

2018 Controlling the HIV Epidemic Summit

International Conference Centre Geneva

May 3-4, 2018 Geneva Switzerland

Background

The International Association of Providers of AIDS Care (IAPAC) convened the sixth *Controlling the HIV Epidemic Summit* on May 3-4, 2018, in Geneva, Switzerland. The Summit was sponsored by IAPAC in collaboration with the Joint United Nations Programme on HIV/AIDS (UNAIDS), the Global Network of People Living with HIV (GNP+), the Foundation for AIDS Research (amfAR), and the Geneva University Hospitals (HUG). The Summit was Chaired by Ilona Kickbusch from the Graduate Institute of International and Development Studies, Geneva, and Kenneth Mayer from the Fenway Institute, Boston, MA, USA, and included a faculty of 45 from 17 countries.

Objectives

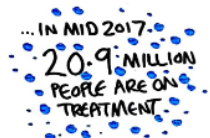


The *Summit* objectives were to review current definitions of epidemic control, examine existing and proposed new metrics for epidemic control, explore facilitators of and barriers to controlling HIV epidemics, share experiences from the field, and map the way forward to 2020 and 2030. Infographics provided by Drawnalism.TM



Executive Summary

The Summit featured presentations and panel discussions examining definitions of and metrics for defining HIV epidemic control (or the UNAIDS-preferred term “epidemic transition”), facilitators of control, measurement of stigma, community engagement, country experiences towards achieving epidemic control, as well as lead and finance efforts aimed at controlling the epidemic going forward. What is meant by “HIV epidemic control” is a work in progress. The US President’s Emergency Plan for AIDS Relief (PEPFAR) defines epidemic control as the point at which new HIV infections have decreased and fall below the total



number of deaths among HIV-infected individuals. However, UNAIDS is seeking to better define what epidemic transition is and how it is measured, coupled with efforts to improve the measurement of HIV-related stigma. Although UNAIDS estimates that 20.9 million people living with HIV (PLHIV) were on antiretroviral therapy (ART) as of 2017, there are significant gaps in progress in regions such as Central and Western Africa, Eastern Europe and Central Asia. New HIV infections are not declining fast enough to meet 2020 targets and



ART can only avert 60% of new infections. While the 2016 UN political declaration committed to 90% of people at risk of HIV acquisition having access to combination prevention by 2020, significant gaps exist globally in prevention programming and funding. The newly launched UNAIDS Global HIV Prevention Coalition and the HIV Prevention Roadmap 2020, with its 10-point plan for accelerating primary HIV prevention at the country level, provide platforms for closing the gaps. The World



Health Organization (WHO) cited an historic opportunity to make transformational improvement in world health by driving the elimination of epidemics (Sustainable Development Goal 3.3) and making universal health coverage a reality for more people. A strategic investment approach that combines effective and efficient programming with interventions that address barriers to human rights to health, delivered in partnership with countries and communities, will have the highest impact. Keys to the sustainability of controlling the HIV epidemic are continued strengthening of health and community systems, investments by governments and donors that are sufficient to achieve 90-90-90 targets, the rollout of universal health coverage, ART for all using a people-centered differentiated care approach, access to combination prevention for HIV negative individuals, and elimination of stigma.

The Health Sustainable Development Goals and Universal Health Coverage

Under new leadership, the WHO has embarked on its Global Program of Work (GPW) with an emphasis on country-level support towards ending the epidemics of HIV, viral hepatitis (hepatitis B virus [HBV] and hepatitis C virus [HCV]), and sexually transmitted infections (SDG 3.3). The GPW addresses better data for impact, equitable delivery of health services, universal health coverage, and financing for sustainability. Looking ahead, stand-alone programs will be challenged, and integration is key, while ensuring that the quality and specificity achieved in HIV programs over many years are not compromised. The principle of 'leave no one behind' must be applied to all communities and all health issues. There must be a strong focus on key and vulnerable populations in the universal health coverage agenda, effective interventions need to be brought to scale, services need to be people-centered and differentiated, structural and behavioral barriers to service access need to be addressed, and advocacy is required for increased health budgets and investments in frontline workers.



Defining HIV Epidemic Control

PEPFAR defines "HIV epidemic control" as the point at which new HIV infections have decreased and fall below the total number of deaths among



HIV-infected individuals.¹ The UNAIDS Scientific Advisory Board convened a stakeholder meeting of experts in October 2017 in Glion, Switzerland,² to build



consensus around definitions of "HIV epidemic transition" which take into account the heterogeneity of the HIV response in terms of age, gender, geography, and key populations. UNAIDS is also examining alternative terms for epidemic transition, with plans to use the evolving definitions and metrics in the next round of UNAIDS global, regional, and national HIV/AIDS data reporting.

HIV Epidemic Control (or Transition): Overview of Existing and Proposed Metrics

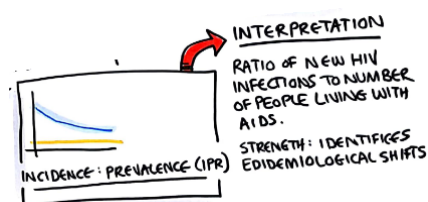
At the 2017 stakeholder meeting in Glion, four potential metrics were defined that could complement existing indicators as countries aim for HIV epidemic control. The new metrics can demonstrate progress towards epidemic control in addition to meeting specific programmatic targets.

¹ Sustainable HIV Epidemic Control: PEPFAR Position Paper, 2017

² Making the End of AIDS Real: Consensus Building around What We Mean by Epidemic Control. A meeting convened by the UNAIDS Scientific Advisory Board, October 4-6, 2017, Glion, Switzerland

Existing metrics

- Incidence rate per 1,000 uninfected (SDG indicator)
- AIDS-related mortality rate per 1,000 population
- % reduction in new infections from 2010 baseline
 - 2016 UN High Level Meeting on HIV target
- % reduction in AIDS deaths from 2010 baseline
 - 2016 UN High Level Meeting on HIV target



Potential metrics

- Ratio of Incidence to Prevalence (IPR)
- Ratio of Incidence to Mortality (IMR)



Table 1: Comparing IPR and IMR

	Incidence/prevalence ratio (IPR)	Incidence /mortality ratio(IMR)
Definition	The ratio of new infections to the number of PLHIV	The ratio of new infections to the total number of deaths among PLHIV
Benchmark	0.03	1
Strengths	Identifies an epidemiologically relevant shift in the epidemic	Identifies a point at which the number of people living with HIV (and thus potentially the HIV related health care costs) will diminish
Limitations	Cannot be disaggregated by sex, age or key population as the metric reflects an entire epidemic including transmission across population groups	Requires interpretation together with a measure of low mortality among PLHIV or high ART coverage otherwise an IMR<1 could be attained in the presence of high mortality Cannot be disaggregated by sex, age or key population as incidence may arise from different strata
Interpretation	The level of incidence that needs to be achieved to result in a shrinking epidemic over time. When this ratio is maintained below 0.03 the epidemic will decline Increasing prevalence due to effective treatment, and/or decreasing incidence due to effective prevention (including treatment) can both lead to reductions	When this value <1, the size of the population living with HIV decreases lowering the costs of ART and services

Metrics for Stigma and Discrimination

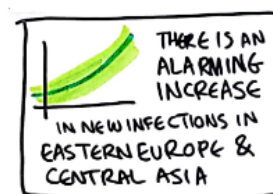
Presentations from UNAIDS discussed indicators of stigma and discrimination that include discrimination in healthcare settings and employment because of HIV status, verbal or physical harassment because of HIV or key population status, avoidance of healthcare among key populations because of stigma and discrimination. and discriminatory laws and policies. Participants at the 2017 Glion stakeholder



meeting called for measures of epidemic control to be packaged with improved measures of HIV-related stigma and discrimination. Subsequently, the UNAIDS Monitoring Technical Advisory Group (MTAG) convened a task team meeting in March 2018 to make recommendations on metrics for stigma and discrimination. An interim indicator set was proposed and includes discrimination in healthcare settings and employment, health care coverage, violence, avoidance of healthcare, and enforcement of laws and policies against stigma and discrimination.

Progress and Gaps in Controlling the HIV Epidemic

As of 2017, UNAIDS estimates there were 20.9 million PLHIV on ART and the world was on-track to having 30 million people accessing HIV treatment by 2020. As AIDS mortality declines, economic growth improves with reductions in mortality from HIV, tuberculosis (TB), malaria, and child mortality accounting for 11% of economic growth in low- and middle-income countries. However, there are significant gaps in progress. An estimated 15.8 million PLHIV are still in need of ART and reductions in new HIV infections are off-target to meet the UNAIDS goal of <500,000 new HIV infections by 2020. There has been an alarming rise in new HIV infections in Eastern Europe and Central Asia. About 15 million adolescent girls and 30% of ever-partnered women have experienced sexual violence. HIV prevalence among key populations is higher than in the general population, and discriminatory attitudes towards PLHIV and vulnerable populations continue. User fees and co-pays remain an obstacle to treatment in many countries.



Countries rapidly need to adopt the WHO's 'treat all' global clinical standard, shift towards the most effective antiretroviral regimens, support saturation of combination HIV prevention interventions that are targeted to address the needs of populations, provide training for stigma and discrimination elimination, support community-led responses, and take more responsibility for financing their HIV responses.

PEPFAR

A PEPFAR presentation highlighted that its role is to support, in the most effective and efficient manner, the SDG 3 goal of controlling the HIV epidemic by 2030 using the global fast-track strategy to achieve and sustain the goal. PEPFAR's three guiding principles for epidemic control are accountability (cost-effective programming that maximizes the impact for every dollar invested), transparency (sharing all levels of program data), and impact (sustained epidemic control, saving lives, and averting new infections)

Where Are We Now



In high prevalence generalized HIV epidemics in Eastern and Southern Africa, the expansion of key services has met with demonstrated outcomes and impact.

In low-prevalence mixed HIV epidemics in West and Central Africa, AIDS responses have been plagued by sluggish policy adoption, slow expansion of prevention and treatment services, barriers to care caused by user fees and co-pays, stigma and discrimination, and a lack of impact despite significant investment.





In some concentrated HIV epidemics, such as those in Eastern Europe and Central Asia, there has been poor performance of prevention and treatment cascades, stigma and discrimination, and investments that have not achieved impact. Key gaps include the need for saturation of focused prevention interventions, increased awareness of risk and HIV status among 15- to 30-year-olds, engagement of men of all ages, consistent political will to address key populations with necessary interventions, and strategies to eliminate stigma and discrimination.

PEPFAR's Priorities in Achieving HIV Epidemic Control

To achieve HIV epidemic control, PEPFAR is prioritizing customized testing driven by specific epidemiology, the scale up of index testing, intentionally managed linkage from testing to care at scale, including same-day linkage, intensified efforts to find and test men of all ages and scale services for them, continued investment in the DREAMS project for girls and young women, accelerated voluntary male medical circumcision (VMMC), the removal of formal and informal user fees, and site-level management which extends beyond monitoring to active engagement and improvement targeted at sustained viral load suppression. PEPFAR is placing a premium on partner performance that is continuously improved, with future funding linked to partner and country performance.

Facilitating HIV Epidemic Control

Optimizing the Global Health Workforce to Control the HIV Epidemic

Presentations from Ghana and Malawi focused on the importance of human resources for health in facilitating HIV epidemic control. While Malawi has made significant progress towards achieving the 90-90-90 targets and is on a trajectory towards epidemic transition, high vacancy rates among health workers are a challenge (e.g., vacancy rates for pharmacy technicians and midwives stand at 83% and 74%, respectively). In Ghana, a five-year roadmap has been developed to mobilize health workers to locate, test, treat, and retain PLHIV in care and achieve sustained viral suppression. Keys to achieving the roadmap targets are the training of 20,000 community health workers (CHWs) in the country's 16 districts and accelerated efforts to implement universal health coverage.



Strengthening Community Engagement

The 2016 High-Level Political Declaration on HIV/AIDS committed to at least 6% of global AIDS resources being allocated to social enablers including advocacy, community and political mobilization, community monitoring, and human rights programming. A presentation from the International Treatment Preparedness Coalition (ITPC) underscored how effective community engagement drives accountability by shining a light on the gap between promise and reality. This includes acting as watchdogs for HIV-related criminalization and prosecutions, corruption and mismanagement, monitoring of procurement and stockouts, advocacy for health system reform, and quantifying stigma and discrimination through the PLHIV Stigma Index.



Scaling Up Combination HIV Prevention



UNAIDS reported that new HIV infections are not declining fast enough to meet the 2020 fast-track targets and that ART can only avert 60% of new infections. Further, HIV prevention is a human right.



Proven impact has been demonstrated from condom use, pre-exposure prophylaxis (PrEP), VMMC, needle/syringe programs and opioid substitution therapy, treatment as prevention, empowerment of women and sex workers, secondary education for girls and young women, and harm reduction policies. The 2016 High-Level Political Declaration on HIV/AIDS committed to 90% of people at risk of HIV acquisition having access to combination HIV prevention by 2020. However, significant gaps still exist in prevention programming and funding. The newly launched UNAIDS Global HIV Prevention Coalition and the HIV Prevention Roadmap 2020, with its 10-point plan for accelerating primary HIV prevention at the country level, provide platforms for closing the gaps.



Finding and Testing the HIV Unawares: The Role of HIV Self-Testing



Combination HIV prevention, including HIV self-testing, is key to reaching 90-90-90 targets. Self-testing must be affordable and integrated into existing programs offering HIV services, and policies are required to support sustainable implementation at scale. Models of implementation include supervised and unsupervised testing, with distribution through pharmacies, community-based organizations, outreach clinics, mobile vans, vending machines, private clinic kiosks, hospital-based kiosks, and web-based apps. One such app presented at *Summit* is HIVSmart!™, an open-access mobile app that supports people who wish to self-test through the steps of accessing the test kit, conducting the test, interpretation of the result, and linkage to care. HIVSmart!™ and IAPAC have announced a partnership for roll out in Fast-Track Cities.

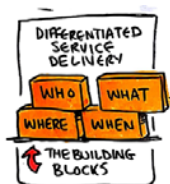
Integrating PrEP with Early ART Initiation

The integration of early ART initiation for all and combination HIV prevention, including PrEP, will be needed if epidemic control is to be achieved. While the scale up PrEP has been relatively slow, the WHO estimates that >300,000 people have accessed PrEP globally, more than half of whom are in the United States. Combination prevention, including PrEP and treatment as prevention, has yielded dramatic declines in the numbers of new HIV infections where these two interventions have been implemented and taken to scale.



Differentiated Care

The WHO reported that differentiated care facilitates ART by improving efficiency, adherence and retention, improving health outcomes, reducing cost, and freeing up human resources to 'treat all' in pursuit of 90-90-90 targets. The original 'who,' 'what,' 'when,' and 'where' building blocks of differentiated care have been expanded to include differentiated HIV testing and differentiated care decision frameworks for key populations, adolescents, children, families, and people with advanced HIV disease.



Update on Long-Acting Antiretrovirals

Long-acting antiretrovirals may optimize HIV treatment and prevention by improving adherence. For injectables, currently available options for delivery are bimonthly with the possibility of twice yearly. For oral preparations, weekly or biweekly dosing will soon be feasible. For prevention, a single antiretroviral will suffice. For treatment, three agents with matched pharmacology will be required and we are not there yet. While less frequent dosing improves adherence, long-acting sustained release formulations do not eliminate adherence challenges, increasing the importance of getting people back into



clinic for re-dosing. In the prevention pipeline, the HPTN 083/084 studies are examining the safety and efficacy of long-acting injectable cabotegravir (CAB) compared to oral tenofovir (TDF)/emtricitabine (FTC) in men and transgender women. In the treatment pipeline, a protocol is in development for long-acting CAB plus a broadly neutralizing antibody (bNAb) for maintenance of viral suppression in HIV-positive adults whose virus has been suppressed with conventional ART.



The Nursing Perspective

A presentation from the Association of Nurses in AIDS Care (ANAC) re-affirmed how nursing has been a key component in scaling up global HIV programs through development of nurse-led models of care. ANAC promotes a holistic and evidence-based approach to HIV care and advocates for policies grounded in a human rights approach to health. Reaching 90-90-90 targets is going to require innovative approaches to eliminating stigma, the needs of the aging HIV population, and universal health coverage. Nursing education, faculty development, improved workplace conditions, and economic fairness need to be prioritized.



Leaving No One Behind

ITPC reported that still too many people are being left behind either because they are invisible, they are accessing services which are of poor quality, or because society does not care about them. Those left behind include children, adolescents, young girls, adult males, and members of key and priority populations, including those who are internally displaced or mobile. Keys to not leaving anyone behind include community monitoring of quality and access to services, strengthening of community advocacy, and community systems.



In support of leaving no one behind, the AIDS Healthcare Foundation (AHF) supports antidiscrimination programs in the Philippines, Vietnam, China and Cambodia; testing sites for migrant workers along border areas; sexual and reproductive health services for youth and young girls; and the signing of a commitment by 27 city mayors in West Java to increase HIV testing and treatment services and reduce stigma and discrimination.

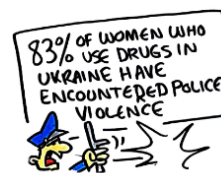
Sharing Experiences - A Snapshot

Progress towards HIV epidemic control was communicated via regional experiences in the Caribbean and Europe, and national and municipal (Fast-Track City) experiences in Kenya, Côte d'Ivoire, Australia, Brazil, India, and the United States.



In **Nairobi, Kenya**, between 2014 and 2017, the number of people knowing their HIV status increased by 21%, the number of PLHIV on ART increased by 90% and the number of PLHIV on ART with viral suppression increased by 55%. This was achieved by strong leadership and partner coordination, enhanced key population and adolescent services, and intensified HIV testing, including self-testing.

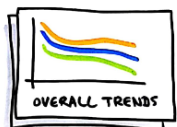
In **Europe**, significant inequalities exist across countries and regions. A presentation from Eastern Europe focused on women living with HIV who use drugs and how they face stigma, discrimination, HIV criminalization, police violence, and lack of access to opioid substitution therapy services. In contrast to the situation in Eastern Europe, many countries in Western Europe are close to reaching the 90-90-90 targets. However, even in Western Europe, people are being left behind including migrant women and children and ethnic minority groups such as Roma.



In **Melbourne/State of Victoria, Australia**, the 90-90-90 targets were realized in 2015 but there has not yet been a significant decline in the number of new HIV infections. This was achieved through a rigorous focus on MSM (who account for 73% of PLHIV in Victoria State), investment in partnership approaches, practical responses and a commitment to good data. However, success creates its own challenge with the perception among some community and political spheres that HIV and AIDS are no longer public health concerns.



In **India**, ART scale-up efforts have placed more than 1.2 million PLHIV on ART out of an estimated 2.1 million people in need. While there has been a >50% decline in HIV incidence and mortality, new HIV infection fast-track targets are not being met. Challenges include the sustainability of ART commodities, with stock-outs occurring, the emergence of drug resistant strains of HIV, and the prevention and management of non-communicable diseases (NCDs) among PLHIV.



In the **United States**, disparities persist across populations and regions, with southern states bearing the greatest burden of HIV. While HIV incidence has decreased among heterosexuals, it has remained steady among MSM. One in seven PLHIV do not know their HIV status (2015 data) and viral load suppression among PLHIV on ART in 37 states and the District of Columbia was 58% (2014 data).



HIV prevalence in **Brazil** ranges from 0.4% in the general population to 18.0% among MSM and 36.7% among transgender women. HIV treatment for all has been standard of care in Brazil since 2013. Viral load suppression for people on ART is high at 86%; 69% of PLHIV know their HIV status; and 64% of people who know their status are on ART (2012 data). Free PrEP was introduced in December 2017. *The Strategic Agenda for Key Populations, Young People, and Other Vulnerable Groups* (2018) aims to improve access to comprehensive healthcare services for these populations.



In **the Caribbean**, HIV prevalence is 1% across the region (1.8% in Haiti), and there are an estimated 310,000 PLHIV, 52% of whom are on ART. With a mixed generalized and concentrated HIV epidemic, there has been a significant decrease in HIV incidence (49% decline



2001-2015), near elimination of mother-to-child transmission of HIV and a decline in mortality, morbidity, and the social impact of HIV. Factors continuing to drive the HIV epidemic in the Caribbean include high rates of transactional sex, crack cocaine use, sexually transmitted infections, bisexuality and a 'macho' culture that fosters abuse, violence, and vulnerability.

Mapping the Way Forward

Investing Strategically

UNAIDS described how this is a critical point in the HIV response and smart investments and rapid implementation of quality interventions at scale are needed. An investment approach which combines effective and efficient programming packaged with interventions that address barriers to access to care, delivered in partnership with communities, will have the highest impact. Mapping the gaps will require a granular analysis of who is left behind and why, and interventions developed for each gap. For an AIDS response to be effective, it needs to be targeted to the cycle of transmission within the community. Scale matters and pilots need to stop if high impact is to be achieved. Empowerment of young women and girls and community mobilization work. The negative impact of user fees in many countries needs to be addressed. Finally, real-time data must be used to adapt quickly to changing HIV epidemic patterns and local priorities.

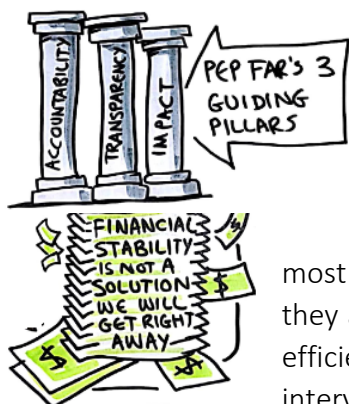


Who is Going to Lead and Finance HIV Epidemic Control Efforts?

In the Summit's final panel, representatives from PEPFAR, WHO, UNAIDS, UNITAID, and Georgetown University discussed the path forward to achieve HIV epidemic control. The fast-track to epidemic control is an imperative if we are going to end AIDS as a public health threat by 2030. The questions and challenges facing epidemic control are similar to those faced following the 2011 financial crisis when UNAIDS launched its strategic investment framework in support of finding efficiencies as a path to continued acceleration of the HIV response in a climate of diminishing resources.



PEPFAR emphasized the importance of technical and allocative efficiencies in the quest for sustainability.



Countries must lead but be supported by the international community to achieve maximum impact. We have a core set of interventions which we know are effective, but they are not being implemented at a scale sufficient to achieve population-level impact. Cost-effectiveness analyses alone will not lead to investing for the maximum impact, and the

most cost-effective interventions will not have impact if they are not implemented well. Only with effective and efficient enablers (environment, laws, regulation, policy) will cost effective interventions work. Countries in regions such as Central and West Africa are falling



behind, and investments are needed in this region to understand why this is occurring and how to remove the barriers that are negatively impacting their responses. Interventions driven by the local context, both in programs and enabling environments, are needed to achieve the fast-track targets. Keys to the

sustainability of HIV epidemic control are continued strengthening of health and community systems, investments by governments and donors that are appropriate and sufficient to achieve the 90-90-90 targets, the rollout of universal health coverage, ART for all using a people-centered, differentiated care approach, access to combination prevention for HIV negatives, and the elimination of stigma and discrimination.

Conclusion

Evoking mountaineering imagery to describe the current path towards HIV epidemic control, IAPAC posited at the Summit's opening and again at its conclusion that the global AIDS community finds itself (somewhat precariously) perched midway up a public health 'Mount Everest' that still needs climbing. We must acknowledge significant progress made since the 2011 launch of this series of Controlling the HIV Epidemic Summits, at which discussions



have transitioned from purely aspirational to the concrete possibility that HIV epidemic control can be achieved where there is a confluence of facilitating factors. This transition is tempered, though, by a 'new realism' predicated on the notion that the exceptionalism that AIDS has enjoyed within the public health space is no longer sustainable without strategic actions to position the HIV response within a broader global health agenda.

