaches.

Informed by evidence from clinical trials and observational studies released since 2013, showing that earlier use of ART results in better clinical outcomes for people living with HIV compared with delayed treatment. If this policy were adopted in full in Myanmar, there would be an additional 100 000 people eligible for ARV treatment as currently only around 50% of people living with HIV are on treatment.

Myanmar's HIV NSP III was developed in the context of these latest global strategies, aiming to end HIV as public health threat by 2030. While ambitious, countries around the globe are aiming to achieve the same vision. There is no doubt that front loading investments as early as possible will help to reduce the total cost of achieving the goals of this strategy. While government contribution is increasing, continued overseas financial assistance is needed to ensure that Myanmar can invest in expanding cost efficient and effective prevention and treatment coverage required to achieve the fast track targets.

# B.

# OPERATIONAL CONTEXT IN MYANMAR

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The 2014 census put the population of Myanmar at more than 51 million, with two thirds living outside urban areas.[1] It is estimated that at least 25% of people live below the poverty line and nearly 85% of the poor live in rural areas.

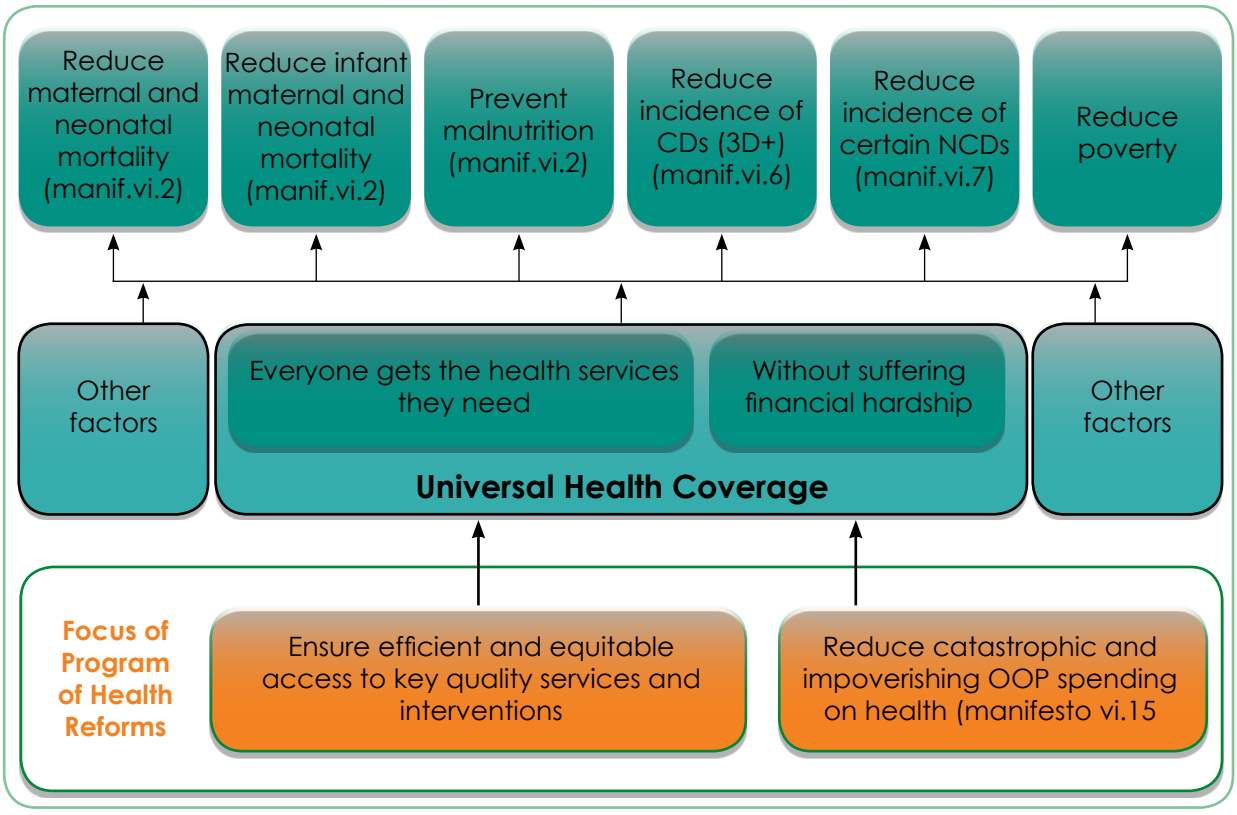
Foundations of a comprehensive primary health care system were established more than 50 years ago. Twenty years of political and economic isolation have weakened health infrastructure, particularly in conflict zones and mountainous states. Low investment in health has also resulted in high out-of-pocket payments with households accounting for 70% of total health expenditure, and high catastrophic expenditures further exacerbating both rural and urban-based poverty.[2] Despite this, Myanmar is now striving for more inclusive economic growth and poverty reduction.

## Programme of health reforms and Universal Health Coverage

The National Health Policy of the Ministry of Health and Sports places "Health for All" as a primary aim and presents a roadmap to achieve Universal Health Coverage (UHC). Improving health and reducing poverty for the rural poor has been identified as a high priority.

[1] The Republic of the Union of Myanmar Population and Housing Census, 2014, provisional results.
[2] Program of Health Reforms: A Roadmap Towards Universal Health Coverage in Myanmar (2016-2030), March 2016

**Figure 1. Myanmar's Vision of Universal Health Coverage[3]**




Efforts to support the programme of health reforms and to end HIV as a public health threat will be harmonized. The strategies of HIV NSP III will support the Government's efforts to redress health inequities, improve quality, efficiency, accountability, inclusiveness and sustainability. The HIV NSP III will aim to integrate cost effective HIV prevention and treatment services into the Universal Health Coverage and Essential Package of Health Services (EPHS) in Myanmar.

## National financing, partnerships and the donor context

Myanmar's development context is complex. While the Government has made commendable progress in laying the building blocks for a market economy and improved livelihoods, significant challenges remain.

Government health expenditure has been steadily increasing from 2005 to 2011. However, total health expenditure in Myanmar, at 2.0% to 2.4% of its gross domestic product (GDP) between 2001 and 2011, is among the lowest in the WHO South-East Asia and Western Pacific regions. A key driver of inequities is household out-of-pocket (OOP) spending. The WHO targets for out-of-pocket spending are no greater than 30% to 40% of total health expenditure, however in Myanmar it is currently greater than 80%, representing the highest mix of private versus government health spending in the region.[4] The Government has increased public investment in health with a focus on access to medicines, which is the largest component of out-of-pocket spending. The statutory financing system is very limited with only 1% of the population covered by the Social Security Scheme.[5]

[3] Ibid, Program of Health Reforms, 2016
[4] WHO, Health Financing Strategy in Asia and the Pacific (2010 – 2015), 2009
[5] The Republic of the Union of Myanmar Health System Review, Health Systems in Transition Vol. 4 No. 3 2014

***Strong government HIV commitment.*** Myanmar has demonstrated strong political commitment with HIV designated as one of the priority diseases in the National Health Plan 2011–2016. In 2016, the Government has pledged US$15 million for HIV treatment including ARVs and other commodities and US$1 million for the procurement of methadone. The Myanmar Health Sector Coordinating Committee (M-HSCC), established as a part of the Nay Pyi Taw Accord in 2013, has the broad mandate as the coordinating body for all public health sector issues.[6] The M-HSCC, chaired by the Minister of Health and Sports, oversees implementation of the NSP and has participation of other ministries, United Nations organizations, non-governmental organizations (NGOs), development partners and community organizations. The HIV Technical Strategic Group (TSG), chaired by the Director of Disease Control and the National AIDS Programme Manager is responsible for implementation of the national strategy and includes a large number of international, local, private sector, people living with HIV and community partners supporting the NSP.

***HIV resources and spending.*** The 2012–2013 National AIDS Spending Assessment (NASA) findings indicate that more than 20 donors provide aid for these programmes. Despite the number of donors in this space, the bulk of funding for HIV is provided by only a few, with the Global Fund to Fight AIDS, Tuberculosis and Malaria (the Global Fund) currently providing around half. Given the number of donors, ensuring adequate communication and coordination is important in reducing administrative and opportunity costs, achieving additional efficiencies and helping to foster country ownership. At the same time, the concentration of donor funding for HIV among very few donors is a potential risk if their funding commitments were to change.

NASA results for 2014–2015 indicated that total funding had increased from US$40 million in 2012 to US$84.2 million in 2015, with an increase in domestic and international donor funds.[7] Government funding had increased threefold since 2012 representing 12% or US$10.4 million in 2015 with US$9 million allocated to treatment and methadone programme for people living with HIV and key populations. Nonetheless, Myanmar's HIV spending is reported to be among the lowest per capita (per estimated person living with HIV) when compared across countries in the Asia-Pacific region.[8]

International financing still provides the majority of resources at 85% with the Global Fund providing US$42.3 million or 50% of the overall funding of the HIV response, followed by MSF-Holland, which provided US$14.5 million or around 17% of financing in 2015 (Table 1).[9]

[6] The Nay Pyi Taw Accord, adopted at the First Myanmar Development Cooperation Forum, January 2013
[7] National AIDS Spending Assessment in Myanmar, 2014–2015. Resource Flows and Actual Spending in the HIV Response in Myanmar, Nitsoy et al. 2016
[8] National AIDS Spending Assessment in Myanmar, 2014–2015. Resource Flows and Actual Spending in the HIV Response in Myanmar, Nitsoy et al. 2016
[9] Ibid, 2016

**Table 1. Detailed financing sources of the HIV Response, 2014-2015 data**

| | 2014 | | 2015 | |
|---|---|---|---|---|
| **Financing sources** | **US$** | **%** | **US$** | **%** |
| Government | 3 614 678 | 5% | 10 352 985 | 12% |
| Private | 2 519 966 | 4% | 1 861 339 | 2% |
| International bilateral* | 11 160 207 | 16% | 10 261 000 | 12% |
| International multilateral – Global Fund | 35 281 783 | 51% | 42 343 029 | 50% |
| International multilateral – UN** | 2 904 382 | 4% | 2 238 154 | 3% |
| International multilateral - ADB, EC | 355 369 | 1% | 1 635 721 | 2% |
| International NGOs | 13 062 837 | 19% | 15 363 918 | 18% |
| **Grand Total** | **68 899 221** | **100%** | **84 056 147** | **100%** |

* Governments of Australia, Denmark, Finland, Japan, Netherlands, Sweden, Switzerland, United Kingdom and United States of America (including 3MDG)

** UNAIDS, UNDP, UNFPA, UNICEF, WFP, WHO

***Government transition.*** The trend of increased resources, particularly from the Government, has been important, but not sufficient to meet the goals of the previous NSP and a financing gap is anticipated for NSP III. Historically, the private sector through international and local NGOs has played a major role in HIV service delivery in Myanmar. However, in recent years the Government has become a stronger and more active provider of HIV services, managing 27% or more than US$22 million in 2015. A major transition is planned during NSP III with the Government taking a larger leadership role in implementation and management. The Government plans to increase its role with an aim to support a large increase in number of ART patients receiving care in the public sector. This will require capacity development within the public sector with a focus on high burden areas within the country and a transition plan will be developed in the coming year.[10]

## Development of NSP III 2016-2020

## NSP II Evaluation

The development of the NSP III began with an evaluation of NSP II in August 2015. Five thematic groups, under the leadership of the HIV TSG, were organized to assess progress in implementing NSP II across various technical areas. Each thematic group developed synthesis papers for their assigned technical area, documenting progress and making recommendations for NSP III. The Expanded HIV TSG and an expert panel validated the findings in September 2015. The Expanded HIV TSG included representatives from multiple government ministries, community based organizations, people living with HIV, key population networks, NGOs, the private sector, multilateral and bilateral donors.

[10] Optimizing Myanmar's National Strategic Plan on HIV and AIDS (2016-2020) for maximum impact and sustainability: Service Delivery Approaches , draft 2016

## NSP III Draft Development

In October 2015, the TSG Core Group (NAP, UNAIDS, WHO, US CDC and ICAP) agreed on the NSP III development process, which was presented to the Expanded HIV TSG. A series of consultations was held to obtain input on the vision, guiding principles and strategic directions, and to develop priority interventions with more than 70 persons attending from people living with HIV and key population networks, community groups, NGOs, INGOs, government ministries and donors. A draft Strategic Framework was shared with the Expanded HIV TSG and inputs sought from all partners.

To focus the response, the geographical distribution of need and risk was analysed. The prioritization process was carried out in collaboration between NAP, WHO, UNAIDS, US-CDC, ICAP, Global Fund Principal Recipients, 3MDG Fund and multiple implementing partners. Key variables were identified, two township prioritization workshops were conducted, and data validation, analysis and refinement took place. All 330 townships were categorized. The resulting categorization is not static but will be reviewed periodically. Refinements will occur over the lifetime of the NSP when additional data are collected and opportunities sought to collaborate with Ethnic Health Organizations (EHO) and in areas where no data exists.

In December 2015, the IBBS studies on female sex workers and men who have sex with men were analysed and disseminated. An AEM workshop was conducted with updated consensus data. The outputs of the IBBS studies and AEM workshop informed prioritization, initial scenario planning and costing. A full draft of NSP III was shared with the Expanded HIV TSG on 22 December for validation and input.

## NSP III validation, refinement and optimization

In early 2016, several reviews and further analysis were undertaken to validate and refine the NSP and inform its operationalization and development of the Global Fund concept note including: a collaborative review of the TB–HIV activities in Myanmar; a cooperative review of Myanmar's HIV service delivery approach; a participatory review of HIV prevention programming for key populations, and an MOHS subnational workshop to develop consensus on the pace of public sector transition in ART management. In April and May 2016, a thorough analysis of unit costs was completed to improve efficiencies and an AEM optimization workshop was held to analyse a range of policy scenarios of coverage, targets and costs, to optimize the utilization of funding and identify resource needs associated with targets for prevention and treatment outcomes.

## What's new in NSP III?

The HIV NSP III represents a strategic consensus to ensure a highly focused and cost efficient NSP that will provide the right interventions to the right people in the right places to end HIV as a public health threat in Myanmar. This is supported by:

- **Geographic prioritization** through categorization of townships based on epidemic burden and risk of new infections
- **Differentiating service delivery** approaches for high impact, reaching priority populations and expediting their access to services
- **Continuum of HIV prevention, testing, care and treatment services** including partnerships between the public, NGO, community and private sectors
- **Prioritizing integration of services in high burden areas**
- **Transition to increased public sector management, especially of ART**
- **Revised programme costs to ensure savings and efficiency gains.**

# C.

# HIV SITUATIONAL ANALYSIS

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## Epidemiological Context

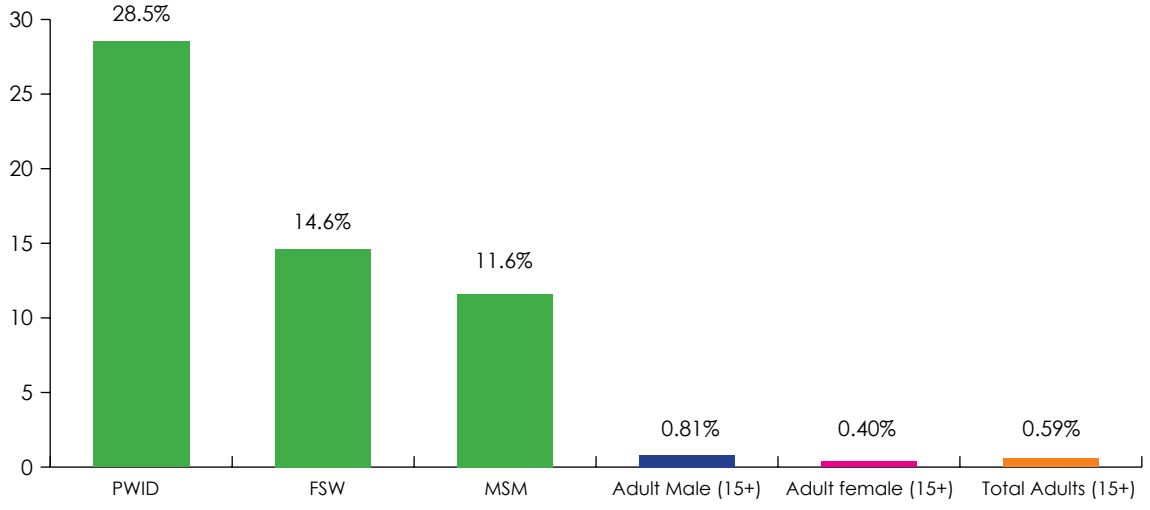
The HIV global epidemic began more than three decades ago, and the first case of HIV in Myanmar was detected in 1988. At a national level the prevalence of HIV among adults 15 years and older seems to have stabilized at below 1% and there has recently been a significant decline in deaths (from 15 601 in 2011 to 9675 in 2015).[11] In 2015 it was estimated that there were 224 794 people living with HIV, with the epidemic heavily affecting the key populations of people who inject drugs (PWID), female sex workers (FSW), men who have sex with men (MSM) and the intimate partners of these groups.[12] National level HIV prevalence was estimated to be 28.5% among people who inject drugs in 2014, and 14.6% among female sex workers and 11.6% among men who have sex with men in 2015 (Figure 2).

***Trends in HIV Incidence***. According to epidemic modelling, there were an estimated 11 000 new infections in 2015, approximately 30 new infections per day.[13] The annual number of new infections is no longer declining at the same rate as it did between 2000 and 2010 (Figure 3).

**Key facts**

- *11 000 new infections (~30/day) in 2015*
- *High prevalence among key populations*
- *Among the highest prevalence in the Asia-Pacific region in key geographic areas*

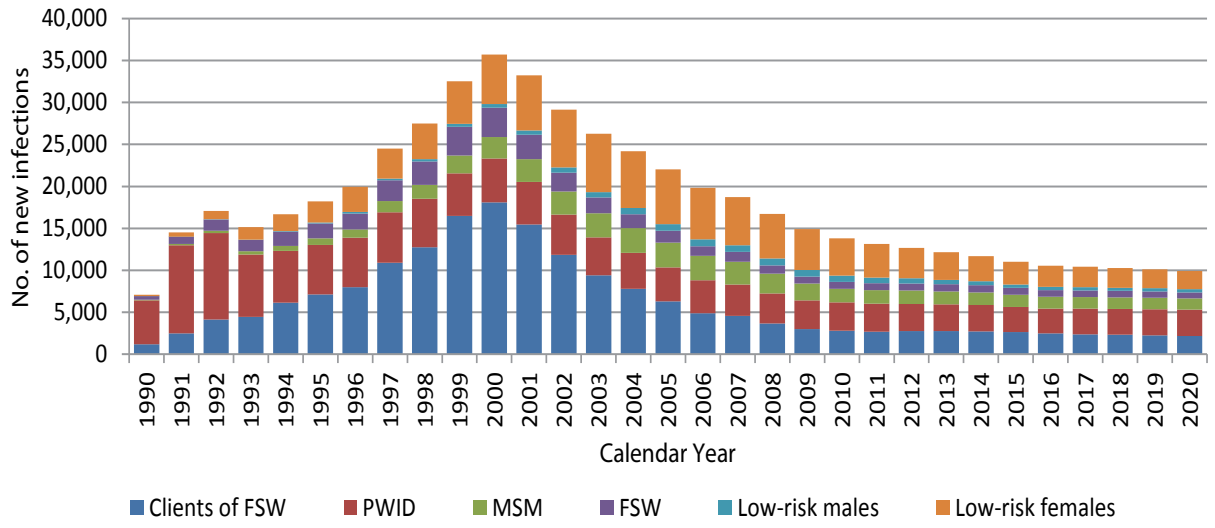
**Figure 2: HIV Prevalence among populations in Myanmar (2015)**




Sources: AEM model prevalence based on IBBS (PWID 2014, FSW & MSM 2015) and HSS 2014; Myanmar Spectrum, AEM 5.41 (2016)

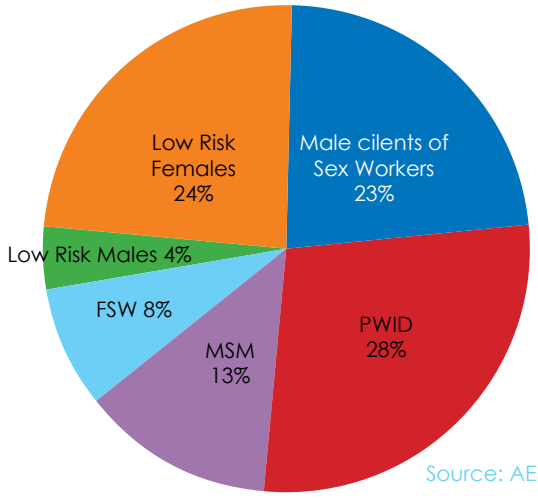
[11] AEM modelled prevalence, based on IBBS (PWID 2014, FSW & MSM 2015) and HSS 2014; AIDS Epidemic Model and Spectrum 5.4, April 2016
[12] Ibid, 2016
[13] Ibid, 2016

**Figure 3: Trend of new infections by key populations 1990-2020**




The highest proportion of new infections were among male people who inject drugs (28%) through use of contaminated injecting equipment. This is followed by the group known as low-risk women (24%), who are often married to or are regular partners of clients of sex workers; followed by clients of sex workers (23%) and men who have sex with men (13%).[14]

**Figure 4: New HIV infections among key populations at risk in Myanmar, 2015**

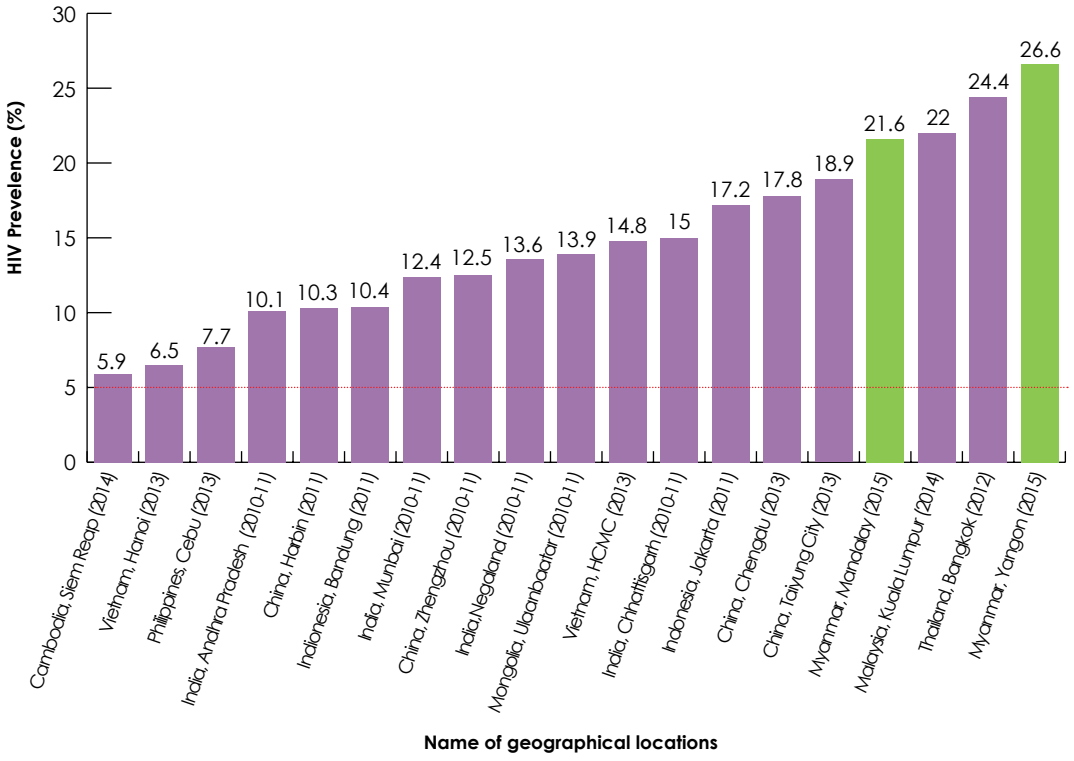



Source: AEM, Sprectrum 5.4, 2016

***High Epidemic Severity in the Asia-Pacific region.*** HIV prevalence in some locations in Myanmar is among the highest in the Asia-Pacific region. In Yangon, among men who have sex with men, the HIV prevalence at 26.6% is the highest in a specific geographical location in the Asia-Pacific region, higher than Bangkok at 24.4% in 2012.[15] Mandalay had the fourth highest HIV prevalence in the Asia-Pacific region with a prevalence of 21.6% among men who have sex with men (Figure 5). These rates are alarming and should present a call to immediate action to expand services in prioritized geographical locations among key populations in Myanmar.

[14] AEM modelled prevalence, based on IBBS (PWID 2014, FSW & MSM 2015) and HSS 2014; AIDS Epidemic Model and Spectrum 5.4, April 2016.
[15] AIDSdatahub.org and the Integrated biological and behavioural survey (IBBS) of MSM in five cities in Myanmar, Draft-March 2016.

**Figure 5: HIV prevalence among MSM in selected geographical locations 2010-2015**

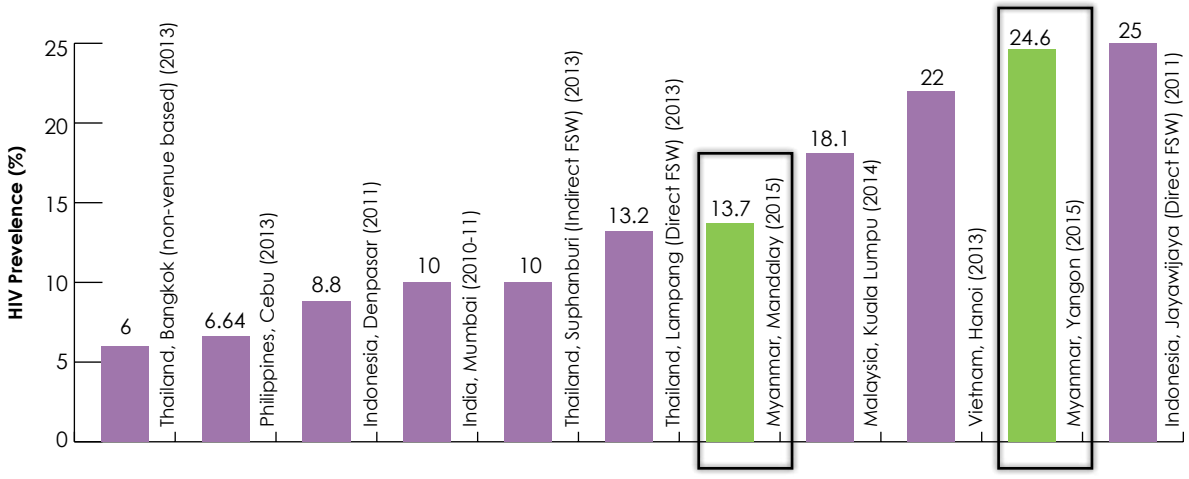



Sources: aidsdatahub.org; Myanmar IBBS, MSM, 2015

In 2015, HIV prevalence among female sex workers was 24.6% and 13.7% in Yangon and Mandalay respectively, representing the second and fifth highest HIV prevalence among female sex workers in key geographic locations in the Asia-Pacific region (Figure 6).[16]

In 2014, in Waingmaw in Kachin State, near its capital Myitkyina, the HIV prevalence among people who inject drugs was 47%, the fifth highest HIV prevalence among people who inject drugs across the selected locations in the Asia-Pacific region (Figure 7).[17]

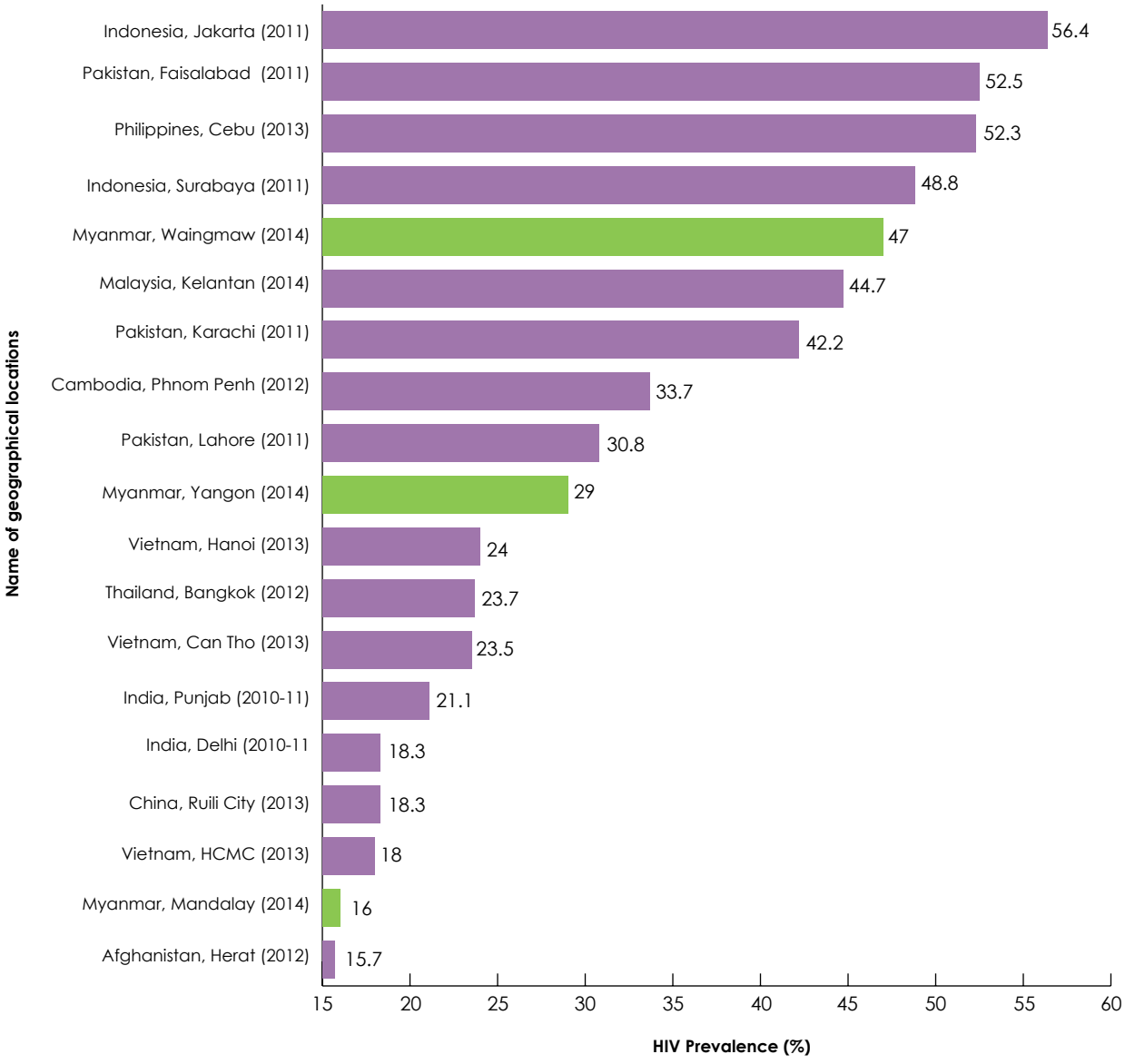
**Figure 6: HIV prevalence among FSW in selected geographical locations, 2010-2015**




Sources: aidsdatahub.org, 2016; Myanmar IBBS,

[16] Aidsdatahub.org,2016; Myanmar Integrated biological and behavioral survey (IBBS) of FSW in five cities in Myanmar, Draft-March 2016
[17] Aidsdatahug.org, 2016; Myanmar Integrated biological and behavioral survey(IBBS) PWID, 2014.

**Figure 7: HIV prevalence among PWID in selected geographical locations, 2010-2014**




Source: aidsdatahub.org; 2016: Myanmar IBBS, PWID, 2014

***Geographic variations in HIV prevalence within Myanmar***. The severity of the HIV epidemic within Myanmar varies across geographic locations and behavioural risk profile. Data suggest that the HIV burden is substantially higher in urban or semi-urban areas and areas where injecting drug use is prevalent, illustrated by HIV prevalence ranging from 6% to 47% among people who inject drugs in different areas of Myanmar (Figure 8).[18]

***Men who have sex with men (MSM)***. HIV prevalence among men who have sex with men varied across five survey sites in Myanmar ranging from 6% to 27% (Figure 9).

[18] Myanmar Integrated biological and behavioural survey (IBBS) PWID, 2014, MOHS, HSS, 2014

**Figure 8: HIV prevalence among male PWID respondents- IBBS and HSS results (2014)**

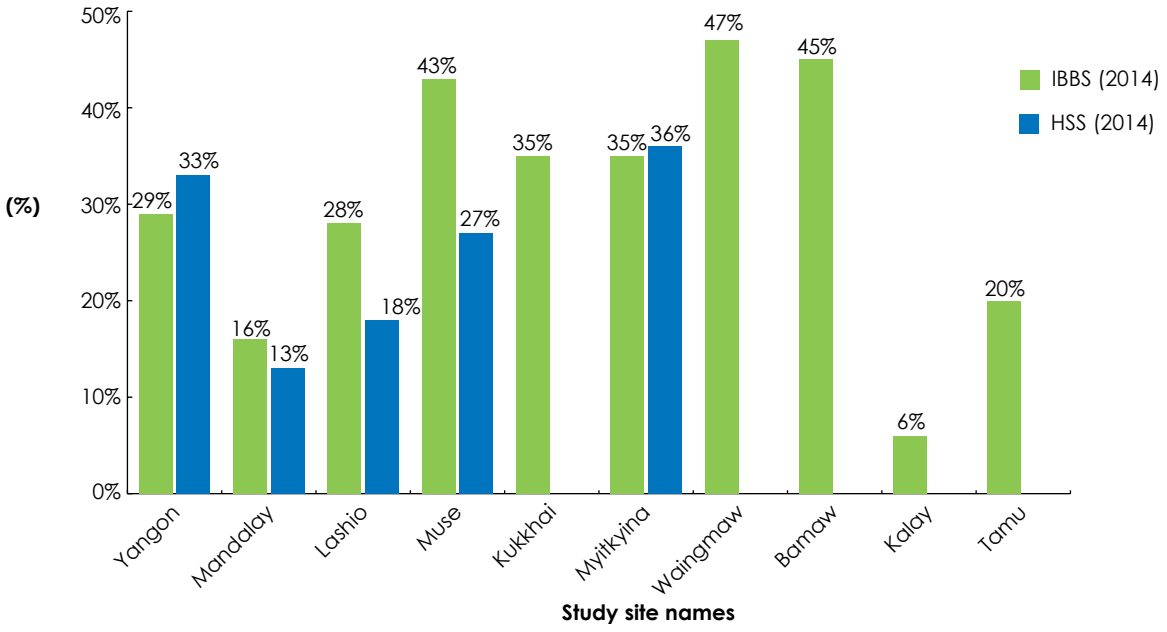
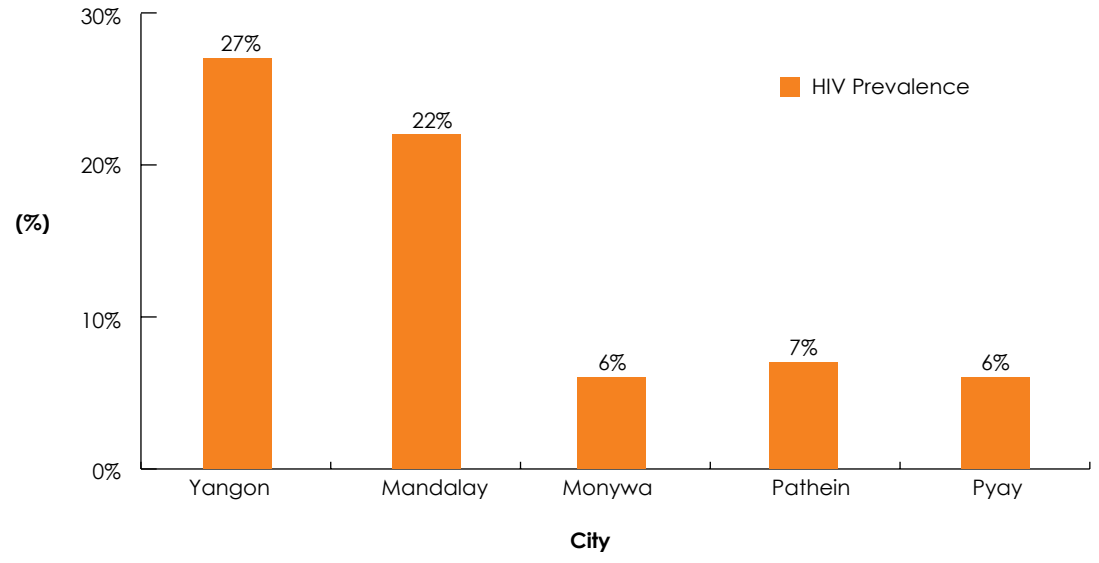



**Figure 9: HIV prevalence among MSM, IBBS (2015)**

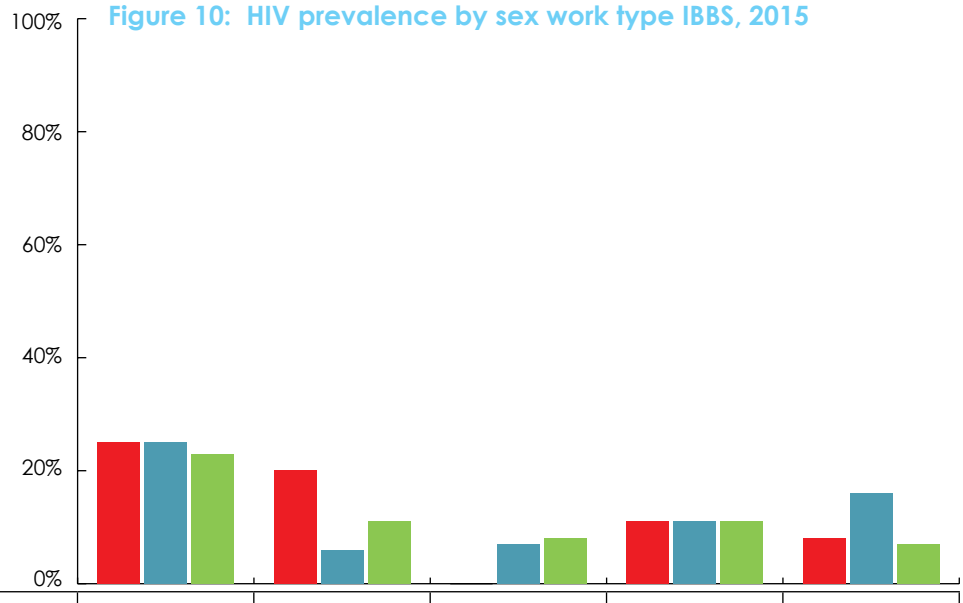



Source: Integrated biological and behavioral survey (IBBS) among MSM in five cities in Myanmar, Draft-March 2016

Masculinity, male sexualities and male-to-male sexual dynamics are complex in Myanmar and NSP III will aim to provide an appropriate framework for effective responses to intertwined gender identities, sexual orientations and behaviours.[19] Men who have sex with men and transgender persons in Myanmar self-identify by local terms that reflect distinctions made on the basis of sexual orientation, gender identity and public expression of gender identity, specifically *apwint, apone* and *tha nge* (further defined in Section D7). The 2015 IBBS showed that *apwint* and *apone* are at higher risk of HIV infection because they are generally the more receptive sexual partner during anal sex. In Yangon, among men who have sex with men, there appears to be a higher rate of partner change, a higher rate of selling or buying sex, lower knowledge on HIV transmission and prevention, lower contact by outreach workers and a lower rate of condom use, all resulting in higher HIV prevalence.[20]

***Female sex workers***. HIV prevalence varies by location and sex worker group (visible or disclosed sex workers; semi-visible and hidden or non-disclosed sex workers) in Myanmar. The lack of a consistent pattern of HIV prevalence in one group of sex workers suggests that sex work and associated risk dynamics vary from city to city, with some cities apparently associated with more risk behaviour than others. The highest HIV prevalence among sex workers in Myanmar in 2015 was in Yangon, for each of the groups, followed by the group of visible (disclosed) sex workers in Mandalay (Figure 10).[21]

**Figure 10: HIV prevalence by sex work type IBBS, 2015**




| | Yangon | Mandalay | Monywa | Pathein | Pyay |
|---|---|---|---|---|---|
| Visible | 25% | 20% | 0% | 11% | 8% |
| Semi-Visible | 25% | 6% | 7% | 11% | 16% |
| Hidden | 23% | 11% | 8% | 11% | 7% |

*** Statistically significant differences**

Source: Myanmar Integrated biological and behavioural survey (IBBS) of FSW in five cities in Myanmar, Draft-March 2016

[19] Situational analysis of the HIV response among men who have sex with men and transgender persons in Myanmar, December 2015
[20] Myanmar Integrated biological and behavioural survey (IBBS) among MSM in five cities in Myanmar, Draft-March 2016
[21] Ibid

Geographic analysis of sex work suggest that there are greater numbers of disclosed and non-disclosed sex workers in large cities while smaller cities had more non-disclosed sex workers/women engaging in sex work. The proportion of non-disclosed sex workers ranged from 11% to 33% across large and small cities but has increased in large cities since 2007.[22] Non-disclosed sex workers are often more difficult to reach with HIV programming.

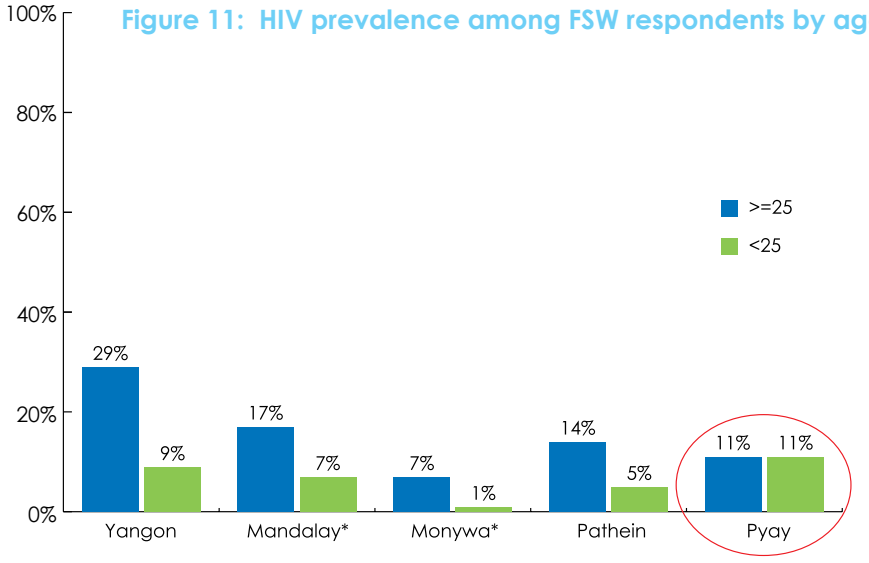
***Young key populations.*** In most geographical locations in Myanmar, people among key populations who have engaged in high-risk behaviour over a longer period generally have a higher HIV prevalence than their younger counterparts, with some exceptions. In the recent IBBS among female sex workers, between 21% and 34% of respondents were under 25 years of age. HIV prevalence was significantly higher among female sex workers who were at least 25 years old, with the exception of Pyay (Figure 11).[23] The majority of respondents in the recent IBBS on men who have sex with men were younger men, under the age of 30. Men who were 25 years or older were much more likely to be living with HIV than younger men (Figure 12). However, in Yangon and Mandalay there were high levels of HIV prevalence among the younger age group (under 25 years), at 14% and 10% respectively.

As mentioned above, HIV prevalence among people who inject drugs is very high in certain locations in Myanmar. The HIV prevalence was higher for the 25-plus age group in all locations with the one exception of Tamu. However, in 7 out of 10 settings, HIV prevalence among young people who inject drugs ranged from 20% to 34%, demonstrating a critical need to reach young people who inject drugs with effective combination prevention services (Figure 13).

### Key facts

*Urban and semi-urban areas (Yangon and Mandalay) are associated with greater HIV epidemic, as are areas where injecting drug use is prevalent (Kachin State and Shan State).*

**Figure 11: HIV prevalence among FSW respondents by age, IBBS, 2015**




[22] Myanmar integrated biological and behavioural survey (IBBS) of FSW in five cities in Myanmar, Draft-March 2016
[23] Ibid.

**Figure 12: HIV prevalence among MSM respondents by age, IBBS, 2015**

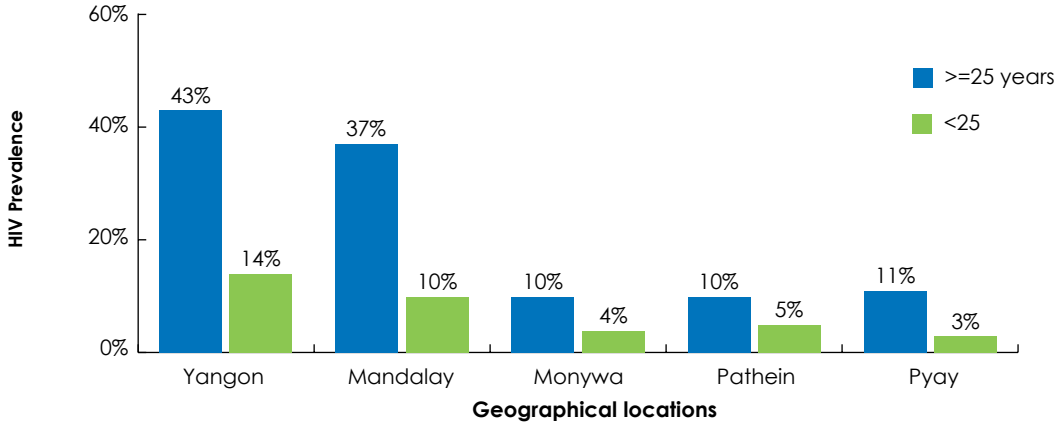
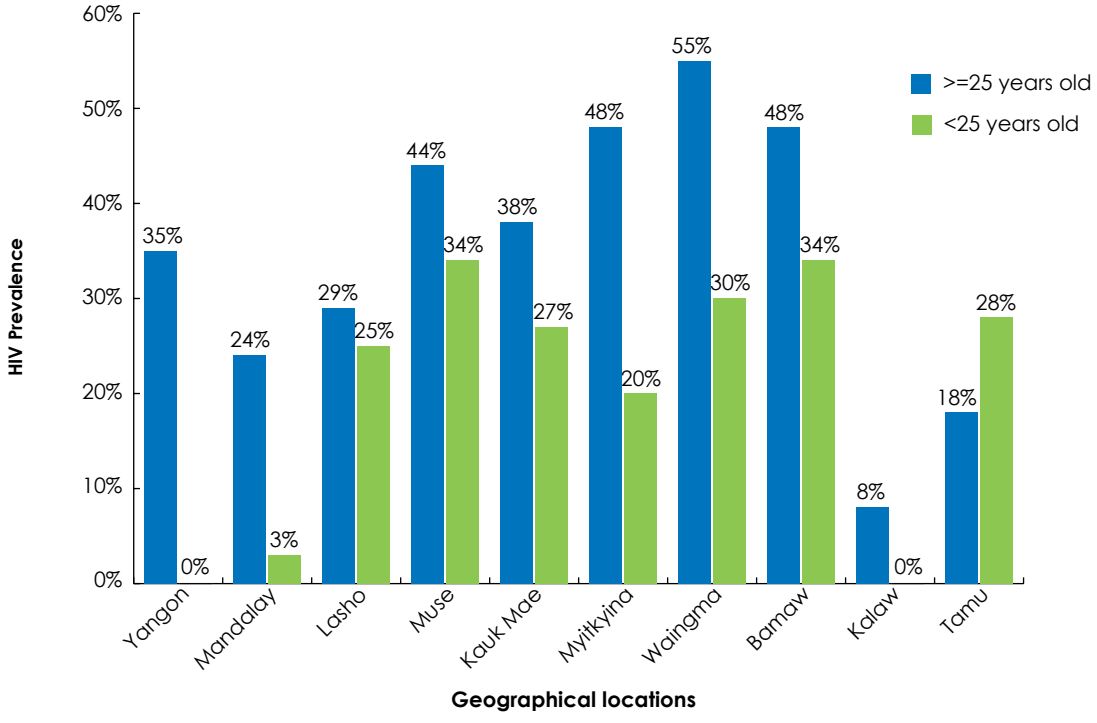



**Figure 13: HIV prevalence among male PWID respondents by age, IBBS, 2014**




**In summary**, recent situation analyses and IBBS reports suggest that several major urban and semi-urban settings, particularly Yangon and Mandalay, are locations with higher HIV epidemic for all key populations, as are areas where injecting drug use is highly prevalent, including in Kachin and Shan states. In addition, while the HIV prevalence is generally higher among people in key populations who have engaged in high-risk behaviour longer (and are older than 25 years) than their younger counterparts, there are significant levels of risk for young key populations particularly in high burden areas. Overall, the analyses suggest that geographic and population prioritization with locally tailored and age sensitive responses are critical to address the issues and achieve the desired programmatic impact.

## Achievements and gaps in Myanmar's response to HIV

Myanmar's progress in responding to the HIV epidemic has contributed to an estimated national decrease in new HIV infections from 13 000 in 2011 to 11 000 in 2015, but there is still more to be done in prevention.

From 2013 to 2015, there was a 67% increase in the number of needles and syringes distributed (from around 11 million to 18.5 million), equivalent to an increase from 147 to 223 per person who injects drugs by 2015.[24] There has been significant expansion of prevention outreach and education activities and increased availability of counselling and HIV testing in the country. However the estimated testing coverage among key populations is far from optimal with more than 66% of key populations not accessing testing services in 2014 (Table 2).

Coverage of antiretroviral therapy (ART) has doubled from 24% in 2012 to 47% or 106 490 people on ART by the end of 2015 (Figure 14).[26] This achievement surpasses the NSP II treatment target and in large part is due to the expansion of Ministry of Health and Sports (MOHS) services.

The MOHS and National AIDS Programme (NAP) along with partners have increased the number of ART facilities from 147 in 2013 to 269 with 82 public sector ART initiation sites, 137 decentralized sites for ART maintenance and 50 private (non-government) sites. There has been a significant decline in the trend in deaths from 15 601 in 2011 to 9675 in 2015.[27] While this is a significant achievement, approximately half of all people living with HIV are not yet on treatment.

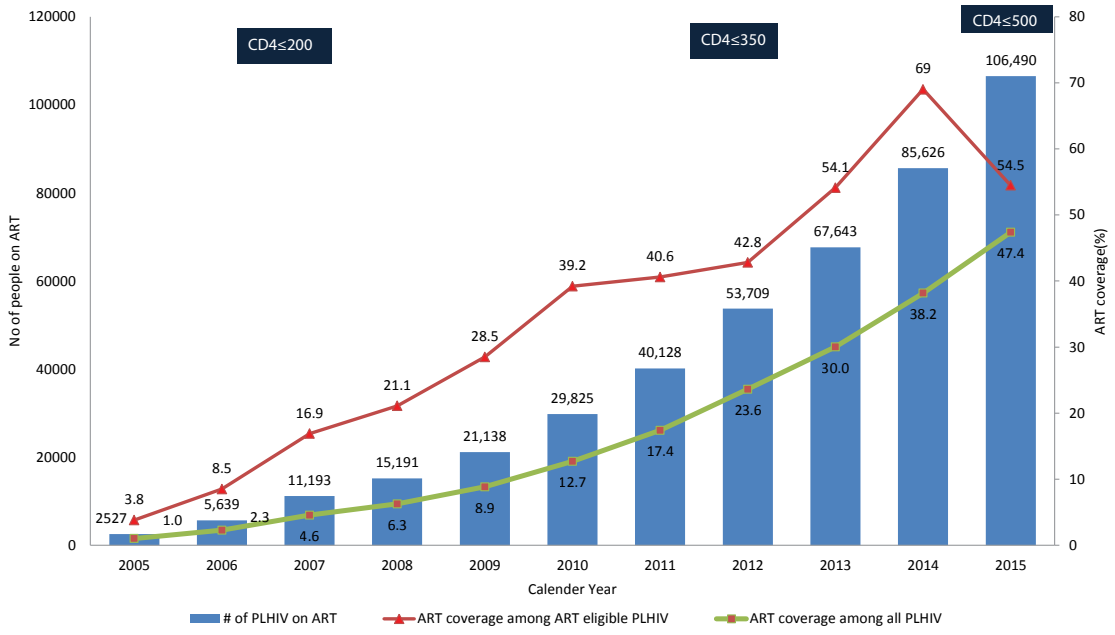
**Table 2: Estimated Effective Prevention Coverage based upon service data 2014[25]**

| Priority Population | Reached coverage | Tested coverage |
|---|---|---|
| FSW | 67% | 34% |
| MSM | 53% | 20% |
| PWID | 67% | 27% |

Source: Estimates and Projection workshop, December 2015

[24] GARPR, 2016 –Sources: Annual Reporting 2015 from AHRN, Alliance, Burnet, HPA, MANA, MDM, SARA, UNODC
[25] Estimates and projections workshop, December 2015. Coverage calculated taking programme results divided by population size estimates (PSE) based on new PSE 2015 from IBBS FSW and MSM. For PWID programme data divided by PSE 2014 from IBBS PWID
[26] Ministry of Health and Sports, GARPR, 2016
[27] AIDS Epidemic Model April 2016

### Figure 14: Antiretroviral Therapy 2005-2015

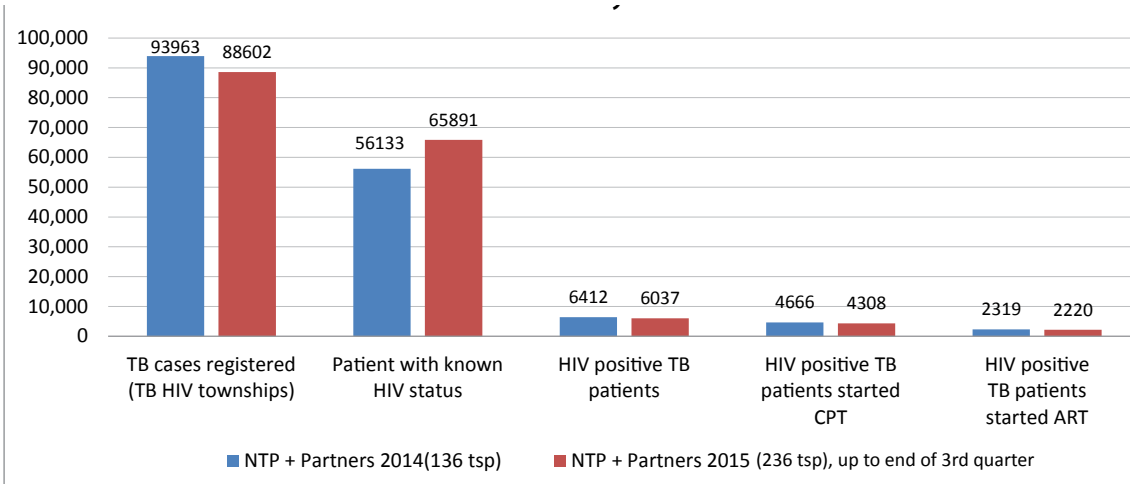



Source: ART programme data; Spectrum, April 2016

## HIV and TB coinfection

The proportion of TB patients with known HIV status has increased from 60% in 2014, when 56 133 out of 93 963 TB patients knew their HIV status to 74 % in 2015 (Figure 15).[28] In 2014, among those TB patients tested, the HIV prevalence was 11% with a range of 6% in Yangon, 13% in Nay Pyi Taw to 25% in Hpakant and Myitkyina (Kachin State) and Shan State.[29] There has been an increase in the number of townships with NAP/NTP collaborative TB–HIV activities from 28 in 2013, to 108 in 2014, to 236 townships in 2015. Despite the increasing trend of knowledge of HIV status among TB patients, the proportion of HIV-positive TB patients who have received ART remained low at 37% in 2015.[30] In other words, 63% of all HIV-positive TB patients are not receiving lifesaving ART.

### Figure 15. TB/HIV cascade: NTP Myanmar 2015




Source: Review of collaborative TB/HIV activities in Myanmar, 18–30 January 2016

[28] Review of collaborative TB/HIV activities in Myanmar, January 18-30 2016.
[29] Ibid
[30] NTP Programme communications, 2016

## HIV and hepatitis B and C coinfection

Coinfections are common among priority populations in Myanmar. A study in Myanmar enrolling patients in an integrated HIV care programme from 2005 to 2012 found that among people who inject drugs the prevalence of hepatitis B virus (HBV) and hepatitis C virus (HCV) coinfection was 10.2% and 47% respectively.[31] A study by Médecins du Monde from 2005 to 2013 screened female sex workers, men who have sex with men and people who inject drugs for hepatitis B and C during enrolment in ART, and concluded that these coinfections were common among key populations (Table 3).[32]

## Prevention of mother-to-child transmission of HIV (PMTCT)

HIV counselling and testing services for all pregnant women have been integrated into routine antenatal services provided by basic health personnel. By the end of 2015, NAP was implementing PMTCT programme with on-site HIV counselling and testing services for all pregnant women with confirmation of HIV status and provision of ARV drugs for HIV positive pregnant women in 339 sites across 301 townships and 38 hospitals.

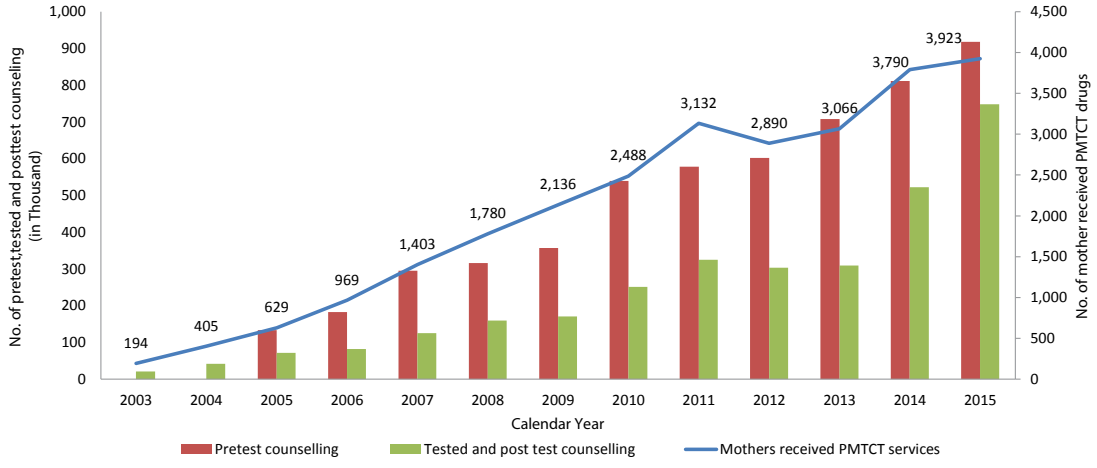
In selected major hospitals in Mandalay, Yangon, Tanintharyi and Myitkyina, HIV

**Table 3: Patients coinfected with HIV and HBV, HIV and HCV**

| Key population | Coinfected with HIV and HBV | Coinfected with HIV and HCV |
|---|---|---|
| MSM | 15.2% | 5.7% |
| PWID | 14% | 59.7% |
| FSW | 10.3% | 9.2% |

Source: MdM, 2013

**Figure 16. PMTCT Programme 2003-2015**




Source: PMTCT programme data

[31] Sai Ko Ko Zaw, Sai Thein Than Tun, Aye Thida, Thet Ko Aung, Win Maung, Myint Shwe, Mar Mar Aye and Philippe Clevenbergh, Prevalence of hepatitis C and B virus among patients infected with HIV: a cross-sectional analysis of a large HIV care programme in Myanmar, Tropical Doctor 43(3) 113–115 (2013).

[32] Myint, WM et al. Hepatitis B and C co-infection among the key affected populations in an ART programme in Myanmar, 20th international AIDS Conference, Melbourne, Australia, July 2014

prevalence among pregnant women was over 3% in 2014. In 32 other hospitals, HIV prevalence ranged between 1% and 2.6%. 315 out of 339 PMTCT sites reported PMTCT data. Among these 315 sites, HIV-positive pregnant women were found in 284 PMTCT sites or in 90% of all reporting sites in 2015.[33]

In 2015, more than 900,000 pregnant women received pre-test counselling and more than 700,000 took an HIV test and received post-test counselling. In 2015, 3923 HIV-positive pregnant women received ARV to reduce the risk of mother-to-child transmission (2400 received Option B and 1523 Option B+).[34] In 2015, among 2239 exposed babies who were delivered, 2169 exposed infants were started on nevirapine (NVP) prophylaxis. Using the data of estimated HIV positive pregnant women who required PMTCT services in 2015 as the denominator, about 46.6% of exposed infants born to HIV-positive women were receiving ARV prophylaxis.[35] The number of infants who received an HIV test within two months of birth to ensure early infant diagnosis was 801 (773 negative, 25 HIV-positive and 3 indeterminate) suggesting a low uptake of early infant diagnosis testing among exposed infants within two months of birth.[36]

There is a critical need to ensure a stronger collaboration between NAP and the Maternal and Reproductive Health (MRH) and Child Health Development (CHD) programmes to establish a case management approach for the comprehensive PMTCT cascade services. In addition, there is a need to promote uptake of HIV testing among spouses of pregnant women living with HIV, as only half of their spouses were tested in 2015.

[33] MOHS communications, 2015
[34] GARPR, 2016
[35] GARPR, 2016
[36] GARPR, 2016

# D.

# STRATEGIC FRAMEWORK FOR THE NATIONAL STRATEGIC PLAN III 2016-2020

# STRATEGIC FRAMEWORK FOR THE NATIONAL STRATEGIC PLAN III 2016-2020

The following strategic framework articulates the NSP III 2016–2020 vision, guiding principles and goal.

### D1. Vision

By 2030, end HIV as a public health threat in Myanmar through fast-tracking access to a continuum of integrated and high quality services that protect and promote human rights for all.

This vision will support Myanmar to achieve the Sustainable Development Goals (SDGs) and universal health coverage, building on the Millennium Development Goals, by strengthening national, regional and local leadership with enhanced public, private and community partnerships at all levels and with sustainable funding.

### D2. Guiding Principles

**Three 'Ones" - National Plan, National Coordination, M&E Plan**

| | | | |
|---|---|---|---|
| **Evidence-informed** and **results-oriented** innovative interventions that are **cost effective** and **prioritized** to maximize the impact of the resources resulting in quality health services targeting those most in need. | **Fast-tracking integrated, decentralized, high quality services** and **health and community systems strengthening** to efficiently address co-occurring vulnerabilities and support the continuum. | **Protection and promotion of human rights, gender equity** and **favourable policy** and **laws** to eliminate stigma, discrimination and violence and remove obstacles to ensure access and uptake of HIV services and social protection. | **Sustainable partnerships**, including public and private sector and **communities** to jointly design, deliver, monitor and evaluate services and programs for maximum coverage and reach and ensure **accountability**. |

**Universal access to health and development, towards achieving the SDGs**

### D3. Goal

**To reduce HIV transmission and HIV-related morbidity, mortality, disability and social and economic impact**

### D4. Objectives and Strategic Milestones

To achieve this goal, three objectives and five strategic milestones were identified.

**Objective 1:**
**Reduce incidence among priority populations and their partners**

**Objective 2:**
**Facilitate and ensure viral suppression for all PLHIV**

**Objective 3:**
**Improve the enabling environment to support the response**

### Strategic milestones

- 90% of sex workers, men who have sex with men, people who inject drugs, prisoners and migrants have access to combination prevention services
- 90% of people living with HIV know their status
- 90% of people living with HIV who know their status receive treatment
- 90% of people on treatment have achieved viral suppression
- 90% of people living with, at risk of and affected by HIV report no discrimination, especially in health, education and workplace settings.

### D5. Strategic Directions

To achieve these objectives and associated milestones, five strategic directions were identified with corresponding priority intervention areas (Table 4). These strategic directions articulate critical areas that are interlinked; to achieve maximum impact they would each need adequate financing, technical and programme support.

**Strategic Direction 1:**
**Reducing new HIV infections**

**Strategic Direction 2:**
**Improving health outcomes for all people living with HIV**

**Strategic Direction 3:**
**Strengthening integration of community and health systems and promoting a human rights based approach**

**Strategic Direction 4:**
**Strengthening strategic information and research to guide service delivery, management and policy**

**Strategic Direction 5:**
**Promoting accountable leadership for the delivery of results and financing a sustainable response**

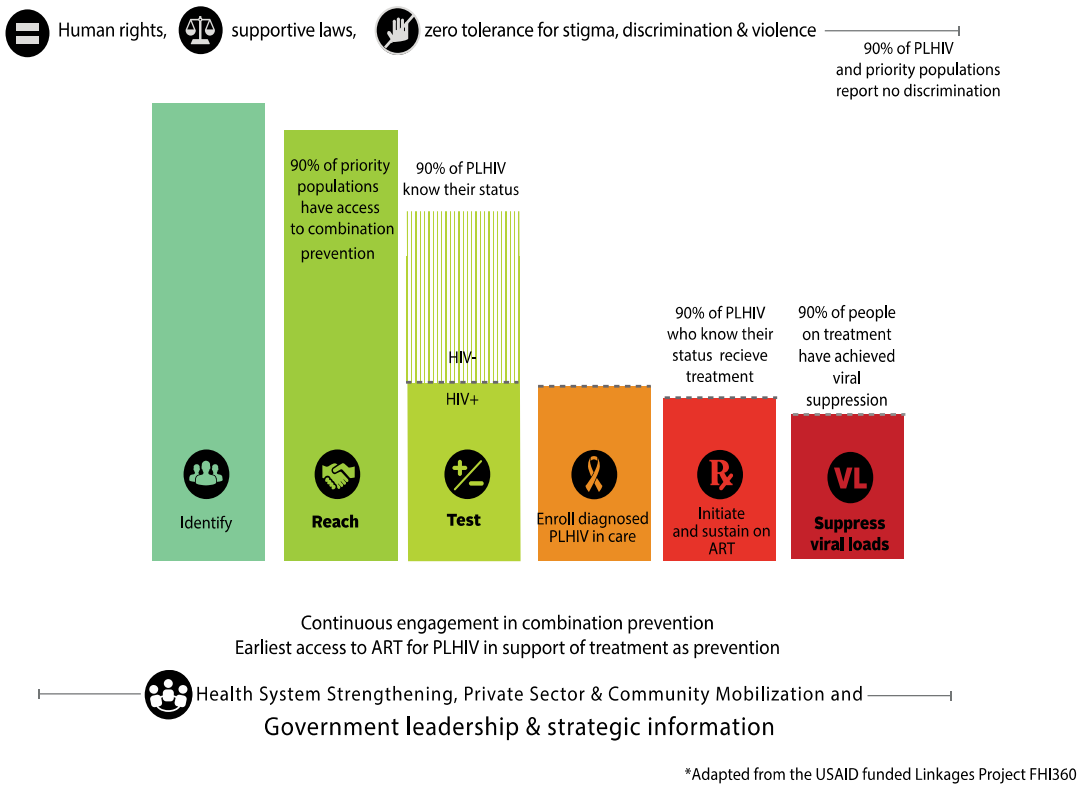
**Table 4. Summary of strategic directions and priority intervention areas**

| Strategic Directions | Priority Intervention Areas |
|---|---|
| 1. Reducing new HIV infections | • Increase scale of combination prevention interventions for priority populations<br>• Maximize HIV testing and linkage to ART among priority populations<br>• Maximize efficiency in service delivery and enhance integration opportunities with MNCH, SRH, and others<br>• Work towards the elimination of mother-to-child transmission of HIV<br>• Model pre-exposure prophylaxis (PrEP) |
| 2. Improving health outcomes for all people living with HIV | • Maximize immediate enrolment, linkage and retention in ART and viral load monitoring<br>• Improve the quality, efficiency and coverage of care and ART<br>• Cooperative integration of TB and HIV (testing, diagnosis and treatment) services<br>• Monitor for viral suppression<br>• Enhance positive prevention |
| 3. Strengthening integration of community and health systems and promoting a human rights based approach | • Strengthen and expand HIV service delivery models, ensuring continuum and quality<br>• Invest in and build robust systems for health (Human Resources for Health, Procurement Management System, laboratory including viral load)<br>• Strengthen the community to be engaged in service delivery including reducing stigma and discrimination<br>• Improve national and sub-national legal and policy environment for protection and promotion of HIV-related services<br>• Integrate HIV in UHC and social protection schemes for priority populations and orphans and vulnerable children<br>• Implement workplace programmes and leverage involvement of other sectors in the HIV continuum of services |
| 4. Strengthening strategic information and research to enhance the response | • Generate and use strategic information to guide service delivery, programme management, policy and financing<br>• Improve monitoring and reporting to provide quality data and effectively track NSP III and improve performance at all levels<br>• Strengthen coordination and human resources for strategic information<br>• Conduct research and apply findings for programmatic improvement and policy change |
| 5. Promoting accountable leadership for the delivery of results and financing of a sustainable response | • Strengthen and sustain high level political commitment at national, regional and township level<br>• Mobilize resources and ensure sustainability<br>• Strengthen governance and multi-partner accountability for delivery of results<br>• Strengthen national, city and township HIV coordination mechanisms to improve the response<br>• Support Myanmar's participation in regional coordination (i.e. ASEAN) particularly with countries that share border areas |

### D6. Myanmar 2020: HIV Prevention, Care and Treatment Continuum Model

The Myanmar 2020: HIV Prevention, Care and Treatment Continuum model was developed to illustrate how the strategic approach to HIV has changed in NSP III.[37] It illustrates the inherent connections of the strategic elements of the HIV response (Figure 17). Government leadership with strategic information underpins the success of the implementation of the strategy. Health systems strengthening, private sector engagement and community mobilization are necessary elements to ensure the availability and the quality of the continuum of HIV services. The aim of ensuring the earliest access to treatment for people living with HIV will enhance treatment outcomes and will act as an effective prevention strategy. Continuous engagement in combination prevention across all services will enhance achievement of the strategy. The Myanmar 2020 HIV continuum requires implementation based on a human rights and gender equality framework with supportive laws and zero tolerance for stigma, discrimination and violence towards people living with HIV or affected by the epidemic.

**Figure 17. Myanmar 2020: HIV Prevention, Care and Treatment Continuum**




*Adapted from the USAID funded Linkages Project FHI360

[37] Myanmar 2020 Continuum was adapted from the USAID funded Linkages Project implemented by FHI 360

### D7. Priority Populations

HIV prevention programmes are most effective when they address social, gender and age groups with the highest HIV incidence rates and the largest numbers of new HIV infections while also being tailored to their sociocultural context. In all settings, programmes will define priority populations based on regular epidemiologic and sociodemographic analyses of data to determine which population groups are most affected and their size. This means that the most intensive community outreach and demand generation is needed for priority population groups in areas with high HIV prevalence, priority populations and diagnosed people living with HIV.

In the context of Myanmar, we have defined the following groups as priority populations:[38]

- **People living with HIV (PLHIV)** whether aware or unaware of their status. In 2015, the total number of people living with HIV is estimated to be 224 794 with 215 312 adults (64% male and 36% female) and 9482 children.[39]

- **People who inject drugs (PWID):** This refers to people who inject psychotropic or psychoactive drugs, including, but not limited to, opioids, amphetamine-type stimulants, cocaine, hypno-sedatives and hallucinogens. In Myanmar, heroin is the most commonly injected drug. Injection may be through intravenous, intramuscular, subcutaneous or other routes. The 2014 population size estimate of people who inject drugs is 83 000.

- **Men who have sex with men (MSM):** The term describes males who have sex with males, regardless of whether or not they also have sex with women or have a personal or social gay or bisexual identity. This concept is useful because it also includes men who self-identify as heterosexual but who have sex with other men. Men who have sex with men and transgender persons in Myanmar self-identify by local terms that reflect distinctions made on the basis of sexual orientation, gender identity and public expression of gender identity including:[40]

  - ***Apwint*** are biological males whose public and private gender identity is generally feminine, but they may dress as men or dress and act as females. Apwint are generally more 'open' MSM and some could be considered 'transgender', but this term is not widely used in Myanmar.
  - ***Apone*** are biological males whose gender identity may be either masculine or feminine and may or may not express themselves femininely. Apone can be 'open' or 'hidden' MSM.
  - ***Tha Nge*** are biological males whose gender identity is masculine with a sexual

[38] UNAIDS 2015. Fast-tracking combination prevention
[39] HIV estimation and projections 2011–2020 Spectrum 5.4 and Baseline AEM, April 2016
[40] Ibid, MSM situational analysis, Dec 2015

preference for apwint and apone as well as for women, however they are often 'hidden' MSM.
- o There are ***additional 'undisclosed' MSM*** in Myanmar. Research is required to further understand their risk and needs for services.

The 2015 population size estimate in Myanmar for men who have sex with men was 253 210 with approximately half, 126 000, estimated to be *apwint, apone* and *tha nge*; and the other half 'undisclosed'.

- **Transgender persons (TG)** is an umbrella term that refers to persons whose gender identity and expression does not conform to the norms and expectations traditionally associated with the sex assigned to them at birth. Transgender people may self-identify as transgender, female, male, transwoman or transman, trans- sexual, or one of many other transgender identities, and may express their genders in a variety of masculine, feminine and/or androgynous ways.[42] In Myanmar, some transgender persons can be identified as *Apwint* (see above).

- **Sex workers:** include female, male and transgender adults and young people who receive money or goods in exchange for sexual services, either regularly or occasionally, and who may or may not consciously define those activities as income-generating. In Myanmar, the primary focus of HIV interventions has been on female sex workers, whereas data on male and transgender sex workers remain quite limited. The 2015 estimated size of the female sex worker population (aged between 15 and 49 years) was 66 056, and the population size of their male clients was estimated at 1 115 000.[41]

- **People in prisons and other closed settings:** Prisons and other closed settings refers to places of detention that hold people who are awaiting trial, who have been convicted or who are subject to other conditions of security. There are 45 prisons and 48 camps in Myanmar with an estimated 65 000 to 70 000 prisoners. These settings may differ in some jurisdictions, and they can include jails, prisons, detention centres, and penitentiaries. In addition, there are up to 40 000 persons in pre-trial detention. This population group is included due to the high levels of incarceration of people from the other priority population groups and the increased risk behaviours and insufficient HIV services in these settings.

- **Migrants:** As defined by the International Organization for Migration (IOM) in Myanmar, a migrant is a person who lived away from their town or village of origin continuously for more than three months. A migrant worker is a person who regularly moves around various locations within Myanmar and beyond in a relatively shorter timespan (e.g. traders, truck drivers, fishermen, railway staff). However,

[41] Ibid
[42] Situational analysis of the HIV response among men who have sex with men and transgender persons in Myanmar, December 2015

please note that HIV risk is related to engagement in risk behaviour and limited access to services, rather than being a member of this group alone.

Estimates from the 2014 census indicate that over 11 million Myanmar residents have migrated internally or externally.[43] No comprehensive information is available on HIV prevalence or risk behaviours in migrants and mobile populations in Myanmar but programme data suggest that HIV is an issue among migrant groups who are engaging in high risk behaviour. Migration alone is not a risk for HIV infection.

### Notes on priority populations

Within the priority populations described, young people are an important group and will be addressed within the priority population interventions within the NSP III. In addition, with overlapping risk factors that place priority populations across multiple groups, sexual partners of priority populations, particularly those living with HIV, must be reached with targeted HIV prevention interventions, particularly through using partner notification and tracing as an entry point.

- **Sexual partners of priority populations and people living with HIV:** Sexual partners of priority populations are at substantial risk of HIV and STIs based on risk behaviours. This includes clients and regular partners of sex workers, female partners of people who inject drugs and men who have sex with men, and sexual partners of prisoners and migrants. The continuum of services must reach partners of these priority populations with services to ensure that one or both partners remain uninfected, and to ensure that the partner living with HIV is linked with appropriate treatment and care. Risks to partners will be discussed during counselling and interpersonal communication, partner notification and testing strongly encouraged and support for mutual disclosure available. In addition, sexual partners of priority populations will be reached through men's health clinics, integrated health services, PMTCT and community-based services.

- **Young priority populations:** Younger members of priority populations (25 years and younger) are included within the men who have sex with men, transgender persons, people who inject drugs and sex workers groups. However younger people need special attention due to rapid physical, emotional and mental development, complex psychosocial and socioeconomic factors and poor access to and uptake of services, particularly for those under 18.[44] As previously described, there is significant level of risk of HIV infection among young priority populations, particularly in high burden areas, and efforts must be made to tailor services to reach them. In April 2016, through Spectrum AEM, the number of young people living with HIV was estimated to be 9483 children 0–14 years old and 11 268 children 10–19 years old.

[43] Department of Population, Ministry of Immigration and Population. The 2014 Myanmar population and housing census – The Union report, Part 2. Nay Pyi Taw.
[44] WHO, 2014. Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations

Young people may require specific and more creative engagement strategies to promote uptake of services. Sociocultural factors, including religious beliefs on sex before marriage, and a lack of clarity on the age at which young people can access health services without parental/guardian consent, can impede access to services. It is vital that young priority populations are reached with accurate information on HIV risks and prevention strategies, and have access to youth-friendly prevention, harm reduction, reproductive health, and HIV care and treatment services.

- **Overlapping risks, TB and HIV co-infection and alcohol/substance abuse:** High HIV prevalence among diagnosed TB cases in Myanmar requires special attention. Some people from priority population groups engage in more than one high-risk behaviour (e.g. injecting drugs and sex work, or a man who has sex with other men who also injects drugs). Risk behaviours related to alcohol and other drug use can also be an issue among the priority population groups. The risk of transitioning from non-injecting drug use to injecting drug use will also be addressed with the priority population groups, as well as with other people who use drugs.

# E.

# OPERATIONAL MODEL

# OPERATIONAL MODEL

## E1. Geographic Distribution of Need and Risk of new HIV Infections

### Criteria used for prioritization of townships

Optimizing the response to HIV in Myanmar required an analysis of the geographical distribution of need and risk of new infections. Townships were prioritized at central level through a process of triangulating population size estimates of priority populations, known HIV prevalence, reported data on HIV-positive cases, number of people living with HIV on ART and reported data on the number of pregnant women living with HIV enrolled in PMTCT services. Townships were categorized into three groups based upon HIV burden and risk of new infections: high, medium and low priority based upon the following variables:[45]

- Population size estimates of people who inject drugs, men who have sex with men and female sex workers
- Known HIV prevalence among key populations
- HIV-positive case reports among TB patients
- HIV-positive case reports among pregnant women
- HIV-positive case reports from ART services and the existence of ART services
- Other qualitative criteria, for example including knowledge of local areas with HIV risk behaviour or higher risk of transmission.
- Other criteria included townships located in border areas with considerable migrant or mobile populations, mining camps, economic zones or large prison populations.

[45] Prioritization of townships for National Strategic Plan on HIV/AIDS (2016–2020), NAP & UNAIDS, 2015

**Table 5. Criteria used in township prioritization**

| High Priority Risk/Burden | Medium Priority Risk/Burden | Low Priority Risk/Burden |
|---|---|---|
| **Quantitative Criteria:**<br><br>• Township having estimated key population **above 1000 (or)**<br><br>• Township having estimated key population in **between 300 and 1000 and providing ART services for more than 200 PLHIV (or)**<br><br>• Township having key population in between **300 and 1000, which has (>30) HIV-positive among TB patients or (>30) HIV-positive among pregnant women**<br><br>**Qualitative Criteria:** border areas and mining areas having migrant population, large prison population and economic and trade zones | **Quantitative Criteria:**<br><br>• Estimated key population **between 300 and 1000 (or)**<br><br>• Estimated key population **less than 300, which has ART centre (or)**<br><br>• Estimated key population **less than 300, which has >20 HIV-positive among TB patients or >20 HIV-positive among pregnant women**<br><br>**Qualitative Criteria:** known areas with higher risk of HIV | **Quantitative Criteria:**<br><br>• Estimated key population **less than 300, which has no ART centre (or) which has (<20) HIV-positive among TB patients or (<20 ) HIV-positive among pregnant women**<br><br>• **Inadequate information** on key populations, HIV-positive among TB patients or pregnant women |

The analysis resulted in the classification of 85 high priority townships, including 33 within Yangon and Mandalay; 151 medium priority; and 94 low priority townships (Table 6).[46] Currently included among the low priority townships are 28 townships with insufficient data to enable accurate classification, and where additional information will be collected to permit better classification in future.

Table 7 summarizes the distribution of needs and risk of new infections as defined by key population sizes, adults living with HIV, adult new infections and adults on ART by high, medium and low priority townships.[47]

[46] Prioritization of township for National Strategic Plan for HIV/AIDS (2016-2020), NAP & UNAIDS, 2015
[47] Optimizing Myanmar's National Strategic Plan on HIV and AIDS (2016-2020) for maximum impact and sustainability: Service Delivery Approaches, draft 2016

**Table 6: Summary of HIV NSP III Priority Townships 2015**

| State/Region | High | Medium | Low | Total |
|---|---|---|---|---|
| Yangon | 20 | 22 | 3 | 45 |
| Mandalay | 13 | 14 | 1 | 28 |
| Sagaing | 7 | 13 | 17 | 37 |
| Kachin | 6 | 6 | 6 | 18 |
| Shan (N) | 6 | 11 | 7 | 24 |
| Naypyitaw | 4 | 4 | 0 | 8 |
| Ayeyarwady | 5 | 14 | 7 | 26 |
| Magway | 4 | 11 | 10 | 25 |
| Bago | 3 | 20 | 5 | 28 |
| Rakhine | 3 | 5 | 9 | 17 |
| Shan (E) | 3 | 3 | 4 | 10 |
| Tanintharyi | 3 | 5 | 2 | 10 |
| Shan (S) | 2 | 9 | 10 | 21 |
| Mon | 2 | 8 | 0 | 10 |
| Kayin | 2 | 3 | 2 | 7 |
| Chin | 1 | 2 | 6 | 9 |
| Kayah | 1 | 1 | 5 | 7 |
| **Total** | **85** | **151** | **94** | **330** |

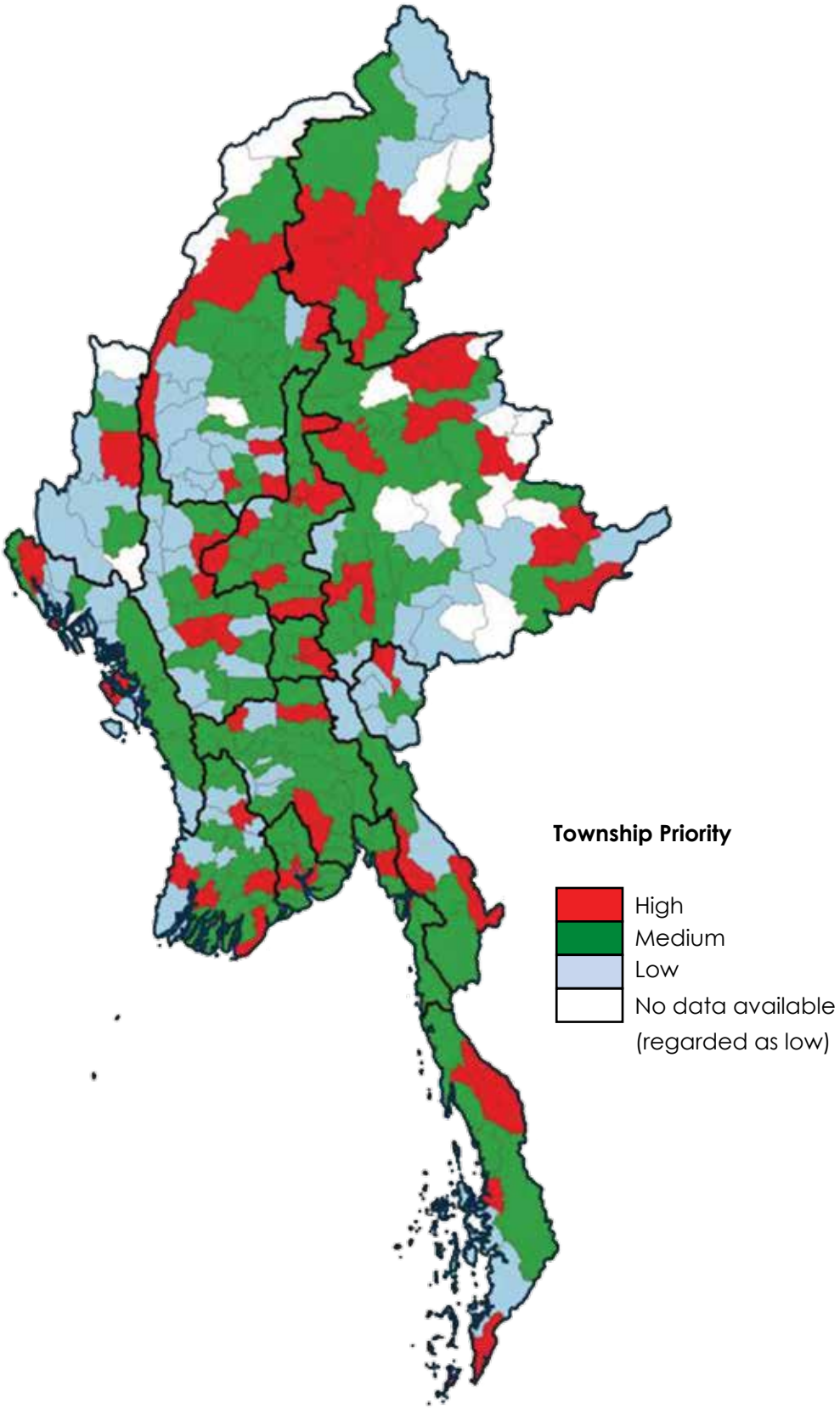
**Table 7: Geographic distribution of need and risk based upon population size**

| | Total population (Census 2014) | | FSW | | MSM | | PWID | |
|---|---|---|---|---|---|---|---|---|
| High | 19,089,190 | 38% | 51,161 | 77% | 159,792 | 63% | 54,011 | 65% |
| Medium | 22,833,375 | 45% | 13,018 | 20% | 78,007 | 31% | 25,279 | 30% |
| Low | 8,357,335 | 17% | 1,877 | 3% | 15,411 | 6% | 4,048 | 5% |
| Total | 50,279,900 | 100% | 66,056 | 100% | 253,210 | 100% | 83,338 | 100% |

| | Adult PLHIV | | Adult new infection | | Adult on ART | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | (by reporting site) | | (by residence) | |
| High | 165,503 | 76% | 8,250 | 76% | 94,838 | 95% | 77,422 | 78% |
| Medium | 44,264 | 20% | 2,234 | 21% | 4,544 | 5% | 19,218 | 19% |
| Low | 6,924 | 3% | 355 | 3% | 22 | 0% | 2,764 | 3% |
| Total | 216,692 | 100% | 10,839 | 100% | 99,404 | 100% | 99,404 | 100% |

In terms of need, between 63% and 77% of key populations are located in high priority townships; 76% of the adults living with HIV are located in high priority townships; and 78% of adults on ART reside in high priority townships. In terms of risk, 76% of new adult infections are estimated in high priority townships. Between 19% and 31% of key populations and adults on ART are found in medium priority townships and only 3% to 6% of key populations are found within in low priority townships. It is also important to note that while 95% of adults on ART are in high priority townships, a proportion reside in medium burden townships, suggesting the need to continue to decentralize ART distribution efforts closer to the homes of people living with HIV. The NSP III strategy will build upon where services for people living with HIV have been developed under NSP II and allocate resources and efforts based upon the variable geographical distribution of need and risk among priority populations. Figure 18 shows a map of townships by priority. As additional information becomes available, this map will be updated.

**Figure 18. Map of Myanmar by township priority**




The following sections of NSP III describe the details of the essential service delivery packages and approaches for high, medium and low priority townships.

## E2. Local Programmatic Mapping and Prioritization

### IDENTIFY

Programmatic mapping enables the systematic identification within a township or a cluster of townships where HIV transmission may be greatest. Mapping also supports the development of a pragmatic typology of priority populations within these areas; the identification of the locations where priority populations congregate and could be reached with services; the size of each priority population; and an assessment of whether services are locally available.[48]

Programmatic mapping will be prioritized first in high priority and then in medium priority townships, however all townships should conduct periodic monitoring to identify risks and provide new HIV case reports. In addition, high and medium priority townships will conduct microplanning on a regular basis to see if programme adjustments are needed to improve the quality and coverage of the HIV service continuum.

**Table 8. Mapping priority populations and geographic locations including response review and service availability**

| Recommended activities | Results |
|---|---|
| 1. Identify and characterize:<br>a. Typology of priority populations and conduct size estimates<br>b. High risk areas<br>c. Map high risk venues at city and township levels<br>d. Map sub-township level as needed<br><br>2. Identify local barriers and service delivery gaps and identify commodity, lab service and human resource needs<br><br>3. Identify local key stakeholders, public, private and community partners | 100% of high priority townships complete comprehensive programmatic mapping<br><br>100% of medium priority townships complete basic programmatic mapping<br><br>100% of high and medium priority townships conduct periodic micro-planning<br><br>Periodic monitoring in low priority townships to assess if key populations are present and HIV case detection reports |
| **Partners responsible** | |
| Lead: MOHS NAP<br>Supporting Partners: United Nations system, donors and INGOs<br>Implementing Partners: Local AIDS/STI teams and local steering committee, NGO and CBO partners, PLHIV and key population networks, private sector and local community leaders | |

[48] Programmatic mapping workbook, 22 September 2014, Global Fund, UNAIDS et al.

### E3. Essential HIV Services Packages

Under NSP III, essential HIV services will be available in all townships, either through direct service provision or through referral to nearby townships. These services include:

- HIV prevention
- Integrated HIV testing and counselling services
- HIV clinical care and ART (including PMTCT)
- Sexual and reproductive health (SRH) (including STI management)
- Safe blood supply
- Enabling environment

Beyond the essential HIV service package, HIV services will be tailored to the township needs. The following description provides guidance for HIV service packages.

**Figure 19. HIV service packages by township risk and burden**

**Essential HIV Services**

**High Risk & Burden Townships**

- Routine hotspot mapping and size estimation
- Intensified outreach (tailored to KP), social media and network recruitment, community-based services
- Comprehensive, one-stop services at selected sites (tailored to KP)
- KSC or mobile services (tailored to KP)
- Active case tracking, partner referrals and linkages
- Commodity distribution (needles/syringes, condom, lubricant, STI drugs, PEP etc)
- Integrate and formalize linkages between outreach, MMT, HTS, HIV care, PMTCT and ART sites at all levels
- Integrate HIV into TB, STI, RH/FP, ANC Services
- Coordination through partnership models
- Model new approaches - peer navigation - Model PrEP
- Intense focus on creating enabling environment to ensure uptake and retention in services

**Medium Risk & Burden Townships**

- Basic Mapping at Township level
- Tailor peer education, social support & social networking
- Outreach
- Integrated HTS and PMTCT availble
- Focused case tracking
- Integrate MMT, HIV care and ART at township (and sub-township levels as required)
- Commodity distribution (needles/syringes, condom, lubricant, STI drugs, PEP etc)
- Coordination through partnership models

**Low Risk & Burden Townships**

- Periodic monitoring for emergence of KP and/or increase of HIV case reports
- Integrate IEC into existing health messaging
- Provide HTC and PMTCT services or referral
- Provide HIV care and ART by referral or linkages

## E4. Service Delivery Models

**Develop township plans and conduct microplanning to tailor service delivery models to support the HIV service continuum (linked to SD1, SD2, SD3 & SD4)**

Township level plans will be developed using the results of the programmatic mapping. Plans will include a typology of local priority populations, specific township priority interventions, activities and targets of achievement. Service delivery models will be established by tailoring services to the specific priority populations. Partnership models will be developed in high and medium burden townships among public, private, NGO and community partners including networks of people living with HIV and priority populations. There are several options for service delivery that can be tailored to the local situation including:

- Dedicated government clinic linked to community outreach
- Dedicated NGO/community-led clinic
- Government or NGO/community-led clinic with dedicated hours for priority populations
- Private sector clinic
- Outreach/mobile clinic run by Government and/or NGOs with community linkages
- Hybrid partnership model between Government, NGO, private sector and communities (e.g. a public sector physician providing clinical services in an NGO-run drop-in centre; or a community network providing support groups within a government facility for people living with HIV).

**Figure 20. Service delivery approaches based upon township classification**

| | High burden | Medium burden | Low burden |
|---|---|---|---|
| Prevention | NGO (& Public)<br>KSC/Outreach | NGO (& Public)<br>Outreach | Public<br>Facility/IEC |
| Testing | ANC, TB-HIV<br>AIDS/STI Team VCT<br>Hospital ART Centre VCT<br>Township VCT<br>HTS/KSC/Outreach | ANC, TB-HIV<br>Township VCT<br>HTS/Outreach | ANC, TB-HIV<br>Township VCT<br>HTS |
| Treatment | Full ART Including complex (up to sub-township)<br>Integrated care<br>Case monitoring | ART initiation and/or maintenance at Township | Referral |

The aim of the tailored service delivery models will be to increase priority population access and linkages to services across the HIV service continuum (Figure 21).

**Figure 21. Continuum of prevention, care and treatment for priority populations**

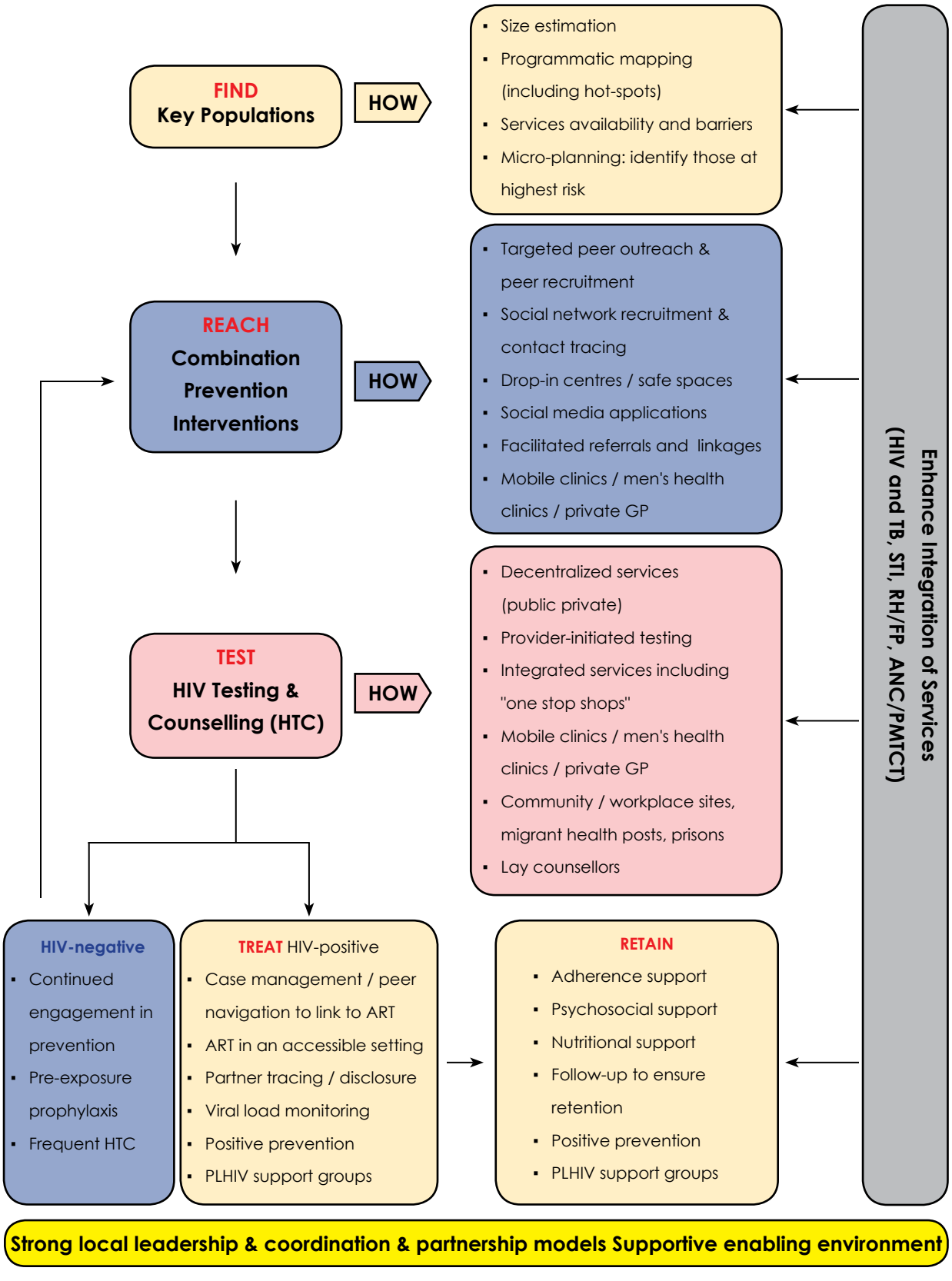


Table 9 provides a comprehensive list of services to be tailored to each population. These services must be supported by a strong community empowerment element and linked to a wider system of critical enablers and structural health and development synergies, in particular health systems strengthening, social protection and gender equality and norms. To support the development and the detailed interventions of the HIV continuum, five strategic directions with key activities and associated results are detailed for the NSP. Structural interventions will be described in Strategic Direction 3 and monitoring approaches in Strategic Direction 4.

**Table 9. Combination prevention interventions by priority population group**

| | Behavioural intervention | Biomedical intervention |
|---|---|---|
| **People who inject drugs** | 1. Strengthen demand creation and risk reduction<br>2. Strengthen addiction/substance abuse programmes<br>3. Support safer injecting practices<br>4. Support positive health, dignity and prevention<br>5. Link to mental health/psychosocial support | 1. Scale up needle–syringe programmes<br>2. Scale up opioid substitution therapy (including community-based and satellite services; take-home doses)<br>3. Increase condom and lubricant use<br>4. Promote and provide frequent and regular HTC<br>5. Strengthen STI screening and treatment<br>6. Provide PMTCT<br>7. Scale up ART (regardless of CD4 count)<br>8. Model pre-exposure prophylaxis<br>9. Provide post-exposure prophylaxis<br>10. Provide vaccination for hepatitis B<br>11. Introduce and scale up overdose management (at DICs, DTCs and through trained peer educators and outreach workers)<br>12. Increase wound care |
| **Men who have sex with men Identify higher risk MSM: apwint & apone** | 1. Strengthen demand creation and risk reduction<br>2. Strengthen community peer-led outreach<br>3. Support positive health, dignity and prevention<br>4. Link to alcohol/substance abuse programmes<br>5. Introduce opinion leaders and new media approaches<br>6. Link to mental health/psychosocial support | 1. Increase male condom and lubricant use<br>2. Promote and provide frequent and regular HTC<br>3. Strengthen clinical health services (STI including anal STIs, anal cancer)<br>4. Scale up ART (regardless of CD4 count)<br>5. Model pre-exposure prophylaxis<br>6. Provide post-exposure prophylaxis |

| | Behavioural intervention | Biomedical intervention |
|---|---|---|
| **Sex workers Identify higher risk SW** | 1. Strengthen demand creation and risk reduction<br>2. Strengthen community peer-led outreach<br>3. Support positive health, dignity and prevention<br>4. Introduce opinion leaders and new media approaches<br>5. Link to alcohol/substance abuse programmes<br>6. Link to mental health/psychosocial support | 1. Increase male and female condom use<br>2. Promote and provide frequent and regular HTC<br>3. Strengthen clinical health services (STI, FP, SRH)<br>4. Scale up ART (regardless of CD4 count)<br>5. Model pre-exposure prophylaxis<br>6. Provide post-exposure prophylaxis<br>7. Provide PMTCT |
| **People living with HIV** | 1. Strengthen positive health, dignity and prevention<br>2. Support disclosure to partner<br>3. Provide mental health/psychosocial support | 1. Scale-up ART (regardless of CD4 count)<br>2. Strengthen treatment adherence<br>3. Promote and provide couple HTC<br>4. Strengthen clinical health services (STI, FP, SRH)<br>5. Provide PMTCT<br>6. Scale up viral load monitoring<br>7. Increase condom and lubricant use |
| **Prison communities** | 1. Introduce risk reduction<br>2. Support positive health, dignity and prevention<br>3. Introduce evidence-informed behavioural interventions<br>4. Provide mental health/psychosocial support | 1. Introduce frequent and regular HTC<br>2. Introduce STI screening and treatment<br>3. Introduce ART (regardless of CD4 count)<br>4. Provide post-exposure prophylaxis |
| **Migrants** | 1. Strengthen demand creation and risk reduction<br>2. Link to alcohol/substance abuse programmes<br>3. Link to positive health, dignity and prevention<br>4. Pre-departure and post-arrival orientation | 1. Increase condom and lubricant use<br>2. Provide needles and syringes<br>3. Increase STI screening and treatment<br>4. Strengthen HTC services<br>5. Scale up ART (regardless of CD4 count)<br>6. Comprehensive referral systems particularly for ART patients |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# F.

# STRATEGIC DIRECTIONS AND PRIORITY INTERVENTIONS

# STRATEGIC DIRECTIONS AND PRIORITY INTERVENTIONS

## Strategic Direction 1: Reducing new HIV infections

REACH & TEST 

**Summary of Priority Interventions**

1. Increase scale of combination prevention interventions for priority populations
2. Maximize HIV testing and linkage to ART among priority populations
3. Maximize efficiency in service delivery and enhance integration opportunities with MNCH, SRH and others
4. Work towards the elimination of mother-to-child transmission of HIV
5. Model pre-exposure prophylaxis (PrEP)

**Context**

Despite past achievements in prevention, important gaps and challenges remain. Critically, no priority population programme has been scaled up to high effective coverage levels. The NSP will aim to increase utilization of effective combination prevention services including testing to ensure those that are HIV-negative stay negative and those that are HIV-positive are immediately linked to treatment services.

**Key Results**

- 90% of priority populations (PWID, SW, MSM, prisoners, migrants and PLHIV) reached by HIV prevention programmes
- 90% condom use among priority populations at last sex
- 30 million needles and syringes distributed to PWID (providing approx. 360 clean needles per year per PWID)
- 32 000 PWID receiving methadone maintenance therapy (MMT) or oral substitution therapy (OST)
- 85% of individuals receive MMT/OST for at least six months
- 90% of those reached with prevention programme tested and know their status
- 90% of people from priority populations received a test in the last 12 months and know their results
- 90% of all PLHIV are tested and know their HIV-positive status (including children and young people)
- 75% reduction of new infections (modelled on 2010 baseline )

### Prevention among people who inject drugs

In 2015, more than 18 million sterile needles and syringes were distributed free of charge to people who inject drugs. However, with current injecting practices estimated at 2–3 daily injections, there continues to be a major gap for the estimated 83 000 people who inject drugs in the country. In 2014, estimates of the proportion of people who inject drugs who reported ever having used a previously used needle varied across the country from 16% in Mandalay to 63% in Waingmaw and Kalay.[49] IBBS data in 2014 showed that access to sterile injecting equipment varied considerably between areas and in a large number of sites, less than 20% of male people who inject drugs were tested in the last year and received their results.

NSP III aims to increase the amount of needles and syringes distributed to more than 30 million and reach 90% of PWID with effective prevention services. More than 10 000 people who inject drugs have received MMT, however demand for services remains higher than availability. NSP III will aim to increase the number of MMT sites from 41 sites currently to 46, with 30 sites in high priority and 15 sites in medium priority townships . This will support a threefold increase in the number of people who inject drugs on MMT to 32 000 persons, while aiming to keep 85% of those receiving MMT on MMT for at least six months by 2020.

### Prevention among female sex workers and their clients

The 2015 IBBS of female sex workers suggests that reported condom use with last paying client in Monywa and Mandalay was 54% and 79% respectively, whereas in most sites on average 70% of female sex workers had received condoms and knew of a place to get an HIV test. In spite of that, only 48% of female sex workers were tested in the last year and knew their test results.[50] In Myanmar, sex workers are classified into street-based and brothel-based sex workers (known as group 1) and entertainment locale-based and 'non-disclosed' sex workers who often use phones and the Internet to link with clients (known as group 2). HIV interventions must reach both groups with effective prevention services to encourage condom use and increase uptake of HIV testing.

NSP III aims to reach 59 450 female sex workers, equivalent to 90% of the estimated population, and one third of all male clients of sex workers (334 659) with effective prevention services, resulting in an increase in condom use at last sex with a client to reach 90%.

### Prevention among men who have sex with men, including transgender persons

Analysis of the 2015 IBBS on men who have sex with men suggests that *apwint*, *apone* and *tha nge* (known collectively as group 1) frequent places where people go to look for sex, and have multiple sexual partners; and that *apwint* (some of this group are considered transgender persons) and *apone* may be at higher risk of HIV infection because they are generally the more receptive sexual partner during anal sex, although additional research is required to understand gender dynamics and sexual risk in these groups. According to the IBBS, prevention coverage (for group 1) in some geographic areas is above 75%, but in Yangon and Monywa only 54% of men who have sex with men received condoms and

[49] PWID Integrated and biological surveillance study, 2014
[50] Integrated biological and behavioural survey (IBBS) of FSW in five cities in Myanmar, Draft-March 2016

knew where to get tested and less than 40% of the men who have sex with men in the same cities were tested in the last year and knew their result.[51] Less is known about the men who have sex with men classified as 'non-disclosed' (or group 2) and about the risk behaviours of this group.

NSP III aims to reach 113 400 men who have sex with men, including transgender persons (approximately 80% of 'disclosed' and 20% of 'non-disclosed') with effective prevention programmes and aims that 91 685 will have received a test in the last 12 months and know their result. Strategies will be evaluated to see if the target to reach more 'non-disclosed' men who have sex with men can be expanded through innovative social media, test-and-treat campaigns and proactive outreach linked to services friendly towards men who have sex with men and transgender persons.

### Prevention among migrant and mobile population

As mentioned earlier, migration alone is not considered a risk for HIV exposure, however there is evidence that some migrant and mobile populations may engage in risk behaviours.[52] Qualitative evidence comes from research conducted in Myawaddy and Kawkareik townships in Kayin State, of sexual interaction between so-called mobile men with money and female sex workers or men who have sex with men.[53] Moreover, IOM project data found that 18% of people identifying as migrants in Mon and Kayin states were HIV-positive.[54]

NSP III has prioritized many townships identified to have migrant and mobile populations, and service delivery mapping will help to further extend strategies for those engaging in risk behaviours. Service packages for female sex workers, men who have sex with men and people who inject drugs will incorporate an understanding of how mobility potentially increases HIV risk and reduces access to services, including HIV treatment. Specific packages for people in border/key urban areas may be warranted in or near migrant clusters and transit points. In addition, cross-border referral mechanisms and agreements to access health services in destination countries will be strengthened.

### Prisoners and other closed settings

NSP III will focus on the establishment of a comprehensive HIV package for prisoners, which will aim to better respond to HIV, TB, viral hepatitis and drug dependency in prisons in Myanmar through developing an integrated system of health services including: HIV–TB services and evidence-informed drug dependency treatment in prisons.[55] The programme will be implemented jointly by the Ministry of Health and Sports (MOHS) and the Ministry of Home Affairs (MOHA), with support from international agencies. The continuum of services will link prison facilities and prevention, care and treatment in the community to ensure continuity of access to ART for individuals entering and exiting prisons. Targets will be set in the first year for comprehensive coverage and service delivery outcomes.

[51] Integrated biological and behavioural survey (IBBS), MSM, Draft-March 2016
[52] IOM 2010. Migration and HIV/AIDS in Thailand: Triangulation of biological, behavioural and programmatic response data in selected provinces Bangkok, Thailand
[53] IOM 2014. HIV Vulnerability and Service Availability in Mobility Settings of Myawaddy and Kawkareik. Draft
[54] IOM 2014 Project Data. "Migrant" classification is mutually exclusive with other risk groups such as FSW and MSM
[55] Integrated HIV, Tuberculosis, Viral Hepatitis and Evidence-based Drug Dependency Treatment Services in Closed Settings in Myanmar, Draft-2016

### Opportunities for improvement

- **Significantly scale up coverage of effective combination prevention services among people who inject drugs,** including innovative models for needle and syringe programme, expansion of oral substitution services and overdose prevention.

- **Increase uptake of HIV testing and counselling services** through community-based and mobile services **and prompt access** for treatment for all priority populations, including those under 18 years old.

- **Integrate TB screening in HIV prevention programmes with linkages to TB diagnosis and treatment** particularly for people who inject drugs, but also for other priority populations.

- Use social **media and mobile applications and other innovative models.**

- Implement **partner tracing and testing** to expand testing to intimate partners of priority populations.

- Develop **peer-driven outreach models t**o access combination prevention services and link this to **a case management approach.**

## Priority Interventions

### 1.1 Increase scale of effective combination prevention interventions for priority populations

The purpose of priority intervention 1.1 is to strengthen and scale up the provision of effective combination prevention services in high, medium and low priority townships with tailored services depending upon local needs. NSP III will apply strategies to identify and reach those at the highest risk of infection, with increased intensity in high priority townships. Five key components of HIV prevention programming are identified:[56]


[56] HIV Prevention Programming for Key Populations in Myanmar: 2016-2020. Draft-April 2016

1. Combination HIV and TB prevention. A package of HIV–TB prevention services that focuses on knowledge and skills enhancement for health and for behaviour change.
2. Comprehensive HIV prevention outreach. Outreach prevention that encompasses case management practices that assess and respond to HIV and other health and welfare needs of priority populations.
3. Key population service centres. Transformed drop-in centres that are responsive, key-population-oriented services with proactive community-based outreach in HIV high burden areas that provide health services for key populations for HIV.
4. HIV case management. Services that link people living with HIV to care, support and treatment initiation and long-term health support.
5. Proactive efforts to raise demand for information and services among key populations including hidden/ undisclosed populations, using innovative social media approaches.

Within the scope of each priority intervention or programming area, a number of activities are recommended. These listed in table form, below, along with those key partners in the national response to HIV that are responsible for their implementation.

## 1.1 Recommended activities

**PREVENTION**

1. **Scale up HIV combination prevention interventions** for priority populations (people who inject drugs, men who have sex with men, sex workers, prisoners and migrants, including young priority populations), people living with HIV and their partners
2. Formalize NAP, civil society and implementing partners' roles and responsibilities

**Partners responsible**

- Lead partner: MOHS NAP in collaboration with civil society networks
- Support partners: United Nations system, donors and INGOs
- Implementing partners: Local AIDS/STI teams, NGOs and CBOs, PLHIV and key population networks, private sector health care providers, pharmacies and shops, workplace partners, social media partners, risk venue owners, drug treatment centres and related departments under Ministry of Home Affairs

Figure 22 outlines the township-level prevention programme service delivery approach that will be implemented based upon township classification. In high priority townships there will be a rationalized use and tailored approach to key population service centres (KSC). One-stop shops for integrated service delivery will be established that provide diagnosis and treatment for STI/VCT/TB/MMT and immediate access to ART. In medium priority townships, prevention programmes will build upon the 100% Targeted Condom Promotion (TCP) programme for female sex workers and men who have sex with men with some support from NGOs where needed with outreach, education and smartphone-based activities. NGOs will continue to deliver needle and syringe programmes and other services to people who inject drugs and voucher systems in collaboration with pharmacies will be modelled. In low priority townships, prevention will be done by the public sector including commodities, HTC, education and referral for other services.

**Figure 22. Prevention service delivery approach by township priority classification**

| High priority | Medium priority | Low priority |
|---|---|---|
| **DIC transformed to key population service centres (KSC) – outreach through NGOs linking to public sector and private service providers**<br><br>• Combined local mapping between Government/ NGOs<br>• According to locations of FSW/MSM & PWID<br>• Large, medium, small sized KSC<br>• KSC with ART, without ART<br>• KSC as a base for managing outreach<br>• Strengthen comprehensive combination prevention (CCP) for FSW & MSM<br>• Social media network promotes public, private and NGO services | **By public sector (NGO support as needed)**<br><br>• Local mapping led by Government<br>• Outreach building on CCP for FSW/MSM<br>• NSP for PWID (e.g. using a coupon scheme)<br>• Private sector involvement<br>• According to locations of key populations<br>• Social media network promotes public and private services | **By public sector (township public health)**<br><br>• Periodic monitoring of emergence of key populations and/or HIV reports<br>• Commodities, HTC, IEC at township health facilities<br>• Referral for other services<br>• Social media network promotes public services |

### 1.2 Maximize HIV testing and immediate initiation of ART among priority populations

Decentralization of HTC services (with NGO and general practitioners being able to provide testing, with same-day results) resulted in an increase in HTC uptake in 2014 and 2015. However, there remains a need for clear national guidance on standardized HTC protocols. HTC sites often refer clients to other health facilities for confirmation of HIV test result, which leads to a large loss to follow-up. The Service Delivery Review concluded that there was limited availability and promotion of VCT for key populations and limited community based testing. People living with HIV are primarily seeking testing and discovering their status when they are already very sick.[57]

**Overview of current HIV testing availability in Myanmar**

- **Key populations** are reached through outreach activities or drop–in centres, which may be provided by NGO partners or the local AIDS/STI team of the National AIDS Programme
- **Voluntary counselling and HIV testing (VCT)** is provided by the AIDS/STI teams, and by some NGO partners
- **Provider-initiated testing and counselling (PITC)** for pregnant women and TB patients is provided through public health facilities, some NGOs, and in MMT sites
- **Blood safety services** are delivered in public hospitals

[57] Optimizing Myanmar's National Strategic Plan on HIV and AIDS (2016-2020) for maximum impact and sustainability: Service Delivery Approaches, draft 2016

- **Diagnostic testing** is also available in health care settings including hospitals, general practitioners, and private medical laboratories

**Under NSP III, early testing will be promoted.** HIV testing services will continue to be decentralized, guided by published national HTS guidelines and standard operating procedures (SOPs), and expanded community-based testing (outreach based screening and mobile clinics) and within key populations service centres (KSC). VCT will be advertised and offered in hospitals for clients of sex workers, unreached key populations and their partners. Co-location of confirmation testing will occur in ART initiation sites in hospitals and decentralized ART sites. Provider initiated testing and counselling will be ensured for STI clients, TB patients, pregnant women and prisoners. A quality assurance system for testing will be established to ensure that national protocols are followed. Demand raising will occur through innovative channels including through social networks, social media and FM radio in more remote areas.

Overall, proactive, community-based and provider-initiated HTC services will be supported to identify asymptomatic HIV-positive people with early testing and improved access to treatment. Convenient, accessible treatment services tied to prevention services will be emphasized for increased uptake of HTC with same-day test results to reduce dropout rate. For young priority populations, HTC (and prevention) services will be based on a provider's assessment of the client (based on competencies, ability to be tested and understanding). Services will be tailored to increase access to young populations. In support of HTC scale-up, lay personnel (non-medical peer educators, outreach workers and counsellors) will be trained and supervised to independently conduct HIV testing using rapid diagnostic tests. This task-shifting will reduce the pressure on current medical human resources and reduce loss to follow-up caused by delays in HIV testing and receiving results.

## Proposed approach for HIV testing and counselling

- **Outreach testing and key population service centre** for key populations
- **VCT for FSW clients, unreached key populations** and their partners in hospitals
- **Co-location of confirmation HTC and ART** initiation in hospitals
- **Provider initiated testing/counselling** for STI clients, TB patients, pregnant women and prisoners
- **Expanded quality assurance**
- **Demand raising** through social network campaign, social media, FM radio
- **Peer facilitated/peer navigated linkages to care and treatment**

## 1.2 Recommended activities

1. Review, adapt and publish testing guidelines to ensure the rapid scale-up of HTC and operationalize according to priority population needs
2. Establish VCT in hospitals and ensure promotion of services in the community
3. Expand co-location of confirmation HTC at ART initiation sites including hospitals
4. Expand priority population testing
   - **PWID, MSM and SW:** integration of HIV testing in community outreach, KPCs, mobile vans and facility-based prevention and care services
   - **Prisoners:** integrate into prison health services
   - **Mobile and migrants:** integrate through community sites, migrant health posts and workplaces
   - **Increase access for young** priority populations, children, and orphans and vulnerable children where needed
5. Conduct targeted **peer outreach**, social media campaigns and social network recruitment for testing
6. Model the use of **social media** for Know Your Status campaigns
7. Further decentralize and **promote PITC HTC** services including for STI clients, TB/HIV, hepatitis B, C and others
8. **Expand quality assurance** and supervision systems to include monitoring of quality of rapid HIV testing, counselling, confidentiality
9. **Identify and test partners of PLHIV** through partner notification, contact tracing and testing
10. **Develop local language** promotional materials, job aids and approaches to address ethnic minority populations and ensure access of these across services
11. Strengthen peer navigators for linkage to care and treatment (see 2.1)

**Partners responsible**

- Lead partner: MOHS NAP
- Support partners: United Nations system, donors, INGOs
- Implementing partners: Local AIDS/STI teams, health care workers, government health facilities, NGO & CBO partners, PLHIV and key population networks, private facilities (specialist hospitals and private general practitioners' clinics), social media partners, risk venue owners, drug treatment centres

**Results**

- 90% of those reached with prevention programme tested and know their status
- 90% of people from priority populations received a test in the last 12 months and know their results (disaggregated by PWID, MSM, SW, migrants and prisoners)
- 90 % of newly diagnosed HIV-positive people newly enrolled and receiving care (including ART)
- 90% of all PLHIV are tested and know their HIV-positive status (including children and young people)

**1.3 Maximize efficiency in service delivery and enhance integration opportunities with TB, MNCH, SRH, and others including hepatitis**

Integration of services is an important way to address the multiple needs of patients, serve as an entry-point to provision of HIV services to those accessing other services, while reducing service costs, enhancing the effectiveness and sustainability of programmes, and generating wider health benefits. Integration of services may include HIV into other health areas (e.g. TB, MNCH, SRH including STI and family planning), provision of family planning and STI services within HIV care, and integration of HIV services in general medical care.

NSP III will ensure access to, and use of, sexual and reproductive health information and quality services through integrated SRH services for adolescents.

Continued scale-up of provider-initiated testing and counselling of STI and TB patients will be an efficient strategy to identify people living with HIV who may not yet know their HIV status, including the wide network of general practitioners throughout Myanmar (see Section 2.3 for full TB–HIV integration).

The first national viral hepatitis strategy is in development, and aims to increase availability of HBV vaccines to priority populations and annual screening for people living with HIV and other priority populations—a key area of collaboration between the NAP and the National Programme on Viral Hepatitis Control.

Currently, blood supply is screened for HIV, HBV, and HCV in public sector sites but not in the private sector and will therefore be strengthened . Health care workers will be trained in infection prevention, and equipped with gloves, masks and other commodities and have access to proper waste disposal facilities to reduce transmission of HIV (and other infections) in health care settings. Post-exposure prophylaxis will be made available in all health care settings, with appropriate protocols, training and reporting systems in place.

## 1.3 Recommended activities

**Link and integrate HIV services with TB, MRH, CHD, hepatitis B and C and other services**

1. Integrate HIV testing services within TB, MRH, CHD and STI services (provide SOPs, HIV test kits and training)
2. Integrate voluntary and non-coercive family planning and STI services within HIV services
3. Integrate PMTCT services into MRH and CHD (See 1.4)
4. Ensure collaboration with the National Programme on Viral Hepatitis Control to ensure HBV vaccines are provided to priority populations
5. Link to National Programme on Viral Hepatitis Control for treatment

**Health care settings**

6. Screen blood supply for HIV, HBV and HCV in public and private sector sites
7. Institute mechanisms to report and receive post-exposure prophylaxis (PEP) for occupational exposure
8. Improve disposal of medical waste

**Partners responsible**

- Lead partner: MOHS NAP in collaboration with MRH and CHD, Department of Medical Services, National Programme on Viral Hepatitis Control, government health facilities and the private sector
- Support partners : United Nations system, donors and INGOs

**Results**

- Increased number of TB, MRH and CHD sites that provide HTS
- Increased number of HIV testing sites that integrate voluntary and non-coercive family planning and STI services
- Increased number of integrated PMTCT –MRH and CHD services providing HTS
- Increased availability of HBV vaccines to priority populations for people living with HIV and other priority populations
- Increased number of private sector facilities screening for HIV-HBV and HCV
- Increased number of health workers receiving PEP for occupational exposure
- Increased number of health facilities with waste disposal following international standards
- Increased number of people diagnosed with HIV receiving HBV vaccine and HCV treatment as needed
- See TB results under Section 2.3

### 1.4 Work towards the elimination of mother to-child transmission of HIV

To speed up efforts towards the elimination of mother to- child transmission of HIV, the focus of PMTCT will be ensuring integrated maternal, neonatal and child health care for women living with HIV and their babies until 18 months with strong case management. While emphasis will be on Rural Health Centers, urban, semi-urban and township hospitals in high and medium priority townships, basic minimum services (HIV testing and counselling, and ARV for prevention of mother to child transmission and ARV prophylaxis for children) will be made available in routine antenatal care services in low priority townships. An integrated case management approach at field level will be developed through a partnership between the Maternal and Reproductive Health (MRH) and Child Health Development (CHD) programmes to support the PMTCT continuum with the involvement of medical social personnel and PLHIV networks to provide counselling and adherence support where possible.

The AIDS/STI teams will provide capacity building, on-site mentoring and supervision requested to track women and babies throughout the continuum of PMTCT services. By strengthening the National Health Laboratory and specific referral system (linking with the viral load referral system), DNA PCR testing will be scaled up to ensure all exposed infants are tested for HIV in a timely manner, supported by systems to identify and track infants with an HIV-positive diagnosis until enrolment into treatment and care.

**The key areas for PMTCT include:**

- Maintain/increase current coverage of PITC for pregnant women and ART for HIV-positive pregnant women
- Rapidly expand early infant diagnosis
- Strengthen linkage to pediatric ART
- Quality improvement at the point of care for testing and ARV treatment for HIV positive pregnant women and their children to ensure the greatest impact

NSP III aims to test 95% of all pregnant women; provide 90% of all HIV-positive pregnant women with PMTCT services and ensure 90% of HIV-exposed infants receive ARV prophylaxis by 2020.

## Service delivery for PMTCT

- **Integrated services with MRH and CHD**
- **Emphasis will be on rural health centers, urban, semi-urban and township hospitals in high and medium priority townships.** In addition, **basic minimum services** (HIV testing and counselling, and ARV for prevention of mother to child transmission or referral for life long ART for pregnant women and ARV prophylaxis for children) to be made available in routine antenatal care services **in low priority townships**
- **Integrated case management** with the Maternal and Reproductive Health and Child Health Development programmes (support from medical social personnel and PLHIV networks where possible)
- Strengthen National Health Laboratory and referral system

## 1.4 Recommended activities

1. Continue high rates of HIV testing of pregnant women
2. Develop SOPs for basic health staff on integrated **case management for PMTCT**
3. **Explore the involvement** of medical social personnel for counselling support coupled with the involvement of PLHIV networks for community adherence support
4. Develop and implement a **quality assurance/quality improvement** programme for PMTCT
5. Ensure 100% access to pediatric ARV for infants born to HIV-positive mothers in line with National Guidelines for the clinical management of HIV infection in Myanmar
6. Ensure 100% access to lifelong ART regardless of CD4 count for HIV-positive women[58]
7. **Improve monitoring** and regular yearly programme review meeting for PMTCT programme
8. **Improve access to DNA-PCR test** results of HIV exposed children to improve EID
9. **Improve follow-up of infants** born to HIV-positive mothers
10. Increase training to basic health staff and other health care provider **to eliminate stigma and discrimination** towards HIV-positive mothers and their infants
11. Provide psychosocial support and counselling for HIV-positive pregnant women to assist increasing adherence, retention and reducing self-stigma and minimizing loss to follow-up
12. **Ensure linkage to pediatric** treatment
13. **Develop** promotional materials, job aids in local language and find out approaches to address needs of ethnic minority populations

**Partners responsible**

- Lead partner: MOHS NAP, MRH, CHD, pediatric departments
- Support partners: United Nations system, donors, INGOs
- Implementing partners: NGOs, government health facilities, private facilities (specialist hospitals and private clinics)

**Results**

- 95% of pregnant women attending antenatal care services who received HIV testing and test result with post-test counselling in 2020
- 90% of HIV-positive pregnant women received ART to reduce the risk of mother-to-child transmission in 2020
- 90% of HIV-exposed infants initiated on ARV prophylaxis
- 90% of HIV-exposed infants received a virological test for HIV within 2 months of birth
- 90% of HIV-exposed infants started on cotrimoxazole prophylaxis within 2 months of birth
- 100% of identified HIV-positive infants initiated on ART by 12 months of age
- Subnational validation of elimination of mother-to-child transmission of HIV in at least one district by 2020.

[58] Option B+ refers to the PMTCT approach in which all pregnant women living with HIV are offered lifelong ART regardless of CD4 count

### 1.5 Model pre-exposure prophylaxis (PrEP)

Oral pre-exposure prophylaxis (PrEP) containing tenofovir disoproxil fumarate (TDF), is now recommended by WHO as an additional prevention choice for people at substantial risk of HIV infection as part of combination prevention.[59] A feasibility study on PrEP is planned in Myanmar to determine the acceptability of PrEP to potential key population groups (such as men who have sex with men or sex workers) and considerations for its implementation. Data from the study will be reviewed and additional studies conducted if needed. In addition, NAP and partners will analyse strategic information to identify those who would fall into the substantial risk category and define the eligibility criteria for introduction of PrEP. The MOHS and partners will implement a model PrEP programme and document its results and outcomes, as well as challenges and lessons learned. This will inform the development of a national policy to scale up coverage of and adherence to PrEP among those most in need.

#### 1.5 Recommended activities

1. Develop a model PrEP programme for populations at substantial risk of HIV infection
2. Utilize results to inform policy and PrEP programme

**Partners responsible**

- Lead partner: MOHS in collaboration with NGOs, government health facilities
- Support partners: United Nations system, donors, INGOs
- Implementing partners: NGOs, CBOs, KP, networks

**Results**

- PrEP model implemented and national policy adopted
- Increased number of priority populations using PrEP (target to be defined by model programme and policy)

[59] WHO 2015. Guideline on when to start antiretroviral therapy and on pre-exposure prophylaxis for HIV

# Strategic Direction 2: Improving health outcomes for all people living with HIV

## ENROL, TREAT, RETAIN & SUPPRESS VIRAL LOAD

### Summary of Priority Interventions

1. Maximize immediate enrolment, linkage and retention in ART and viral load monitoring
2. Improve the quality, efficiency and coverage of care and ART
3. Integration of TB and HIV (testing, diagnosis and treatment) services
4. Monitor for viral suppression
5. Enhance positive prevention

### Key Results

- 90% of diagnosed people living with HIV receiving ART
- 90% of adults and children on ART 12 months after initiation of ART
- 90% of HIV-positive new and relapsed TB patients on ART during TB treatment
- 90% of HIV-exposed infants initiated on ARV prophylaxis
- 100% of identified HIV-positive infants initiated on ART by 12 months of age
- 90% of people living with HIV on ART received a viral load test in the last 12 months
- 90% of people living with HIV and on ART achieving viral suppression

### Context

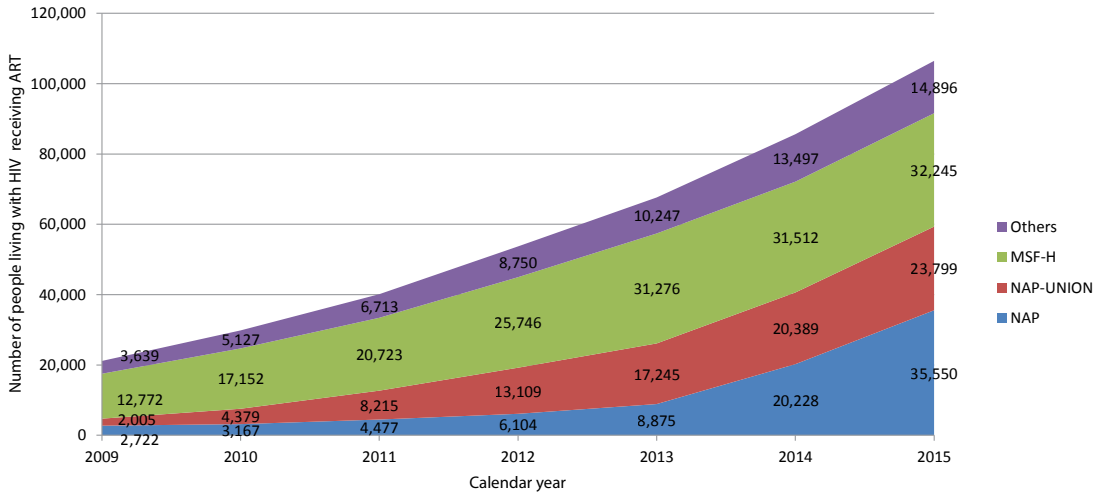
#### Antiretroviral therapy (ART)

Myanmar has achieved major gains in scaling up HIV testing and treatment with an impressive increase in the number of people on antiretroviral therapy (ART). In the last three years, there has been a 63% increase in the availability of ART facilities with 82 public sector ART initiation sites and 137 decentralized sites providing ART maintenance. In addition, there are 50 NGO/INGO/private sector ART sites. ART coverage has doubled, reaching over 47% of estimated number of people living with HIV in 2015, or 106 490 individuals.[60]

Nonetheless, improvements still need to be made in initiation into pre-ART care, and monitoring and retention from HIV diagnosis to ART initiation. In 2014, more than 112 479 people living with HIV were in care, including both the number of people on ART and the number of people living with HIV who are not on ART but are receiving cotrimoxazole prophylaxis.[61] Increasing consistent use of the pre-ART register in all sites would improve the reliability of these figures, which currently underrepresent the total number of people living with HIV on care.

[60] MOHS communications, based upon Spectrum 5.4 April, 2016.
[61] MOHS, GARPR, 2015

**Figure 23. Number of people living with HIV on ART, 2009–2015**




Source: GARPR reports 2015 programme data

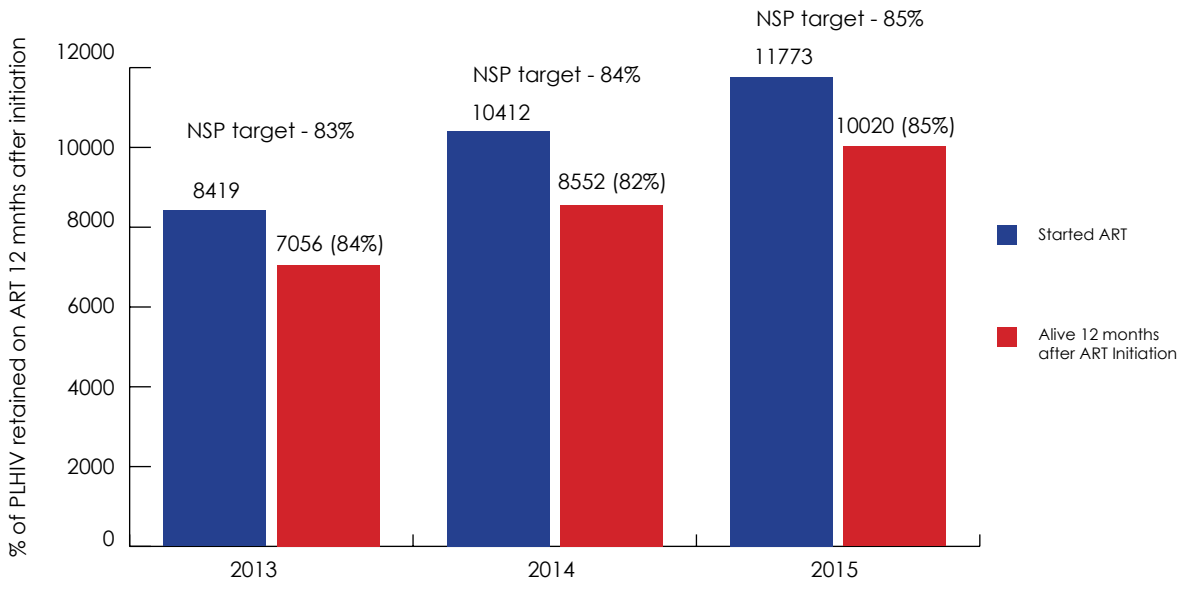
**Table 10. PLHIV newly enrolled in care and ART initiation, public/private sector, 2014–2015**

| | PLHIV | 2014 | % initiated (2014) | 2015 | % initiated (2015) |
|---|---|---|---|---|---|
| **Public sector** | Newly enrolled | 19 599 | 65% | 27 833 | 74% |
| | ART initiation | 12 749 | | 20 611 | |
| **Private sector** | Newly enrolled | 8079 | 76% | 5582 | 81% |
| | ART initiation | 6198 | | 4543 | |

Source: MOHS/NAP Programme Reports, 2014–2015

Not all ART initiation and maintenance sites are monitoring and reporting patient retention on ART for 12 months after initiation. However, as shown by MOHS NAP reports, there has been a steady increase in the absolute number of patients alive 12 months after ART initiation as well as some improvement in the overall proportion, reaching 85% in 2015 or 10 020 individuals (Figure 24). It is important to note that this represents a relatively small subset of the total number of people living with HIV on ART. Establishment of an AIDS death registry and an improved Health Information System would support the strengthening of the Myanmar health system and address these challenges.

**Figure 24. Cohort alive 12 months after ART initiation (2013-2015)**

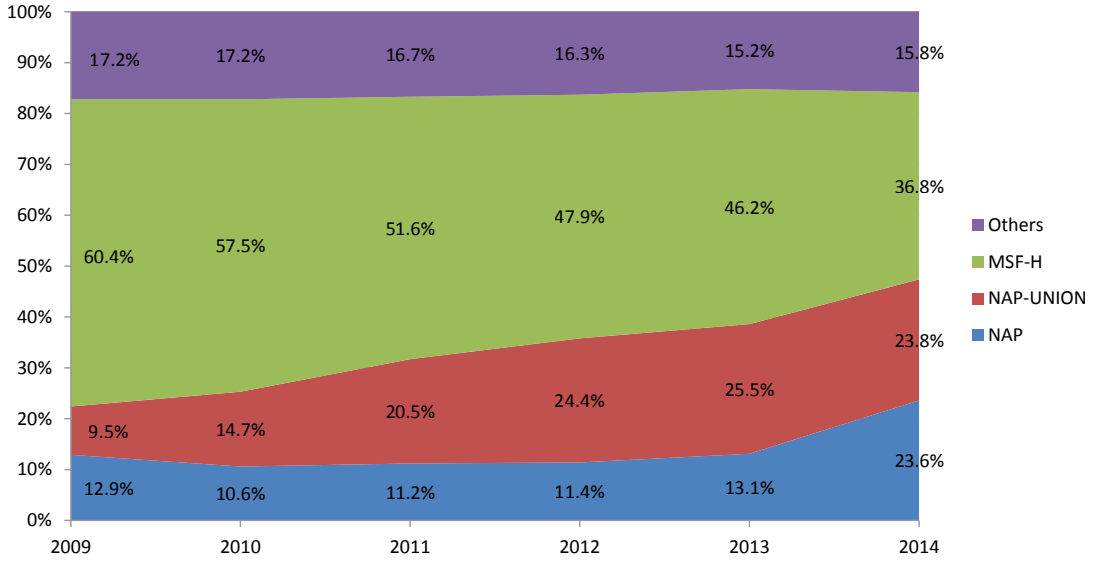



Source: GARPR reports (2013, 2014, 2015)

In terms of viral suppression, in 2015 out of the 106 490 patients (adults and children) who were on ART, only 9700 had a viral load test. Among those who had a viral load test, 8421 had achieved viral suppression. Therefore among those tested for viral load, 86.6% had achieved viral suppression, but only 9% of people under treatment benefited from a viral load test.[62]

The current model of ART service delivery in Myanmar varies across the country; however at a national level, 56% of ART is provided through a collaborative model of Government/NGO partnership (34% fully Government supported and 22% collaborative Government/NGO) and the remaining 44% of ART is provided in the NGO sector (Figure 25).

**Figure 25. Providers of ART service delivery**




[62] MOHS, GARPR, 2015

The aim of NSP III is to provide ART to 90% of diagnosed people living with HIV receiving ART. To accomplish this expansion in a sustainable manner, implementation of NSP III will support a greater transition of ART from the NGO sector to the public sector to ensure greater efficiency of long-term care of people living with HIV. Further decentralization will be supported in high and medium priority townships and new collaborative models (e.g. satellite sites/ general practitioners and community based ART distribution) will be piloted and implemented.

As highlighted in Section B: Operational Context in Myanmar, efforts to support the programme of health reforms and to end HIV as a public health threat will be harmonized. The HIV NSP III will integrate cost effective treatment services into Myanmar's Basic Package of Health Services. Table 11 lists HIV and STI interventions and services that are planned to be covered in the Basic Package of Health Services.

**HIV–TB Service Delivery Collaboration**

As previously described, by 2014 HIV–TB collaborative activities had expanded to 236 townships with full national coverage expected by 2016.[63] The proportion of TB patients with known HIV status increased from 60% in 2014 to 74% in 2015, although the proportion of HIV-positive TB patients receiving ART remained low at 38%.[64] The coverage of HIV testing among TB patients in townships with HIV–TB collaborative programming shows significant improvement, but is not consistent across the country. The case fatality rate among HIV-positive TB patients remains high at about 15% compared to 4% in HIV-negative TB patients. During 2014, 35 townships provided TB–HIV collaborative quarterly reports. A total of 10 345 people living with HIV were enrolled under the care of the NAP in these townships, out of which 85% received TB screening. There were a number of gaps in starting TB treatment, cotrimoxazole prophylaxis and ART among HIV-positive TB patients.[65] The coverage of isoniazid preventive therapy (IPT) among people living with HIV remains very low.

**Table 11. HIV and STI Components of the Basic Package of Health Services**

| | Interventions and Services Provided | Community | Subrural Health Centre | Rural Health Centre | Maternal and Child Health Centre | Urban Health Centre | Station Hospital | Township Hospital |
|---|---|---|---|---|---|---|---|---|
| 1 | Health education and awareness raising | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 2 | Promotion and distribution of condoms | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 3 | HIV testing services (HTS) | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 4 | Ante-natal care including voluntary counselling and testing services | No | Yes | Yes | Yes | Yes | Yes | Yes |
| 5 | ART (facilities-based) and referral | No | No | Yes | No | Yes | Yes | Yes |
| 6 | Prophylaxis of opportunistic infections | No | Yes | Yes | Yes | Yes | Yes | Yes |
| 7 | Treatment of opportunistic infections | No | No | Yes | No | Yes | Yes | Yes |
| 8 | Post-exposure prophylaxis (PEP) | No | No | No | No | No | Yes | Yes |
| 9 | VDRL test for syphilis and syndromic management of STIs | No | Yes | Yes | Yes | Yes | Yes | Yes |

Source: National AIDS Programme, MoHS, January 2017

[63] Myanmar National Strategic Plan for Tuberculosis (2016-2020)
[64] Review of the collaborative TB/HIV activities in Myanmar 18-30 January, 2016
[65] Ibid, 2016

In terms of TB patients on ART, none of the 17 states and regions reported reaching 60% of TB–HIV patients on ART and only 3 out of the 17 regions reported 50% coverage of ART for TB–HIV patients.[66] There are many opportunities to enhance integration of HIV testing, care and treatment with TB services including in hospital settings, but also in prisons and with migrant and mobile populations and other priority populations. There are also opportunities to improve TB treatment services in HIV care and treatment settings.

**Opportunities for Improvement**

- **Transition from NGO to public sector service delivery** to increase cost efficiency and ensure sustainability.
- **Integrate TB screening and ensure TB diagnosis and treatment services** through one-stop shop service for priority populations to increase reach of people living with HIV and their enrolment in TB treatment for improved health outcomes for HIV-positive TB patients.
- **Treat earlier.** In 2014, over 47% of newly enrolled HIV-positive patients were accessing ART when their CD4 cell counts were very low (<200). Early treatment will greatly enhance health outcomes for people living with HIV.
- **Retain patients.** Loss to follow-up is an issue, due to weak referral systems, distance from patients' homes to treatment centres, mobility and migration of priority populations and fear of stigma and discrimination in the health care setting.
- **Monitor treatment failure.** There is a need for **standardized adherence support** in both NGO and public sectors, as well as expanding viral load testing capacity in order to monitor treatment failure.
- **Strengthen case reporting and monitoring of the HIV continuum of services** (see Strategic Direction 4).

### Proposed public - NGO - private collaboration for ART service delivery

1. **Transition from NGO to public sector delivery with private sector collaboration**
   a. Establish individual case monitoring, starting from HIV diagnosis–ART initiation phase in high priority townships across public - NGO - private sectors
   b. Standard adherence support in NGO and public sector settings
   c. Reduce stigma and discrimination in health facilities
   d. Transition support by NGO for public facilities
2. **Expand private sector collaborative models, e.g. satellite sites/general practitioners**
3. **Establishing key population-friendly service network involving public sector, NGOs, general practitioners and key populations**
4. **Trial community** based ART service delivery, including ART adherence clubs and community based ART distribution schemes

[66] Strategic Synthesis Paper: Review of HIV Testing, Care and Treatment, September 2015

## Priority Interventions

### 2.1 Maximize immediate enrolment, linkage and retention in ART

The initiation of ART will be accelerated for all people living with HIV within this strategy. Targeted HIV testing and immediate enrolment through the test and early treatment approach will be ensured through the provision of services closer to and tailored for priority populations.

The WHO guidelines to treat all regardless of CD4 count adopted in 2016, will be rolled out in 2017. Efforts to strengthen peer facilitated linkages between existing services or a peer navigation system will be developed. Township and local capacity will be built to track and link points of testing and points of treatment. Innovative public, private and community partnerships will enhance priority population access to services including public sector outreach clinics in community settings and formalized community roles in public sector health services. Community based ART adherence clubs and community based ART distribution schemes will be supported.

In high priority townships, services will be integrated and 'one stop shops' defined to include peer driven outreach and recruitment, counselling and immediate confirmatory testing. Integrated access to MMT, ART and TB services and peer support for people living with HIV will be established. A large effort will be undertaken to ensure a reduction of loss to follow-up. Treatment literacy will be integrated into services to enhance success of an expanded programme to ensure that 90% of people on ART achieve viral suppression. Moreover, adherence can be more challenging among adolescents due to their emotional and lifestyle characteristics. Recognizing the needs of young people, services need to be strengthened with treatment preparedness counselling for adolescents, including ongoing peer support services to encourage uninterrupted ART adherence.

### 2.1 Recommended activities

1. **Identify barriers to immediate enrolment and retention**
2. **Strengthen ART enrolment and retention in high priority townships**
   - Conduct assessment of health facilities in the public sector including case load, absorptive capacity, human resources and management needs, and opportunities for integrated services for accelerating transition and maximizing coverage and retention of ART services
   - Establish roles and responsibilities of public sector, NGO sector, general practitioners and community partners in expansion and transition of ART services
   - Establish confirmation HTC at ART initiation sites to maximize retention from HIV diagnosis to ART initiation
   - Establish sub-regional plans for the transition and expansion of ART services and collaborative SOPs to facilitate the transition of patients from the NGO to public sector
   - Conduct trainings and provide support to ART sites for increasing case load

3. **Integrate HTS and ART services with MMT services**
   - Train MMT sites to support HIV testing, ART initiation where possible and ART maintenance
   - Assess ability of MMT sites to also support sexual partners of people who inject drugs and their families
4. **Develop innovative models to improve enrolment and retention**
   - **Involve community and health care workers** in creating solutions to reduce loss to follow-up
   - Formalize local system for patient tracking with rapid response mechanism to track and re-engage defaulters on a weekly basis
   - Formalize and enhance the **peer educator's role** in helping people living with HIV to navigate treatment services (e.g. peer navigation[67])
   - **Utilize technology and social media** to support innovative models and social networks/SMS reminders to motivate enrolment and retention
5. Special enrolment and retention needs by priority population
   - **PWID**: Increase integration of MMT and ART sites to improve retention
   - **SW**: Due to mobility, develop linked network of SW friendly services and longer prescriptions
   - **MSM**: Develop MSM sensitive peer system and tailor ART service models to MSM needs
   - **Mobile/migrants**: Link enrolment with TB services, develop and implement a system to initiate or continue ART for returned migrants living with HIV and formalize link with cross-border initiatives in key areas (Myanmar–Thailand border)
   - **Prisoners**: Provide ART in prisons (satellite sites) for those newly diagnosed and those previously on ART, link released prisoners to ART services in the community and integrate TB–HIV services for prisoners
   - **PLHIV**: Enhance PLHIV support groups and develop peer navigators to assist other PLHIV in enrolment and retention
6. **Develop SOPs and train peers, health care workers** and partners in models to track cases and to rapidly act on defaulters
7. **Develop local language** promotional materials, job aids and approaches to address ethnic minority populations and ensure access of these across services
8. **Design an associated system including unique identifier codes** and defaulter tracking tool to track, monitor and retain patients (SD4)

**Partners responsible**

- Lead partner: MOHS NAP
- Support partners: United Nations system, donors, INGOs
- Implementing partners: HIV/STI teams, government health facilities, PLHIV and key population networks, civil society networks and NGO partners, private specialist hospitals and private clinics

[67] Optimizing entry into and retention in HIV care and ART adherence for PLWHA: A train the trainer manual for extending peer educators' role in patient navigation, International Association of Physicians in AIDS Care and National Minority AIDS Council, 2012, USA

**Results**

- Reduced the number of people living with HIV initiating ART at CD4 <200 by 50% by 2018 (note: 2014 CD4 <200 was 47% GARPR)
- A plan to strengthen ART enrolment and retention is being implemented in high priority townships
- Increased integration of HTS and ART in MMT services
- At least 5 models implemented to improve ART enrolment and retention for each key and priority population (PWID, FSW, MSM, migrants, prisoners)
- 90% of adults and children on ART 12 months after initiation of ART
- 90% of people living with HIV and on ART achieving viral suppression

### 2.2 Improve the quality, efficiency and coverage of care and ART

The proposed ART service delivery models in NSP III will be patient-centred, and be as convenient as possible: minimizing long travel times, minimizing wait times, dispensing drugs at convenient locations with longer prescriptions and promoting adherence support through peers and support groups. For priority populations, comprehensive one-stop services will be scaled up to include ART. ART services will continue to be transitioned from the NGO sector to the MOHS, with NGOs continuing to support the MOHS. With greater numbers of people on ART, there will need to be a strong partnership between the public, NGO and qualified private (general practitioner) sectors. Task shifting, as well as shifting authority to decentralized sites to have more control in initiating and managing patients on ART, will be included in national guidance.

The Government plans to increase its role in management of ART patients, with an aim to support more than 50% of all people living with HIV. A full transition plan will be developed and take into account capacity building and development of common treatment standards.

Quality assurance systems will be implemented, including mentoring and a supportive supervision system for continuous monitoring and improvement of clinicians' skills to initiate and manage patients on ART, including side effects and treatment failure (linked to SD3).

The current loss to follow-up of 75% of HIV-exposed infants within the PMTCT programme will be addressed through scale-up of DNA PCR testing, linked to the scale-up of viral load testing capacity. All infants diagnosed with HIV infection will be promptly provided with ART using recommended pediatric formulations, through close follow-up and facilitated referrals as needed; health care workers and community caregivers will provide nutrition counselling, nutritional monitoring and link to food supplementation efforts. People living with HIV and orphans and vulnerable children will be linked to social protection schemes and income generation programmes to help support their basic living needs. Proper transition from pediatric ART to adult ART (through adolescent sensitive and friendly services) will be ensured for improving treatment adherence.

**Table 12. Proposed approach to support ART transition to the public sector**

| Guidance and capacity building | Standard treatment support across sectors | Transition support |
|---|---|---|
| 1. Clinical management, counselling<br>2. SOPs for different types of ART sites<br>3. Standard training<br>4. Mentoring support<br>5. Quality monitoring and support | 1. Self help<br>2. Transportation for patients<br>3. Hospitalization<br>4. Accommodation<br>5. Nutrition for those in need<br>6. Materials | 1. Renovation of public facilities for ensuring privacy, infection control, etc.<br>2. Training of health care workers in public facilities<br>3. NGO staffing for mentoring and supporting transition<br>4. Transportation of NGO staff to public sites |

## 2.2 Recommended activities

1. **Update national treatment guidelines** and SOPs based on most recent WHO guidance including:
   - Test and offer treatment regardless of CD4 count for all people living with HIV
   - Task shifting
   - Differentiated care including longer prescriptions.
   - Viral load monitoring
2. **Develop a National Transition Plan**
   - Analyse case load, absorptive capacity, human resources and management needs for expansion and transition of ART services
   - Establish sub-regional plans for expansion and transition of ART services
3. **Develop a pediatric and adolescent testing and ART strategy** and updated treatment guidelines including referral from pediatric to adult care
4. **Decentralize ART services** to the township level, sub-township level and station health units and rural health centre, as indicated by burden of disease; ensure co-location of HTS/ART
5. **Strengthen capacity** at decentralized sites through training of health care workers and peers to implement quality assurance system for care and treatment (also see SD3 and SD4 on quality improvement)
6. **Integrate care and treatment services models** one-stop shops or KSCs for priority populations with public/private/community partnerships
7. **Special priority population treatment needs**
   - **PWID**: at MMT sites and one-stop services or KSCs
   - **MSM**: one-stop services or KSCs, network of sensitized public health facilities/ general practitioners
   - **SW**: KSCs, due to mobility, network of sensitized satellite sites including public health facilities or general practitioners
   - **Prisoners**: develop policy and programme for test, treat and provision of care and treatment in prisons

- **Mobile/migrants**: link and integrate with TB services and workplace programmes

8. **Pediatric and adolescent treatment**
   - Develop a pediatric and adolescent testing and ART strategy and update treatment guidelines
   - Strengthen the system to identify and track HIV-exposed infants, and initiate ARV and cotrimoxazole prophylaxis
   - Scale up DNA PCR sample referral system so that all identified HIV-exposed infants receive early infant diagnosis services
   - Ensure that all HIV-diagnosed infants are promptly provided ART using recommended pediatric formulations, through close follow-up and facilitated referrals as needed
9. **Provide nutritional counselling and monitoring to people living with HIV** as part of care and treatment, and link those in need to food supplementation activities
10. **Provide community based care to people living with HIV** in need of psychosocial and adherence support and link people living with HIV and orphans and vulnerable children to social protection schemes

**Partners responsible**

- Lead partners: MOHS NAP, MRH, CHD, NTP, NHL
- Supporting partners: United Nations system, donors, INGOs
- Implementing partners: PLHIV and key population networks, civil society networks, ART service providers (all sectors), NGOs/CBOs

**Results**

- 90% of people living with HIV diagnosed receiving ART
- Decrease in the rate of AIDS-related deaths per 100 000 population
- 90% of HIV-exposed infants initiated on ARV prophylaxis
- 90% of HIV-exposed infants received a virological test for HIV within 2 months of birth
- 90% of HIV-exposed infants started on cotrimoxazole prophylaxis within 2 months of birth
- 100% of identified HIV-positive infants initiated on ART by 12 months of age

### 2.3 Integration of TB and HIV (testing, diagnosis and treatment) services

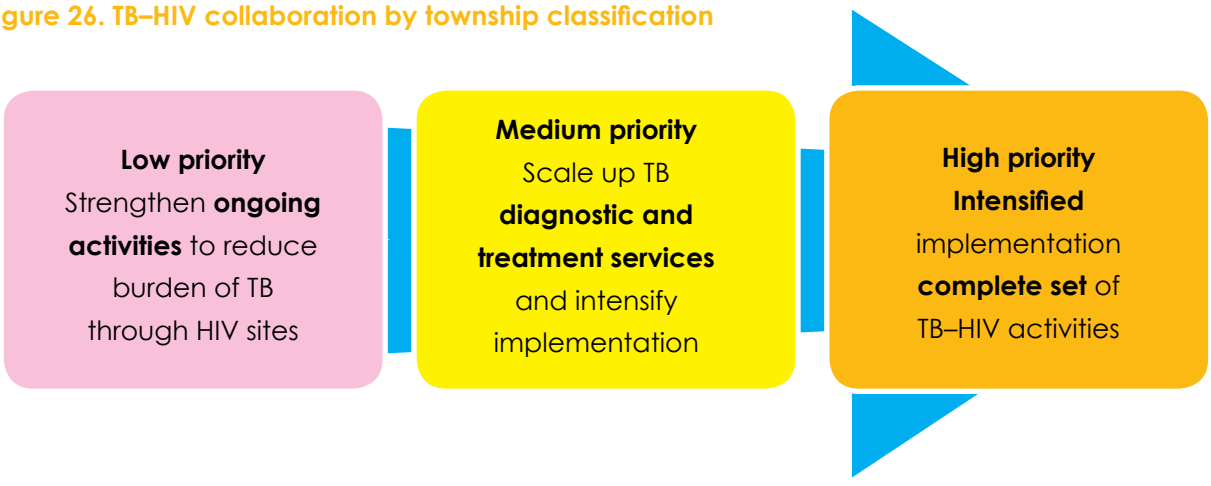
To strengthen TB–HIV programming, the recommended activities will ensure that routine HIV testing for TB patients is provided in all settings and that HIV-positive clients are systematically screened for TB (based on symptoms) during clinical care visits. All TB–HIV coinfected patients will receive early treatment with ART, as well as management of TB using an integrated approach to reduce loss to follow-up. All TB–HIV coinfected patients will have access to cotrimoxazole preventive therapy and people living with HIV who do not have active TB disease will be provided with isoniazid preventive therapy (IPT). Integration of HIV testing, care and treatment with TB services including in hospital settings, but also in prisons and with migrant and mobile populations and other priority populations will be enhanced, as well as improving TB treatment services in HIV care and treatment settings.

**Key areas of TB–HIV programming include:**

- Strengthening coordination
- Additional human resources and capacity strengthening
- Optimize joint TB–HIV implementation in high, medium and low priority townships
- Improve M&E and strategic information
- Strengthen and harmonize procurement and supply management for HIV and TB programmes

A three tiered approach to TB–HIV integration will be implemented according to township classification (Figure 26).

**Figure 26. TB–HIV collaboration by township classification**




## 2.3 Recommended activities

1. **Develop guidelines and SOPs** for the cooperative integration of TB and HIV service delivery for different priority townships
   - Develop SOPs and train community workers and health care workers to scale up routine HIV testing for all TB patients and routine TB screening for all HIV-positive patients
   - Integrate HIV treatment into TB clinics (develop SOPs and train)
   - Strengthen system to ensure that TB–HIV coinfected patients are initiated on ART promptly (develop SOPs and train)
2. Ensure integration of **intensified TB case finding among priority populations** prevention programmes
3. **Integrate HIV VCT into existing TB services**, including mobile and facility based
4. **Strengthen coordination** mechanisms between NTP and NAP at all levels
5. **Decentralize HIV testing services** for presumed and diagnosed cases of TB and expand ART initiation capabilities
6. **Provide high priority townships with Xpert MTB/RIF testing technology** and ensure access to all people living with HIV
7. **Provide isoniazid preventive therapy (IPT) to all people living with HIV** who do not have active TB at both public and private ART sites by procuring IPT, developing SOPs and training all required providers

8. **Integrate TB–HIV testing and treatment programmes** for all priority populations including prisoners, miners and migrants (see 3.6)
9. **Develop innovative models** in medium priority townships to enhance access to services
10. **Ensure ongoing monitoring** in low priority townships and access to transportation support for referral
11. **Support capacity development** of existing staff, recruitment for unfilled positions and promote task shifting as required
12. **Improve documentation and cooperative reporting** between TB and HIV programmes

**Partners responsible**

- Lead partners: MOHS NAP, MNCH, NTP
- Support partners: United Nations system, donors, INGOs
- Implementing partners: PLHIV networks, ART service providers (all sectors) and NGOs/CBOs

**Results**

- Increased number of facilities providing ART services for people living with HIV with demonstrable infection control practices that include TB control
- 90% of TB patients who had an HIV test result recorded in the TB register by 2020
- 90% of HIV-positive patients who are screened for TB in HIV care or treatment settings by 2020
- 90% of HIV-positive new and relapse TB patients on ART during TB treatment by 2020
- 50% of persons with newly diagnosed HIV infection starting IPT by 2020

### 2.4 Monitor for viral suppression

Globally, viral load testing has been recommended as the preferred approach to monitor patient response to ART. Scaling up viral load testing capacity (with quality control systems) will be a priority as a part of routine monitoring of ART patients. People on ART who have an undetectable viral load have a low risk of disease progression and of transmitting HIV. In addition, viral load monitoring will be used to measure potential drug resistance and inform a provider's decision to change ART regimens. As viral load testing capacity is scaled up and the 'test and early treatment' strategy is implemented, the use of CD4 monitoring will be phased out.

### 2.4 Recommended activities

1. Conduct viral load testing based on priority criteria including suspected treatment failure and length of treatment, beginning in high priority townships
2. Develop laboratory guidelines and SOP for viral load and CD4 monitoring linked to national ART guidelines, including criteria for switching to second and third line treatment regimens (see SD3)
3. Scale up the availability of viral load testing at state and regional level depending upon patient load

4. Develop guidelines and training for health care workers and patients for counselling and peer education to support viral suppression

**Partners responsible**

- Lead partners: MOHS and NHL
- Support partners: United Nations system, donors, INGOs
- Implementing partners: Government health facilities, NGOs and private specialist hospitals and private clinics, PLHIV and key population networks

**Results**

- 90% of PLHIV receive viral load measurement during reporting period
- 90% of PLHIV on ART achieve viral suppression among those tested for viral load test in the last 12 months
- >85% of PLHIV on ART achieve viral suppression (<1,000 copies/ml) at 12 months after treatment initiation

### 2.5 Enhance positive prevention

Viable self-help groups of people living with HIV are an essential component of effective impact mitigation because they are best placed to understand and respond to the needs of their peers. NSP III will continue to support self-help groups based at health facilities, key population service centres and in community-based settings (through local organizations and networks). These groups play a unique role in providing emotional support to members, as well as reinforcing positive prevention, partner disclosure, ART adherence and case management. HIV prevention commodities will be made widely available through self-help groups, health facilities/ key population service centres and outreach services to support positive prevention.

Self-help groups will be strengthened to actively participate in and monitor service delivery, including quality issues. The feedback on the quality of services should be shared with service providers (including public sector providers) in order to address any issues that may affect satisfaction with and uptake of services.

## 2.5 Recommended activities

1. Support adherence and positive prevention including supported disclosure through self-help groups and counselling
2. Provide access to HIV prevention commodities (condoms, lubricant, needles/syringes)
3. Facilitate linkages to PMTCT for people living with HIV

**Partners responsible**

- Lead: MOHS NAP with PLHIV and KP networks, and NGO/CBO partners
- Support partners: United Nations system, donors, INGOs
- Implementing partners: PLHIV and key population networks, and NGO/CBO partners

**Results**

- Increased number of self-help groups actively monitoring service delivery and providing feed back on quality of services.

## Strategic Direction 3: Strengthening integration of community and health systems and promoting a human rights based approach

The purpose of this Strategic Direction is to further strengthen systems, management, human resources, innovative partnerships and civil society engagement to enhance the quality and availability of HIV prevention, care and treatment services and enhance the enabling environment in which services are delivered.

**Summary of Priority Interventions**

1. Strengthen and optimize efficiency of HIV service delivery models ensuring continuum and quality
2. Invest in and build robust systems for health (Human Resources for Health, procurement and supply management system, laboratory including viral load testing)
3. Strengthen the community to be engaged in service delivery including reducing stigma and discrimination
4. Improve national and sub-national legal and policy environment for protection and promotion of HIV related services
5. Integrate HIV in UHC and social protection schemes for priority populations and orphans and vulnerable children (OVC)
6. Support workplace programmes and leverage involvement of other sectors in the HIV continuum of services

**Key Results**

- Increased coverage of HIV continuum services measured by: increased % of facilities providing HIV-specific services
- Increased % of ART patients treated by public facilities
- 100% of ART sites with quality improvement activities
- Eliminate HIV related stigma and discrimination in health care setting by 2020

**Priority Interventions**

### 3.1 Strengthen and expand HIV service delivery models, ensuring continuum and quality

As previously described, service delivery models will focus on selecting and expanding local partnerships that have the greatest strategic impact in reaching the goals of NSP III. These will include enhanced public sector capabilities and partnerships with private sector service providers, PLHIV and key population networks, and civil society organizations. A strengthened and expanded network of public, private and civil society service providers will enhance the HIV continuum and its sustainability. Innovative models will leverage the strengths of different sectors. The purpose of this intervention is to improve the quality of services. In addition, models will be costed to ensure efficiency and effectiveness.

### 3.1 Recommended activities

1. Recruit new partners as required to expand coverage, acceptability and sustainability of services (particularly in difficult to reach areas or areas with ethnic health authorities)
2. Establish learning resource centres (i.e. especially for PWID programming) including training modules, monitoring tools, job aids, SOPs and other reference materials including in local ethnic languages
3. Identify and train public, private, local civil society partners to improve quality and expand service delivery (Linked to SD1 & SD2)
4. Implement quality assessment/quality improvement programmes across the continuum
5. Provide ongoing mentorship and profession learning
6. Evaluate and cost service delivery models (linked to SD4)

**Partners responsible**

- Lead partner: MOHS NAP
- Support partners: United Nations system, donors, INGOs
- Implementing partners: University or training partner, NGO/CBO partners, private sector service providers, PLHIV and key population networks

**3.2 Invest in and build robust systems for health**

**3.2a Improve HIV human resources for health (HRH)**

### 3.2a Recommended activities

1. Conduct an HIV HRH needs assessment in priority townships
2. Develop and implement an HIV HRH plan reflecting priority township requirements
3. Explore innovative strategies for HIV HRH management and retention including outsourcing and task shifting
4. Develop and implement a national HIV training plan including pre-service and in-service training with specific recommendations by cadre and implement associated mentoring
5. Mobilize resources, develop strategies and advocate for increased allocation of medical staff to high priority townships

**Partners responsible**

- Lead partner: MOHS and NHL for laboratory
- Support partners: United Nations system, donors, INGOs
- Implementing partners: NHL, government health facilities, NGO partners

**3.2b Integrate HIV-related PSM systems into one national Procurement Management System (PSM)**

Considerable progress has been made towards achieving HIV-related procurement and adequate PSM systems currently exist, but are largely operating in parallel rather than in an integrated system.[68] During 2016–2020, the quantity and value of commodities required for the HIV response will further increase and distribution will be expanded. The first two years of the NSP III will be required to fully harmonize forecasting tools and synchronize processes among all partners and upgrade facilities and infrastructure. Closer collaboration and alignment of the current parallel HIV PSM systems will need to occur and opportunities will be sought for efficiencies, process simplification and cost saving.[69] The NAP will be supported to adopt one stock data tool and its role in leadership and coordinating capacity strengthened. As data are increasingly captured electronically, opportunities to harmonize forecasting and supply planning across partners will improve. Regular sharing of quarterly stock reports is required between private/ NGO partners and the NAP. All partners need to consider economies of scale and consolidate products into fewer warehouses or a government central warehouse meeting international standards. Migrate to an electronic logistics management and information system (LMIS) is planned.

## 3.2b Recommended activities

1. Standardize/harmonize forecasting and supply planning method, monitoring and reporting mechanism
2. Establish an early warning system (EWS) for ARVs that would alert programme staff to impending stock-outs based on pipeline data and link to a dynamic procurement system that responds to the EWS alerts
3. Align efforts with roll-out of national plan for standardized logistics management information system (LMIS)
4. Train MOHS and partners to improve consumption reporting, forecasting and stock management practices
5. Monitor stock management and conduct site supervision visits to improve accuracy, completeness, quality and flow
6. Improve warehousing infrastructure in line with the PSM and in the context of priority areas
7. Improve local service delivery infrastructure including supply safety
8. Ensure linkages of HIV PSM to other health procurement and government financial management system

**Partners responsible**

- Lead partner: MOHS, FERD, Customs
- Support partners: United Nations system, donors, INGOs
- Implementing partners: Government departments

[68] Synthesis Paper Group 5, Cross-cutting HSS, CSS, Enabling Environment, 2015
[69] Ibid

**3.2c Strengthen HIV in the national laboratory services and systems**

Laboratory systems and services both need to be strengthened to reach the targets of NSP III. To strengthen the system, NSP III will be aligned with the National Health Laboratory's now finalized National Strategic Plan for Lab 2020, which includes an HIV component. Laboratory strengthening will be prioritized in the context of decentralized HTC, integration efforts with TB and hepatitis, and will also develop/update a national viral load monitoring strategy and plan.

## 3.2c Recommended activities

**Laboratory network**

1. Develop national laboratory network to oversee coordination and quality control with HIV-specific laboratory policy
2. Develop good clinical laboratory practice guidelines and SOPs
3. Implement phased laboratory training and support in light of decentralized HTC as well as TB and hepatitis integration efforts
4. Ensure support for testing strategy for PITC including quality testing for HIV-exposed infants
5. Maintain or provide necessary laboratory equipment as per guidelines
6. Maintain or strengthen sample transport where necessary
7. Maintain accurate laboratory stocking, quantification and forecasting system
8. Establish/strengthen national reporting mechanism

**Viral load monitoring**

9. Update and strengthen viral load monitoring strategy and plan with SOPs linked with scaling back of CD4 testing
10. Develop and implement a transport system for patient samples to viral load testing laboratories for routine monitoring and early infant diagnosis
11. Implement quality assurance for viral load testing and support reporting system

**Partners responsible**

- Lead partner: MOHS and NHL for laboratory
- Support partners: United Nations system, donors, INGOs
- Implementing partners: NHL and government health facilities, INGOs

**Results**

- Decrease in # of facilities reporting laboratory commodity stock-out in any quarter over the last year
- Increase in % of laboratories with successful external quality assessment results in the past year
- 90% of PLHIV on ART received viral load measurement during the reporting period

**3.3 Strengthen the community to be engaged in service delivery, including reducing stigma and discrimination and improving legal and policy frameworks**

The community systems strengthening (CSS) strategy will now need to be updated to reflect the new targets in NSP III and implemented over five years. Support is required for the governance and management structures, but also for community groups in order to promote accountability and efficient use of resources. Efforts will focus on organizations working with priority populations, in particular people who inject drugs, men who have sex with men, sex workers, and people living with HIV. Currently, self-led groups of people living with HIV support each other and services such as health facilities, drop-in centres and other community settings to reinforce positive prevention, ART adherence and case management. In addition, PLHIV groups often jointly organize and implement economic activities, such as income-generation and vocational training. Community-based ART distribution schemes will be piloted. PLHIV support groups will be strengthened to actively participate in and monitor service delivery, including quality issues. The feedback on the quality of services will be shared with service providers (including public sector providers) in order to address any issues that may affect satisfaction with and uptake of services.

Civil society will also be supported to be actively involved in the formulation of HIV plans, policies and programmes; in research; in reducing HIV-related stigma and discrimination; and in supporting legal and HIV-related human rights.

## 3.3 Recommended activities

**Civil society and community engagement**

1. Update CSS strategy to strengthen the community role to reflect new NSP priorities
2. Train and/or mentor organizations and networks to improve governance and management
3. Develop SOPs and train in community role, including people living with HIV in peer navigation, and quality improvement for service delivery
4. Support community networks to conduct training with health care workers to reduce stigma, discrimination in the health care setting
5. Formalize community role providing constructive feedback to local HIV service providers and quality and accessibility
6. Support PLHIV groups and networks
7. Conduct training for community involvement in advocacy, human rights and legal support

**Partners responsible**

- Lead partner: Civil society networks including PLHIV groups
- Support partners: MOHS, United Nations system, donors, INGOs
- Implementing partners: PLHIV and key population networks, NGO/CBO partners

**Results**

- Strengthened community-level AIDS competency and civil society engagement in policy and legal framework changes
- Increase in number of networks of key populations and people living with HIV engaged in HIV prevention, testing and treatment programmes
- At least 30% of all services delivery is community led by 2020

### 3.4 Improve national and sub-national legal and policy environment for protection and promotion of HIV related services

NSP III will promote respect for human rights, dignity and equal opportunities to build a more inclusive society. This strategy will work with service providers in health care settings, law enforcement agencies, the media, workplace and education settings to eliminate HIV-related stigma and discrimination, including against people living with HIV and all priority populations. The strategy will aim to prevent and challenge violations of human rights, and to empower people living with, at risk of and affected by HIV, to know their rights and access legal services. Examples of good policy and practice undertaken by police in support of HIV prevention, care and treatment will be highlighted. Special attention will be paid to supporting a positive narrative for all priority populations but particularly for people who inject drugs, as the most HIV-affected and often severely marginalized priority population in the country.

The strategy will aim to remove punitive laws, policies and practices that block an effective HIV response and end impunity and denial of priority populations' rights to justice. NSP III will support cultural competence training for health care providers and public health officials. These trainings will specifically aim to reduce stigma and discrimination against priority populations in health care settings and include understanding of gender identities, sexualities, male sexual behaviours and sexual orientation. NSP III will support training in collaboration with the Ministry of Home Affairs, Social Welfare, Ministry of Education and Ministry of Labour, Immigration and Population for law enforcement agencies, the media community and other key stakeholders to reduce stigma, discrimination and violence against priority populations. Special focus will include working with female police officers to reduce harsh penalties and incarceration and improve access to HIV services. Table 13 lists some of the existing laws and regulations to be reformed to protect people living with HIV, people who inject drugs, men who have sex with men, transgender people and female sex workers from violence, incarceration, stigma and discrimination and support access to the HIV continuum of services. Full details are provided in the National HIV Legal Review Report of September 2014.

**Table 13. Legal and policy reform requirements for the HIV continuum[70]**

| PLHIV | PWID | MSM | FSW | Migrant/Mobile persons |
|---|---|---|---|---|
| Universal ART access: guidance on ART access and eligibility for all required | The Burma Excise Act 1917: recently revised | Penal Code, Section 377: anti-sodomy law prohibiting homosexual behaviour discourages disclosure in health services | Suppression of Prostitution Act 1949 including Section 7: allows police to arrest sex workers merely on reputation | Review and harmonize national health and migration policy to provide access regardless of legal status |
| Reproductive rights for HIV-positive women | Age of legal capacity (18 years) to consent to an HIV test: prevents all priority populations from receiving an HIV test without parent, guardian or competent officer, discouraging youth from knowing their status | | | |
| Patents Bills<br><br>-TRIPS flexibilities<br><br>-Patent protection of pharmaceuticals particularly 2nd and 3rd line ART regimens | Narcotics Drugs and Psychotropic Substance Law: requires legal mandatory registration for drug treatment or face imprisonment, therefore discouraging use of substitution programmes | Rangoon Police Act of 1899 and the Police Act of 1945: allows police to arrest without a warrant encouraging harassment and exploitation of MSM | Legal aid services for sex workers, MSM, PWID and PLHIV | Incorporate access to health services in new and revised MOUs between migrant worker sending and receiving countries |

[70] National HIV Legal Review Report, September 2014

## 3.4 Recommended activities

**Promote an enabling environment**

1. Assess structural and policy issues affecting the HIV continuum of services for priority populations including prisoners and person in closed settings
2. Conduct cultural competence training for healthcare providers and public health officials to understand priority population needs
3. Conduct training for law enforcement agencies, media and other key stakeholders including Ministry of Home Affairs, Ministry of Social Welfare, Relief and Resettlement, Ministry of Education and Ministry of Labour, Immigration and Population on HIV, reproductive rights, gender based violence reduction (note: focus on female police officers)
4. Conduct training of brothel owners to raise awareness of benefits of HIV services, improve access to HIV services and promote condom use
5. Provide legal support services for priority populations (i.e. through hotlines, counselling and linkages to legal aid programmes)
6. Monitor HIV-related human rights violations and advocate for changes to existing policies and laws
7. Reform existing policies and laws to protect priority populations and OVC from violence, stigma and discrimination and enhance access to HIV services
8. Develop and enact a protective HIV law to cover rights of people living with HIV and key populations

**Partners responsible**

- Lead partners: Parliament, NAP MOHS, Ministry of Social Welfare, Relief and Resettlement (MOSWRR), with civil society networks
- Support partners: United Nations system, donors
- Implementing partners: Parliament, Government Departments, civil society organizations, INGOs

**Results**

- 90% of people living with HIV, at risk of and affected by HIV report no discrimination, especially in health, education, and workplace settings.
- Eliminate HIV-related stigma and discrimination in all settings (health care; employment and education) by 2020
- Decrease in the number of punitive laws and policies
- Increase in the number of protective laws and anti-discrimination policies for people living with HIV and key populations

### 3.5 Integrate HIV in UHC and social protection schemes for priority populations and OVC

Ensuring that the HIV essential services are integrated into the national UHC schemes and national health benefit package is critical for sustainability of the response to HIV in Myanmar. NSP III will further develop and refine service models for low, medium and high priority townships to ensure tailored and effective responses are implemented at an intensity that will have an impact on the epidemic. It is critical that effective and efficient models of the HIV continuum are integrated into UHC schemes to ensure long-term access to essential HIV and health services including HIV-related medicines and technologies. Service delivery models will be costed and advocacy and planning undertaken to integrate HIV prevention, care and treatment services into UHC schemes and national health benefits package.

### 3.5 Recommended activities

1. Cost service delivery models including prevention, care, treatment and associated laboratory and commodity requirements (supported by SD4)
2. Conduct size estimations for people living with HIV and orphans and vulnerable children (OVC) (see SD 4.1)
3. Conduct planning and advocacy for inclusion of HIV service into UHC schemes and essential health services for all people living with HIV and OVC
4. Advocate with the Ministry of Social Welfare, Relief and Resettlement to integrate HIV-sensitive policies for priority populations including for OVC in the national social protection policy and child protection policy and plan and advocate for funding it
5. Link people living with HIV and OVC to nutritional support including through social protection programmes
6. Coordinate with the Ministry of Education and Ministry of Social Welfare, Relief and Resettlement to facilitate access to education for people living with HIV and OVC
7. Conduct advocacy for HIV-sensitive programmes in national disaster management

**Partners responsible**

- Lead partners: MOHS, MOE, MOSWRR
- Support partners: United Nations system, donors, INGOs, NGO/CBO partners, PLHIV and key population networks
- Implementing partners: NAP, MOHS, Government Departments, civil society organizations, INGOs

**Results**

- HIV prevention, care and treatment essential services included in the UHC schemes

**3.6 Implement workplace programmes and leverage other sectors involvement in the HIV continuum of services**

## 3.6 Recommended activities

1. Leverage and coordinate with other sectors for HIV prevention programming including the Ministry of Labour, Immigration and Population (MoLIP) Ministry of Education, mining sector, rubber plantations, private factories and other sectors that attract priority populations
2. Provide health education and on-site HTC services, with referrals and linkages
3. Particularly with mining companies, ensure needle and syringe programmes for workers who inject drugs
4. Advocate with private sector companies to provide HIV services in workplace clinics and adopt peer education programmes if necessary
5. Integrate HIV prevention services and TB screening at migrant health posts
6. Review/monitor the HIV situation in special economic zones and industrial zones that attract a large influx of migrants/workers and direct resources to provide services as necessary (including through mobile vans, at factory clinics/sites/ referrals)
7. Enhance involvement of minority organizations and faith-based organizations in providing HIV-sensitive leadership and programmes where appropriate

**Partners responsible**

- Lead partner: MOHS NAP, Ministry of Education, MoLIP
- Support partners: IOM
- Implementing partners: Private sector employers (mining companies, plantations, factories, etc.), Myanmar Business Coalition on Aid (MBCA) and NGO/CBO partners, Ethnic Health Authorities

## Strategic Direction 4: Strengthening strategic information and research to guide service delivery, management and policy

### Summary of Priority Interventions

1. Generate and use strategic information to guide service delivery, programme management, policy and financing
2. Improve monitoring and reporting to provide quality data and effectively track NSP III and improve performance at all levels
3. Strengthen coordination and human resources for strategic information
4. Conduct research and apply findings for programmatic improvement and policy change

### Context

The purpose of this Strategic Direction is to strengthen the capacity for HIV monitoring, accountability and financial planning under NSP III. Strategic information will provide the evidence base for enhancing the quality and effectiveness of the HIV continuum, it will provide data to redress social inequities and it will inform how best to plan for financial sustainability. Under NSP III, strategic information efforts need to be prioritized and aligned to the goal of reducing HIV transmission and HIV morbidity, mortality and disability along the HIV continuum, with a focus on populations at the highest risk and in geographic areas of priority.

### Key Results

- Availability of information on each of the nationally and globally defined indicators of the health sector response to HIV
- Establishment, roll-out and use of a case based reporting system integrated into the "District Health Information System 2", a free and open source web-based application for health information systems
- Epidemic profiles available in high priority townships
- Microplans available in high priority townships
- NSP III midterm review advised by new strategic information
- National Surveillance Plan developed and implemented
- National Research Database established and key research questions answered

### Priority Interventions

#### 4.1 Generate and use strategic information to guide service delivery, programme management, policy and financing

Location risk analysis is necessary to classify townships into low, medium and high priority townships. Systems to monitor the highest burdens of infection, the size of risk populations in conjunction with programmatic coverage and gaps are needed to implement NSP III. In general, greater efforts are needed to further improve the methods to estimate population sizes, as these are used to establish denominators to calculate coverage of different kinds of interventions and forecast budget

requirements. In conjunction, HIV service continuum gaps will be identified and addressed to allow greater targeting of resources to improve efficiency and effectiveness of the national response. Under this priority intervention, geographic and programmatic mapping will be supported at township levels and township classification further refined as necessary. Use of local data to inform and enhance linkages and improve the quality and effectiveness of local HIV continuum services will support microplanning at township level. A national five-year Surveillance Plan will be developed and implemented including modelling outcomes and impact over the life of NSP III. The need for a programme evaluation of the harm reduction programme for people who inject drugs was raised as a matter of priority during the development of NSP III.

## 4.1 Recommended activities

**Know the epidemic—and the response**

1. Coordinate the analysis of national and sub-national data to monitor trends to characterize the epidemic
2. Support the development of local epidemic and response profiles through comprehensive programmatic mapping of hotspots, high risk populations, services and size estimates of priority populations at township level and classify townships and identify service needs
3. Support microplanning at township level to enhance the quality and effectiveness of local HIV continuum services
4. Use epidemic and response profiles to advise management, policy and financing

**Surveillance priorities**

5. Develop and implement a five-year detailed surveillance and population size estimates plan (including HSS surveillance strengthening, IBBS every 2 to 3 years for priority populations, STI surveillance and development of guidelines)
6. Conduct HIV prevalence studies in special non-government regions and among priority populations including mobile, migrants, people in prisons, as appropriate
7. Conduct yearly national level and decentralized modelling of the HIV epidemic in at least 2 main affected cities
8. Conduct early initiator surveys as proxy measure for incidence
9. Conduct yearly antiretroviral drug resistance surveillance
10. Conduct a programme evaluation/review of harm reduction programming for people who inject drugs, and other prevention programmes for priority populations

**Partners responsible:**

- Lead organization: MOHS NAP
- Support Partners: United Nations system, donors, INGOs, NGOs, CBOs, key population and PLHIV networks, other implementing partners, academic institutions
- Implementing partners: all of the above

**Results**

- Availability of information on each of the nationally and globally defined indicators of the health sector response to HIV:
  - Increase in epidemic profiles available in high priority townships
  - Increase in microplans available in high priority townships
- NSP III midterm review advised by new strategic information
- National Surveillance Plan developed and implemented

**4.2 Improve monitoring and reporting to provide quality data and effectively track NSP III and improve performance at all levels (e.g. eHealth)**

The establishment of robust accountability mechanisms at national and sub-national levels requires a process of transparent data review and a mechanism to take results into policy making. Transparent mechanisms are required for partners to hold each other mutually accountable for results. The current M&E plan will be reviewed and revised with the aim of strengthening both the paper-based systems and collaborate in the establishment of eHealth systems combining HIV–TB–malaria data and reporting. This will be done in the context of ongoing efforts in the country including the Three Interlinked Patient Monitoring System, which provides interlinked clinical data with indicators to monitor several national programmes including HIV/ART, TB and MNCH/PMTCT. Indicators and reporting will be strengthened to accurately collect service data, disaggregated by priority population and age, specifically in relation to HIV testing, ART, TB screening and treatment, TB and HIV coinfection, hepatitis services, and SRH services in an integrated system. This will be done without increasing stigma, discrimination or harm against priority populations. An HIV case reporting system and an AIDS death registry are of particular importance, but monitoring across the continuum is needed.

The Health Information System (HIS) in Myanmar includes disease surveillance and outbreak notification, data generated by household surveys, vital events and census, administration and resources management, data collection on patients and services records and reporting, programme specific monitoring and evaluation. The HIS Strategic plan (2011-2015) will be assessed and a new five-year plan will be developed. The current HIS Strategic Plan promotes data sharing encompassing IT development. In 2014, MOHS began using DHIS2 for processing its data at the national level. Through 2015, DHIS2 has begun expansion to the township level. This township-level roll-out is expected to be mostly completed by the end of 2016.

The Health Management Information System (HMIS) includes public health programmes information, among others information from the HIV, Malaria and TB National Programmes which are hosted under the Department of Disease Control. National programmes operate their data collection systems in parallel and there is no platform that enables efficient data sharing between programmes even at central level. DHIS2 platform was suggested as the core platform for aggregate data collection, reporting and analysis. This allows one Monitoring and Evaluation system (M&E), supporting longterm sustainability and communication between programmes with secured sharing of data and statistics to inform decisions. MOHS and development partners collaboratively

worked on the HIV, TB and Malaria E-Health Investment Plan (2016 – 2020). In May 2016, an integrated E-Health plan for HIV/AIDS, TB and malaria case-based surveillance and aggregate reporting systems was formulated and agreed to by the three national programmes. A software was chosen to develop the Master Patient Index (MPI) for effective longitudinal patient monitoring across care and aggregate DHIS2 reporting form development has been prioritized for 2016. Overall HIS strengthening will be financed in future years by the Global Fund, 3MDG Fund, GAVI, the World Bank and MA4 Health among others.

## 4.2 Recommended activities

1. Conduct a **Monitoring and Evaluation System Strengthening (MESS) assessment** reviewing M&E flow, timeframe and indicators, etc.
2. Develop a comprehensive HIV M&E plan, SOPs, guidelines and training plans including decentralization of M&E, reporting and evaluation processes
3. Include a **Quality Assurance Plan** in the National M&E Plan
4. Roll out the revised plans with systematic training, regular coaching and supervision for quality
5. Develop **simple tools for data analysis** at township level to support microplanning and train partners
6. Report yearly progress at national and global level
7. Conduct case based reporting technical feasibility assessment
8. Support the **pilot implementation of electronic DHIS2 in four townships**
9. Develop **DHIS2 prototype module for integrated HIV programme monitoring** and case based reporting
10. Support the road map for scaling up and sustaining DHIS2
11. **Scale up DHIS2 case based reporting/tracking and HIV programme monitoring**
12. Evaluate case based reporting system

**Partners responsible**

- Lead organization: MOHS NAP, Department of Medical Services, TB and malaria programmes
- Support Partners: United Nations system, donors, INGOs, NGOs, CBOs, key population and PLHIV networks
- Implementing partners: all of the above

**Results**

- Increase in the number and frequency of performance reviews of the M&E system
- E-Health Plan for HIV/AIDS, TB and malaria case-based surveillance and aggregate reporting systems implemented
- % of high priority townships that were trained as per plan
- % of high priority township that had 3 supervisory visits/year as per plan
- % of high priority townships implementing quality assurance protocols for M&E
- National and global progress reports submitted annually

**4.3 Strengthen coordination and human resources for strategic information**

To prioritize strategic information, human resources need to be expanded and strengthened at every level of the response. Increasing collaboration with new partners may help expand human resources and efforts in this area. A human resource plan for strategic information needs to be developed and key positions filled. A national NAP training plan needs to be developed to build capacity to implement strategic information priorities. These trainings could be outsourced as is done in other countries. Ultimately, the trainings need to build capacity for data analysis and use to improve the targeting of resources and increased effectiveness of the response. Coordination between NAP and its partners needs to be strengthened, particularly at regional and local levels, to obtain and utilize regular quality reports. Regular mentoring of staff would help this process. Over the five years, the monitoring, reporting and evaluation process needs to be decentralized with high and medium priority townships prioritized, but all townships need to have capacity to monitor changes in the local epidemic patterns and mobilize responses.

## 4.3 Recommended activities

1. Assess human resources for health (HRH) needs in HIV strategic information management and develop an HIV strategic information HRH plan linked to other sectors. Consider additional partners or outsourcing where needed to fulfil the decentralization of M&E capacity to all townships
2. Establish a central M&E unit for HIV, TB and malaria including for joint TB–HIV collaboration
3. Develop an advocacy and resource mobilization plan
4. Increase human resources for strategic information in high priority areas first and then progressively across the nation
5. Develop a training plan and conduct training

**Partners responsible**

- Lead organization: MOHS – Human Resources Administration, Department of Public Health, National AIDS Programme, National TB Programme, and National Malaria Control Programme, Department of Medical Services
- Support Partners: United Nations system, donors, INGOs, NGOs, CBOs, key population and PLHIV networks
- Implementing partners: all of the above

**Results**

- HIV strategic information human resources plan implemented in 100% high priority townships
- Decrease in vacant positions in high priority townships
- At least 3 coordination meetings a year per region and per high priority township

### 4.4 Conduct research and apply findings for programmatic improvement and policy change

Under NSP III, research investment will be innovative and prioritize addressing the biological, behavioural and structural factors that increase risk of transmission and disease progression among key populations and their partners. Implementation or operations research will aim to improve the efficiency and effectiveness of interventions; biological research will aim to enhance prevention and treatment effectiveness; and social and behavioural research will aim to understand the factors that drive the epidemic and structural determinants of risk.

Implementation research will be immediately relevant to improving the effectiveness of interventions along the continuum. Examples identified during NSP III development include:

- Which alternative HIV testing and counselling service models increase reach of high-risk men who have sex with men, female sex workers or people who inject drugs, and what do they cost?
- Which are the most cost-efficient and effective models of service delivery?
- How to rapidly increase capacity to manage a greater number of ART patients in different settings?
- How to optimize community participation in the HIV continuum, such as using peer educators as peer navigators?
- How best to support the HIV continuum of services in closed settings or across borders?

Biological research will ensure treatment effectiveness among the large and increasing cohort of people on ART. Drug resistance monitoring surveys will be required to identify optimal first-line and second-line drug therapies for adults and children. In addition, a system to monitor the need for second and third-line ART regimens will be established and strengthened.

Social and behavioural research will help to determine and influence the structural determinants of risk including, but not limited to, an examination of the role and impact of faith based organizations, traditional health practitioners, and traditional health practices on prevention, care, stigma, and treatment. Data from all research will be widely disseminated to influence HIV policy, law reform and programme decision-making.

## 4.4 Recommended activities

1. Update and resource **a national research agenda** in the context of NSP III
2. Establish a national database for research
3. Develop a national research agenda, identify key research questions
4. Mobilize resources for the national research agenda
5. Undertake **one new key research study yearly**
6. Disseminate research findings innovatively **to improve service delivery, programme, policy and the enabling environment**

**Partners responsible**

- Lead organization: MOHS NAP – Ethical committee and other partners in MOHS, Department of Medical Research, NTP, National Programme on Viral Hepatitis Control
- Support Partners: United Nations system, donors, NGOs, CBOs and other implementing partners, PLHIV and key population networks, academic institutions
- Implementing partners: all of the above

**Results**

- Research agenda developed and funded
- National research database established
- At least 3 national key research questions answered

## Strategic Direction 5: Promoting accountable leadership for the delivery of results by all partners and financing the response

**Summary of Priority Interventions**

1. Strengthen and sustain high level political commitment at national, states/regions and township levels
2. Mobilize resources and ensure sustainability
3. Strengthen governance and multi-partner accountability for delivery of results
4. Strengthen national, states/regions and township HIV coordination mechanisms to improve the response
5. Support Myanmar's participation in regional coordination (i.e. ASEAN) particularly with countries that share border areas

**Key Results**

- At least 20% of the HIV response financed with domestic funds
- Good governance practices and accountable leadership strengthened for the multisectoral HIV response at all levels
- Effective and well-functioning stakeholder coordination and accountability mechanism in place and fully operational at national and township levels
- An enabling policy, legal and regulatory framework strengthened and HIV recognized as a priority in national law

**Context**

The Government of the Republic of the Union of Myanmar leads the national HIV response, through the National AIDS Programme of the MOHS. The Myanmar Health Sector Coordinating Committee (M-HSCC) will continue to serve as the national coordinating body for all public health sector issues, including oversight of the implementation of NSP III, providing policy guidance and identifying appropriate external support.

The HIV Technical Strategic Groups (TSG) will continue to draw technical expertise from UNAIDS, UNFPA, UNICEF, UNODC, WHO, bilateral donors, and development partners. Participating members also include people living with HIV, community organizations, professional associations, international and national NGOs supporting HIV programming. People living with HIV and members of priority population groups are critically important participants to ensure that the implementation of plans meets the needs of these populations. The TSG, reporting to the M-HSCC, is responsible for coordination of implementing partners and their activities, providing guidance on technical issues, developing the operational plan, monitoring progress against the NSP and advising the M-HSCC on HIV-related policy issues. There are a number of technical working subgroups under the HIV TSG, focused on specific technical areas (e.g. PMTCT, harm reduction, M&E, sexual transmission, care and treatment, human rights and gender, etc.). These will need to be reviewed in the context of the new NSP.


**Opportunities for improvement**

- Improve and streamline reporting and coordination across all levels
- Secure funding (domestic and international) for the HIV response
- Strengthen oversight of and reporting to the M-HSCC and coordination between HIV TSG and TB TSG

**Priority Interventions**

**5.1 Strengthen and sustain high level political and technical commitment in Myanmar**

The ambitious strategic directions within NSP III will require effective partnership and coordination between the NGO, private and government health sectors in scaling up services, with a focus on priority populations and priority geographic areas, under the leadership of the MOHS/NAP. Guidelines will be updated in support of NSP III, and the structure of the HIV and TB TSGs and technical working groups will be reviewed.

NSP III will continue to require close collaboration and support from the Ministry of Social Welfare, Relief and Resettlement (particularly on impact mitigation), the Ministry of Education (work with youth), and the Ministry of Home Affairs, including the Central Committee for Drug Abuse Control, Myanmar Police Force, and the Prisons Department.

Within the MOHS, state/regional, district and township AIDS committees will continue to play a leadership and coordination role in service delivery, surveillance, monitoring and reporting at township level. Coordination will be seen as an opportunity for inclusive convening of all partners at township level allowing for the participation of local organizations, networks and self-help groups, as well as international organizations. Township coordination meetings will be regular and open opportunities for experience exchange, review and planning, and discussion of how to overcome challenges to effective implementation.

**5.1 Recommended activities**

1. Review and update national policies, strategies, regulations and guidelines relevant to the HIV response (HIV treatment guidelines, HTS guidelines, core prevention package, laws/policies linked to enabling environment)
2. Review and update the terms of reference and structure of the HIV TSG and its technical working groups
3. Strengthen coordination and synergies between the HIV TSG and TB TSG (and NAP and NTP)
4. Mobilize, manage and disburse domestic and international (public and private) resources for HIV
5. Provide effective strategic multi-sectoral leadership for the response in collaboration with partners

**Partner responsible**

- Lead: M-HSCC, MOHS (NAP and other sections, including NTP)
- Partners: United Nations system, donors, INGOs, State and Township Health Departments/Committees

## 5.2 Mobilize resources and ensure sustainability

UNAIDS has identified Myanmar as a fast track country with a severe epidemic and Yangon as a "key city" within the Asia-Pacific region. NSP III has described the need to scale up treatment and reinvigorate prevention in key geographical areas of high priority. Reaching fast-track targets will require efficient use of existing resources while also finding new ways of resourcing the national response in anticipation of a potentially changing funding landscape.

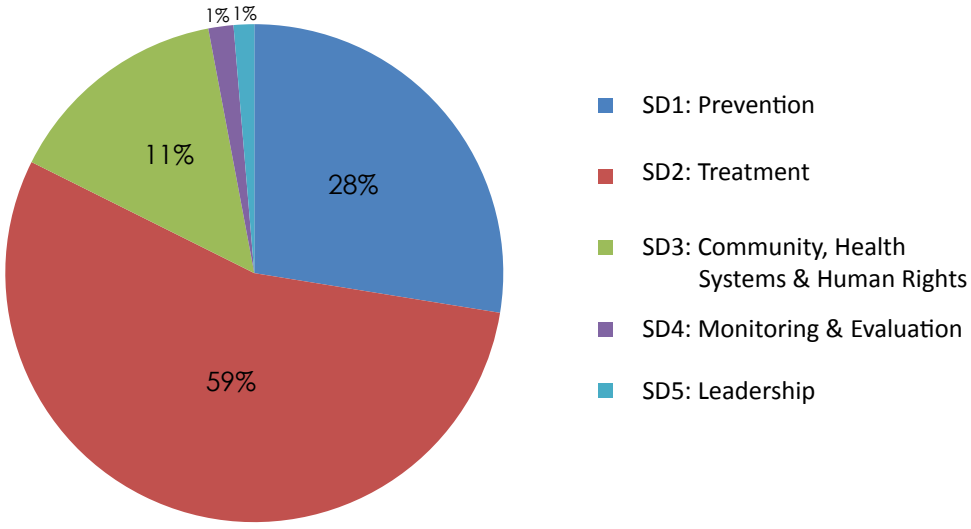
Despite the fact that the global guidelines call to front-load investments to reach the 90–90–90 targets, the successful implementation of NSP III will require an increase in national resources that is beyond the current resourcing envelope of the Government and known donor commitments. The total gross resource needs for NSP III was estimated at US$610 million over five years based upon previous state of the art model-based costing approaches (Table 14).

**Table 14. NSP III gross resource needs**

| | 2016 | 2017 | 2018 | 2019 | 2020 | 2016–2020 |
|---|---|---|---|---|---|---|
| **SD 1: Prevention** | 25 817 081 | 30 029 494 | 34 269 040 | 38 481 667 | 42 721 540 | 171 318 822 |
| **SD 2: Treatment** | 55 065 810 | 63 148 625 | 71 605 275 | 80 298 590 | 89 375 891 | 359 494 190 |
| **SD 3: Systems** | 13 200 000 | 13 200 000 | 13 200 000 | 13 200 000 | 13 200 000 | 66 000 000 |
| **SD 4: SI/M&E** | 1 464 488 | 1 464 488 | 1 464 488 | 1 464 488 | 1 464 488 | 7 322 442 |
| **SD 5: Leadership** | 1 200 000 | 1 200 000 | 1 200 000 | 1 200 000 | 1 200 000 | 6 000 000 |
| **TOTAL** | **96 747 379** | **109 042 608** | **121 738 803** | **134 644 745** | **147 961 919** | **610 135 454** |

(Note: Figures are in US dollars; total is US$513M for 2017–2020)

**Figure 27. Proportion of gross resource needs per Strategic Direction**




To improve cost efficiencies, unit costs for prevention, care and treatment were streamlined in accordance with geographically focused and tailored approaches in high, medium and low priority townships with an emphasis on priority populations and an increasing role of the Government.

In consultation with multiple partners, prevention programme unit costs were revised to reflect different service delivery models (KSC with and without ART, outreach, etc.) and tailored to township classification, with high priority townships[71] reflecting a full package of services provided through a mix of KSC models. The medium priority townships were based primarily upon an outreach model and the low burden townships have a standard commodities and service package, but through a simple integrated public sector approach. The staff mix varies by service delivery model and year-on-year estimated changes to key population coverage and resource use were analysed. Commodities (e.g. condoms, needles), HIV counselling and testing, STI/SRH services were calculated based upon total population need with a mix of KSC and outreach services by township.

The following is a summary of the optimized prevention unit costs for men who have sex with men, sex workers and people who inject drugs:

[71] Full details found in Optimizing Myanmar's National Strategic Plan on HIV and AIDS (2016-2020) for maximum impact and sustainability: Analysis of Resource Needs, draft 2016

| Prevention Unit Cost - MSM | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| High priority townships | 55.49 | 56.76 | 58.44 | 61.14 | 60.33 |
| Medium priority townships | 20.11 | 19.65 | 19.43 | 19.24 | 18.90 |
| Low priority townships | 9.70 | 9.05 | 8.63 | 8.14 | 7.79 |

| Prevention Unit Cost - SW | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| High priority townships | 81.48 | 81.44 | 80.22 | 80.60 | 79.73 |
| Medium priority townships | 45.65 | 44.24 | 41.50 | 39.80 | 37.88 |
| Low priority townships | 34.39 | 33.04 | 30.21 | 28.30 | 26.43 |

| Prevention Unit Cost - PWID | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| High priority townships | 163.58 | 152.55 | 149.26 | 139.45 | 140.51 |
| Medium priority townships | 129.50 | 119.17 | 113.64 | 109.67 | 107.86 |
| Low priority townships | 129.50 | 119.17 | 113.64 | 109.67 | 107.86 |
| | | | | | |
| **MMT Unit Cost - PWID** | **209.75** | **202.46** | **198.73** | **196.28** | **194.64** |

(Note: Figures are in US dollars)

The cost of treatment was also reviewed with modified assumptions of a greater transition of ART patients from the international NGO sector to the public sector, factoring in year-on-year changes to the estimated number of people living with HIV and scaling up viral load testing. The key highlights of the decreasing treatment unit costs are increase in scale efficiencies, the transition of patients from the INGO to the public sector, decreasing cost of drugs and a targeted provision of standardized adherence support. Unit costs for children on ART increase marginally due to a decrease in the number of children becoming infected and requiring treatment.[72]

The following is a summary of the optimized average treatment unit costs per adult ART patient per year:

The combination of revised prevention and treatment unit costs resulted in a budget based upon the net resource requirements associated with a more cost efficient approach with township based implementation (Table 15). This resulted in around US$150 million cost savings over the gross resource requirements. Full budget details can be found in Annex 2.

The proportion of net resource requirements for treatment was 56% and for prevention 27% (Figure 28).

| | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---|---|---|---|---|
| **Average cost per ART patient** | 351 | 341 | 328 | 315 | 303 |

(Note: Figures are in US dollars)

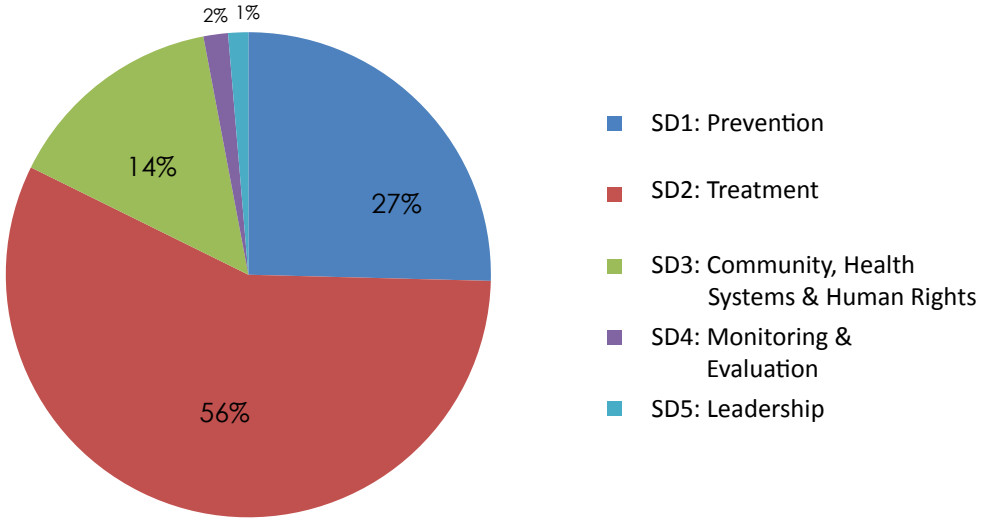
[72] Full details to be published in a report entitled, Optimizing Myanmar's National Strategic Plan on HIV and AIDS (2016-2020) for maximum impact and sustainability: Service Delivery Approaches, draft 2016

**Table 15. NSP III net resource requirements (based upon new unit costs)**

| | 2016 | 2017 | 2018 | 2019 | 2020 | 2016–2020 |
|---|---|---|---|---|---|---|
| **SD 1: Prevention** | 19 080 351 | 21 963 411 | 25 109 047 | 28 094 725 | 30 929 048 | 125 176 583 |
| **SD 2: Treatment** | 42 329 924 | 47 191 823 | 51 352 088 | 55 391 192 | 59 343 976 | 255 609 004 |
| **SD 3: Systems** | 13 200 000 | 13 200 000 | 13 200 000 | 13 200 000 | 13 200 000 | 66 000 000 |
| **SD 4: SI/M&E** | 1 464 488 | 1 464 488 | 1 464 488 | 1 464 488 | 1 464 488 | 7 322 442 |
| **SD 5: Leadership** | 1 200 000 | 1 200 000 | 1 200 000 | 1 200 000 | 1 200 000 | 6 000 000 |
| **TOTAL** | **77 274 764** | **85 019 723** | **92 325 624** | **99 350 405** | **106 137 512** | **460 108 028** |

(Note: Figures are in US dollars; based upon updated prevention/treatment unit costs; total is nearly US$383M for 2017–2020)

**Figure 28. Proportion of net resource requirements per Strategic Direction**




To further optimize the mix and focus of interventions, an AIDS Epidemic Model (AEM) optimization workshop allowed NSP partners to analyse several policy scenarios of effective prevention coverage across high, medium and low priority townships, MMT coverage, ART coverage for key populations and general population, and treatment scenarios of test with immediate treatment, or treatment initiation at <500 CD4 levels. Population size estimate inputs as described in the NSP were used and net resource unit costs were used to develop resource requirements. Details of the optimization process will be published in the Optimizing Myanmar's National Strategic Plan on HIV and AIDS (2016-2020) for maximum impact and sustainability: Analysis of Resource Needs report.

**Overall Funding Landscape for the Implementation Period (2017–2020)**

The NSP III resource need is estimated at US$460 million, an 16% decrease from the total funding need of the previous NSP (2011–2016) of US$550 million. The decrease in the new NSP is attributable to newly adjusted service delivery models and streamlined costs that will enable an effective and efficient strategic scale-up of priority programme components and strengthening of cross-cutting components. The geographic and population prioritization approach following levels of HIV burden in the new NSP also contributes to cost savings, as comprehensive packages of services are only implemented at highest intensity for

those in the highest priority areas (85 out of the 330 townships), and not nationwide.

Domestic funding for the national HIV response is channelled through the budget of the National AIDS Programme and shared health systems. Public sector spending increased from US$3.6 million in 2014 (5% of total HIV spending) to US$10.4 million in 2015 (12% of total HIV spending). Results from the recent National AIDS Spending Assessment (NASA) in Myanmar for 2014–2015 indicated that public sector direct spending on HIV in 2015 was primarily focused on treatment and care programmes, harm reduction (MMT), and policy and coordination.

Through shared health systems, MOHS funding for HIV also includes maternal and child health, infrastructure costs for public health facilities that provide HIV programmes, and general health care staff, among other components. Other ministries also provide modest contributions to the national HIV response through their respective budgets, including the Ministry of Social Welfare, Relief and Resettlement and Ministry of Home Affairs. Planned direct government contributions to implement NSP activities from special budget in 2016 are estimated to increase to US$16 million at minimum for HIV medicines and OST alone, which does not include regular budget and shared health systems costs (i.e. total government contributions will be greater than US$16 million). Although the country remains dependent on external resources, the growing share of public sector spending indicates the commitment and ownership of the Government to transition a domestically financed national HIV response.

The single largest external financing source of the HIV response is the Global Fund, amounting to 50% of total funding (external and domestic sources) for HIV in 2015. Other limited external financing sources include the 3MDG Fund (a multi-donor trust fund that pools the contributions of seven bilateral donors), PEPFAR, Asian Development Bank (ADB), and international and local NGOs. Between 2012 and 2017, out of US$271 million total funding available from the 3MDG Fund, US$13.5 million were allocated for HIV.

Disconcertingly, there is a decreasing trend in external funding for HIV in Myanmar. The Government of Australia in 2015 withdrew health sector support. The 3MDG Fund will close out at the end of 2017, significantly decreasing resources for HIV prevention in Myanmar, particularly in the area of harm reduction for people who inject drugs. As yet, there is no official commitment from the 3MDG Fund Board for HIV after 2017. The United States Government has increased HIV prevention and technical assistance funding through PEPFAR, but this is a modest amount at around US$10 million a year. ADB's investments are largely infrastructure-focused and HIV funding (US$10 million over three years ending at the end of 2017) towards national capacity strengthening, limited to the economic corridors in Kayin State and Mon State. No other donors have pledged significant funds for the HIV response in Myanmar for the NSP III period (2016–2020).

Table 16 provides an overview of estimated and anticipated non-Global Fund resources available in 2017–2020 at around US$98.6 million. Considering anticipated Global Fund new contributions of around US$200 million for 2017–2020, there will still be up to US$150 million shortfall to fund the full NSP at US$460 million.

**Table 16. Resources available for HIV NSP III implementation (excluding Global Fund)**

| Funding Source | 2017 | 2018 | 2019 | 2020 | Total |
|---|---|---|---|---|---|
| Public | 13 243 600 | 13 370 908 | 13 502 035 | 13 637 096 | **53 753 639** |
| International bilateral | 7 949 000 | 7 549 000 | 7 549 000 | 7 549 000 | **30 596 000** |
| International multilateral | 14 076 750 | 200 000 | - | - | **14 276 750** |
| Private | - | - | - | - | **-** |
| **Total US$** | **35 269 350** | **21 119 908** | **21 051 035** | **21 186 096** | **98 626 389** |

* Resource availability survey results; no estimates available from certain organizations beyond the current year
(Note: Figures are in US dollars

During the course of the NSP III several activities will assist the NAP to increase efficiency and maximize effectiveness. These include continued operational and cost efficiency analysis to ensure that current levels of resources are being used to the maximum effectiveness. A National AIDS Spending Assessment will be conducted biennially and capacity transferred to the appropriate national counterpart (e.g. Directorate of PSM, Finance and Administration and Audit in the Department of Public Health) to strengthen the national capacity in monitoring spending and improve efficiencies. Service delivery models will be streamlined. In addition, the Myanmar Health Sector Coordinating Committee (M-HSCC) will lead a process to actively pursue additional international funding to diversify the donor base with the aim of closing the funding gap. Simultaneously, a longterm funding transition plan with greater domestic resource allocation will be developed to ensure the sustainability of the national response beyond 2020. Integration of HIV into UHC schemes will improve sustainability. New and innovative financing models could also be explored such as larger tax revenues, special levies, and corporate social investments.

### 5.2 Recommended activities

1. Conduct yearly resource reviews and resource planning exercise to inform strategic investment decisions
2. Conduct a National AIDS Spending Assessment (NASA) biennially and develop capacity of NAP with the Directorate of PSM, Finance and Administration and Audit in the Department of Public Health to conduct NASA
3. See Strategic Direction 4 on strategic information for cost-efficiency/cost effectiveness analysis
4. Support M-HSCC to lead a process to actively pursue additional national and international funding to diversify the donor base and increase sustainability
5. Investigate alternative models of funding such as larger tax revenues, special levies, corporate social investments
6. Advocate for increased domestic resources including UHC schemes
7. Develop and implement a Funding Transition Plan

**Partners responsible**

- Lead: M-HSCC, MOHS NAP, Directorate of PSM, Finance and Administration and Audit
- Partners: United Nations system, donors, INGOs, all implementing partners for maximizing efficiency and mobilizing resources

**Results**

- At least 20% of the HIV response financed with domestic funds
- Diversified international and private sector resource availability to complement public funds for the NSP
- Increased resources for prevention interventions up to 25% of total resource allocation

### 5.3 Strengthen governance and multi-partner accountability for delivery of results

United Nations organizations (particularly UNAIDS, WHO, UNFPA, UNICEF and UNODC) will continue to provide technical support to government and non-government partners in policy and guidance development, research, planning, coordination, monitoring, procurement and implementation.

**5.3 Recommended activities**

1. Strengthen the M-HSCC to better monitor the integration of the HIV response across the health sector
2. Develop and implement systems that strengthen good governance of the HIV response
3. Build capacity of partners for resource management and accountability through institutionalized technical support mechanisms
4. Develop a Global Fund transition plan including detailing technical and management assistance required to ensure successful transition of Principal Recipient to the Government
5. Build capacity of civil society and priority populations and PLHIV networks to promote strong accountable institutions (see SD 3)
6. Develop and implement a partnership accountability mechanism based on targets and results for national and township levels of interventions
7. Review reporting mechanisms to leverage on regulatory institutions to capture private sector contribution to the HIV response
8. Establish an NSP III monitoring committee to oversee tracking of progress towards results
9. Coordinate advocacy work and information and knowledge management

**Partners responsible**

- Lead: M-HSCC, MOHS
- Partners: United Nations system, donors, State and Township Health Departments/Committees, INGOs, civil society and key population/PLHIV networks, NGOs/CBOs

### 5.4 Strengthen national, regional/state and township HIV coordination mechanisms to improve the response governance and multi-partner accountability for delivery of results

**5.4 Recommended activities**

1. Ensure that mandates, roles and responsibilities among the institutions, stakeholders and sectors at different levels are clearly defined
2. Formalize civil society, priority populations and PLHIV network roles at subnational levels
3. Enable all state and non-state actors to play an effective role in promoting and implementing NSP III
4. Update state and township level plans to reflect and operationalize the priorities and strategies outlined in NSP III
5. Provide technical and management support to state and township levels to implement their HIV plans

**Partners responsible**

- Lead: M-HSCC, MOHS
- Partners: United Nations system, State and Township Health Departments/ Committees, ethnic health authorities

### 5.5 Support Myanmar's participation in regional coordination (i.e. ASEAN) particularly with countries that share border areas

Particularly in areas with migrant flows, Myanmar's collaboration with neighbouring countries to strengthen internal and cross-border referral mechanisms and data sharing will be a priority. This will help address gaps in referral systems for migrants, and facilitate initiation or continuation of ART for returned migrants (including deported migrants) living with HIV. This will be supported by increased awareness and uptake of existing social security and health insurance schemes in countries of origin and destination, including by addressing barriers at the point of care, such as discrimination. In addition, collaboration among the Ministry of Health and Sports, the Ministry of Labour, Immigration and Population, and sending and receiving governments, to simplify and improve access to formal migration mechanisms that guarantee decent work, labour rights and comprehensive health entitlements for all migrants, and improve referral mechanisms for migrants.

**5.5 Recommended activities**

1. Participate in improving mechanisms for regional cooperation, coordination and support of HIV responses
2. Participate in regional sharing of information and data to improve coordination of HIV responses
3. Collaborate in cross-border mechanisms and programmes to support the HIV continuum for priority populations and people living with HIV that cross borders
4. Increase awareness and uptake of existing social security and health insurance schemes in countries of origin and destination, including by addressing barriers at the point of care, such as discrimination.

**Partners responsible**

- Lead: M-HSCC, MOHS
- Partners: United Nations system, donors, INGOs, State and Township Health Departments in border areas

# ANNEXES

# ANNEXES

## ANNEX 1. Monitoring and Evaluation Plan

| Standard Indicators | Data Source | PSE (NSP III) | 2015 Baseline | Proposed for NSP III | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | 2016 | 2017 | 2018 | 2019 | 2020 |
| **FSW** | | | | | | | | |
| **Impact/Outcome Targets (FSW)** | | | | | | | | |
| Number of new infections per 1000 FSW among the uninfected population of FSW | Modelling | 66,000 | 14.56 | | | | | 3.49 |
| % of female sex workers reporting condom use at last sex with client | HSS/IBBS | | 81.1% | | | 86.4% | | 90.0% |
| **Output/Coverage Targets (FSW)** | | | | | | | | |
| % female sex workers reached with HIV prevention programmes | HSS/IBBS | | 72.6% | | | 83.0% | | 90.0% |
| % female sex workers who received an HIV test in the last 12 months and who know the result | IBBS | | 45.8% | | | 71.5% | | 90.0% |
| Number of female sex workers reached with HIV prevention programmes | Program data (from annual report) | 66,000 | 35,443 | 44,280 | 49,559 | 54,837 | 60,116 | 65,395 |
| Number of FSW who received an HIV test and who know the result in the last 12 months | Program data | | 27,865 | 32,993 | 38,121 | 43,249 | 48,377 | 53,505 |
| Number of FSW reached with effective HIV prevention programmes | Program data | 66,000 | 31,654 | 38,636 | 43,840 | 49,043 | 54,247 | 59,450 |
| Number of clients of female sex workers reached with HIV prevention programmmes | Program data | 1,115,530 | 14,410 (High)<br>14,293 (Low) | 78,323 | 142,407 | 206,491 | 270,575 | 334,659 |

| Standard Indicators | Data Source | PSE (NSP III) | 2015 Baseline | Proposed for NSP III | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | 2016 | 2017 | 2018 | 2019 | 2020 |
| **MSM** | | | | | | | | |
| **Impact/Outcome Targets (MSM)** | | | | | | | | |
| Number of new infections per 1000 MSM among the uninfected population of MSM | Modelling | 126,000 | 13.92 | | | | | 3.89 |
| % of men who have sex with men reporting condom use at last anal sex | HSS/IBBS | | 77.1% | | | | 87.4% | 90.0% |
| **Output/Coverage Targets (MSM)** | | | | | | | | |
| % men who have sex with men reached with HIV prevention programmes | HSS/IBBS | | 71.0% | | | | 86.2% | 90.0% |
| % men who have sex with men who received an HIV test in the last 12 months and who know the result | IBBS | | 49.6% | | | | 81.9% | 90.0% |
| Number of men who have sex with men reached with HIV prevention programmes | Program data (from annual report) | 126,000 | 60,469 | 73,277 | 86,083 | 98,890 | 111,696 | 124,503 |
| Number of men who have sex with men who received an HIV test and who know the result | program data | | 34,528 | 47,995 | 61,463 | 74,930 | 88,398 | 101,865 |
| Number of men who have sex with men reached with effective HIV prevention programmes | Program data | 126,000 | 47,499 | 60,636 | 73,773 | 86,910 | 100,047 | 113,184 |

| Standard Indicators | Data Source | PSE (NSP III) | 2015 Baseline | Proposed for NSP III | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | 2016 | 2017 | 2018 | 2019 | 2020 |
| **PWID** | | | | | | | | |
| **Impact/Outcome Targets (PWID)** | | | | | | | | |
| Number of new infections per 1000 PWID among the uninfected population of PWID | Modelling | 83,000 | 50.74 | | | | | 13.60 |
| % of people who inject drugs reporting the use of sterile injecting equipment the last time they injected | HSS/IBBS | | 86.0% | 87% | 88% | 89% | 89% | 90.0% |
| **Output/Coverage Targets (PWID)** | | | | | | | | |
| % people who inject drugs reached with HIV prevention programmes | IBBS | | | | 77.5% | | | 90% |
| % people who inject drugs who received an HIV test in the last 12 months and who know the result | IBBS | | 22.2% | | 56.1% | | | 90.0% |
| Number of people who inject drugs reached with HIV prevention programmes (Outreach and DIC) | Program data | 83,000 | 37,846 | 44,543 | 51,240 | 57,937 | 64,634 | 71,331 |
| Number of people who inject drugs received an HIV test and who know the result | Program data | | 25,385 | 33,914 | 40,026 | 46,137 | 52,249 | 58,361 |
| Number of people who inject drugs reached with effective HIV prevention programmes | Program data | 83,000 | 32,824 | 39,228 | 45,633 | 52,037 | 58,442 | 64,846 |
| Number of sterile injecting equipment distributed to people who inject drugs in the last 12 months | Program data | 83,000 | 18.5m | 20.8m | 23.1m | 25.4m | 27.7m | 30 m |
| Number of people who inject drugs receiving methadone maintenance therapy (at a specified date) | Program data | 83,000 | 10,290 | 14,632 | 18,974 | 23,316 | 27,658 | 32,000 |
| % of individuals receiving methadone maintenance therapy for at least 6 months | Program data | 83,000 | 65% | 72% | 75% | 78% | 82% | 85% |

| Standard Indicators | Data Source | PSE (NSP III) | 2015 Baseline | Proposed for NSP III | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | 2016 | 2017 | 2018 | 2019 | 2020 |
| **General** | | | | | | | | |
| **Impact Targets (General)** | | | | | | | | |
| Number of new infections per 1000 adult (15-49) person-years among the uninfected population | Modelling | | 0.40 | | | | | 0.12 |
| **Output/Coverage Targets (General)** | | | | | | | | |
| Number of regular sexual partners of key populations and discordent couples of PLHIV reached with HIV prevention programmes | Program data | | | | 80,000 | 100,000 | 140,000 | 1,875,000 |
| Number of people who received an HIV test in the last 12 months and who know their result (by FSW, Clients, MSM, PWID, partners of KP, others) by age group | Program data | | 257,178 | 315,616 | 374,054 | 432,493 | 490,931 | 626,204 |
| % of PLHIV who have been tested and known their HIV positive status | Program data | estimated no. of PLHIV | 53% | 60% | 68% | 75% | 83% | 90% |

| Standard Indicators | Data Source | PSE (NSP III) | 2015 Baseline | Proposed for NSP III | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | 2016 | 2017 | 2018 | 2019 | 2020 |
| **PMTCT** | | | | | | | | |
| **Impact Targets (PMTCT)** | | | | | | | | |
| % HIV-infected among HIV-exposed infants born in the past 12 months | Modelling | | 15% | | | | | <5% |
| **Output/Coverage Targets (PMTCT)** | | | | | | | | |
| Number of pregnant women attending antenatal care services who received HIV testing | Program data | 1,107,312 | 793446 (72%) | 834,073 | 874,700 | 915,327 | 955,954 | 996,581 |
| Number of pregnant women attending antenatal care services who received HIV test result with post-test counselling | Program data | 1,107,312 | 748299 (68%) | 797,955 | 847,612 | 897,268 | 946,924 | 996,581 |
| Number of HIV positive pregnant women attending antenatal care services who received HIV testing and know their positive status | Program data | Spectrum result for respective years | 4365 (86%) | 4473 | 4483 | 4536 | 4579 | 4616 |
| Number of HIV-positive pregnant women who received antiretrovirals to reduce the risk of mother-to-child transmission | Program data | Spectrum result for respective years | 3923 (77%) | 4101 | 4206 | 4351 | 4486 | 4616 |
| % of HIV exposed infants who initiated ARV prophylaxis | Program data | Spectrum result for respective years | 2169 (43%) | 52% | 62% | 71% | 81% | 90% |
| % of HIV exposed infants started on cotrimoxazole prophylaxis within 2 months of birth | Program data | Spectrum result for respective years | 1470 (29%) | 41% | 53% | 66% | 78% | 90% |
| % of HIV exposed infants receiving a virological test for HIV within 2 months of birth | Program data | Spectrum result for respective years | 801 (16%) | 31% | 46% | 60% | 75% | 90% |
| % of identified HIV positive infants who initiated ART by 12 months of age | Program data | Spectrum result for respective years | | 100% | 100% | 100% | 100% | 100% |

| Standard Indicators | Data Source | PSE (NSP III) | 2015 Baseline | Proposed for NSP III | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | 2016 | 2017 | 2018 | 2019 | 2020 |
| **ART** | | | | | | | | |
| **Outcome Targets (ART)** | | | | | | | | |
| % people living with HIV and on ART who are retained on ART 12 months after initiation | Program data | denominator - PLHIV on ART | 85% | 86% | 87% | 88% | 89% | 90% |
| % of PLHIV on ART who are virally suppressed (<=1,000 copies/ml) | Program data | denominator - PLHIV on ART | 8% | 24% | 41% | 57% | 74% | 90% |
| % of PLHIV on ART who are virally suppressed among those tested for viral load test in the last 12 months | Program data | denominator - those on ART and tested for VL in the last 12 months | 87% | 88% | 88% | 89% | 89% | 90% |
| % of PLHIV on ART with viral load suppression (<1,000 copies/ml) at 12 months after treatment initiation | Program data | denominator - those tested for VL at 12 months after ART | 85% | >85% | >85% | >85% | >85% | >85% |
| **Output/Coverage Targets (ART)** | | | | | | | | |
| Number and % of newly diagnosed HIV positive people newly enrolled in and receiving care | Program data | | | | | | | 90% |
| % of people living with HIV who are receiving antiretroviral therapy | Program data | denominator - all PLHIV | 47% | 54% | 61% | 67% | 74% | 81% |
| Number of adults living with HIV who are receiving ART | Program data | estimated no. of adult PLHIV for respective years | 99404 (46%) | 115,534 | 132,925 | 151,054 | 170,003 | 189,802 |
| Number of children living with HIV who are receiving ART | Program data | estimated no. of child PLHIV for respective years | 7086 (75%) | 7,696 | 7,771 | 7,722 | 7,559 | 6,941 |
| Number of PLHIV on ART received viral load measurement during the reporting period | Program data | | 9,700 | 36,000 | 36,000 | 45,000 | 90,000 | 177,069 |
| Number of HIV-positive new and relapse TB patients on ART during TB treatment | Program data | 12000 | 6534 (34%) | 7,387 | 8,240 | 9,094 | 9,947 | 10,800 |
| % of people newly enrolled in HIV care who are started on TB preventive therapy (e.g. IPT) | Program data | | 3361 (10%) | 18% | 26% | 34% | 42% | 50% |

## ANNEX 2. Budget Requirements

| | Budget requirements | | | | | |
|---|---|---|---|---|---|---|
| | **2016** | **2017** | **2018** | **2019** | **2020** | **2016–2020** |
| | 77,274,764 | 85,019,723 | 92,325,624 | 99,350,405 | 106,137,512 | 460,108,028 |
| **Strategic Direction 1. Reducing new HIV infections** | **19,080,351** | **21,963,411** | **25,109,047** | **28,094,725** | **30,929,048** | **125,176,583** |
| PWID DiC+Outreach | 6,172,276 | 6,674,191 | 7,424,071 | 7,832,796 | 8,723,233 | 36,826,567 |
| PWID on MMT | 3,069,013 | 3,841,476 | 4,633,589 | 5,428,712 | 6,228,480 | 23,201,270 |
| FSW DiC+Outreach | 2,966,829 | 3,356,304 | 3,685,809 | 4,083,020 | 4,383,454 | 18,475,415 |
| MSM DiC+Outreach | 2,836,224 | 3,513,453 | 4,245,472 | 5,087,822 | 5,389,085 | 21,072,056 |
| Migrants | 1,110,168 | 1,110,168 | 1,110,168 | 1,110,168 | 1,110,168 | 5,550,838 |
| Clients of SWs | 340,333 | 618,794 | 897,255 | 1,175,715 | 1,454,176 | 4,486,272 |
| Prisoners | 382,031 | 541,210 | 700,390 | 859,570 | 1,018,749 | 3,501,950 |
| Mass media | 160,000 | 164,800 | 169,744 | 174,836 | 180,081 | 849,461 |
| PMTCT | 2,043,479 | 2,143,015 | 2,242,551 | 2,342,087 | 2,441,623 | 11,212,754 |
| **Strategic Direction 2. Improving health outcomes for all PLHIV** | **42,329,924** | **47,191,823** | **51,352,088** | **55,391,192** | **59,343,976** | **255,609,004** |
| ART (Adult) | 40,529,574 | 45,363,519 | 49,506,780 | 53,541,408 | 57,583,726 | 246,525,007 |
| ART (Children) | 1,599,851 | 1,605,995 | 1,595,867 | 1,570,727 | 1,450,083 | 7,822,523 |
| TB/HIV | 200,500 | 222,310 | 249,441 | 279,056 | 310,167 | 1,261,474 |
| **Strategic Direction 3. Strengthening integration of community and health systems & promoting a human rights based approach** | **13,200,000** | **13,200,000** | **13,200,000** | **13,200,000** | **13,200,000** | **66,000,000** |
| Strengthening supply management | 1,700,000 | 1,700,000 | 1,700,000 | 1,700,000 | 1,700,000 | 8,500,000 |
| Infrastructure renovation and upgrading, including lab | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 | 5,000,000 |
| Capacity building GOV | 350,000 | 350,000 | 350,000 | 350,000 | 350,000 | 1,750,000 |
| Capacity building CSOs | 150,000 | 150,000 | 150,000 | 150,000 | 150,000 | 750,000 |
| Policy and Coordination | 10,000,000 | 10,000,000 | 10,000,000 | 10,000,000 | 10,000,000 | 50,000,000 |
| **Strategic Direction 4: Strengthening strategic information and research to guide service delivery, management, financing and policy** | **1,464,488** | **1,464,488** | **1,464,488** | **1,464,488** | **1,464,488** | **7,322,442** |
| Routine reporting, analysis and review | 828,308 | 828,308 | 828,308 | 828,308 | 828,308 | 4,141,542 |
| Surveillance and Surveys | 420,180 | 420,180 | 420,180 | 420,180 | 420,180 | 2,100,900 |
| Strengthen HR and coordination | 216,000 | 216,000 | 216,000 | 216,000 | 216,000 | 1,080,000 |
| **Strategic Direction 5: Promoting accountable leadership for the delivery of results by all partners** | **1,200,000** | **1,200,000** | **1,200,000** | **1,200,000** | **1,200,000** | **6,000,000** |
| Management and administration | 1,200,000 | 1,200,000 | 1,200,000 | 1,200,000 | 1,200,000 | 6,000,000 |