



## **Frequently Asked Questions about 90-90-90 Targets, the HIV Care Continuum, the Updated National HIV AIDS Strategy (NHAS), and the *Fast-Track Cities Initiative***

### **What is the origin of the 90-90-90 targets?**

The "3 by 5" initiative, launched by the World Health Organization (WHO) in 2003, called for providing three million people living with HIV/AIDS (PLHIV) in low- and middle-income countries with antiretroviral treatment (ART) by the end of 2005. Despite considerable skepticism regarding the advisability and feasibility of expanding access to ART in low and middle income settings, as of mid-2014 over 12 million PLHIV were on ART (now it is over 15 million). This significant increase in treatment uptake, thanks in large part to the President's Emergency Plan for AIDS Relief (PEPFAR) and the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) support, has been accompanied by a growing evidence base that earlier treatment can prevent illness and death for the individual, reduce HIV transmission to partners and children, and over a medium- to long-term timeframe, can decrease overall costs. The data and models suggested that when testing and treatment coverages are in the 90-90-90 range (described below) there is a significant impact towards controlling the HIV epidemic. This prompted the joint United Nations Program on HIV/AIDS (UNAIDS) in 2014 to release new 90-90-90 treatment targets by 2020 for HIV.

- 90% of PLHIV knowing their status
- 90% of PLHIV who know their status on antiretroviral therapy (ART)
- 90% of PLHIV on ART with suppressed viral loads

### **Why are the 90-90-90 targets a “game-changer”?**

The 90-90-90 targets are significant in that they are the first targets that explicitly focus on improving the HIV care continuum from diagnosis to viral suppression. Specifically, they focus on ensuring that the majority of PLHIV learn their HIV status; they are an advocate for effective treatment by promoting early ART initiation and requiring that the majority of those on ART are retained in care with sustained suppressed viral loads; and they place responsibility on the program to monitor the quality and impact of HIV services over the long run by paying attention to viral load measurement. The 90-90-90 targets, when adopted, have a major impact on program strategy and budgeting—for example PEPFAR 3.0 has adopted the targets and undertaken a major pivot away from “business as usual” to supporting the attainment of 90-90-90 targets in over 30 countries worldwide.

### **What is the *Fast-Track Cities Initiative* and its connection to 90-90-90?**

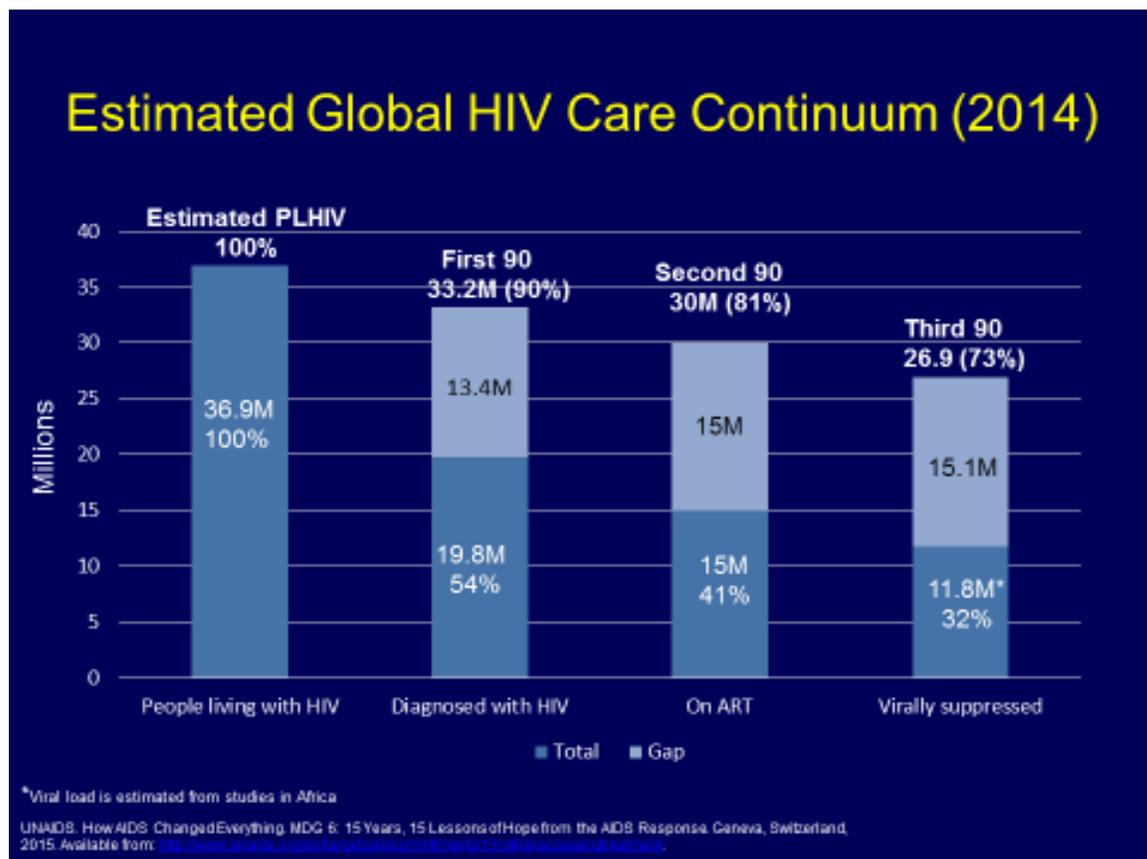
The *Fast-Track Cities Initiative* (FTCI) is a global effort to accelerate the AIDS response in urban contexts where much of the HIV burden lies. FTCI is a partnership between IAPAC, UNAIDS, UN-Habitat, City of Paris and relies on cities to pioneer efforts in achieving 90-90-90 targets by 2020. Though the initiative focuses on 90-90-90 targets, cities are encouraged to track other relevant indicators, such as linkage to and retention in care. FTCI will include metropolitan areas from the United States and overseas and will provide a framework whereby cities can share experiences and technical information, use common objectives, and work together to control HIV.

### **How does 90-90-90 relate to the HIV care continuum?**

To answer this question we must first define the basic HIV care continuum, also known as the HIV cascade. The care continuum approach can be reduced to four basic elements: 1) an estimate of PLHIV in the geographic setting (e.g., jurisdiction, district, city, state, nation), 2) the number and proportion of people diagnosed with HIV, 3) the number and proportion of PLHIV on ART and 4) the number and proportion of PLHIV virally suppressed. The estimated number of PLHIV serves as the denominator for all of the stages of the care continuum: HIV diagnosis, on ART, and virally suppressed.

Although 90-90-90 involves the same elements as the care continuum, it uses a shifting denominator. The 90-90-90 targets are a subset of the overall care continuum with the 90% of people diagnosed with HIV representing the first “90.” However, differing from the care continuum, the second “90” (on sustainable ART) is a subset or proportion of the PLHIV diagnosed with HIV (i.e., not a subset of everyone estimated to be living with HIV), and the third “90” (viral suppression) is a proportion of the PLHIV on treatment. In other words, to translate the second and third “-90-90” into true care continuum metrics we take 90% of the 90% people diagnosed with HIV as being on ART for the second “90” target ( $.90 \times .90 = .81$ ) and 90% of the 81% of people on ART as the third “90” target ( $.81 \times .90 = .73$ ). This works out so that the 90-90-90 targets, expressed as a standard care continuum using everyone living with HIV as the denominator, translates into **90-81-73**.

**Figure 1: Description of global HIV care continuum for 2014 illustrating the 90-90-90 targets and their relationship to the overall care continuum.**



### **What about the care continuum, 90-90-90, and the NHAS?**

The FTCI 90-90-90 targets translate into a 90-81-73 care continuum for all PLHIV. That is because of the floating denominator that translates into 90% of everyone living with HIV being diagnosed with HIV, 90% of those 90% being on ART (81%), and 90% of the 81% of people on ART virally suppressed. In other words 90% multiplied by 90% multiplied by 90% equals 73% of people estimated to be living with HIV being virally suppressed.

The updated NHAS targets for treatment and care are:

1. Increase the percentage of PLHIV who know their serostatus to at least 90%.
2. Increase the percentage of newly diagnosed persons linked to HIV medical care within one month of diagnosis to at least 85%.
3. Increase the percentage of persons with diagnosed HIV infection who are retained in HIV medical care to at least 90%.
4. Increase the percentage of persons with diagnosed HIV infection who are virally suppressed to at least 80%.

The HIV diagnosis target for NHAS is 90% of everyone living with HIV. Of these, NHAS, calls for 90% to be retained in care which for the majority of people translates into being on treatment. The most important NHAS target is the viral suppression target which calls for 80% viral suppression among those diagnosed with HIV. In other words we have 80% suppression among the 90% of PLHIV who are diagnosed. This translates into 72% of everyone estimated to be living with HIV being virally suppressed.

Viral suppression is the most important measure because it encompasses ART's both treatment and preventative benefits. Viral suppression allows PLHIV to remain healthy and significantly reduces (almost eliminates) the chance of HIV transmission between partners and children. As described in both the NHAS and FTCI, the preventative benefits of 90-90-90 should be complemented with improved access to other prevention interventions and reduction in disparities in order to achieve maximum reduction of new HIV infections. In summary, the difference between 72% (NHAS) and 73% (FTCI) viral suppression is negligible and the NHAS targets are roughly the same as the FTCI 90-90-90 targets.

In congruence with the updated NHAS, the FTCl focuses efforts in cities with high HIV burden and among key populations such as men who have sex with men (MSM), sex workers, and people who inject drugs (PWID). Therefore, within the context of the United States, the FTCl particularly concentrates continuum optimization efforts around high HIV burden groups such as MSM, young Black gay and bisexual men, Black females, and persons living in Southern US cities.