#### First face-to-face meeting of the

# Steering Committee on Target-Setting, Impact and Resource Needs

10-12 October 2018 Glion, Switzerland

### Summary

Impact-level and programmatic targets, and estimates of the resources needed to reach those targets, are periodically developed by UNAIDS and its partners to guide the global AIDS response. From late 2018 to the middle of 2021, programmatic targets for 2025 and resource needs estimates for 2021–2030 will be developed. As in past years, the outputs are timed to serve as inputs to the next UNAIDS strategy and a possible future United Nations General Assembly High Level Meetings on the global HIV response, as well as Global Fund replenishments, national target-setting and strategic planning and the decision-making of major global partners.

A multi-stakeholder Steering Committee for the target-setting, impact and resource needs process held its first face-to-face meeting on 10-12 October 2018 to:

- Define the scope and technical areas of the process;
- Agree upon the topics, participants and outputs of the technical group meetings;
- Develop a plan for the dissemination of outputs of the process; and
- Define the Steering Committee's ways of working as it moves forward.

The process for evidence-based target-setting and resource needs estimation for a comprehensive response includes:

- Updating the inventory of services with proven impact in the HIV response.
- Assessing the impact of non-biomedical interventions, including the role of advocacy, social media, human rights enforcement and community engagement in increasing meaningful access to critical services.
- Proposing ambitious yet feasible targets for 2025 to meet existing impact goals for 2030.
- Calculating the impact of reaching these targets by determining the size of populations, coverage of services within these populations and the effectiveness (impact on incidence and mortality) of each service.
- Updating unit costs for service delivery, including feasible allocative, technical and productive efficiencies.
- Calculating resource needs based on the targets, populations sizes and unit costs.
- Estimating the costs and benefits of integrated service delivery.
- Considering the potential long-term impact of future technologies.

Steering Committee members noted that a major challenge the Committee faces is the potential for siloed approaches that create artificial divisions between, for example, prevention, testing and treatment, and between service delivery and the enabling environment.

The Committee resolved various operational issues and agreed on its scope of work (see Section 5), emphasizing that the process must include mechanisms for regular communication and coordination across the various technical consultative groups to ensure that their work reflects a more comprehensive and "combination" approach to prevention, testing, treatment, advocacy, capacity building, innovations and community engagement. Committee members will directly participate in the technical groups, and advise on, advocate for and participate in public communications throughout the process, including interim and final outputs.

The Committee also explored solutions to strategic issues, including differentiated country progress to date, populations being left behind, the strengths and weaknesses of 90–90–90, combination prevention, incorporating social enablers, efficiencies and effectiveness, integration and universal health coverage and longer-term technologies.

#### Strategic decisions

- Define what is needed to reach the 2030 impact goals and guide countries to more efficiently and effectively achieve them
  - Make the strongest possible investment case at both global and country levels
  - o Optimize use of current and future additional resources
  - Define and measure the cost of inaction
  - Capture the benefits of combination prevention & treatment, community and health system delivery, integration with UHC as appropriate
- Ensure that the contribution of social enablers and their costs are included in the target-setting
  - o Recognize the value of advocacy in all settings
- Set programme targets to achieve high coverage of accessible and quality bundles of peoplecentred services
  - Headline global targets, including targets for key populations
    - Engage with countries to enhance ownership and commitment to more effective, comprehensive responses
    - Combination prevention & treatment target
    - Address the hidden gaps of 90-90-90 (e.g. viral suppression, morbidity, nonbiomedical prevention activities)
    - Impact and programme targets = global
    - Resource needs estimate = LMICs (but will explore adding HICs)
  - o Disaggregated and differentiated regional, sub-regional and national targets
    - Age, sex, key populations and other populations at risk and sub-national locations disaggregation, as appropriate
    - Differentiated country performance
    - Differentiated service delivery modalities (including facility-based and community-based)

## 1. Introduction and background

Over the past two decades the Joint United Nations Programme on HIV/AIDS (UNAIDS) has played a central role in the development of impact-level and programmatic targets for the global AIDS response, as well as estimates of the financial resources required to reach those targets. Much of the early focus was on resource needs, notably the US\$10 billion "war chest" estimated to be needed for the AIDS response by 2005 ahead of the 2001 United Nations General Assembly Special

Session on HIV/AIDS. That first-ever General Assembly meeting focused on the global pandemic, produced the Declaration of Commitment on HIV/AIDS, and the subsequent establishment of the Global Fund to Fight AIDS, Tuberculosis and Malaria.

Subsequent UNAIDS estimations of targets, resource needs and impact have informed multi-year strategies for the global response, Global Fund replenishments and three General Assembly high-level meetings. These processes have been ambitious by nature, inspiring commitments to move towards universal access to prevention, testing, treatment and care, and to expand access to antiretroviral therapy to 15 million people living with HIV by 2015.

In 2014, as the Millennium Development Goals drew to a close and the Sustainable Development Goals were being conceived, UNAIDS convened a panel of leading scientists, politicians, implementers, activists and people living with HIV to consider potential long-term goals for the global response to the AIDS epidemic. The panel agreed on "ending AIDS as a public health threat" by 2030 as an ambitious yet feasible goal for policies and strategies. This goal was defined as 90% reductions in the incidence of HIV infections and AIDS-related deaths. UNAIDS worked with technical partners to develop a model that would project the service coverage required to achieve the 2030 goal. It was determined that the existing Investment Framework for HIV/AIDS—developed in 2011 to guide efforts towards the most efficient use of resources to confront the AIDS epidemic—and the rate of programme scale up calculated to achieve existing targets for 2015, would be insufficient to reach the 2030 goal.

An updated model was developed, based on the overarching concepts and the components of the Investment Framework. An updated list of prevention, testing and treatment programmes were included in the model, as were social and programme enablers and development synergies. Unit cost estimates were collated from existing sources, including data provided by national AIDS spending assessments (NASAs), literature reviews and expenditure analyses. Experts and regional and country representatives were consulted, and their advice provided to a core modelling group.

The policy question for the 2014 exercise was different than the one addressed in the 2011 exercise. The 2011 process focused on the most efficient use of financial resources that participants felt could be mobilized. The 2014 exercise (and a 2016 update) was driven by the 2030 impact goals, and had to answer the question of how they could be achieved.

This work determined that a "Fast-Track" approach was needed: a front-loading of investments to rapidly accelerate programme coverage and reach a set of targets by 2020—including the 90–90–90 testing and treatment targets<sup>1</sup>, 95% coverage of services to prevent mother-to-child transmission of HIV, and access to a package of HIV prevention services to at least 90% of key populations—that would establish the required momentum to reach the 2030 impact goals.<sup>2</sup> Annual financial resources needed for this Fast-Track response for all low- and middle income countries (LMICs) peaked in 2020 at US\$26.2 billion—including US\$7.4 billion in low-income countries, US\$8.2 billion in lower middle-income countries and US\$10.5 billion in upper-middle-income-countries—before declining approximately 9% by 2030. This resource needs estimate included savings of up to 35%; future efficiencies generated by economies of scale, price reductions and other technical and allocative efficiencies. The outputs of the model served as the basis for the UNAIDS 2016–2021

<sup>&</sup>lt;sup>1</sup> 90% of people living with HIV know their status; 90% of people living with HIV who know their status are on treatment; and 90% of people on treatment are virally suppressed.

<sup>&</sup>lt;sup>2</sup> Stover J, Bollinger L, Izazola JA, Loures L, DeLay P, Ghys PD et al. What Is required to end the AIDS epidemic as a public health threat by 2030? The cost and impact of the Fast-Track approach. PLoS ONE. 2016;11(5):e0154893. doi:10.1371/journal.pone.0154893.

Strategy and the commitments within the United Nations General Assembly's 2016 Political Declaration on HIV/AIDS.<sup>3</sup>

The Fast-Track model represented a significant strategic and technical improvement over previous target-setting exercises. However, there were multiple challenges. The 90–90–90 testing and treatment target has been seen to subsume the other critical targets, encouraging a response that primarily focuses on treatment to reduce both mortality and incidence. Impact analyses indicate that achieving 90–90–90 alone will only result in a 37–48% reduction in new HIV infections.<sup>4</sup> A relatively short timeframe for the process (April to October 2014) limited opportunities for broader consultation. Input challenges included insufficient available data to properly model economies of scope, as well as insufficient available data to estimate resource needs in high-income countries (HICs). Each service was modelled separately, making it difficult to explore combination targets, economies of scope and integration of the service delivery in the health system or for the non-health aspects. The incorporation of social enablers<sup>5</sup> did not follow a typology, nor did it take into account the wide variety of country contexts within countries.

As UNAIDS looks forward to a new round of target-setting and impact and resource needs estimations, lessons learned from the previous process include the need for broader engagement and ownership of the process, including among civil society and country programmes. The resource needs estimates were criticized by some stakeholders as far too high, and by other stakeholders as far too low, with criticism on both sides often failing to review and consider the technical details of the process. For example, dramatically different resource needs estimates were promoted by critics without due attention to their vastly different scope (e.g. the services or countries covered by the estimate).

Similarly, the targets were often misunderstood to be a projection of the future, rather than the high levels of service coverage and the widespread establishment of programme and social enablers that must be achieved to reach the ambitious 2030 goals. The future Fast-Track scenario, together with communications about "ending AIDS" may have led to the perception that the HIV epidemic was under control and no longer a global concern.

From late 2018 to the middle of 2021, programmatic targets for 2025 and resource needs estimates for 2021–2030 will be developed by UNAIDS in close collaboration with its partners. As in past years, the outputs are timed to serve as inputs to the next UNAIDS strategy, a possible future United Nations General Assembly High Level Meetings on the global HIV response, Global Fund replenishments, national target-setting and strategic planning and the decision-making of major global partners.

The objectives of this first meeting of the Steering Committee were to define the scope and technical areas of the process, agree upon the topics, participants and outputs of the technical group meetings, to develop a plan for the dissemination of outputs of the process and to define the Steering Committee's ways of working as it moves forward.

<sup>&</sup>lt;sup>3</sup> Fast-Track commitments to end AIDS by 2030. Geneva: Joint United Nations Programme on HIV/AIDS, 2016 (http://www.unaids.org/sites/default/files/media\_asset/fast-track-commitments\_en.pdf).

<sup>&</sup>lt;sup>4</sup> Stover J, Bollinger L, Izazola JA, Loures L, DeLay P, Ghys PD et al. What Is required to end the AIDS epidemic as a public health threat by 2030? The cost and impact of the Fast-Track approach. PLoS ONE.

<sup>2016;11(5):</sup>e0154893. doi:10.1371/journal.pone.0154893.

<sup>&</sup>lt;sup>5</sup> Social enablers are defined in the 2011 investment framework as: (1) political commitment and advocacy; (2) laws, legal policies, and practices; (3) community mobilization; (4) stigma reduction; (5) mass media; and (6) local responses to change risk environment.

Note: To ensure frank and open dialogue, the participants agreed that unscripted discussions would be done under the Chatham House Rule, in which participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed. However, pre-prepared presentations and formal background papers were attributable to individual speakers and authors.

# 2. The process

#### **Objective**

The objective of the target-setting, and impact and resource needs estimation process is to bring together the expertise and experience of a range of partners around three related areas of work:

- Programmatic targets focused on 2025, plus resource needs and impact estimates through 2030. This process will not change the 2030 impact targets already agreed by the United Nations General Assembly within the 2030 Agenda for Sustainable Development: 90% reductions in HIV incidence and AIDS-related mortality, compared to a 2010 baseline. The focus will be on incorporating new research, programmatic and costing data, new metrics for measuring impact and the existence of new medicines and service-delivery tools within a revised target-setting model, and taking achievements-to-date into account.
- 2. Explore in depth the potential synergies to be gained through integrated delivery of HIV, health and social services, including through a universal health coverage framework, as well as the potential risks.
- 3. Consider the potential long-term impact of future technologies, including broadly neutralizing antibodies, vaccines and a cure.

# *Figure 1. Process for setting 2025 programmatic targets and 2020–2030 resource needs and impact estimates*



#### Steering Committee

A multi-stakeholder Steering Committee is tasked with guiding the process (see list of members in Annex 1). The Steering Committee is led by Adele Benzaken, Director of the Department of

Surveillance, Prevention and Control of STI, HIV/AIDS and Viral Hepatitis of the Ministry of Health of Brazil, and Paul De Lay, currently a consultant on global health and formerly the Deputy Executive Director, Programme, of UNAIDS, and composed of technical experts and representatives of stakeholders including national AIDS programmes, civil society and UNAIDS Cosponsors. Members, who are nominal, act in their capacity as independent experts and do not represent their organization and are expected to represent their constituent groups, and as appropriate reach out to their constituents for inputs and to keep them informed of developments. Steering Committee members who were present at the first meeting noted that young people are a key constituency group that is not represented in the Committee.

#### Technical groups

Technical consultative groups will be convened around six thematic areas: (1) testing and treatment; (2) primary prevention; (3) social enablers; (4) costs and resources; (5) integration; and (6) longerterm technologies. The groups will be mostly comprised of experts from various stakeholder groups, including representatives of national programmes and civil society. Whenever possible the technical group will be closely linked to an existing stakeholder group working on the area, such as <u>the Global HIV Prevention Coalition</u> for primary prevention, the UNAIDS Scientific and Technical Advisory Committee (STAC) for testing and treatment programmes, the Human Rights Reference Groups for social enablers, and the Global Health Costing Consortium for costing. One or more Steering Committee members, whenever possible, will serve on each group to improve communication and cohesion throughout the process. Committee members stressed during their first meeting that the Committee's top-line guidance—for example, if the Committee would like programmatic and enablers targets to be packaged a certain way—must be clearly communicated to the technical groups.

The main outputs of the technical groups may include, depending on the topic:

- An updated inventory of services with proven impact in the HIV response, including state-of-theart medical interventions, innovative approaches that will be rolled out during the 2020–2030 period, and those that will become available during 2030-2050.
- Identification and incorporation of newer methods to assess the impact of non-biomedical interventions, including the role of advocacy, social media, human rights enforcement and community engagement in increasing meaningful access to critical services.
- Exploration of the increased use of combination/bundled approaches to prevention, testing, treatment and support.
- Link service provision and social enablers
- Identify synergies between HIV service delivery and efforts to deliver other health and social services.
- Proposed ambitious yet feasible targets for 2025.
- The impact of reaching these targets will be calculated by determining the size of populations, coverage of services within these populations and the effectiveness (impact on incidence and mortality) of each service.
- Updated unit costs for service delivery, including feasible allocative, technical and productive efficiencies.
- Estimated resource needs, based on the targets, populations sizes and unit costs.
- Peer-reviewed scientific papers on the above topics, as appropriate.

There was substantial debate among Committee members regarding the segmenting and sequencing of the technical groups. There was general agreement of the need to facilitate

information sharing—or "cross-talk"—among the groups, and the need to inspire confidence that enablers were not being treated as a cursory add-on to services. However, it was difficult to forge consensus on how to do this. Some felt that several groups should be combined to avoid artificial divisions between, for example, HIV prevention and treatment. Others expressed concerns that larger groups tasked with wider responsibilities would struggle to efficiently produce outputs of sufficient specificity. There were calls for (a) members of the enablers groups to also participate in the prevention and testing/treatment groups, (b) the enablers, prevention and testing/treatment groups to gather together at a "marathon meeting" in early 2019, or (c) the enablers group to meet first. It was also proposed that the costing and integration groups could be combined or the order of the two groups' meetings reversed, because of the potential impact on overall costs, when funding is shared across multiple social and health service goals. The UNAIDS Secretariat expressed concerns that it could be a challenge to organize and manage larger meetings, with groups meeting in parallel as well as together. One simple proposal to address these concerns was to ensure that a minimum number of Steering Committee members would participate in each technical group. The Secretariat pledged to review these various options and report back to the Steering Committee.

#### Costing and resource needs

The technical group on costing, efficiencies and other resource-related inputs is scheduled to meet in the first quarter of 2020, after the programmatic and enablers groups have finished their work. The group is tasked with identifying relevant data sources and developing the inputs for the model: unit costs or expenditure per units for each intervention or the use of cost functions. Within that work it will estimate the cost of integrated and standalone services and estimate efficiencies that should be included within the assumptions of the model (see strategic issues below). Outputs from the group could include a peer-reviewed paper on "The cost of implementing the global response to HIV/AIDS through 2030: current and future unit costs, efficiencies, economies and diseconomies of scale and scope". The work will be closely related to the working group on integration, which will provide results on cost saving options derived from the service delivery integration of HIV services.

The Steering Committee noted that there was a lack of data in the previous process that precluded the inclusion of HICs in the resource needs estimate. It should be noted that HICs are included in the sharing of global targets and impact assessments. The Committee agreed that the focus of the resource needs estimation should be LMICs, where the results may be most impactful. The Committee also called for the group to try to include high-income countries where data is available.

Committee members also called for the costing work to define and include "the cost of inaction" as part of the results. The Secretariat noted that the previous target-setting exercise had two scenarios: (1) the impact if the targets are reached; and (2) the impact if current levels are maintained (business as usual). This approach should be maintained, but there was a suggestion that, in the face of diminishing funds for the AIDS response, additional scenarios should be included. These could include scenarios that show a reversal of gains made, or the consequences of a failure or delay in achieving epidemic transition or epidemic control, including the negative consequences for sustainability of effective responses. In addition, an analysis of the cost of past inaction should also be undertaken, by comparing the impact achieved by 2020, to the impact that could have been achieved had the 2020 programmatic targets been achieved.

#### Modelling

The outputs of the technical groups will serve as the inputs for a modelling team from <u>Avenir Health</u> that will be supported by an advisory group of modelling experts. The advisory group will advise

both on the modelling methods for the current exercise, and on the alignment of the modelling with ongoing in-country application of "investment case"-type of analyses. Steering Committee members called for the modelling advisory group to have strong linkages to the Steering Committee. It was also suggested to consider use of the <u>International Classification of Health Interventions</u>, a common tool for reporting and analysing health interventions for statistical purposes that is currently under development. Committee members also called on the technical groups and modelling group to collect a broader range of data, including population survey data, as there is an impression that the previous process was over-reliant on facility data. The Committee also proposed that the modelling produce confidence intervals or plausibility ranges so that the level of uncertainty in the estimates are clearer.

#### Outputs and communications

Outputs from all of the groups and interim modelling results will be reviewed by the Steering Committee. A small group of major donors (e.g. Global Fund, GFATM, the US President's Emergency Plan for AIDS Relief, the Bill and Melinda Gates Foundation) and other key stakeholders will be briefed and consulted along the way. Countries will be briefed about progress through UNAIDS governance mechanisms. A small team from the UNAIDS Strategic Information Department will serve as a secretariat for the process.

Detailed descriptions of the process and the model will be shared at major AIDS conferences, and the final targets and resource needs estimates will be disseminated in UNAIDS flagship publications, one or more scientific papers, most likely in late 2020, in time to influence preparations for a possible mid-2021 United Nations General Assembly High Level Meeting on HIV/AIDS. Several Steering Committee members called for more specific plans for interim products and communications. Others expressed concern that communicating too early about an effort to set new targets could undermine ongoing efforts to achieve the 2020 targets. Consensus was achieved on middle ground, where communications about the process and some of the products of the technical groups could be shared in 2019 and early 2020. Many Steering Committee members supported the creation of a UNAIDS linked website which would present timely reporting on the progress of the Steering Committee and the Technical Consultative Groups.

Steering Committee members volunteered to serve in various technical working groups to ensure cross fertilization across the groups, and they also proposed the names of appropriate experts to be invited to serve in the groups.

#### **Epidemic transition metrics**

The Steering Group was briefed on an October 2017 meeting of experts on the development of new metrics that countries can use to refine their efforts to reach the end of AIDS as a public health threat by 2030.<sup>6</sup> The experts considered four potential metrics:

- 1. Percentage reductions in HIV incidence and AIDS-related mortality (the current global goals for 2030 that are included in the 2030 Agenda for Sustainable Development)
- 2. Absolute rates of HIV incidence and AIDS-related mortality of less than one per 1,000 adults per year, or less than one per 10,000 adults per year

<sup>&</sup>lt;sup>6</sup> Full descriptions of the epidemic transition metrics and the deliberations of the expert group are included within the report <u>Making the end of AIDS real: consensus building around what we mean by "epidemic control"</u>.

- 3. The incidence-mortality ratio (a ratio of new HIV infections and all-cause mortality among people living with HIV)
- 4. The incidence-prevalence ratio (a ratio of HIV incidence to HIV prevalence within a given population)

The notion of epidemic transition, but not all of the above metrics, was included in the 2014 and 2016 resource needs estimates. The expert group agreed that a new summary metric that signals countries' progress towards ending AIDS as a public health threat and ultimately zero new HIV infections, zero discrimination and zero AIDS-related deaths would be useful to (a) dispel the notion that AIDS is no longer a problem or that a tipping point of certain success will soon be reached, and (b) to help drive policy-makers and galvanize continued political commitment and financial investment in the HIV response. There was also agreement that each of the proposed metrics had merits and drawbacks, and that each should be tracked moving forward, with clear background information to ensure that the reader understands the implications of evolving data.

The Steering Committee agreed that, as well as maintaining the globally agreed 90% reduction targets for 2030, the target-setting process should consider an incidence-prevalence ratio below 0.03 and an incidence-mortality ratio below 1, as well improved impact measures for the elimination of stigma and discrimination.

## 3. Strategic issues

Members of the Secretariat briefed the Steering Committee on the general progress of the global AIDS response, as well as specific opportunities and challenges within each of the areas that will be addressed by the technical groups. These briefings were followed by discussion among the Committee members (see meeting agenda in Annex 2). During this interaction the following strategic issues emerged as particularly relevant for the target-setting and resource needs estimation exercise, requiring specific consideration and decisions by the Committee at its first meeting.

#### Differential progress towards 2020 targets

UNAIDS' overview of the global HIV epidemic and response—based primarily on its 2018 estimates, end-2017 Global AIDS Monitoring data and the <u>Miles to go report</u>—noted that strong reductions in AIDS-related mortality have been achieved since 2010, driven by steady scale-up of antiretroviral therapy. However, primary prevention efforts have been less successful, and declines in new HIV infections globally have been more gradual. Ultimately, global trends for both of these impact measures are off target; if the current rates of decline continue, 2020 targets of less than 500,000 new HIV infections and less than 500,000 AIDS-related deaths will not be achieved. Approximately 47% of new HIV infections globally in 2017 were among key populations and their sexual partners. In sub-Saharan Africa, adolescent girls and young women (aged 15–24 years) bear the brunt of HIV prevention shortcomings, accounting for one in four HIV infections in 2017 despite being just 10% of the population.

Efforts to achieve the 2020 goal to eliminate HIV-related stigma and discrimination are also offtarget. Population-based survey data suggest that stigma has declined, but discriminatory attitudes persist. Laws that criminalize key populations and the transmission of HIV exacerbate HIV risk. Gender inequality, intimate partner violence, and parental and spousal consent laws leave women and girls vulnerable to HIV, other sexually transmitted infections, unwanted pregnancies and maternal mortality. Efforts to mobilize sufficient funding for the HIV response are also off-track. An estimated US\$ 20.6 billion (in constant 2016 US dollars) was available in 2017—about 80% of the 2020 target set by the United Nations General Assembly. There were no new significant commitments from donors in 2017. Even if increases in domestic public expenditures continue, reaching the 2020 investment target is at risk unless new donor commitments are made soon.

Global averages obscure stark differences among regions and countries. In eastern and southern Africa, steady increases in both domestic and international funding have fuelled cutting-edge research and a massive expansion of evidence-informed programmes over the past decade, including strong progress towards the 90–90–90 targets. The impact has been dramatic: a 42% reduction in deaths from AIDS-related illness and a 30% reduction in new HIV infections between 2010 and 2017. However, even though it appears that financial resource needs have been met in eastern and southern Africa, progress is not fully on track to reach the 2030 goals because there is pending work to adopt and implement implementation efficiencies to maximize the effort of these resources.

Progress in other regions—notably western and central Africa, eastern Europe and central Asia, and the Middle East and North Africa—has been much slower. Achievement of Fast-Track targets in many countries within these regions appear increasingly out of reach.

The Steering Committee was asked whether unified targets for all countries and regions will be valid in the future. Is it realistic to expect a country with very low coverage of HIV prevention, testing and treatment services in 2018 to not only achieve 80% or 90% coverage in 2020, but even higher coverage in 2025? In addition, it was noted that the vast majority of new HIV infections and AIDSrelated deaths occur in less than 30 countries. Should those countries be somehow given additional priority within the target-setting process? It was also noted that programme coverage and impact trends can vary widely within countries, with services not always being scaled up in the areas with the most acute needs. Steering Committee members acknowledged this differential progress, as well as the proposal for future targets and progress reporting to be differentiated, by region and by country. However, concern was expressed that lower targets for poor-performing countries could perpetuate insufficient efforts to reach key populations at higher risk of HIV infection. The Steering Committee felt strongly that the outputs of this process should encourage additional efforts for those populations who continue to be underserved.

#### Populations being left behind

Data collected by UNAIDS from national programmes and special studies suggest that key populations—sex workers, people who use drugs (and in particular those who inject drugs), transgender people, prisoners and gay men and other men who have sex with men—continue to face additional barriers to services, and as a result HIV treatment and prevention coverage among these populations is often lower. In high-prevalence settings, women face higher risks to HIV and additional barriers to HIV prevention services, which translates to higher rates of HIV infection, especially among adolescent girls and young women. Conversely, men and boys in these settings are less likely to get an HIV test and, if diagnosed with HIV, initiate antiretroviral therapy. As a result, AIDS-related morbidity and mortality among men is often higher. There is also evidence in countries such as Brazil and the United States of America that people from different ethnic groups and income

levels face different levels of HIV risk and access to services, and that migrants in some countries face similar challenges.<sup>7 8 9</sup>

It was also noted during discussion that new data on HIV transmission dynamics show that reaching some people with HIV services—for example young women in southern Africa—prevents more onward infections than, say, reaching an older woman in the same location. On the other hand, older people living with HIV face additional challenges to maintaining viral suppression and may require additional care.

The Steering Committee agreed that the above differences among sub-populations, gender and age groups reinforced a well-recognized need for programmes to collect disaggregated data, analyse those data and take steps to close these gaps. It was suggested that the development of similarly disaggregated targets for 2025 could further encourage countries to adopt a population-location approach.

#### The strengths and weaknesses of 90–90–90

The 90–90–90 testing and treatment targets are probably the best known and most successful of the targets that emerged from the 2014 target-setting exercise, from both advocacy and programmatic perspectives. They are succinct, memorable, measurable and packaged in a way that is programmatically relevant, reflecting the linkages among HIV diagnoses, treatment initiation and treatment adherence. Both country programmes and donors have eagerly adopted and promoted the targets, improved their collection of testing and treatment data, and used 90–90–90 as a framework for analysing and reporting those data.

However, 90–90–90 in isolation from other targets has significant drawbacks. Committee members noted that the changing denominator from first 90 to second 90 to third 90 can cause confusion and give the false impression that viral load suppression among people living with HIV is much higher than reality (Figure 2). For example, global progress on the 90–90–90 targets at the end of 2017 was 75% for the first 90, 79% for the second 90 and 81% for the third 90. This can be misinterpreted to mean the viral suppression among people living with HIV is very close to the third 90 target. However, when these same data are presented along a cascade with the same denominator (all people living with HIV) it can be seen that less than half of people living with HIV are virally suppressed, much lower than the 2020 target of 73% (90% of 90%).

#### Figure 2. Comparing 90–90–90 to the HIV testing and treatment cascade

<sup>&</sup>lt;sup>7</sup> Caldwell, K.L. Centering African-descendant women in HIV/AIDS research, policy, and praxis in Brazil. J. Meridians Fem. race, transnationalism. Volume 14, Pages 121-147.

<sup>&</sup>lt;sup>8</sup> Azfar-e-Alam Siddiqi, Xiaohong Hu, H. Irene Hall. Mortality Among Blacks or African Americans with HIV Infection — United States, 2008–2012. MMWR Morb Mortal Wkly Rep. 2015 Feb 6; 64(4): 81–86.

<sup>&</sup>lt;sup>9</sup> Hernando V, Alvárez-del Arco D, Alejos B, Monge S, Amato-Gauci AJ, Noori T et al. HIV infection in migrant populations in the European Union and European Economic Area in 2007–2012: an epidemic on the move. J Acquir Immune Defic Syndr. 2015;70(2):204–11.

Progress towards 90–90–90, global, 2017



HIV testing and treatment cascade, global, 2017



Committee members also noted that the 90–90–90 targets for 2020 and the 2030 impact goal on AIDS-related mortality do not explicitly show the importance of reducing morbidity, and that the 90s are rarely disaggregated by age, sex, sub-population and sub-national locations. It was also mentioned that emergence of drug resistant strains of HIV, the rate of switching to second- and third-line regimens and the considerably higher cost of those regimens will need to be carefully considered by the testing and treatment technical group. Additionally, the targets do not cover primary prevention.

In the eyes of some, 90–90–90 has been too successful. UNAIDS and other global partners have been accused of overly promoting 90–90–90 at the expense of other areas of the response. It was pointed out that the 2014 modelling that served as basis for Fast-Track was fully comprehensive, including service packages for key populations, behaviour change interventions in high-prevalence settings, voluntary male medical circumcision, PrEP, and social enablers (Table 1). However, in practice, efforts to achieve only the 90–90–90 targets have unfortunately and mistakenly often become synonymous with Fast-Track.

#### Table 1. Categories from the 2014 target-setting and resource needs estimation process

Intervention	2020 Coverage	2030 Coverage	Effects
KEY POPULATIONS			
Service package for female sex workers	90%	90%	90% condom use at last sex act
Service package for MSM	90%	90%	90% condom use at last sex act
Service package for transgender populations	90%	90%	90% condom use at last sex act
Service package for PWID	90%	90%	90% condom use at last sex act, 51% reduction in percentage sharing needles
Opioid substitution therapy for PWID	40%	40%	46% reduction in number of sexual partners, 71% reduction in needle sharing
Service package for prisoners	90%	90%	Increased condom use in prisons
BEHAVIOUR CHANGE			
Condom promotion	90% condom use at last sex	90% condom use at last sex	90% condom use at last sex among people with multiple partners
Cash transfers for girls	30% In Hyper-endemic countries with low rates of secondary school enrollment <sup>1</sup>	50% In Hyper-endemic countries with low rates of secondary school enrollment <sup>1</sup>	40% reduction in incidence among young women and girls (15–24 years old) in areas with low rates of secondary enrollment [6]
MEDICAL INTERVENTIONS			
PMTCT	95%	95%	80% starting ART before current pregnancy, 15% starting during current pregnancy. 98% reduction in perinatal transmission, 87% reduction in transmission during breastfeeding [9]
Male circumcision	90% of 10–29 year old men in countries with generalized epidemics and low MC rate <sup>2</sup>	90% of 10–29 year old men in countries with generalized epidemics and low MC rate <sup>2</sup>	60% reduction in susceptibility [ <u>10</u> , <u>11</u> , <u>12</u> ]
Post-exposure prophylaxis (PEP)	80%	80%	Provided to rape victims and health workers experiencing accidental exposure
PrEP for sero-discordant couples	10% in generalized and hyper-endemic countries	30% in generalized and hyper- endemic countries	80% reduction in susceptibility for sero-discordant couples. PrEP includes oral pills, vaginal gel, vaginal ring and injectable forms. [13, 14, 15, 16]
PrEP for sexually active females 15–24 in areas with incidence above 3% in this population group	10% in hyper-endemic countries	30% in hyper-endemic countries	80% reduction in susceptibility. For adolescent females we assume half this effect through 2020 then the full effect after 2020. PrEP includes oral pills, vaginal gel, vaginal ring and injectable forms. [13, 14, 15, 16]
Testing	24% of all adults and children in countries with generalized epidemics and of key populations and people with multiple partners in countries with concentrated epidemics	Gradual decrease to 20% of key populations, those with multiple partners and pregnant women in all countries with incidence below 0.1%. 20% of adults and children in countries with incidence above 0.1%	Identify HIV+ for linkage to care
Pre-ART care	81% of PLHIV not on ART	90% of PLHIV not on ART	
Adult ART	81% (90% started, 90% retained)	90% (95% started, 95% retained)	Eligibility for treatment expands to all PLHIV by 2018. 95% reduction in infectiousness among those virally suppressed [17]. By 2030 AIDS- specific mortality rates decline by 50% from 2015 rates due to enhanced retention and viral suppression.
SOCIAL ENABLERS	Includes community mobilization <sup>3</sup> , media communications <sup>4</sup> and other general population approaches that support behavior change		

Source: Stover J, Bollinger L, Izazola JA, Loures L, DeLay P, Ghys PD et al. What Is required to end the AIDS epidemic as a public health threat by 2030? The cost and impact of the Fast-Track approach. PLoS ONE. 2016;11(5):e0154893. doi:10.1371/journal.pone.0154893.

#### **Combination prevention**

The proposed list of services for the prevention technical group includes services for prevention of mother-to-child transmission of HIV, post-exposure prophylaxis (PEP), treatment as prevention (TasP) and a range of primary prevention options, including condoms, voluntary medical male circumcision (VMMC) and pre-exposure prophylaxis (PrEP).

In recent years, enthusiasm for primary prevention has been lower than for HIV testing and treatment, especially after the preventative effect of sustained viral suppression was confirmed in 2014 by the HPTN 052 randomized control trial. Efforts to reinvigorate primary prevention have included a new focus on "combination HIV prevention", a mix of proven high-impact HIV prevention interventions, including HIV testing and treatment, tailored to the populations and locations in greatest need. Steering Committee members expressed strong preference for a target that captured the importance of combination prevention, including one specific suggestion for a "four 90s" target.

There was particular enthusiasm for the development of packages or bundles of services and social enablers for key populations and other priority populations, such as adolescent girls and young women. Such bundles of services could be presented and modelled in a way that discourages countries from selecting only biomedical interventions and neglecting condom promotion, peer outreach and other important aspects of combination prevention.

#### Incorporating social enablers

A common perception within the Steering Committee was that social enablers did not receive sufficient attention nor emphasis during previous target-setting processes. In 2014/2016, social enablers were included in the categories of interventions for the modelling and resource needs estimations, but they were not a dynamic feature within the model due to a lack of empirical evidence on their impact. Ultimately social enablers were assumed to be necessary for the full effectiveness of basic programmes to be realised, that they need to be context-specific and were roughly costed as a ratio to basic programmes or percentage of the total needs. As a result, when countries develop their own targets it is easy to ignore social enablers because the model does not translate investment into impact.

Steering Committee members agreed that social enablers were important in both high-prevalence and low-prevalence epidemics. An illustrative example was the advocacy conducted by civil society organizations in low-prevalence settings. This grassroots advocacy within countries where HIV is just one of many health challenges has been instrumental in raising political awareness and pushing through policy changes that have substantially increased access to HIV services. If financial resources are not earmarked for advocacy and other enablers, political pressure on critical issues such as discrimination and criminalization will continue to diminish.

Steering Committee members called for the new process to take a more sophisticated approach that would emphasize the role of social enablers in achieving the 2030 goals, with social enablers potentially included in bundles of comprehensive services. It was noted that a major challenge will be the availability of empirical data on the impact of enablers. It was suggested that comparisons could be made between countries with similar epidemics: those with active civil society advocates and those with limited space for activism. However, it was also suggested that quantification of the impact of enablers would be difficult to apply in a standard way because the mix of social enablers required was highly dependent on the local context. Committee members recognized that an effort to quantify the impact of social enablers would need to be scientifically sound. If stakeholders have the impression that assumptions in the model are not driven by data, they may lose confidence in the model and the resulting targets and resource needs estimates.

#### Efficiencies and effectiveness

Target-setting processes are necessarily ambitious, as targets are first and foremost designed to inspire countries and individuals to make greater achievements. However, targets must also be achievable or they will be dismissed as fantasies. Steering Committee members were cognizant that the global AIDS response is operating within an increasingly difficult global environment. Populism and nationalism are on the rise in many countries, multilateralism is on the wane, and the overall space for civil society has shrunk. The AIDS response itself is often viewed as a lower priority than emerging issues such as climate change and migration, and investments for global health and universal health coverage are believed to be more sustainable than single-disease approaches.

The 2014/2016 resource needs estimates required maximization of implementation efficiencies as well as increases in the programme effectiveness, resulting in a 35% reduction in the amount of

resources needed to achieve the 2030 impact goals. Several Steering Committee members called for the new target-setting and resource needs estimation process to place additional emphasis on efficiency and effectiveness. It was noted that several low- and middle-income countries in a diversity of settings have proven that sustainable impact can be achieved with limited resources if comprehensive, evidence-based services are provided to the people and places in greatest need. It was noted that some investment cases for low-income country responses had resulted in resource needs estimates that were double the current national budget and clearly unrealistic and unsustainable. National investment cases and strategic planning processes for 2020–2025 must help countries determine how to use their resources better, and could include quicker adoption of new technologies and service delivery approaches that may have higher unit costs, but deliver much higher returns on investment (e.g. the use of self-test kits in peer-assisted active case finding among key populations).

#### Integration and universal health coverage

Integration of responses to communicable and noncommunicable diseases has risen in importance as countries search for the most efficient and effective ways to meet global health goals. In many quarters the AIDS response—despite its considerable innovations and success—is no longer considered exceptional. Within the Millennium Development Goals, HIV was the primary feature of MDG 6 (combat HIV/AIDS, malaria and other diseases); within the Sustainable Development Goals HIV is one of several components of SDG 3 (good health and well-being). This trend was apparent after the last target-setting process, when "taking AIDS out of isolation" was emphasized in the UNAIDS 2016–2021 strategy, and the United Nations General Assembly emphasized integration and health systems strengthening, and included specific commitments for tuberculosis and viral hepatitis, within the 2016 Political Declaration on HIV/AIDS.

As regional frameworks for implementation modalities of universal health coverage are developed, HIV might be perceived as a minor concern outside of sub-Saharan Africa. This raises specific concerns. Will antiretroviral therapy for people living with HIV be included? Will community-based efforts to reach key populations and others at high risk of HIV infection fall outside of a system that favours facility-based services?

Several concepts were shared during the meeting to facilitate common understanding of the issues:

- *Technical efficiency*: the right mix of resources to provide HIV services or produce outputs at the lowest cost', or maximizing the outputs by unit cost.
- *Allocative efficiency*: whether the right mix of HIV services are provided to achieve the maximum outcomes, commonly assessed by cost-effectiveness analysis.

Further efficiencies can be achieved through:

- Economies of scale: when the average cost of a single HIV service declines with increased scale of service provision. Economies of scale may be found where integration enables expansion of service coverage to clients who have not previously accessed them (outreach). Diseconomies of scale typically occur at high levels of service coverage. Cost functions may be used to model them.
- *Economies of scope*: when undertaking two or more different activities in the same place leads to greater output per investment than undertaking the same two activities separately.

Opportunities for integration of HIV-related services with other health services are myriad, and could potentially include:

- Tuberculosis prevention and treatment
- Viral hepatitis prevention and treatment
- Sexual and reproductive healthcare and rights, including sexually transmitted infections
- Maternal and child healthcare
- Human papilloma virus vaccination and cervical cancer treatment
- Prevention and treatment of noncommunicable diseases
- Drug dependence treatment
- Mental healthcare

Considerable concern was expressed regarding the potential for "forced integration" if funding for HIV responses declines. Steering Committee members agreed that efforts to achieve efficiencies through integration should be guided by the concepts of "HIV-sensitive universal health coverage" and "integration when it makes sense within the local context"—services are integrated when the synergies are clear, but they are kept separate when integration will likely compromise coverage, quality or human rights. The technical group on integration will need to consider how the case for integration will change from region to region and from country to country.

There was considerable discussion regarding how integration should be handled within the model, target-setting and resource needs estimation. If HIV services have broader impacts (e.g. antiretroviral therapy's contribution to tuberculosis prevention and treatment or harm reduction's contribution to viral hepatitis and crime prevention), can those broader impacts be made explicit? Should the costs be somehow shared? Similarly, how should the efficiencies and cost savings of multi-disease approaches to screening and diagnosis be shared? Or the integration of information systems, monitoring and evaluation systems and advocacy efforts? These issues will need to be explored in detail by the technical group for integration and lead to detailed indicative costing for the modelling exercise.

Universal Health Coverage continues to be an overarching goal for most of the global health community and is closely linked to achieving the health-related SDGs. However, there is still much work to be done in defining the scope of services, the operational aspects of UHC and laying out a realistic timeline and resources needed for implementation in a variety of low and medium resource/capacity settings.<sup>10</sup> The AIDS community must be fully engaged in all aspects of these discussions, so that the mutual benefits of both global programmes are recognized and that the potential overlaps in service delivery are identified and capitalized upon.

#### Longer-term technologies

The technical group for new technologies will meet relatively late in the process (in the second quarter of 2020), after the provisional outputs of the new model are ready. The timing reflects the fact that this group is focused on technologies that are not expected to be readily available until after 2025 and probably not brought to scale until after 2030. The late convening of this group also allows for proposed adjustments to the model, if technologies under development today are brought to market sooner than expected.

<sup>&</sup>lt;sup>10</sup> WHO has costed the price tag of reaching UHC and SDG-related targets—including the Fast-Track approach to HIV—in 67 countries. Karin Stenberg, Hanssen O, Tan-Torres Edejer T, Bertram M, Brindley C, Meshreky A, et al. Financing transformative health systems towards achievement of the health Sustainable Development Goals: a model for projected resource needs in 67 low-income and middle-income countries. July 17, 2017. https://doi.org/10.1016/S2214-109X(17)30263-2.

Recent innovations, such as differentiated service delivery models, community prevention models, the provision of services by civil society and PrEP will be largely covered in the other technical groups. The technical group for new technologies is expected to explore the potential impact of potential innovations such as:

- Long-acting antiretroviral medicines for treatment
- Long-acting antiretroviral medicines for prevention
- Antibody mediated treatment, prevention and cure
- Biosynthetic, immune-mediated treatment prevention and cure
- Preventive vaccines
- Therapeutic vaccines
- Multi-purpose technologies
- Approaches to cure
- Artificial intelligence and digital health

A cautious approach was suggested to the Steering Group, based on the long timeframes required for trials and regulatory approval, and the fact that over the course of the AIDS response many anticipated innovations have not come to fruition, such as microbicides and tenofovir gels. It was noted, for example that vaginal rings have so far only been able to produce partial protection, and that widespread use of long-acting formulations of cabotegravir is not anticipated until at least 2025.

The technical group will be expected to produce a paper on long-term technologies, including reviews of the current state of development of anticipated innovations, updated timelines of their expected availability and scale up, proposed target populations and coverage targets, and the estimated impact of these interventions through 2030 and between 2030 and 2050. The paper should also include recommendations on the likely critical pathways for these anticipated innovations, and any steps that can be taken to shorten them.

Some Steering Committee members felt that the use of artificial intelligence and advanced digital solutions in healthcare delivery could develop faster, potentially contributing to greater impact by 2025. Even though some low-income countries are still using paper-based monitoring systems, there is a potential for leapfrogging, as was the case with telecommunications over the past two decades. Others cautioned against betting on the emergence of "silver bullet" technologies, noting that the impact of treatment as prevention, VMMC and PrEP to date has not met the expectations of some who believe that the end of AIDS can be achieved solely within the healthcare system.

# 5. Consensus moving forward

The following decisions were made by the Steering Committee at the conclusion of its first meeting:

#### Strategic issues

- Define what is needed to reach the 2030 impact goals and guide countries to more efficiently and effectively achieve them
  - Make the strongest possible investment case at both global and country levels

- o Optimize use of current and future additional resources
- Define and measure the cost of inaction
- Capture the benefits of combination prevention & treatment, community and health system delivery, integration with UHC as appropriate
- Ensure that the contribution of social enablers and their costs are included in the target-setting
   Recognize the value of advocacy in all settings
- Set programmatic targets to achieve high coverage of accessible and quality bundles of people-centred services
  - Headline global targets, including targets for key populations
    - Engage with countries to enhance ownership and commitment to more effective, comprehensive responses
    - Combination prevention & treatment target
    - Address the hidden gaps of 90-90-90 (e.g. viral suppression, morbidity, non biomedical prevention activities)
    - Impact and programme targets = global
    - Resource needs estimate = low- and middle-income countries (but explore the feasibility of adding high-income countries estimates)
  - Disaggregated and differentiated regional, sub-regional and national targets
    - Age, sex, key populations and other populations at risk and sub-national locations disaggregation, as appropriate
    - Differentiated country performance
    - Differentiated service delivery modalities (including facility-based and community-based)

### Scope of work of the Steering Committee

- Develop a constellation of key issues that will be used for modelling and communications that will be used for global target setting and resource and impact estimation;
- Develop, support and engage the technical groups;
- Review products of the technical groups;
- Consolidate and harmonize across the technical groups and modelling group;
- Monitor progress of the groups and overarching process;
- Advise on, advocate for and participate in the dissemination of products from the process.

#### **Operational issues**

- Add representatives of young people to the Steering Committee and technical groups.
- Establish mechanisms that ensure interaction between the technical groups, the modelling group and the Steering Committee.
- Manage multiple forms of integration across the technical groups:
  - o Patient management
  - Service integration
  - Systems integration
  - o Universal health coverage
- Clarify that technical groups will continue to exist beyond their face-to-face meeting in case the Steering Committee requires clarifications or additional inputs.
- The technical groups should collect more non-facility-based input data for the modelling.
- The technical groups should consider the potential emergence of artificial intelligence for health and other new technologies in the medium term.

- Interim products and communications of the process should include:
  - A website and/or Facebook page that shared technical group papers and other interim materials;
  - The pairing of each journal article with a "community report" that communicated the same information in a more accessible way.
- For communications purposes, the process should be given a shorter and more compelling name than "target-setting, impact and resource needs".

#### STRATEGIC ADVICE FROM MICHEL SIDIRÉ

At the close of the meeting the Steering Committee was joined by UNAIDS Executive Director Michel Sidibé for a debrief and strategy session. Mr. Sidibé urged the committee to be ambitious and set 2025 targets that inspire the general public and policy-makers to deal with the big issues facing the global AIDS response as it moves forward. Political leaders need to be stimulated to invest money, and to be reassured that those investments will translate into results such as lower incidence, morbidity and mortality.

Mr. Sidibé mentioned that previous UNAIDS advocacy was perceived as overly optimistic, and noted that recent UNAIDS advocacy, including the *Miles to go* report launched in July 2018, paints a more sober picture of the current gaps and challenges. He also praised plans for the process to highlight differentiated progress and populations left behind, remarking that data from Canada and the United States show that these issues are also relevant within locations and populations of high-income countries.

But he urged the next set of targets to remain optimistic, noting that a part of human nature is to support winners. Progress must always be shown, or momentum could be lost. Mr. Sidibé also warned that there is little global appetite for an AIDS response that exists in isolation of other global concerns. He said a critical challenge moving forward will be to manage the transition of AIDS as a singular emergency to AIDS as one of many global health priorities that must be tackled in concert.

# Annex 1: Participants list for the face-to-face meeting of the Steering Committee on Target-Setting, Impact and Resource Needs

# **Co-Chairs:**

- Benzaken, Adele
- De Lay, Paul

# **Steering Committee Members**

Attending:

- Abdool Karim, Quarraisha
- Ayala, George
- Chang, Judy
- Clayton, Michaela
- Couto, Aleny
- El-Sadr, Waafa
- Gorgens, Marlize
- Low–Beer, Daniel
- Jaavedra, Jorge
- Taslim, Aditia
- Thiam, Safietou
- Syarif, Omar

## Regrets:

- Dieffenbach, Carl
- Dybul, Mark
- Joachim, Catherine
- Glassman, Amanda
- Pillay Yogan
- Tagar, Elya
- Tangcharoensathien, Viroj
- Sani, Aliyu

# Modelling group representative

• Stover, John

# **UNAIDS Secretariat**

- Fontaine, Chris
- Frescura, Luisa
- Ghys, Peter
- Godfrey-Fausset, Peter
- Hou, Annemarie
- Izazola, Jose Antonio
- Lamontagne, Erik
- Martineau, Tim
- Semini, Iris
- Sidibe, Michel
- Sprague, Laurel

# Support

• Dantas, Michele

# Annex 2: Agenda of the face-to-face meeting of the Steering Committee on Target-Setting, Impact and Resource Needs

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Day 1: October	10th, 2018	(Wednesday)

Time	Session	Presenter(s)/Lead (s)
12:00-14:00	Arrival and Welcome Lunch	
14:00-14:15	Welcome address	Peter Ghys (UNAIDS)
14:15-14:40	Introduction to the agenda and discussion topics	Co-chairs
14:40-15:00	Session 1	
	Expectations, process and policy frameworks	Peter Ghys (UNAIDS)
15:00-16:30	Session 2	
	State of the Epidemic and the response	Peter Ghys (UNAIDS)
	Description of the key messages from the previous exercises and the technical background of the past modelling exercise (2014/16)	Jose A. Izazola (UNAIDS)
	Discussion	
		Co-chairs
16:30-17:00	Coffee break	
17:00-18:00	Session 3 Scope of 2020-2030 exercise Discussion	Peter Godfrey Faussett Peter Ghys (UNAIDS) Co-chairs
18:00	Close of Day 1	UNAIDS

# Day 2: October 11th, 2018 (Thursday)

Time	Session	Presenter(s)/Lead (s)
9:00-9:15	Recap of day 1	Co-chairs
9:15-10:30	Session 4         Definition of technical areas (group discussion)         • Treatment         • Prevention         • Enablers         • Integration and Synergies         • Resources: Unit costs, Efficiencies         • Innovations and new Technologies	Co-chairs
10:30-11:00	Coffee break	
11:00-12:30	Session 5	
12:30-13:30	Planning for first Technical Meeting on Treatment (group discussion)	Co-chairs
	Lunch	
13:30-15:15	Session 6 Integration and Synergies Discussion	Erik Lamontagne (UNAIDS) Co-chairs
15h15-15h45	Coffee	
15:45-17:00	Session 7         Next generation of interventions – potential timelines and impact beyond 2025         Discussion	Peter Godfrey-Fausset (UNAIDS) and Wafaa EI-Sadr (ICAP) Co-chairs
17:00	Close of Day 2	UNAIDS

Time	Session	Presenter(s)/Lead (s)
9:00-9:15	Recap of day 2	Co-chairs
9:15-10:30	Session 8: Process and Key Milestones (Group discussion) Dissemination Strategy Workplan review	UNAIDS & Co-Chairs
10:30-11:00	Coffee	
11:00-12:30	<ul> <li>Session 9</li> <li>Summary of Decision points: <ul> <li>Agreement on scope of the exercise</li> <li>Agreement on defined technical areas</li> <li>Agreement on Dissemination Strategy</li> <li>Agreement on first technical meeting on treatment</li> </ul> </li> </ul>	Co-chairs
12:30	Close of Meeting	Michel Sidibe (Executive Director, UNAIDS)

# Day 3: October 12th, 2018 (Friday)