Regional Action Plan for HIV in South-East Asia (2017-2021)

## Accelerating the Reversal and Ending AIDS







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#### **FOREWORD**

hirty six years after the first few cases of HIV were reported in the world we have come a long way in our journey against HIV/AIDS. No one would have thought in 1981 that in such a short time we shall be talking of not only controlling HIV/AIDS but also of "Ending AIDS by 2030". Scientists, physicians, communities and political leaders worked together and have come to stage where we are closer than ever before to eliminating HIV.

New HIV infections have declined significantly, AIDS-related deaths have come down over the years, and the provision of antiretroviral therapy has provided good quality of life to millions of people across the world. We have effective means of preventing mother-to-child transmission of HIV. Tremendous efforts are ongoing to develop an effective vaccine against HIV/AIDS and researchers are also talking of a cure for AIDS.

Just two decades ago the WHO South-East Asia Region was one of the most affected by HIV. The epidemic models predicted catastrophic health effects across the Region due to HIV. Focusing on prevention, decision-makers and experts in the Region used sound data to focus their energy and resources in the right places that led to one of the most remarkable successes in HIV response. The involvement of the community in decision-making as well as implementation was a unique feature of the HIV programme and one of the reasons for its great success. The community-led response and focus on key populations have been key features of the AIDS response in the Region.

All countries in the South-East Asia Region have adopted the WHO TREAT ALL recommendations and this is likely to lead to significant increase in the number of people receiving free antiretroviral therapy (ART) in the Region. Increase in coverage of antiretroviral therapy will have significant prevention benefits also in terms of reducing new infections in addition to reduction in HIV-related deaths. The decline in donor funding has been a cause for concern but most countries in the Region have responded quickly to this by increasing their domestic funding for their HIV programmes.

While we have reasons to celebrate the successes, there are a number of challenges too. People are still presenting late with low CD4 counts leading to significant morbidity and mortality. Though 70% of those estimated to be living with HIV know their status, only 45% of those living with HIV are receiving antiretroviral therapy. There are some countries in the Region where new infections are increasing in some areas and subpopulations. Routine viral load monitoring needs to be made available in all countries. It is important to build on the gains achieved so far. At the same time it is more important to fast-track the response so that that we are able to expand the coverage of preventive and treatment services in a significant way to reach the 90:90:90 and other fast-track targets.

The South-East Asia Regional Action Plan (RAP) for HIV (2017–2021) provides a clear vision of "zero new infections, zero HIV-related deaths, and zero discrimination" and a goal of "Ending the AIDS epidemic as a public health threat by 2030". The action plan has targets of reducing new infections to 51 000 and AIDS related deaths to 43 000 annually and increasing the number of people living with HIV on ART to 2.9 million by 2020. It promotes a people-centred approach and is grounded in principles of human rights and health equity.

The Regional Office for South-East Asia has also partnered with the Regional Office for the Western Pacific to finalize the Regional Framework for the Triple Elimination of Mother-to-Child Transmission of HIV, Hepatitis B and Syphilis in Asia and the Pacific 2018—2030.

I hope that the Member States, partners, communities, institutions and other key stakeholders will find the RAP both useful and helpful for WHO to achieve its vision and goal.

Dr. Poonam Khetrapal Singh

Regional Director

WHO South-East Asia Region



#### **FOREWORD**

s we mark World AIDS Day 2017, it is a time to honour the lives lost, celebrate the progress made and commit to redoubling efforts to ending the AIDS epidemic by 2030, a target agreed by United Nations Member States.

The South-East Asian region has much to applaud. Just ask Veena in Bangalore, India. When she was diagnosed with HIV some 20 years ago, her life fell apart. She struggled with poor health. But then she started accessing antiretroviral medicine and became healthy and strong. Now, she is a community educator and her cheery presence comforts many other women living with HIV. There are now more than one million people accessing life-saving treatment in India alone.

Every person accessing timely treatment is a life restored to fullness and health. The treatment gap in the region is still very significant, and while there are innovative solutions for bridging those gaps, Many people living with HIV who already know their status are still not accessing life saving treatment.

And when it comes to new HIV infections, many countries in the region have experienced a significant decline. Countries in South-East Asia were global pioneers in designing and implementing effective key populations interventions at a scale that led to major achievements in reversing the trend of the epidemic, it is now time to consider an adaptation of those models to take advantage from the recent evidence on more effective models and technologies for prevention such as oral pre-exposure prophylaxis (PrEP) and community-based HIV services.

The end of the AIDS epidemic is in sight, but this is not the time for complacency. The last mile is often the hardest.

In South-East Asia, key populations and people living with HIV continue to face stigma and discrimination, adding to their challenges in accessing HIV prevention and other health services.

This year, UNAIDS is shining the light on the right to health and the challenges people around the world

face in exercising their rights. If a person's right to health is compromised, they are often unable to effectively prevent disease and ill health, including HIV, or to gain access to treatment and care. The most marginalized people in society, including sex workers, people who inject drugs, men who have sex with men, people in prisons and migrants, are often the least able to access their right to health; they are also the most vulnerable to HIV.

UNAIDS strongly values its effective partnership with WHO. Together we are supporting the implementation of the Regional Action Plan and will continue working with all countries to provide technical support as needed, ensuring the effectiveness and sustainability of the AIDS response and our ultimate shared goal of ending AIDS.

**Eamonn Murphy** 

Regional Director

Support Team for Asia and the Pacific, UNAIDS





#### **ACRONYMS**

AIDS acquired immunodeficiency syndrome

ARD aids related deaths

ART antiretroviral therapy

**CBO** community based organization

CBNAAT cartridge based nucleic acid amplification test

DBS dried blood spots

EID early infant diagnosis

**GBV** gender-based violence

HBV hepatitis B virus

**HCV** hepatitis C virus

HIV human immunodeficiency virus

HTS HIV testing services

MSM men who have sex with men

NCD noncommunicable disease

NGO nongovernmental organization

OST opioid substitution therapy

**PLHIV** people living with HIV

PMTCT prevention of mother-to-child transmission

POC point-of-care

PrEP pre-exposure prophylaxis

PWID people who inject drugs

Sustainable Development Goal

**SRH** sexual and reproductive health

STI sexually transmitted infection

TB tuberculosis

**UHC** universal health coverage

UNAIDS Joint United Nations Programme on HIV and AIDS

WHO World Health Organization



he WHO Global Health Sector Strategy on HIV 2016–2021 (1) and the UNAIDS 2016–2021 Strategy On the Fast Track to end AIDS (2) have outlined plans and targets for achieving the ambitious goal of ending acquired immunodeficiency syndrome (AIDS) as a public health threat by 2030 in line with Sustainable Development Goal (SDG) Target 3.3. These strategies, firmly grounded in human rights and in values of solidarity, inclusion and smart programming, have resulted in shifting the AIDS paradigm of containment to elimination, requiring a completely different course of action and resource envelope. These strategies warn that the failure to build on past achievements would inevitably cause the HIV epidemic to re-emerge and cost substantially more in the long run.

These cautionary words are prescient for the World Health Organization (WHO) South-East Asia Region comprising 11 Member States.<sup>a</sup> Thus far, these Member States have managed to avoid the predicted explosion of HIV infections and AIDS-related deaths (3). Nevertheless, achieving fast track targets, specifically: (i) the 90–90–90 target, i.e. by 2020, 90% of all people living with human immunodeficiency virus (HIV) will know their HIV status, 90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy (ART) and 90% of all people receiving ART will have viral suppression; and (ii) the WHO global HIV target of reducing both AIDS-related mortality and new infections to less than 500 000, respectively, and eliminating HIV-related stigma and discrimination by 2020 – will require renewed commitment of front-loading investments, redoubling of efforts and developing smart and targeted programming that addresses the heterogeneity of epidemics.

<sup>&</sup>lt;sup>a</sup> The 11 countries of SEAR include: Bangladesh, Bhutan, Democratic People's Republic of Korea, India, Indonesia, Maldives, Myanmar, Nepal, Thailand and Timor-Leste.

It is possible for the Region to achieve the elimination of AIDS by 2030 by placing emphasis on the following actions, as recommended by the strategies:

- reaching those most in need with proven prevention and treatment interventions;
- developing and applying innovative mechanisms and approaches;
- defending and ensuring the human rights of all people by repealing punitive laws that pose as barriers;
- ending stigma and discrimination in health-care settings and in society at large;
- integrating the range of services including those for coinfection, especially tuberculosis (TB) and hepatitis in an equitable manner;
- front-loading financial investments; and
- positioning the health sector response as a cornerstone of universal health coverage (UHC).

Over the next 5 years, Member States in the Region need to recapture the urgency by maintaining a focus on key populations such as sex workers, men who have sex with men (MSM), transgenders and people who inject drugs (PWID). These populations are most heavily affected by the epidemic in the Member States of the South-East Asia Region. The approach will be to reach out to the unreached key populations as well as non-key populations. By grounding the HIV response in human rights values, repealing punitive laws and policies and investing in high quality and stigma-free interventions, the Region could win the fight against AIDS.

The Regional Action Plan for HIV in South-East Asia (2017– 2021), based on the WHO Global Health Sector Strategy on HIV (2016–2021) and the UNAIDS Fast-Track Strategy (2016-2021), adapts global targets for the Region and outlines key actions required by Member States including types of technical support that can be provided through the WHO Regional Office for South-East Asia and the the Joint United Nations Programme on HIV and AIDS (UNAIDS) Regional Support Team. The first section reviews the global commitments, beginning with Millennium Development Goals (MDGs) through to SDG Goal 3 on health, and describes the recent WHO and UNAIDS strategies and respective targets in line with Target 3.3. The next section discusses the HIV epidemiology and emerging challenges in the context of the South-East Asia Region. The last two sections focus on the paradigm shift necessary for ending AIDS, as opposed to controlling it, and discusses the actions needed for achieving the targets for 2020.





# GLOBAL COMMITMENTS AND FRAMEWORK OF THE REGIONAL ACTION PLAN

#### 2.1. MDGs to SDGs

n 2000, the MDGs established a global framework of commitments by leaders of 189 countries to achieve a set of eight measurable goals and targets, to be met by 2015 (4). MDG 6 on combating HIV and AIDS, malaria and other diseases included two HIV targets: (i) halting and beginning to reverse the spread of HIV; and (ii) achieving universal access to treatment. Although these targets were not fully met, there were significant achievements. By 2016, nearly 20 million persons were on treatment compared with a little over one million in 2001, and the number of new HIV infections had been reduced from three million to just over two million.

As the MDGs came to an end, the new set of SDGs were adopted on September 2015 to carry forward the momentum and commitment to global development and set new targets for HIV and AIDS (5). The MDGs related to health (MDG 4 on reducing child mortality, MDG 5 on improving maternal health and MDG 6 on combating HIV/AIDS, malaria and other diseases) were expanded to an overarching goal of ensuring healthy lives and promoting wellbeing for all at all ages, covered in SDG 3 (6). The targets and indicators under SDG 3 that were related to HIV included:

**TARGET 3.3** By 2030, end the epidemics of AIDS, TB, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases.

**INDICATORS:** 

- 3.3.1. Number of new HIV infections per 1000 uninfected population by sex, age and key populations
- 3.3.2. TB incidence per 1000 population.

**TARGET 3.5** Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol.

#### **INDICATORS:**

 3.5.1. Coverage of treatment interventions (pharmacological, psychosocial and rehabilitation and after-care services) for substance use disorders.

**TARGET 3.8** Achieve UHC, including financial risk protection, access to quality essential health-care

services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

#### **INDICATORS:**

- 3.8.1. Coverage of essential health services (defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, noncommunicable diseases (NCDs) and service capacity and access among the general and the most disadvantaged populations).
- 3.8.2. Number of people covered by health insurance or a public health system per 1000 population.

SDG 3 also includes Target 3.7 that ensures universal access to sexual and reproductive health-care services, including for family planning, information and education and the integration of reproductive health into national strategies and programmes.<sup>b</sup>













RESPONSIBLE

CONSUMPTION AND PRODUCTION





14 LIFE BELOW WATER











ON LAND

<sup>&</sup>lt;sup>b</sup> These two accompanying indicators measure only access to family planning and birth rates among adolescents, both of which are not directly linked to HIV but can be easily adapted and connected to it.

In addition to specific health targets, the SDGs contain other goals and respective targets that are of direct relevance to ending AIDS. These include:

- SDG 5 that aims to achieve gender equality and empower all women and girls;
- SDG 10 on reducing inequality within and among countries;
- SDG 16 aims to promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels; and
- SDG 17 on strengthening the means of implementation and revitalizing the global partnership for sustainable development.

The two strategies, the WHO Global Health Sector Strategy on HIV and the UNAIDS Fast-Track Strategy and Political declaration on HIV/AIDS at the High Level Meeting (June 2016) sit squarely within the SDG framework of global commitments (Box 1).

## 2.2. WHO and UNAIDS strategies 2016 to 2021

The WHO Global HIV Sector Strategies 2016–2021 and UNAIDS Fast-Track Strategy 2016–2021, crafted in the wake of new scientific evidence on the benefits of treatment, including early initiation of ART and its role in prevention, focused on the "end of AIDS" by 2030. This goal to end AIDS was further boosted by the visible achievements and progress made in addressing the global HIV epidemic over the past 10 years, and the global commitments that indicate that an AIDS-free generation is within grasp.

The UN High-Level Meeting on ending AIDS held on 8-10 June 2016 reviewed the evidence of the new developments in antiretrovirals and diagnostics, treatment as prevention (7) and the investment case approach (8), and reaffirmed the commitment. It called for urgent actions over the next 5 years to meet the fast track targets, urging governments to front-load investments (9). The funding needed is an estimated USD 26.2 billion for the HIV response in 2020. The High-Level Meeting noted that failure to invest in the response would lead to worsening of the epidemic (10). It also highlighted that a fast track approach will avert 17.6 million new infections and 10.8 million AIDS-related deaths between 2016 and 2030. Noting the shared responsibilities and global solidarity underlined by innovations in programming, new technologies and treatments, commitment to human rights, gender equality and ending stigma and discrimination, the strategies stressed that the opportunity to end the AIDS epidemic by fast-tracking the HIV response is within the grasp of each country.

UNAIDS has pushed countries to meet 10 fast track targets (10) (Fig. 1) by developing locally tailored responses that include communities and key populations, strengthen health systems and remove discriminatory laws, legislation and policies, especially those criminalizing key populations.

The WHO Global Health Sector Strategy on HIV 2016–2021, aligned with the UNAIDS Fast-Track Strategy and the post-2015 health and development agenda and targets, draws on UHC as an overarching framework, the continuum of HIV services (the HIV Cascade) as an organizing basis for implementation, and public health approach as the underpinning. The strategy is organized according to five strategic directions or areas of priority actions.

#### **BOX 1: Timeline of Commitments and Strategies Addressing HIV**

**2000 2001 2006 2010 2011** 

UN Millennium Declaration Millennium

Development Goals

and declaration

of commitment on

HIV/AIDS

Political declaration on HIV and AIDS

UNAIDS getting to zero
2011–2015
WHO Global Health
Sector Strategy on HIV/
AIDS 2011–2015
Global Commission on
HIV and the Law

Political declaration on HIV and AIDS: Intensifying our efforts to eliminate HIV and AIDS investment approach for an effective response to HIV/AIDS

#### **TARGETS FOR 2020**



#### Targets 1

and adults) living with HIV know their status, 90% of people living with HIV who know their status are receiving treatment and 90% of people on treatment have suppressed viral loads





Zero new HIV infections among children, and



#### Targets 2

mothers are alive and well

90% of key populations, including sex workers, men who have sex with men, people who inject drugs, transgender eople and prisoners, as well as migrants, have access to HIV combination prevention services

> **Targets 7** 90% of women and girls live free from gender inequality and gender-based violence to mitigate the risk and impact of HIV



#### **Targets 9**

Overall financial investments for the AIDS response in low- and middle-income countries reach at least US\$ 30 billion, with continued increases from the current levels of domestic public sources





#### **Targets 3**

90% of young people are empowered with the skills, knowledge and capability to protect themselves from HIV



#### Targets 10

75% of people living with, at risk of and affected by HIV, who are in need, benefit from HIV-sensitive social protection



#### Targets 4

90% of women and men, especially young people and those in high-prevalence settings, have access to HIV combination prevention and sexual and reproductive health services



#### **Targets 5**

27 million additional men in high-prevalence settings are voluntarily medically circumcised, as part of integrated sexual and reproductive health services for men

.....



#### **Targets 8**

90% of people living with, at risk of and affected by HIV report no discrimination, especially in health, education and workplace settings



2015 2016



2012

WHO consolidated guidelines on HIV prevention, treatment and care for key populations

2014

UNAIDS fast-track - ending the AIDS epidemic by 2030

PEPFAR 3.0 - Controlling the epidemic: delivering on the promise of an AIDSfree generation



**SDGs** WHO Global Health Sector Strategy 2016-2021

**UNAIDS Strategy** 2016-2021

Political Declaration on HIV and AIDS: On the Fast Track to Accelerating the Fight against HIV and to Ending the AIDS Epidemic by

2030



Five strategic directions of Global Health Sector Strategy on HIV (2016-2021)

#### STRATEGIC DIRECTION 1

#### WHAT IS THE SITUATION?

Focuses on the need to understand the HIV epidemic and response as a basis for advocacy, political commitment, national planning, resource mobilization and allocation, implementation and programme improvement

#### **STRATEGIC DIRECTION 2**

#### WHAT SERVICES SHOULD BE DELIVERED?

Addresses the first dimension of UHC by describing the essential package of high-impact interventions that need to be delivered along the continuum of HIV services to achieve country and global targets, which should also be considered for inclusion in national health benefit packages

#### **STRATEGIC DIRECTION 3**

#### **HOW CAN THESE SERVICES BE DELIVERED?**

Addresses the second dimension of UHC by identifying the best methods and approaches for delivering the continuum of HIV services to different populations and in different locations so as to achieve equity, maximize impact and ensure quality

#### **STRATEGIC DIRECTION 4**

HOW CAN THE COSTS OF DELIVERING THE PACKAGE OF SERVICES BE COVERED?

Addresses the third dimension of UHC by identifying sustainable and innovative models for financing HIV responses, approaches for reducing costs and financial protection systems so that people can access the services they need without incurring financial hardship

#### **STRATEGIC DIRECTION 5**

HOW CAN THE TRAJECTORY OF THE RESPONSE BE CHANGED?

Identifies those areas where there are major gaps in knowledge and technologies, where innovation is required to shift the trajectory of the HIV response so that actions can be accelerated and the 2020 and 2030 targets achieved.



**JUNE 2016** 

GLOBAL HEALTH SECTOR STRATEGY ON

HIV 2016–2021

**TOWARDS ENDING AIDS** 



#### **TARGETS**

The WHO HIV Strategy adopted many of the same targets as in the UNAIDS Fast-Track Strategy (given in italics below) on reducing HIV-related deaths, testing and treatment, prevention and discrimination, and also included some additional targets.

#### **HIV-RELATED DEATHS**

- Reduce global HIV-related deaths to below 500 000
- Reduce TB deaths among PLHIV by 75%
- Reduce hepatitis B and C deaths among people coinfected with HIV by 10%

#### **TESTING AND TREATMENT**

90-90-90

#### **PREVENTION**

 Reduce new infections to below 500 000 and achieve zero new infections among infants

#### **DISCRIMINATION**

- Zero HIV-related discriminatory laws, regulations and policies, and zero HIV-related discrimination in all settings, especially health settings
- Ninety percent of people living with HIV (PLHIV) and key populations report no discrimination in the health sector

#### **FINANCIAL SUSTAINABILITY**

- Overall financial investments for the AIDS response in low- and middle-income countries to reach at least US\$ 26.2 billion
- Ensure that all countries have integrated essential HIV services into national health financing arrangements

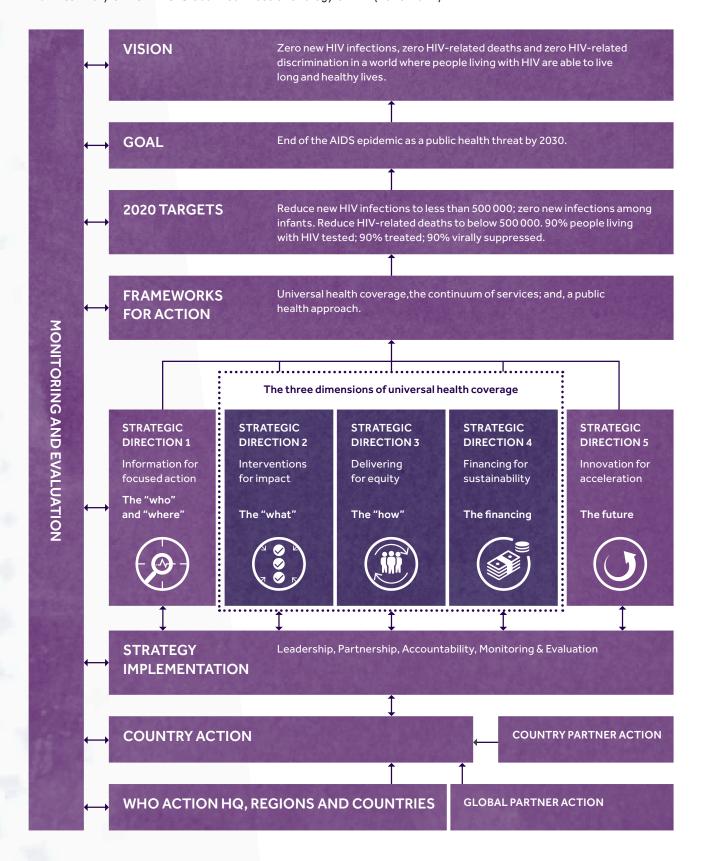
#### **INNOVATION**

- Increase research into and development of HIV-related vaccines and medicines for use in treatment and prevention
- Provision of access by 90% of countries to integrated health services covering HIV, TB, hepatitis B and C, reproductive health and sexually transmitted infections.

The Global Heath Sector Strategy on HIV (2016–2021) (Fig. 2) outlines certain key activities by countries and WHO on each of these strategic directions. According to the WHO strategy, there are six critical areas in the health sector that require renewed commitments, resources and intensified efforts:

- Bolster combination prevention including preventive benefits of ART through preexposure prophylaxis (PrEP) and effective topical microbicides, coupled with condoms. Innovations in condom programming with lubricants will improve the HIV response going forward among both men and women.
- 2. Ensure that all PLHIV know their status by focusing on new HIV testing approaches that include self- and community-based testing.
- Expand quality treatment for all PLHIV and fill the HIV treatment gap by addressing the inequities in access for infants, children, adolescents, and key populations.
- 4. Keep people healthy and alive through a person-centred and holistic chronic care model that links HIV services with those for TB, viral hepatitis and NCDs, and recognizes mental health and substance use disorders. Combining the efforts on HIV and TB programming strengthens integration and enhances the effects of life-saving interventions with efficient use of available resources.
- 5. Reach and protect those most vulnerable and at risk by focusing on investments to strengthen community-based services, reducing vulnerability and effectively tackling gender-based discrimination and violence, expanding harm reduction programmes, reaching key populations (notably MSM, PWID, sex workers, transgenders and prisoners) and overturning laws and changing policies that marginalize and stigmatize populations, promote risky behaviour and serve as a barrier to accessing services.
- Reduce costs and improve efficiencies in resource-constrained environments. This is achieved by increasing efficiencies in service delivery, reducing prices of medicines and other diagnostics and through rational allocation of resources.

FIG.2: Summary of the WHO Global Health Sector Strategy on HIV (2016-2021)



Both strategies emphasize bringing together different constituencies, sectors and organizations in support of a coordinated and coherent response. Recognition of partnerships with donors, development agencies, UN agencies, technical partners and civil society are considered as essential elements of effective implementation. Lastly, these strategies note that accountability mechanisms need to function well this requires strategic information and indictors for measuring progress. Countries should, therefore, set clear goals and targets with appropriate indicators on availability, coverage, quality and impact of interventions to track commitment (11,12).

### 2.3. Regional Action Plan framework

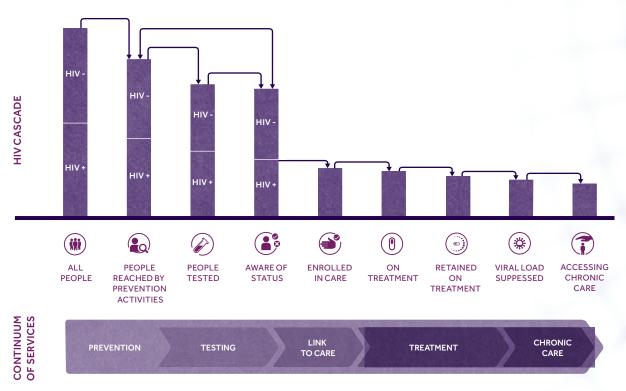
The Regional Action Plan for HIV was developed by taking the two strategies, WHO Strategy for 2016–2021 and UNAIDS Fast Track Strategy with their respective frameworks and targets, and adapting these into six priority action areas.

Priority action area					
Key pillars	<ol> <li>Combination prevention</li> <li>90–90–90 targets of test, treat and viral load suppression</li> <li>Enabling environment</li> </ol>				
Cross-cutting elements <sup>c</sup>	<ul><li>4) Strategic information</li><li>5) Financial sustainability</li><li>6) Community systems strengthening</li></ul>				

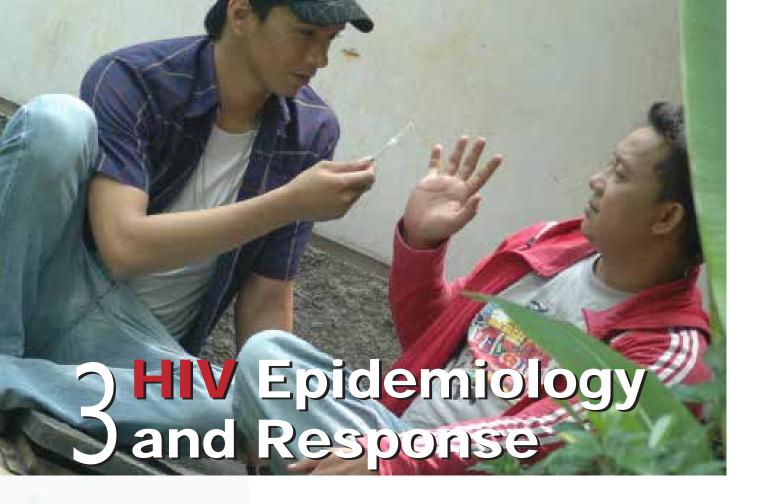
For each priority area, a set of recommended actions were developed, which are to be adjusted and tailored to each country's HIV epidemic and response. In addition, the support needed from WHO/UNAIDS was also outlined in each priority area. These priority action areas are detailed in tables 2-7.

The framework needs to look at the continuum of care for HIV vulnerability, risk reduction, prevention diagnosis treatment and access to chronic care (Fig. 3).

FIG.3: Continuum of care



<sup>&</sup>lt;sup>c</sup>The six priority areas were developed through discussions with UNAIDS Regional Support Team (Vladanka Andreeva and Taoufik Bakkahli) and WHO Regional Office for South-East Asia (Raazia Pendse and B.B. Rewari).



#### 3.1. Characteristics of the epidemic

RT has fundamentally altered the course of the Global AIDS epidemic, reducing HIV-related mortality and morbidity and slowing down the trajectory of HIV transmission. In the South-East Asia Region, the situation is as shown below:

AIDS-related deaths declined by 30% between 2010 and 2016 The number of annual new HIV infections decreased from 350 000 in 2000 to 150 000 in 2016. 25% lower than the number in 2010 (200 000)

Treatment coverage remains low at only 45% of PLHIV on antiretrovirals. This can be considerably lower in key populations.

Although adult HIV prevalence is low at 0.3% of the population in the South-East Asia Region the sheer size of the population in the Region (26% of the world total at 1.86 billion) creates a high burden of HIV in absolute numbers, which is 3.5 million persons in the Region living with HIV (13, 14). This is the second highest burden after sub-Saharan Africa. More than 99% of PLHIV are in five Member States – India, Indonesia, Myanmar, Nepal and Thailand (Fig. 4). Five other Member States (Bangladesh, Bhutan, Maldives, Sri Lanka and Timor-Leste) represent less than 1% of all PLHIVs, and Democratic People's Republic of Korea has not reported any cases. Although India accounts for 60%

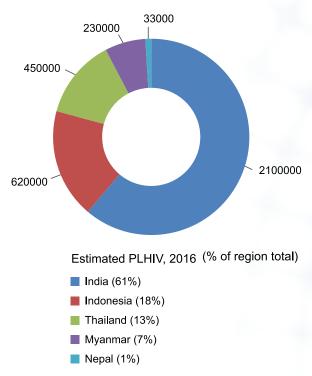
of the HIV burden, Indonesia, Myanmar and Thailand bear a disproportionate number of estimated PLHIV with respect to the size of the population of each country. Within countries, there is widespread geographical variation, but the epidemic tends to be concentrated within certain regions or in urban centres. For example, India has a prevalence of 0.26% but reports a higher HIV prevalence in Southern and North-Eastern States of India (15), while Indonesia reports higher concentrations in Papua and West Papua (16).

The HIV epidemic is also concentrated in certain key populations, which includes sex workers and their clients, MSM, transgender people and PWID, who are at high risk for acquiring HIV. The patterns of transmission vary between different parts of each country and across countries, making nuanced strategic information vital for the response. The prevalence of sexually transmitted infections (STIs), often high among key populations, also fuels HIV transmission.

Adolescents and young adult PLHIV (15-24 years of age), especially those from key populations, account for 44% of all new HIV infections. Epidemic modelling suggests that between 2010 and 2016, new HIV infections among Adolescents and young adult PLHIV (15-24 years of age) have declined 17%, 24%, 25%, 54% and 49% respectively in India, Indonesia, Myanmar, Nepal and Thailand. HIV prevalence is the highest (above 5%) among young MSM in Indonesia, Myanmar and Thailand 25.8%, 4.3%, and 9.15% respectively. As the demographic transition continues over the next decade, a new group of below 15-year olds will shift into being sexually active adults, greatly increasing the risk of resurgence of new infections (17).d

Of the 3.5 million PLHIV living in the South-East Asia Region, 1.3 million (39%) are women aged 15 years and above. The underlying gender inequalities, violence

**FIG. 4.** Proportion of the Region's estimated PLHIV in five high-burden countries (2016)



Source: UNAIDS

against women and girls and lower economic, social and legal status of women continues to make them particularly vulnerable to HIV. There are growing numbers of new infections among women otherwise thought by many to be at low risk, because they are intimate partners of current or past members of key populations. In Myanmar, 29% of new infectees are women. Migrants also serve as a bridge population for introducing new infections back home. Migration is a challenge in these Member States due to their lower economic status and unemployment, which make the population vulnerable to HIV. The recent increasing trend of STI and HIV among migrants in India is evidence of the same.

The demographic and geographic patterns converge in cities, specifically in certain parts of urban centres. The granularity of data and pattern of transmission have major implications for the AIDS response in reaching the WHO and UNAIDS targets. Regional level of aggregation of information can be highly misleading and is of limited value in the next phase of the HIV response.

<sup>&</sup>lt;sup>d</sup>The countries in the Region started the demographic transition, a situation where countries experience transformation of their age structure and face a phenomenon known as youth bulge, in 2000.

## India: Continued decline in new infections

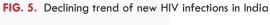
The 2015 HIV estimates confirm that overall, the epidemic in India is declining. Decreasing annual trends in new HIV infections and AIDS-related deaths persist at the national level.

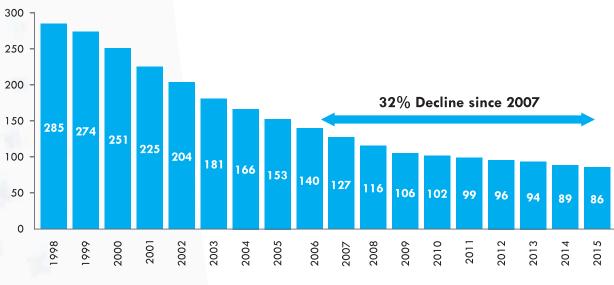
The 2015 HIV estimates results reaffirm the decline in new infections over years. India has achieved Target 6A of MDG 6, which was to "have halted by 2015 and begun to reverse the spread of HIV/AIDS Between 2000 and 2015, annual new HIV infections dropped from 2.51 lakhs (251 thousand) to 86 thousand, a reduction of 66%. If we consider the figures from 2007 to 2015, there has been a decline of 32% in the number of annual new infections (Fig. 5).

The number of AIDS-related deaths (ARDs) also started to show a declining trend after reaching a peak in 2006. The annual number of ARDs has declined by 54% from 2007 to 2015.

## 3.2. The HIV response in the South-East Asia Region

The current coverage of services needs to be expanded significantly at a much faster pace and in an equitable manner to reach the unreached and to those most in need. Focus on adolescent girls and young people at higher risk, e.g., young FSW, MSM, PWID will need to be enhanced. Mobile populations need to be addressed in a targeted way to ensure that they have access to prevention and treatment. Prevention responsese vary across Member States. Only seven of the 11 Member States offer both opioid substitution therapy (OST) and needle syringe exchange sites for PWID, and only India and Myanmar have reached the global standard of more than 200 needles distributed per person per year in 2016. Condoms serve as the cornerstone of the HIV prevention response. Their reported usage varies across key populations. Member States such as India, Myanmar and Thailand with mature condom programmes report high usage, more than





New HIV Infections in thousand Total

Source: India HIV Estimations 2015, National AIDS Control Organization and National Institute of Medical Statistics, Ministry of Health & Family Welfare, Government of India

<sup>\*</sup>Including condom use through behaviour change, communication and outreach, needle and syringe exchange programmes, opioid substitution therapy (OST), and pre-exposure prophylaxis.



80% among female sex workers at last sex. In the MSM population, the reported condom use is high (more than 80%) in India, Nepal and Thailand, but below 50% in Bangladesh and Sri Lanka, which is of concern. Condom programmes have not been very popular amongst PWID; India is the only Member State that reports high rates at 77% among PWID (14).

PrEP for those at substantial risk of HIV is now recommended by WHO as part of the prevention—combination package (24). Currently, Thailand recommends it and India offers PrEP as a prevention intervention in pilot projects for sex workers and MSM. PrEP (generic TDF/FTC) is available for US\$ 18–22 per month in Thailand and nearly 2000 people are receiving it through various programmes.

The coverage for prevention of mother-to-child transmission (PMTCT) remains low in the Region, at 43% of estimated pregnant women living with HIV receiving ART compared with the global average of 76%. Exceptions are Thailand, that has eliminated mother-to-child transmission in 2016 and Myanmar with PMTCT coverage of 87% in 2016. Sri Lanka also has very high coverage and is on the verge of elimination of mother-to-child transmission of HIV. However, even in situations with good PMTCT, exposed infants do not always receive early infant diagnosis (EID) testing or a course of antiretroviral

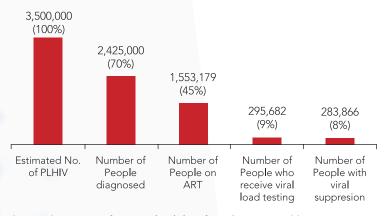
prophylaxis postpartum. In Myanmar, for example, only 50% of exposed infants received a course of antiretroviral prophylaxis and only 18% receive EID testing (24). In most Member States, less than 50% of pregnant women had access to HIV testing services in 2016, and 57% of pregnant women living with HIV are unaware of their status.

HIV testing policies differ across countries, with some recommending testing for all populations and others prioritizing provider-initiated testing and counselling only for high prevalence areas and/or high-risk populations. Myanmar recommends rapid tests by lay providers and India is also moving in this direction. HIV self-testing is not yet a policy in the Region, but countries like India and Indonesia have already started community consultations on the subject. Testing rates have expanded, but reaching key populations remains a challenge. On the 90-90-90 front, this challenge lies in the first "90" (diagnosis) and on non-availability of routine viral load testing to measure the final 90, except in Thailand. Only Thailand has effectively reached the first "90", having diagnosed 91% of the estimated number of PLHIV in 2016; India has reached 77%, Myanmar 59%, Nepal 56%, Sri Lanka 47% and Indonesia 35%. Overall in the Region, less than 70% of PLHIV knew their status in 2016. Long-term retention in care is also an issue that needs attention.

In the HIV cascade (Fig. 6), ensuring that all those diagnosed with HIV are linked to care and treatment is a critical step. While seven Member States already recommend ART irrespective of CD4 count for all PLHIV, the remaining have agreed to "test and treat" in principle (19). Treatment coverage, at 45%, still lags behind the global average of 55% in 2016 for low- and middle-income countries (2020 target: 81%). Thailand has the highest treatment coverage at 69%, while most others remain below 55%. Treatment coverage was very low for Indonesia (13%), Bangladesh (16%) and Maldives (15%) in 2016. Data on treatment coverage in key populations is scarce but published information shows very low coverage (20).

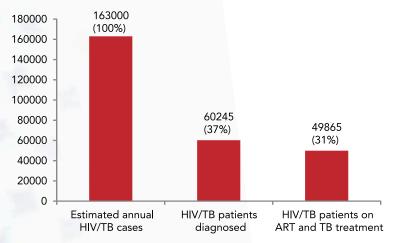
Models of differentiated care service delivery modes are presently under development in Myanmar and India. In none of the Member States can nurses, midwives or non-physician clinicians initiate ART, and neither can ART be provided in community settings. Two or 3-monthly clinic visits and antiretroviral pick-up for PLHIV who are stable on treatment are recommended in Bangladesh, Myanmar, Nepal, Sri Lanka and India.

FIG. 6: HIV treatment cascade in South-East Asia Region (2016)



Source: Summation of country-level data from GAM report 2017

FIG. 7: HIV-TB coinfection data



Source: WHO TB report 2017

#### Good practice on implementation of HIV Self Testing and Partner Notification guidelines in Indonesia

WHO released the guidelines on HIV Self Testing and Partner Notification (PN) in 2016. WHO Country Office for Indonesia presented the guidelines the National AIDS Programme (NAP) of the Ministry of Health of Indonesia, key implementers and community organizations in mid 2017. The participants at the meeting were in favour of partner notification services for key populations. Following the meeting, NAP has requested the support of WHO for developing training modules on partner notification, which will be implemented in five selected priority districts. United Nations Population Fund (UNFPA) had already supported NAP to assess the feasibility of implementing partner notification in these districts. Since then, several workshops have been conducted, identifying the service where partner notification can be offered. It was agreed that partner notification will be discussed during the post-counselling sessions, during HIV treatment follow up, and by outreach workers while offering support for partner notification for their clients. The result of the best strategy in implementing PN will be adopted in other districts.

Some of the districts have applied the PN approach through collaboration between the community and health services.

Despite eight of the 10 Member States recommending routine viral load monitoring, coverage is limited due to lack of access to viral load testing as a routine component of patient care in most Member States except Thailand. Also, data on viral suppression were available from only three Member States (Myanmar, Nepal and Thailand). Those tested show high levels of viral suppression (96%). In the absence of viral load testing, retention of patients on treatment serves as a proxy, and Member States show consistently over 70% retention at 12 months (21).

Countries in the SEAR account for 45% of the global tuberculosis (TB) burden, and there is a high risk of HIV-TB co-infection (3.5% of the 4.6 million incidents of TB were HIV positive in 2016). HIV co-infection with hepatitis B and C is also common, especially amongst PWID due to the common route of transmission. Not all services are provided at different health facilities' sites, and while some countries have good linkages and systematic referral within sub-district to a district facility others need to develop these. The health sector response in terms of services for these diseases and sexual reproductive health needs are slowly being integrated. A summary of key policy and programme interventions in member states is at Annexure I. The current status of epidemic in countries is at Annexure II.

## Success story: Best practice — Differentiated service delivery model-Myanmar

Myanmar is the first country in the Region to develop the concept of differentiated care for HIV services. They categorized all townships in the country according to their respective epidemic burdens. Differentiated service delivery models were then developed for high-, medium- and low-burden townships. The service delivery model for high-burden townships is featured by enhanced outreach and HIV testing for key populations and decentralization of HIV treatment services to township and sub-township levels to maximize the continuum of prevention, testing and treatment.

This innovative approach was adopted in the third National Strategic Plan (NSP-III) and incorporated in the Global Fund Concept Note, which was approved for funding. This experience is highlighted in WHO report entitled "Prevent HIV, test and treat all — WHO support for country impact: Progress report 2016" (http://www.who.int/hiv/pub/progressreports/2016-progress-report/en/).



#### 3.3. Funding the Response

Member States of the Region are still too dependent on external funding for HIV programmes specially for KP programmes, even though domestic resources account for roughly 49% of HIV spending, a share that is roughly comparable to patterns seen globally (Table 1). Bangladesh, Myanmar and Nepal rely almost exclusively on donor support for their AIDS response. Of the international support provided, multilateral and bilateral funding accounts for 91% of investment in Myanmar, 84% in Bangladesh, 58% in Indonesia and 43% in Sri Lanka.

The space for additional international support for AIDS response in Asia is likely to be limited, as donors prioritize assistance to low-income, high-burden countries (22). In addition, strong economic growth in some countries has led to them being reclassified in income categories that make them ineligible for support from the Global Fund. Member States of the Region will need to further increase their domestic financing to bridge the AIDS resource gap. Thailand and India are already transitioning towards funding their own HIV response. Given the limitation of funds, Member States will need to increase efficiency, integration and focused actions to reach key populations as the majority of external funds go towards programmes for key populations (23). In addition, Member States need to build a strong investment case that provides sufficient justification for an adequate allocation of resources from domestic funding, and also bring in efficiencies and effectiveness in spending the resources for long-term sustainability.

Table 1. Dependency of Member States on international funds

	Domestic	International	Total amount	Unit
Bangladesh (2015	21%	79%	12,759,322	USD
Bhutan (2013)	53%	47%	-	-
India (2015-16)	82%	18%	8,300,000,000	INR
Indonesia (2014)	57%	43%	106,794,597	USD
Myanmar (2015)	15%	85%	84,056,147	USD
Nepal (2014)	18%	82%	18,815,087	USD
Sri Lanka (2013)	55%	45%	1,226,938	USD
Thailand (2015)	89%	11%	8,200,000,000	THB

Source: Global AIDS Progress Reporting 2016 and Global AIDS Monitoring 2017

## **ENDING AIDS:**

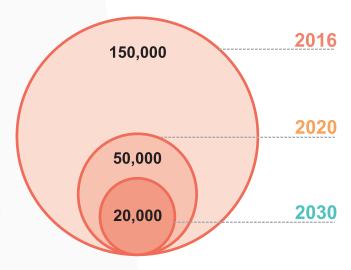
need for a paradigm shift – no more business as usual

Ending the HIV epidemic in the Region is possible, but will be challenging. Not only are targeted interventions for key populations required in the right locations, but Member States will also need to develop innovative and sustainable funding mechanisms and increase domestic financing for HIV interventions. Most Member States rely heavily on external donors for their HIV programmes, and this is an area of major concern in meeting the 2020 and 2030 targets.

In terms of targets, there are specific targets for Member States of the Region on key indicators. New infections need to decrease by 68% between now and 2020 to below 50 000 (Fig. 8). India has demonstrated a significant decline in new infections over the year. There should be zero new HIV and congenital syphilis infections among infants. Combination preventions services package including self-testing, condoms, clean needles and syringes, OST and PrEP (an additional prevention tool for high-risk groups) should reach 90% of sex workers, PWID, transgender people and MSM. Member States need to have a clear understanding of who is most at risk and determine the most appropriate response.

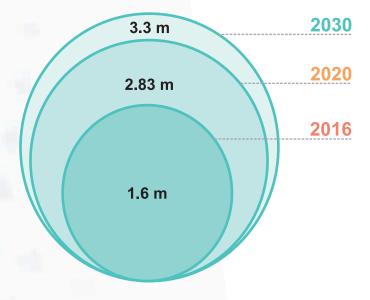
Member States need to more than double their capacity for diagnosis of PLHIV, and link them with treatment and care. Testing strategies need to strategically focus on those at highest risk or most vulnerable to acquiring HIV and in areas with high HIV prevalence (geographical prioritization). New approaches — testing for triage, self-testing, community-based and community-led testing, multidisease prevention campaigns and new validated testing algorithms need to be implemented. For facility-based testing, stigma and discrimination by health-care providers towards key populations will need to be tackled in public sector health facilities. Testing will also need to be increased in people with TB, at antenatal services, OST sites, STI clinics and through social media. WHO Regional Offices for South-East Asia and Western Pacific have also developed a Regional Framework for the triple elimination of mother-to-child transmission of HIV, hepatitis B and syphilis in Asia and the Pacific during the period 2018–2030.

**FIG. 8.** Targets for reduction of new HIV infections in South-East Asia Region



**Note:** This is an estimated reduction of 68% between 2015 and 2020, 61% between 2020 and 2030 and an overall reduction of 88% from 2015 to 2030.

FIG. 9. Targets for treatment



**Note:** The number of people in the Region receiving ART needs to more than double

Treatment coverage will need to be doubled (Fig. 9), and HIV-related mortality reduced by two thirds (Fig. 10). For this to happen, various steps will need to be taken.

- Member States need to adopt and implement a "treat all" policy nationally. All but two Member States have low levels of treatment coverage of less than 50% (12), and there continue to be delays between diagnosis and treatment initiation.
- HIV-related mortality will need to fall below 45,000 by 2020 and below 18,000 by 2030. There is a need to keep people healthy and alive by following a personcentred and holistic care approach.
- TB-related deaths among PLHIV will need to be reduced by 75% and hepatitis B and C deaths reduced by 10% in people coinfected with HIV.
- PWID are at higher risk of viral hepatitis, and will need to be diagnosed and treated for hepatitis C and B.

In addition to adopting the most recent WHO recommendations on key populations (23), certain other actions are also needed.

- Member States will need to look into the decentralization of service delivery differentiated models of care (including task-shifting) and robust supply chain for ensuring minimal loss to follow-up of people diagnosed with HIV and retained on treatment.
- Very few Member States have the capacity to efficiently monitor viral loads as prices for viral load testing are high, staff persons lack training and infrastructure being poor. Therefore, retention on antiretrovirals becomes a critical measure for monitoring drug resistance and HIVrelated mortality.
- Member States need to leverage the benefit of having a large number of cartridge based nucleic acid amplification test (CBNAAT) point-of-care machines purchased by their TB programmes for testing the HIV viral load.

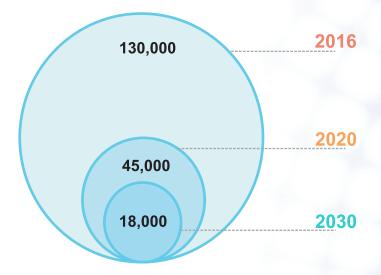
In terms of the 90-90-90 targets for the Region, at least 3.15 million PLHIV need to know their status; 2.84 million who are HIV-positive need to initiate treatment; and 2.56 of them need to be virally suppressed.

Community-led prevention services, based on trust and familiarity, can help strengthen the public health system in delivery of prevention, testing and treatment services.<sup>f</sup>

The scaling up of prevention services, testing and lifelong treatment will put an unprecedented financial burden on Member States at a time when external funds are diminishing. Member States will need to absorb not only the shortfalls in funding the HIV response, but also front-load investment in programming that reaches key populations. Past practices of general prevention and testing everyone will not be cost-effective and are epidemiologically inappropriate. There is robust evidence that integration of services for key populations or for TB have been effective in reducing new infections and developing linkages with services (24). Collaboration with community-based organizations and networks is necessary for reaching key populations who face stigma and discrimination in health-care settings and in society, and whose behaviours are criminalized, such as sex work, sex between men and drug use. Punitive laws and other human rights violations, along with stigma and discrimination experienced by clients in healthcare settings, would need to be targeted and eliminated.

There is room for efficiencies and smarter programming, and the options for the South-East Asia Region are clear – in terms of either ending AIDS, or letting the opportunity slip and watch the crisis worsen over time.

**FIG. 10.** Targets for reduction in HIV-related mortality deaths due to HIV in the Region



**Note:** Deaths due to HIV need to be reduced drastically – by 67% between 2015 and 2020 and 60% between 2020 and 2030. An overall reduction of 87% in HIV-related mortality between 2015 and 2030 is needed to meet the Fast-Track target.



f Community empowerment is a strategic pillar in the HIV response, and included in the operational tools such as the Sex Worker Implementation Tool (SWIT) or Transgender Implementation Tool that have been developed and offer guidance on effective programming.

# The South-East Asia Regional Action Plan for HIV: VISION, GOAL AND TARGETS

he South-East Asia Regional Action Plan for HIV (2017–2021) is based on the WHO and UNAIDS Health Sector Strategies, SDG 3 on health and Political Declaration of June 2016 on UNAID Fast-Track Commitments adopted by all Member States committed to ending AIDS by 2030. It promotes a people-centred approach and is grounded in principles of human rights and health equity. The actions outlined in the Regional Action Plan are meant as guidance for Member States to achieve the 2020 targets on HIV prevention, testing, treatment and viral load suppression, an enabling environment, and on operational aspects including strategic (granular) information, financial sustainability and community systems strengthening. Underlying these six priority areas are successful partnerships and collaborations between governments, donors, technical partners, UN agencies, civil society and community organizations and networks. The added layers of complexity in managing and monitoring programmes and tracking of progress depends on strengthened partnerships with greater understanding of challenges that will need to be overcome.

VISION: Zero new infections, Zero HIV-related deaths and Zero discrimination GOAL: Ending AIDS epidemic as a public health threat by 2030

Given the paradigm shift from control to elimination, countries and donors need to reconsider the resources envelope and approaches. All countries should come up with national targets and transition plans for increased domestic investments, including negotiating the bridge funding needed with donors. The six priority areas of Regional Action Plan for HIV in South-East Asia (2017-2021): (i) combination prevention, (ii) testing, treating and viral load suppression, (iii) enabling environment, (iv) strategic information, (v) financial sustainability, and (vi) community systems strengthening are described in the following tables. Each priority area includes the 2020 targets with recommended priority actions for countries and areas of support from WHO Regional Office for South-East Asia and UNAIDS.

#### -Priority action 1-

#### VISION

Zero new HIV infections

Zero HIV-related deaths

Zero HIV-related discrimination

#### **GOAL**

End of the AIDS epidemic as a public health threat by 2030

#### **AREA**

Combination prevention

#### **TARGETS 2020**

Reduce new HIV infections to below 51 000 or by 75% by end of 2020 compared with 2010 (prevent 109 000 new infections from occurring between 2016 and 2020)

Reduce sexual transmission of HIV by 50%

Reduce transmission of HIV by 50% in PWID

Eliminate HIV and congenital syphilis in infants

Ensure that 90% of young people have the skills, knowledge and capacity to protect themselves from HIV

Ensure that 90% of young people in need have access to sexual and reproductive health services and combination HIV prevention options by 2020

Increase access to integrated health services covering HIV, TB, HCV, HBV, SRH and STI for key populations

#### **PRIORITY ACTIONS**

Increase access to combination prevention services for key populations – sex workers and their clients, MSM, PWID and transgenders

Increase HIV knowledge and access to combination prevention for young adults from key populations, especially young MSM residing in urban cities, such that 90% of young people are empowered with skills, knowledge and capability to protect themselves from HIV

Increase HIV knowledge on combination prevention for adolescent girls and young women, especially intimate partners of key populations

Increase access and ensure 100% PMTCT coverage including lifelong ART for pregnant and breastfeeding women, expand early infant diagnosis and provide antiretrovirals for all infants diagnosed with HIV (current PMTCT coverage rates in the Region are at 38%)

Introduce and move towards implementation of PrEP for key populations and other high-risk non-key populations

Identify and remove stigma and discrimination, including legal and policy barriers impeding access to prevention services

Review the national condom strategy to generate demand, strengthen logistics, supply systems and quality control

Implement, to scale, a comprehensive package of harm reduction interventions – provision of sterile injecting equipment, OST, risk reduction information and drug dependence treatment

#### WHO AND UNAIDS SUPPORT

Provide guidance on combination HIV prevention interventions, including innovation in service delivery models and focus on areas and communities where the HIV burden is the greatest.

Support actions to eliminate HIV infections in children, validation of elimination of mother-to-child transmission of HIV and congenital syphilis in infants.

Advocate for and support expansion of new prevention technologies and approaches, including early implementation of ART, PrEP and scale up of comprehensive harm reduction package.

Advocate and support interventions to reduce structural barriers that keep key populations away from services, including programmes addressing discrimination in health-care settings and building human rights competencies of law enforcement agencies.

WHO PrEP implementation tools and guidance need to be disseminated in Member States.

Advocacy, technical support and practical guidance on provision of youth-friendly services in health facilities, removal of legal barriers to adolescents' use of HIV and sexual and reproductive health services, ending child marriage and passing and enforcing legislation against gender-based violence are determinant factors of a conducive and enabling environment to ensure all young people, adolescent boys and adolescent girls have access to HIV and other sexual and reproductive health services.

#### TABLE 3: Regional Action Plan - Test, treat and viral load suppression

#### -Priority action 2-

#### **VISION**

Zero new HIV infections

Zero HIV-related deaths

Zero HIV-related discrimination

#### GOAL

End of the AIDS epidemic as a public health threat by 2030

#### **AREA**

Testing, treating and viral load suppression

#### **TARGETS 2020**

Accelerate and expand testing services that focus and prioritize most at risk communities

Emphasis on identification of new infections rather than the number of tests performed

Double the number of people receiving ART, ensuring that 2.9 million persons receive antiretrovirals (current treatment coverage is 38%)

Ninety percent of those on ART to have access to viral load monitoring (use GeneXpert and other point of care platforms for viral load)

Reduce HIV deaths to 43 000 from 130 000 in 2015

Reduce TB deaths among PLHIV by 75%

Reduce hepatitis B and C deaths among people coinfected with HIV by 10% in line with mortality targets for all people with chronic hepatitis B and C

Eliminate paediatric HIV infections through intensified prevention of mother-to-child transmission of HIV

#### **PRIORITY ACTIONS**

Diversify testing approaches by combining provider-initiated and community-based testing using lay providers, mobile testing and self testing HIV testing services for partners of PLHIV and key

HIV testing services for partners of PLHIV and key populations, clients of sex workers and hidden key populations required

Strengthen linkages with programmes for maternal and child health, TB and STI for HIV testing and use all critical enablers to increase testing

Provide immediate ART to all HIV-infected mothers Link and coordinate responses between elimination of mother-to-child HIV transmission and syphilis

Focus on testing of young key populations

Strengthen linkages to care for all persons detected positive with unique identifiers and case-based reporting

Immediate countrywide implementation of "treat all" policy

Safe, simple, affordable and well-tolerated firstline ARVs to enable rapid and sustainable scaleup of treatment for adults; ensure that there are no stock-outs

Map CBOs, self-help groups and key population networks to reach key populations with HTS and train CBOs on demand generations

Focus on reducing linkage losses at all steps of the retention cascade

Adopt the differentiated model of services Expand EID facilities and immediate ART to all infants diagnosed with HIV

Systematic TB screening of PLHIV, isoniazid preventive therapy, and co-trimoxazole prophylaxis

HCV testing of PWID and integrated management of coinfection based on WHO guidelines

Ensure every person on treatment has ready access to viral load monitoring (use GeneXpert and other POC platforms and DBS for sample transport)

Support community-led adherence programmes

#### WHO AND UNAIDS SUPPORT

Regularly update consolidated guidance on HIV testing, treatment and care, paediatric testing, treatment and care, and testing for common coinfections

Support countries to implement quality assurance programming for testing

Support community-led testing, especially for hard-to-reach populations and populations where HIV prevalence is highest

Provide support on implementing the WHO guidelines on case-based reporting and patient monitoring

Provide guidance of differentiated model of service delivery and integrated health-care services including TB and HCV screening

Provide guidance on HIV drug resistance and support the development of strategies to minimize HIV drug resistance

Support alignment of resources with epidemiological pattern of HIV and HIV coinfections with TB and HCV in the country

Provide guidance on integrating communities in health service delivery and patient support

Provide guidance and support POC diagnostic platforms for HIV, TB and HCV

Support countries in strengthening the procurement and supply chain management for uninterrupted availability of testing kits, ARVs, viral load tests and other commodities

#### -Priority action 3-

#### VISION

Zero new HIV infections

Zero HIV-related deaths

Zero HIV-related discrimination

#### **GOAL**

End of the AIDS epidemic as a public health threat by 2030

#### **AREA**

Enabling environment

#### **TARGETS 2020**

Supportive social, legal and policy environments that promote health equity, gender equality and human rights

Removal of barriers such as age of consent laws for adolescents, lack of social protection for migrants and displaced populations and the criminalization of key populations and behaviours such as drug use, sex work and sex between men

Eliminate gender inequality and gender-based violence and increase the capacity of women, girls and sexual and gender minorities to protect themselves against HIV

End stigma and discrimination in health-care settings

#### **PRIORITY ACTIONS**

Identify and reform HIV-related legal and human rights obstacles and challenges and increase funding for implementation of programmes supporting social, political and legal environments that enable people—especially key populations, including their young members—to access HIV services and safeguard human rights

End policies and practices that reinforce stigmatization and discrimination (especially in healthcare settings), particularly for PLHIV and key populations

Address gender inequality and GBV for women, girls and key populations, including those living with HIV

Address issues related to penal provision for homosexuality and drug use in some countries

Provide sexual and reproductive health knowledge, including on HIV and STI prevention

Develop community capacities through training and supervision to improve community-based services, facilitate predictable funding of community organizations and adequate remuneration for services provided

Provide equitable services in closed settings including the comprehensive package of HIV prevention, testing, treatment and care

Integrate HIV into national emergency plans to ensure continuity of services during humanitarian situations

#### WHO AND UNAIDS SUPPORT

Support efforts to review and amend policies, laws and regulations that hinder equitable access to HIV-related services

Support monitoring of HIVrelated violations of human rights, legal and policy barriers and discrimination, as well as people's experience of stigma (including self-stigma) and implementation of PLHIV Stigma Index

Develop and promote WHO policies and guidelines that explicitly address gender inequality, gender-based violence, stigmatization and discrimination, human rights, key populations and public health alternatives to criminalization

Develop and promote guidance on community-based services and community engagement

Provide technical assistance to countries and partners to undertake timely health needs assessments in settings of humanitarian concern and among fragile communities

Support countries in implementation of the Agenda for Zero Discrimination and its seven priority actions

#### -Priority action 4-

#### **VISION**

Zero new HIV infections

Zero HIV-related deaths

Zero HIV-related discrimination

#### **GOAL**

End of the AIDS epidemic as a public health threat by 2030

#### **AREA**

Strategic information

#### **TARGETS 2020**

Promote the adoption of 50 National indicators where appropriate, and ensure that South-East Asian Member States are gathering the 10 simplified indicators

Gather strategic information for an evidence-informed response that contributes to the global political agenda

Prioritize surveillance activities according to the epidemiological context, data needs and resource availability

#### **PRIORITY ACTIONS**

Build a comprehensive strategic information system using standardized indicators and methodologies guided by WHO and UNAIDS guidelines

Strengthen HIV surveillance systems including sentinel and behaviour survey

Develop national guidelines for implementing a case-based patient monitoring system

Collect and analyse data including triangulated surveillance and programme data, re-do risk mapping for key populations and develop new estimates of HIV infections

Provide quality and timely data along the cascade of prevention, care and treatment for the 10 simplified indicators

Increase the "granularity" of data and ensure that it is appropriately disaggregated to district, community and facility levels by age, sex, population and location

Strengthen the use of communitybased information systems to support improvement of programme quality and outcomes

Link and integrate HIV strategic information and data reporting systems with broader health information systems and information platforms, especially for coinfections and other co-morbidities

Capture private sector data on testing

#### WHO AND UNAIDS SUPPORT

Provide consolidated support for country data systems and analysis aligned with the UNAIDS and WHO targets and the SDG agenda

Support governments in setting standards for HIV surveillance and monitoring the health sector response

Support countries in setting up and strengthening their casebased surveillance systems and strengthen capacities for data analysis and use to improve programme performance at local, regional and national levels

Provide technical support to countries for the adaptation and implementation of strategic information guidelines and tools, including for HIV coinfections and PMTCT

Strengthen communities to understand the importance of strategic information and support them in collection of data for monitoring the continuum of care

Support the annual reporting of the health sector response to HIV and progress towards the 2020 target, including impact reviews to monitor progress towards national, regional and global HIV targets

#### -Priority action 5-

#### VISION

Zero new HIV infections

Zero HIV-related deaths

Zero HIV-related discrimination

#### **GOAL**

End of the AIDS epidemic as a public health threat by 2030

#### **AREA**

Financial sustainability

#### **TARGETS 2020**

Overall financial investments for the AIDS response in low- and middle-income countries to reach at least US\$ 26.2 billion with continued increase from domestic public sources

Ensure the national health financing system covers costs of HIV services to minimize out-of-pocket expenditure

Promote alternative financing mechanisms for funding research and development that balance the protection of intellectual property with public health interests

Increase overall financial investments for the AIDS response in Member States by more than 20% of current global spending and increase current levels of domestic funds

Ensure all countries have integrated essential HIV services into national health financing arrangements

#### **PRIORITY ACTIONS**

Develop robust HIV investment cases to advocate for adequate allocation of domestic resources and mobilizing external funding support

Estimate national HIV resource needs and reduce financial barriers including direct, out-of-pocket payment for accessing health services

Align programmatic resources strategically with the epidemiological pattern of HIV in the population and within the country

Strengthen health systems, UHC schemes and national health benefit packages to ensure that all people living with or at high risk of HIV have access to comprehensive and integrated (where appropriate) HIV and health services, including HIV-related medicines and technologies

Scale up investment and financial support for civil society, community groups and regional networks of PLHIV and key populations to enhance and sustain their essential roles in providing services, advancing human rights, advocacy and accountability

Plan and implement an HIV medicines and commodities access strategy to reduce prices of HIV medicines, diagnostics and other commodities including the use of the provision on TRIPS regarding flexibilities to protect public health

#### WHO AND UNAIDS SUPPORT

Support countries to develop national HIV investment cases including estimating and regularly reviewing resource needs, and developing financial transition plans to move from external to domestic HIV funding

Support countries in reducing the financial burden of medicines, diagnostics and other commodities by forecasting demand and promoting WHO prequalification to allow fast-track registration of priority medicines and commodities

Provide guidance on HIV product selection and technical support to communities on strategic information regarding prices of HIV medicines, diagnostics and commodities

Support countries to adopt WHO's Health Accounts Country Platform

#### -Priority action 6-

#### **VISION**

Zero new HIV infections

Zero HIV-related deaths

Zero HIV-related discrimination

#### GOAL

End of the AIDS epidemic as a public health threat by 2030

#### **AREA**

Community systems strengthening

#### **TARGETS 2020**

Optimize new approaches and use existing tools more efficiently in building capacity of community systems through south-tosouth exchanges

Engage communities to increase service efficiencies, improve patient care and obtain socio-behavioural information

Ensure retention in care through community systems strengthening

Ensure that CBOs are supported, including with financial resources

#### **PRIORITY ACTIONS**

Involve communities in the planning and delivery of services to improve their reach, quality and effectiveness

Involve communities in gathering critical socio-behavioural information and identify challenges and opportunities for improving access to services

Tailor services to specific settings and populations while maintaining a certain level of simplicity and standardization to allow for largescale, efficient and sustainable expansion

Develop guidelines for HTS through CBOs, self-help groups, and key population networks

Promote the role of CBOs and NGOs in implementing peer education programmes

Enable civil society advocacy for mobilizing political support to drive ambition, financing and equity in the response

#### WHO AND UNAIDS SUPPORT

Build a south-to-south platform of community experts/ champions on critical issues and facilitate opportunities for learning exchanges

Strengthen community understanding and engagement on human rights, legal and policy barriers and other structural barriers that undermine access to services

Support communities with technical information and for mobilizing sustainable financial resources

The fact that 99% of the HIV burden is in five Member States of the Region, of which Thailand, India and Myanmar are already exhibiting successes in certain areas makes it possible to meet WHO and UNAIDS targets and eliminate HIV. In the other six countries, it should be eminently possible to end AIDS by 2030. With strong political leadership, meaningful partnerships and the necessary financial commitments, Member States of the Region could be the first to end AIDS.

# **ANNEXURES**

### **ANNEXURE I:** Country Response Sheet

Policies	Bangladesh	Bhutan	India	Indonesia	Maldives	Myanmar	Nepal	Sri Lanka	Thailand	Timor-Leste
Prevention										
Needle and syringe program	<b>②</b>	8	<b>Ø</b>	<b>Ø</b>	8	<b>Ø</b>	•	8	<b>Ø</b>	8
OST for PWID	0	8	0	<b>Ø</b>	0	<b>Ø</b>	0	8	<b>Ø</b>	8
PrEP	8	<b>②</b>	8	8	<b>Ø</b>	<b>Ø</b>	<b>⊗</b> *	8	<b>Ø</b>	8
HIV Testing										
Community-based testing and counselling	0	8	0	<b>②</b>	8	0	0	0	0	<b>Ø</b>
Rapid test by lay providers	8	8	0	<b>②</b>	8	<b>Ø</b> **	<b>Ø</b>	0	8	8
HIV self-testing	8	8	8	<b>②</b>	8	8	<b>⊗</b> *	8	8	8
Treatment										
ART irrespective of CD4 count	0	<b>Ø</b>	0	<b>Ø</b>	0	<b>Ø</b>	0	0	0	<b>Ø</b>
Nurse initiated ART	8	8	8	8	8	8	8	8	8	8
ART in community setting	8	8	8	8	8	8	0	8	8	8
3-monthly clinic visit and ARV pick-up	0	8	0	<b>②</b>	0	0	0	<b>Ø</b>	8	8
Monitoring										
Routine CD4 monitoring	0	0	0	0	0	8	0	0	8	<b>Ø</b>
Routine viral load monitoring	8	<b>Ø</b>	<b>Ø</b> *	8	0	0	0	0	0	<b>Ø</b> *
Viral suppression rates	N.A.	N.A.	N.A.	N.A.	56%	92%	19%	77%	97%	N.A.
Health Sector Response										
Prevention										
Number of needles per PWID	156	N.A.	284	9	N.A.	313	60.7	0	13	N.A.
Coverage of OST	2.40%	N.A.	21%	35%	N.A.	15%	3.20%	N.A.	N.A.	N.A.
Testing										
PLHIV diagnosed	34%	N.A.	77%	35%	N.A.	59%	55%	47%	91%	83%
Treatment										
ART coverage	15%	20%	48%	13%	100%	55%	40%	50%	68%	41%
ART coverage among pregnant women for PMTCT	17%	N.A.	45%	14%	N.A.	87%	64%	100%	95%	100%
Access To Medicines										
TDF+3TC registration for prevention	<b>Ø</b>	8	8	8	8	8	8	8	<b>Ø</b>	8
Price of USD per month	N.A.	N.A.	N.A.	N.A.	69	N.A.	N.A.	N.A.	18-22	N.A.
DTG availability	8	<b>②</b>	0	8	8	<b>Ø</b>	8	<b>&amp;</b>	8	8

<sup>\*</sup>In process

<sup>\*\*</sup>by trained community provider

### ANNEXURE II: Country Profiles (Source: UNAIDS RST AP)

BAN	GLADESH			Source
HIV estimates and treatment (2016)	Estimate	Lower estimate	Upper estimate	
People living with HIV	12,000	10,000	14,000	
Women living with HIV	3,900	3,400	4,400	Source: Global AIDS
New HIV infections	1,500	1,200	1,600	Monitoring 2017 and UNAIDS 2017 HIV
People receiving ART	1,817			estimates
AIDS-related deaths	1,000	<1000	1,100	
KP HIV prevalence	Percentage	Comment	Survey or Data Collection year	
HIV prevalence (MSM, National)	0.2	GARPR 2016 reported data	Sero survey 2015	
HIV prevalence (PWID, National)	18.1	GAM 2017	HSS 2016	
HIV prevalence (FSW, National)	0.2	GAM 2017	HSS 2016	
HIV prevalence (TG, National)	1.4	GARPR 2016 reported data	2015	Source: Serological surveys and Global
HIV prevalence (MSM, Dhaka )	0.3	GARPR 2016 reported data	2015	AIDS Monitoring 2017
HIV prevalence (PWID, Dhaka A1)	27.3	GAM 2017	HSS 2016	
HIV prevalence (Street-based FSW, Hili)	0.5	GAM 2017	HSS 2016	
HIV prevalence (TG, Dhaka)	0.9	GARPR 2016 reported data	2015	
Total new HIV infections	Estimate			
2010	1400			
2011	1300			
2012	1300			1151415000171107
2013	1400			UNAIDS 2017 HIV estimates
2014	1400			esimales
2015	1400			
2016	1500			
PMTCT (2016)	Estimate	Lower estimate	Upper estimate	
Estimated number of pregnant women living with HIV (Number)	<200	<200	<200	Source: Global AIDS Monitoring 2017 and
Pregnant women who received ARVs for PMTCT (Number)	22			UNAIDS 2017 HIV estimates
Treatment cascade (2016)				
Estimated PLHIV	12,000			
PLHIV who know their status	3,922			Global AIDS
PLHIV receiving care				Monitoring 2017
People on ART	1,817			and UNAIDS 2017
Tested for viral load				estimates
Suppressed viral load				

ВН	JTAN			Source
HIV estimates (2016)	Estimate	Lower estimate	Upper estimate	
People living with HIV				
Women living with HIV				S
New HIV infections				Source: Global AIDS Monitoring 2017
People receiving ART	273			Monitoring 2017
AIDS-related deaths				
KP HIV prevalence	Percentage	Comment	Survey or Data Collection year	
HIV prevalence (MSM, National)				
HIV prevalence (PWID, National)				
HIV prevalence (FSW, National)				
HIV prevalence (TG, National)				
HIV prevalence (MSM, city/state)				
HIV prevalence (PWID, city/state)				
HIV prevalence (FSW, city/state)				
HIV prevalence (TG, city/state)				
Total new HIV infections	Estimate			
2010				
2011				
2012				
2013				
2014				
2015				
2016				
PMTCT (2016)	Estimate	Lower estimate	Upper estimate	
Estimated number of pregnant women living with HIV (Number)				
Pregnant women who received ARVs for PMTCT (Number)				
Treatment cascade (2016)				
Estimated PLHIV				
PLHIV who know their status	291			
PLHIV receiving care				Source: Global AIDS
People on ART	273			Monitoring 2017
Tested for viral load				
Suppressed viral load				

IN	DIA			Source
HIV estimates and treatment (2016)	Estimate	Lower estimate	Upper estimate	
People living with HIV	2 100 000	1 700 000	2 600 000	
Women living with HIV	800 000	660 000	970 000	Source: Global AIDS
New HIV infections	80 000	62 000	100 000	Monitoring 2017 and UNAIDS 2017 HIV
People receiving ART	1,023,640			estimates
AIDS-related deaths	62 000	43 000	91 000	
KP HIV prevalence	Percentage	Comment	Survey year	
HIV prevalence (MSM, National)	4.3	IBBS 2014-15	2014-15	
HIV prevalence (PWID, National)	9.9	IBBS 2014-15	2014-15	
HIV prevalence (FSW, National)	2.2	IBBS 2014-15	2014-15	
HIV prevalence (TG, National)	7.5	IBBS 2014-15	2014-15	Source: Serological
HIV prevalence (MSM, Andhra Pradesh)	10.1	IBBS 2014-15	2014-15	surveys and Global AIDS
HIV prevalence (PWID, Bihar, Uttar Pradesh and Uttarakhand)	27.2	IBBS 2014-15	2014-15	Monitoring 2017
HIV prevalence (FSW,Maharashtra)	7.4	IBBS 2014-15	2014-15	
HIV prevalence (TG,Thane)	23	IBBS 2014-15	2014-15	
Total new HIV infections	Estimate			
2010	100 000			
2011	99 000			
2012	96 000			C
2013	93 000			Source: UNAIDS 2017 HIV estimates
2014	89 000			Tilly estilliates
2015	86 000			
2016	80 000			
PMTCT (2016)	Estimate	Lower estimate	Upper estimate	
Estimated number of pregnant women living with HIV (Number)	34 000	27 000	44 000	Source: Global AIDS
Pregnant women who received ARVs for PMTCT (Number)	14,000			Monitoring 2017 and UNAIDS 2017 estimates
Treatment cascade (2016)				
Estimated PLHIV	2,100,000			
PLHIV who know their status	1,635,906			
PLHIV receiving care				Source: Global AIDS
People on ART	1,023,640			Monitoring 2017 and UNAIDS 2017 estimates
Tested for viral load				OTANDO ZOTA COMMUNES
Suppressed viral load				

INDO	NESIA			Source
HIV estimates and treatment (2016)	Estimate	Lower estimate	Upper estimate	
People living with HIV	620,000	530,000	730,000	
Women living with HIV	210,000	190,000	250,000	Source: Global AIDS
New HIV infections	48,000	43,000	52,000	Monitoring 2017 and UNAIDS 2017 HIV
People on ART	77,748			estimates
AIDS-related deaths	38,000	34,000	43,000	
KP HIV prevalence	Percentage	Comment	Survey year	
HIV prevalence (MSM, National)	25.8	IBBS 2015	2015	
HIV prevalence (PWID, National)	28.8	IBBS 2015	2015	
HIV prevalence (FSW, National)	5.3	IBBS 2015	2015	
HIV prevalence (TG, National)	24.8	IBBS 2015	2015	Source: Serological
HIV prevalence (MSM,Denpasar )	36.0	IBBS 2015	2015	surveys and Global AIDS
HIV prevalence (PWID, Jakarta)	43.6	IBBS 2015	2015	Monitoring 2017
HIV prevalence (Direct FSW,Surabaya)	15.2	IBBS 2015	2015	
HIV prevalence (Indirect FSW, Denpasar)	5.6	IBBS 2015	2015	
HIV prevalence (TG, Jakarta)	34	IBBS 2015	2015	
Total new HIV infections	Estimate			
2010	61 000			
2011	60 000			
2012	58 000			LINIAIDE 2017 LIIV
2013	56 000			UNAIDS 2017 HIV estimates
2014	53 000			Communico
2015	50 000			
2016	48 000			
PMTCT (2016)	Estimate	Lower estimate	Upper estimate	
Estimated number of pregnant women living with HIV (Number)	12 000	10 000	14 000	Source: Global AIDS Monitoring 2017 and
Pregnant women who received ARVs for PMTCT (Number)	1600			UNAIDS 2017 HIV estimates
Treatment cascade (2016)				
Estimated PLHIV	620,000			
PLHIV who know their status	217,630			
PLHIV receiving care				Source: Global AIDS
People on ART	77,748			Monitoring 2017 and UNAIDS 2017 estimates
Tested for viral load	185			OTANDS 2017 estimates
Suppressed viral load	177			

MYA	NMAR			Source
HIV estimates and treatment (2016)	Estimate	Lower estimate	Upper estimate	
People living with HIV	230 000	200 000	260 000	
Women living with HIV	81 000	71 000	91 000	Source: Global AIDS
New HIV infections	11 000	9,900	12 000	Monitoring 2017 and UNAIDS 2017 HIV
People receiving ART	127,402			estimates
AIDS-related deaths	7,800	5,900	9,800	
KP HIV prevalence	Percentage	Comment	Survey year	
HIV prevalence (MSM, National)	6.4	HSS 2016	2016	
HIV prevalence (PWID, National)	26.3	HSS 2016	2016	
HIV prevalence (FSW, National)	5.4	HSS 2016	2016	
HIV prevalence (TG, National)	N/A			Source: Serological
HIV prevalence (MSM, Yangon)	19	HSS 2016	2016	surveys and Global AIDS Monitoring 2017
HIV prevalence (PWID, Bamaw)	65	HSS 2016	2016	moning 2017
HIV prevalence (FSW, Myawaddy)	13	HSS 2016	2016	
HIV prevalence (TG, city/state)	N/A			
Total new HIV infections	Estimate			
2010	15 000			
2011	14 000			
2012	13 000			C LINIAIDC 2017
2013	13 000			Source: UNAIDS 2017 HIV estimates
2014	12 000			Tilly estillidies
2015	12 000			
2016	11 000			
PMTCT (2016)	Estimate	Lower estimate	Upper estimate	
Estimated number of pregnant women living with HIV (Number)	5400	4700	6300	Source: Global AIDS Monitoring 2017 and
Pregnant women who received ARVs for PMTCT (Number)	4743			UNAIDS 2017 HIV estimates
Treatment cascade (2016)				
Estimated PLHIV	230,000			
PLHIV who know their status				Source: Global AIDS
PLHIV receiving care				Monitoring 2017 and
People on ART	127,402			UNAIDS 2017 HIV
Tested for viral load	37,575			estimates
Suppressed viral load	34,678			

NE	PAL			Source
HIV estimates and treatment (2016)	Estimate	Lower estimate	Upper estimate	
People living with HIV	32 000	28 000	38 000	
Women living with HIV	12 000	10 000	14 000	Source: Global AIDS
New HIV infections	<1000	<1000	1,000	Monitoring 2017 and UNAIDS 2017 HIV
People receiving ART	13,069			estimates
AIDS-related deaths	1,700	1,400	2,100	osimiaros
KP HIV prevalence	Percentage	Comment	Survey year	
HIV prevalence (MSM, National)*	2.4	IBBS 2015	2015	
HIV prevalence (PWID, National)*	6.4	IBBS 2015	2015	
HIV prevalence (FSW, National)*	2.0	IBBS 2015	2015	
HIV prevalence (TG, National)*	6.0	IBBS 2015	2015	
HIV prevalence (MSM, Terai Highway Districts)	8.2	IBBS 2016	2016	Source: Serological surveys and Global AIDS Monitoring 2017
HIV prevalence (PWID, Eastern Terai)	8.3	IBBS 2015	2015	Monnoring 2017
HIV prevalence (FSW, 6 Highway Districts)	1.4	IBBS 2016	2016	
HIV prevalence (TG, Terai Highway Districts)	8.1	IBBS 2016	2016	
Total new HIV infections	Estimate			
2010	2200			
2011	2000			
2012	1700			6 1514156 0017
2013	1500			Source: UNAIDS 2017 HIV estimates
2014	1300			The estillates
2015	1100			
2016	<1000			
Elimination of vertical transmission (eVT) (2016)	Estimate	Lower estimate	Upper estimate	
Estimated number of pregnant women living with HIV (Number)	<500	<500	<500	Source: Global AIDS Monitoring 2017 and
Pregnant women who received ARVs for eVT (Number)	181			UNAIDS 2017 HIV estimates
Treatment cascade (2016)				
Estimated PLHIV	32,000			
PLHIV who know their status	18,130			Source: Global AIDS
PLHIV receiving care				Monitoring 2017 and
People on ART	13,069			UNAIDS 2017 HIV
Tested for viral load	7,042			estimates
Suppressed viral load	6,209			

SRI L	ANKA			Source
HIV estimates and treatment (2016)	Estimate	Lower estimate	Upper estimate	
People living with HIV	4,000	2,700	6,000	
Women living with HIV	<1000	<1000	1,200	Source: Global AIDS
New HIV infections	<1000	< 500	1,100	Monitoring 2017 and UNAIDS 2017 HIV
People on ART	1068			estimates
AIDS-related deaths	<200	<100	<200	
KP HIV prevalence	Percentage	Comment	Survey year	
HIV prevalence (MSM, National)	1.5	HSS 2016	2016	
HIV prevalence (PWID, National)	0	HSS 2016	2016	
HIV prevalence (FSW, National)	0	HSS 2016	2016	
HIV prevalence (TG, National)	NA			Source: Serological
HIV prevalence (MSM, Colombo)	1.7	HSS 2016	2016	surveys and Global AIDS Monitoring 2017
HIV prevalence (PWID, sub-national)	0	HSS 2016	2014	Monnoring 2017
HIV prevalence (FSW, sub-national)	0	HSS 2016	2014	
HIV prevalence (TG, city/state)	NA			
Total new HIV infections	Estimate			
2010	< 500			
2011	<500			
2012	<500			115141DC 00171107
2013	< 500			UNAIDS 2017 HIV estimates
2014	<500			esimales
2015	<1000			
2016	<1000			
PMTCT (2016)	Estimate	Lower estimate	Upper estimate	
Estimated number of pregnant women living with HIV (Number)	Not available	Not available	Not available	Source: Global AIDS Monitoring 2017 and
Pregnant women who received ARVs for PMTCT (Number)	16			UNAIDS 2017 HIV estimates
Treatment cascade (2016)				
Estimated PLHIV	4,000			
PLHIV who know their status	1,901			
PLHIV receiving care				Source: Global AIDS
People on ART	1,068			Monitoring 2017 and UNAIDS 2017 estimates
Tested for viral load	•••			OTANDO 2017 ESTITIOTES
Suppressed viral load	•••			

THAI	LAND			Source
HIV estimates and treatment (2016)	Estimate	Lower estimate	Upper	
			estimate	
People living with HIV	450 000	400 000	520 000	
Women living with HIV	200 000	170 000	230 000	Source: Global AIDS
New HIV infections	6400	5800	7000	Monitoring 2017 and
People on ART	307667			UNAIDS 2017 HIV
AIDS-related deaths	16 000	10 000	23 000	estimates
KP HIV prevalence	Percentage	Comment	Survey year	
HIV prevalence (MSM, National)	9.2	GARPR 2015 reported data.	2014	
HIV prevalence (PWID, National)	20.5	GARPR 2015 reported data.	2014	
HIV prevalence (FSW, National)	1.0	GARPR 2017 reported data.	2015-2016	
HIV prevalence (TG, National)	12.7	GARPR 2015 reported data.	2014	Source: Serological
HIV prevalence (MSM, Bangkok)	28.6	IBBS 2014 (BMA, AIDS center)	2014	surveys and Global AIDS Monitoring 2017
HIV prevalence (PWID, Bangkok)	27.5	IBBS 2014	2014	
HIV prevalence (Non venue based FSW, Chiangmai)	2.5	IBBS 2015	2015	
HIV prevalence (TG, Bangkok)	9.9	IBBS 2014 (BMA, AIDS center)	2014	
Total new HIV infections	Estimate			
2010	13 000			
2011	12 000			
2012	11 000			LINIAIDS 2017 HIV
2013	9700			UNAIDS 2017 HIV estimates
2014	8700			estimates
2015	7300			
2016	6400			
PMTCT (2016)	Estimate	Lower estimate	Upper estimate	
Estimated number of pregnant women living with HIV (Number)	4000	3200	4700	Source: Global AIDS Monitoring 2017 and
Pregnant women who received ARVs for PMTCT (Number)	3800			UNAIDS 2017 HIV estimates
Treatment cascade (2016)				
Estimated PLHIV	450,000			
PLHIV who know their status	410,576			Source: Global AIDS
PLHIV receiving care	•••			Monitoring 2017 and
People on ART	307,667			UNAIDS 2017 and
Tested for viral load	251,065			OTALDS 2017 estillibles
Suppressed viral load	242,979			

## **ANNEXURE III:** WHO Global Health Sector Strategy on HIV 2016-2021–Key Areas of action by countries and WHO on each Strategic Direction

STRATEGIC DIRECTION 1: INFORMATION FOR FOCUSED ACTION (know your epidemic and response)

#### INFORMATION FOR ACTION

#### **FAST-TRACK ACTIONS FOR COUNTRIES**

Build a comprehensive strategic information system to provide quality and timely data, using standardized indicators and methodologies, guided by WHO and UNAIDS quidelines.

Increase the "granularity" of data, appropriately disaggregated to the district, community and facility levels by age, sex, population and location to better understand subnational epidemics, assess performance along the continuum of HIV services and guide more focused investments and services.

Link and integrate HIV strategic information systems with broader health information systems and identify opportunities for integrated strategic information platforms.

#### **FAST-TRACK ACTIONS FOR WHO**

**Provide global leadership,** in cooperation with UNAIDS, in HIV surveillance and monitoring the health sector response.

Set standards and provide updated guidance and operational tools for data collection, analysis and reporting, including the WHO and UNAIDS guidelines for second generation HIV surveillance and the WHO consolidated strategic information guidelines.

Provide technical support to countries for the adaptation and implementation of WHO and UNAIDS HIV strategic information guidelines and tools for strengthening national, district and facility data systems. Support the analysis of health services cascades in key countries to guide quality improvement.

 $\bf Report$  annually on the health sector response to HIV and progress towards the 2020 and 2030 HIV targets.

#### **GOVERNANCE AND ACCOUNTABILITY**

#### **FAST-TRACK ACTIONS FOR COUNTRIES**

Review and, where necessary, reform national HIV governance structures to ensure that HIV is "taken out of isolation" by promoting appropriate linkages and integration of HIV services within the broader national health programme and coordinating the HIV response across relevant sectors.

**Set national targets and milestones** for 2020 and 2030, based on global targets for eliminating AIDS as a public health threat.

Review and update the national HIV strategy to reflect the new national HIV targets and priorities and develop a costed implementation plan to operationalize the strategy.

**Strengthen programme accountability** by regularly reporting on national HIV programme implementation, financing, performance and impact, including progress towards the 2020 and 2030 targets.

#### FAST-TRACK ACTIONS FOR WHO

**Develop and update guidance** on national HIV strategic planning, prioritization and costing, with a focus on achieving 2020 and 2030 targets.

**Provide technical support to countries** to undertake regular HIV programme and impact reviews to monitor progress towards national and global HIV targets and to improve country implementation.

#### **HIV PREVENTION**

#### **FAST-TRACK ACTIONS FOR COUNTRIES**

Prioritize high-impact prevention interventions, including for male and female condom programming, injection and blood safety, and behaviour change communication.

Maximize the prevention benefits of antiretroviral drugs by scaling up antiretroviral therapy coverage for all people living with HIV and implementing a strategic combination of pre-exposure prophylaxis and post-exposure prophylaxis with other prevention interventions

Eliminate HIV and congenital syphilis in infants by setting national targets and providing lifelong antiretroviral therapy for pregnant and breastfeeding women, expanding early infant diagnosis and providing immediate antiretroviral therapy for all infants diagnosed with HIV.

Implement, to scale, a comprehensive package of harm reduction interventions tailored to and appropriate for the local drug-using patterns and country context. Priority should be given to the high-impact interventions, where appropriate, including the provision of sterile injecting equipment, opioid substitution therapy, risk reduction information and drug dependence treatment.

Prioritize combination HIV prevention to adolescents, girls and young women, and male sexual partners, particularly in high-burden settings in sub-Saharan Africa, using interventions that aim to reduce both vulnerability and risk behaviours, including gender-based and sexual violence and sexual risk behaviour associated with alcohol and other drug use.

#### **FAST-TRACK ACTIONS FOR WHO**

Advocate for and support expansion of new prevention technologies and approaches in the context of combination prevention, including implementation of early antiretroviral therapy, pre-exposure prophylaxis and post-exposure prophylaxis, and, in priority countries, voluntary medical male circumcision.

Provide guidance on combination HIV prevention, rapidly integrating new, evidence-based health sector interventions into HIV prevention packages for different epidemic contexts, with particular attention to female and male adolescents, girls, women and key populations (including young key populations).

Support increased commitment, resources and actions to eliminate HIV infections in children, working in cooperation with UNICEF. Validate the elimination of mother-to-child transmission of HIV and syphilis in countries.

Reinforce country implementation of WHO standards and policies on existing prevention interventions, including quality male and female condom and lubricant programmes, and injection and blood safety.

#### **HIV TESTING**

#### **FAST-TRACK ACTIONS FOR COUNTRIES**

**Diversify testing approaches and services** by combining provider-initiated and community-based testing, promoting decentralization of services and utilizing HIV testing services to test for other infections and health conditions.

**Focus testing services to reach populations and settings** where the HIV burden is greatest and to achieve equity.

Prioritize the expanded coverage of early infant diagnosis technologies.

Ensure that HIV testing services meet ethical and quality standards.

#### **FAST-TRACK ACTIONS FOR WHO**

Regularly update consolidated guidance on HIV testing and testing for common coinfections, rapidly integrating guidance on new testing approaches, strategies and diagnostics.

**Support countries to implement quality assurance programmes for testing,** guided by data on misdiagnosis and misclassification.

**Support expansion of paediatric HIV testing** through updated guidance and technical support to countries, including early infant diagnosis and testing in low-prevalence settings.

#### TREATMENT AND CARE

#### **FAST-TRACK ACTIONS FOR COUNTRIES**

Regularly review and update national HIV treatment and care guidelines and protocols, including quidance on the prevention and management of common comorbidities.

**Develop and update treatment plans** to ensure continuity of treatment, differentiated care, as well as timely transitioning from old to new treatment regimens and approaches.

 $\label{lem:lement} \textbf{Implement strategies to minimize HIV drug resistance} \ \text{and use the data to inform national antiretroviral policies and guidelines}.$ 

**Provide general and chronic care services,** make available the WHO Package of essential noncommunicable disease interventions for primary care, <sup>17</sup> provide community and home-based care, and ensure access to opioid medicines for the management of pain and end-of-life care.

#### **FAST-TRACK ACTIONS FOR WHO**

**Review and report on the major causes of, and trends in, morbidity and mortality among** people living with HIV, disaggregated by geographic region, population and gender.

Provide updated consolidated guidelines on the use of antiretroviral drugs for HIV treatment and prevention and the prevention and management of common comorbidities that will guide rapid and sustainable treatment scale-up to all people living with HIV. Provide guidance on differentiated care for people presenting at different stages of HIV infection and disease.

 $\label{lem:provide assistance to countries to} develop and implement national HIV treatment guidelines, plans and protocols based on the WHO global guidelines.$ 

**Provide guidance on HIV drug resistance surveillance, prevention and management** and regularly report on global HIV drug-resistance prevalence and trends.

#### **HUMAN RESOURCES**

#### **FAST-TRACK ACTIONS FOR COUNTRIES**

**Develop, monitor implementation and regularly update a national HIV health workforce plan** that is part of a broader health workforce plan, and aligned with the national health plan and priorities.

**Develop the capacity of the health workforce** by defining core competencies for different roles in the provision of comprehensive HIV services, providing relevant training and introducing appropriate accreditation and certification processes.

**Identify opportunities for task-shifting** to extend the capacity of the health workforce, and apply an appropriate training system and regulatory framework including for community health workers.

**Promote the retention of health workers** through appropriate incentives, in particular ensuring adequate wages for all health workers, including for community health and lay workers.

#### **FAST-TRACK ACTIONS FOR WHO**

**Advocate for training of health workers** to focus on the delivery of people-centred care that addresses discrimination in the health sector, including discrimination against key populations.

**Provide guidance on task-shifting** across the full continuum of HIV services, including on the use of lay providers for the delivery of specific services, such as HIV testing, support for pre-exposure prophylaxis and antiretroviral therapy delivery, and prevention and management of common comorbidities.

#### **SECURING SUPPLY**

#### **FAST-TRACK ACTIONS FOR COUNTRIES**

Strengthen the national HIV procurement and supply management structures and processes by ensuring that they are integrated into the broader national procurement and supply management system.

Ensure the procurement of quality-assured HIV medicines, diagnostics, condoms, male circumcision devices and other HIV-related commodities, including through the use of WHO prequalification.

Plan and implement an HIV medicines and commodities access strategy to reduce prices of HIV medicines, diagnostics and other commodities, including through the use of the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health.

**Safeguard and expand availability of WHO-prequalified generic products** through the expansion of licence agreements and expedition of registration at national level.

#### **FAST-TRACK ACTIONS FOR WHO**

**Forecast demand** for, access to and uptake of medicines, diagnostics and other commodities for HIV and major comorbidities, and use this information to advocate for adequate manufacturing capacity of producers, including, where appropriate, in suitable low- and middle-income settings.

**Promote the WHO prequalification programme** to allow fast-track registration of priority medicines and commodities, and to safeguard and expand availability of quality-assured medicines and diagnostics.

**Provide guidance on HIV product selection** by national programmes, donors and implementing agencies through the generation and dissemination of strategic information on prices and manufacturers of HIV medicines, diagnostics and other commodities.

**Provide technical support to countries** to forecast the need for essential HIV commodities, include them in their national procurement and supply management plans and develop a strategy for negotiating price reductions with manufacturers.

**Support regulatory authorities** in pre-market assessment and registration of new HIV medicines and diagnostics, with post-market surveillance.

 $\label{lem:provide technical support to countries} to develop comprehensive price reduction strategies in order to ensure access to essential HIV medicines, diagnostics and commodities.$ 

#### **ADAPTING SERVICES**

#### **FAST-TRACK ACTIONS FOR COUNTRIES**

**Set national norms and standards** across the HIV service continuum based on international guidelines and other standards and monitor their implementation.

Define and implement tailored HIV intervention packages for specific populations and locations, ensuring services are relevant, acceptable and accessible to populations most affected.

**Provide differentiated care** by providing tailored intervention packages to individuals at different stages of HIV disease and with different treatment needs.

Adapt service delivery models to strengthen integration and linkages with other health areas and to achieve equity, with a particular focus on reaching adolescents, young women, men and key populations.

Enable effective engagement of and capacity building of communities and ensure that legal and regulatory frameworks facilitate stronger collaboration and partnerships with community groups and between the public and private sectors.

Integrate HIV into national emergency plans to ensure the continuity of essential HIV services during emergencies and in settings of humanitarian concern, with a particular focus on preventing treatment interruptions. Provide training to essential emergency and health service staff based on the Inter-Agency Standing Committee Task Force on HIV/AIDS in Emergency Setting's Guidelines for HIV/AIDS interventions in emergency settings.<sup>19</sup>

**Provide equitable services in closed settings,** including implementing the comprehensive package of HIV interventions for prisoners and prison settings as developed by WHO and the United Nations Office on Drugs and Crime.

#### **FAST-TRACK ACTIONS FOR WHO**

Provide updated guidance on essential HIV packages, differentiated care and service delivery models for specific populations and specific settings, including for adolescents, mobile populations, populations in humanitarian settings (WHO in cooperation with UNHCR). Prisoners (WHO in cooperation with the United Nations Office on Drugs and Crime) and key populations.

Support countries in their effort to adapt their HIV services continuum, based on an analysis of their situation, with a particular focus on improving treatment adherence and retention in care.

Provide technical support to countries for implementing the WHO policy on collaborative TB/HIV activities<sup>20</sup> and A guide to monitoring and evaluation for collaborative TB/HIV activities.<sup>21</sup>

Provide guidance on community-based services and community engagement and involve civil society in the development and implementation of WHO policies and guidance.

Provide technical assistance to countries and partners to undertake timely health needs assessments in settings of humanitarian concern and among fragile communities.

#### FINANCING FOR SUSTAINABILITY

#### **FAST-TRACK ACTIONS FOR COUNTRIES**

**Develop a robust HIV investment case** to advocate for adequate allocation of domestic resources and to mobilize external funding support.

Estimate national HIV resource needs and, where necessary, develop plans to transition from external to public domestic funding of HIV services, with a particular focus on protecting essential services most reliant on external funding in order to avoid service interruption.

**Reduce financial barriers,** including phasing out direct, out-of-pocket payments for accessing HIV and other health services.

Provide universal protection against health-related financial risk, covering all populations, and identify the most appropriate way for achieving such protection, including public compulsory health financing systems.

Monitor health expenditures and costs and costeffectiveness of HIV services through the national monitoring and evaluation system in order to identify opportunities for cost reduction and saving.

Strengthen coordination with other health programmes including identifying opportunities to consolidate underlying health systems, such as those for strategic information, human resources, and procurement and supply management.

#### **FAST-TRACK ACTIONS FOR WHO**

**Estimate and regularly review resource needs** (in cooperation with UNAIDS) to achieve the 2020 and 2030 targets.

Advocate for full funding of the HIV response by building political commitment for sustained national financing and by promoting strategic financing partnerships, including with the Global Fund to fight AIDS, Tuberculosis and Malaria, UNITAID, the United States President's Emergency Plan for AIDS Relief, the Bill & Melinda Gates Foundation and others.

Support countries to develop national HIV investment cases and financial transition plans to move from external to domestic HIV funding.

Provide guidance and tools for assessing and monitoring health service costs and cost effectiveness and support countries to adopt WHO's Health Accounts Country Platform.<sup>23</sup>

Advocate for countries to include essential HIV intervention and services into national health benefit packages and remove financial barriers to accessing HIV services and commodities.

### OPTIMIZING HIV MEDICINES AND TREATMENT REGIMENS

Despite major advances in the safety, potency and acceptability of antiretroviral drugs and regimens, there are still areas where innovations and improvements are required. Whereas much progress has been made in the development of simple and effective first-line antiretroviral therapy regimens and formulations, innovation is required to develop simple and robust fixed-dose second-line and third-line regimens. Research on optimal doses of antiretroviral drugs should aim to inform effective regimens while minimizing toxicity and drug-drug interactions and reducing costs. Much innovation is still required on developing suitable antiretroviral formulations and harmonized regimens, including simple and palatable formulations for infants and children, regimens for adolescents to improve acceptability and adherence, and long-acting oral and injectable formulations to improve adherence and viral suppression. At the same time, there is the need to develop more effective drugs and regimens for the prevention and management of major coinfections and other comorbidities.

#### **OPTIMIZING SERVICE DELIVERY**

Much of the success of a rapid scale-up of antiretroviral therapy can be attributed to the adoption of a public health approach to HIV treatment and care, which promotes the use of simplified and standardized regimens, protocols and approaches, makes efficient use of the different levels of health services and engages fully with communities. Similarly, many of the HIV prevention successes can be attributed to innovations in health services and the strengthening of community systems, so that those populations most vulnerable and at risk can be reached with effective interventions.

However, as HIV programmes mature, they need to be adapted to meet new challenges, expand their reach and impact, and enhance equity. A careful balance is required, whereby services are tailored to specific settings and populations, while at the same time maintaining a certain level of simplicity and standardization to allow for large-scale, efficient and sustainable expansion. Experience from a scale-up of antiretroviral therapy has highlighted the need to consider differentiated HIV treatment and care to respond to the different treatment needs of people living with HIV (depending on their age, the stage of HIV disease, their response to treatment, the presence of comorbidities and other health conditions, and local contexts).

Particular focus needs to be given to the development of innovative services to reach, engage and retain in care a number of populations and to deliver specific packages of interventions. Innovative combination prevention packages are urgently needed to tackle the high HIV incidence in some populations of adolescent girls and young women particularly in sub-Saharan Africa, and to increase the engagement of boys and men in both prevention and treatment services. Poor treatment adherence, low rates of retention in care and increasing mortality among adolescents living with HIV require priority attention. Low coverage of voluntary medical male circumcision in adolescent boys and older men needs to be addressed.

### REFERENCES

- 1. World Health Organization. Global Health Sector Strategies for HIV/AIDS 2016-2021; towards ending AIDS. Geneva: World Health Organization; 2016.
- 2.UNAIDS. On the Fast-Track to end AIDS. 2016-2021 Strategy. Geneva: UNAIDS; 2015.
- 3. Singh PK. What needs to be done in South East Asia to Endn AIDS? J Virus Erad. 2016; 2 (Supplement 4):iv.
- 4. United Nations. Ten targets: 2011 United Nations General Assembly Political Declaration on HIV/AIDS: Targets and elimination commitments. United Nations Millennium Declaration. Millennium Summit. 6-8 September. New York; United Nations; 2000 (http://www.unaids.org/sites/default/files/media\_asset/JC2262\_UNAIDS-ten-targets\_en\_1.pdf, accessed 15 November 2017).
- 5. United Nations. Resolution adopted by the General Assembly on 25 September 2015. 70/1. Transforming our world: the 2030 Agenda for Sustainable Development. A/RES/70/1. New York: United Nations; 2015.
- 6. United Nations. Transforming Our World: The 2030 Agenda for Global Action. New York: United Nations; 2015.
- 7. Cohen MS, Chen YQ, McCauley M, HPTN 052 Study Team. Prevention of HIV-1 infection with early antiretroviral therapy. N Engl J Med. 2011;365(6):493–505.
- 8. Schwartländer B, Stover J, Hallett T, Investment Framework Study Group. Towards an improved investment approach for an effective response to HIV/AIDS. Lancet. 2011;377(9782):2031–41.
- 9. General Assembly Resolution 70/266. Political Declaration on HIV and AIDS: on the Fast Track to Accelerating the Fight Against HIV and to Ending the AIDS Epidemic by 2030. New York: United Nations; 2016 (A/RES/70/266).
- 10. UNAIDS. Fast-Track update on the investments needed in the AIDS response. Geneva: UNAIDS; 2016.
- 11. WHO. Consolidated Strategic Information Guidelines for HIV in the Health Sector. Geneva: World Health Organization; 2015.
- 12. UNAIDS. Global AIDS Monitoring 2017: Indicators for monitoring the 2016 United Nations Political Declaration on HIV and AIDS. Geneva: UNAIDS; 2017.
- 13. WHO. Progress Report on HIV in the WHO South-East Asia Region. New Delhi: WHO Regional Office for South-East Asia; 2016.
- 14. Pendse R, Gupta S, Yu Dongbao, Sarkar S. HIV/AIDS in the South-East Asia region: progress and challenges. J Virus Erad. 2016;2(Suppl 4):1–6.
- 15. NACO. India HIV estimation 2015 Technical Report. New Delhi: National Aids Control Organization, Ministry of Health and Family Welfare; 2015 (http://www.naco.gov.in/sites/default/files/India%20HIV%20Estimations%202015.pdf, accessed 15 November 2017).
- 16. Indonesia Country Progress Report 2012-2013. Jakarta: Indonesia National AIDS Commission; 2014 (http://www.unaids.org/sites/default/files/country/documents/IDN\_narrative\_report\_2014.pdf, accessed 15 November 2017).
- 17. WHO. Health situation and trends assessment: regional health observatory. New Delhi: WHO Regional Office for South-East Asia; 2012 (http://www.searo.who.int/entity/health\_situation\_trends/data/chi/age-structure/en/, accessed 15 November 2017).
- 18. Guidance on pre-exposure oral prophylaxis (PrEP) for serodiscordant couples, men and transgender women who have sex with men at high risk of HIV: Recommendations for use in the context of demonstration projects. Geneva: World Health Organization; 2012.
- 19. UNAIDS. Key Population Atlas. Geneva: UNAIDS (http://www.aidsinfoonline.org/kpatlas/#/home, accessed 15 November 2017).
- 20. UNAIDS. Key Population Atlas. Geneva: UNAIDS (http://www.aidsinfoonline.org/kpatlas/#/home, accessed 15 November 2017).
- 21. AIDS info Indicators. Geneva: UNAIDS; 2016 (http://aidsinfo.unaids.org/#data-details, accessed 15 November 2017).
- 22. Stuart R. Stuart RM, Lief E, Donald B, Wilson D, Wilson DP. The funding landscape for HIV in Asia and the Pacific. J Int AIDS Soc;18:2004.
- 23. Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations. Geneva: World Health Organization; 2014.
- 24. Bridging the Gap. Integrated Services for Key Populations: Lessons learnt and best practices from the Bridging the Gaps programme. 2016 (http://www.hivgaps.org/wp-content/uploads/2016/04/Integrated-services-for-key-populations.pdf, accessed 15 November 2017).

