The State of the Philippine HIV Epidemic 2016

Facing Challenges, Forging Solutions

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF HEALTH
EPIDEMIOLOGY BUREAU

The State of the Philippine HIV Epidemic 2016: Facing Challenges, Forging Solutions

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The country's HIV response following the shift in the epidemic to males and transgender women who have sex with males (M/TSM) in 2007 has prevented 211,000 Filipinos from contracting HIV. This is an achievement attributable not only to the health sector's unwavering commitment to halt the ongoing spread of HIV, but also to the tireless work of advocates and champions from other national and regional government agencies, local governments, civil society, community-based organizations, and development partners.

However, the magnitude of the escalating concentrated HIV epidemic in the Philippines continues to be felt by the key populations it directly affects. Current country efforts have been insufficient to reach targets on testing, diagnosis, and antiretroviral therapy initiation. The HIV situation thus demands increased resource allocation and programmatic enhancements.

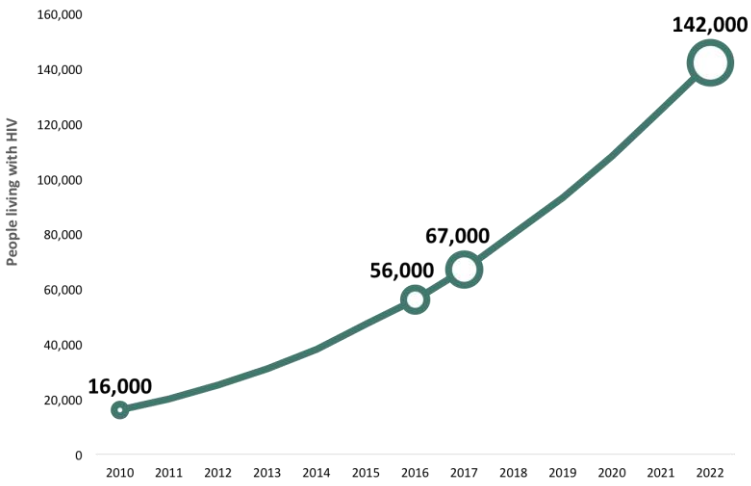
This report provides the current state of the epidemic, drawing mainly from the HIV/AIDS and ART Registry of the Philippines, the latest projections from the AIDS Epidemic Modeling, and the most recent analyses of the Integrated HIV Behavioral and Serologic Surveillance. Best available evidence underscores the urgency to enhance and intensify interventions for key populations, specifically young males and transgender women who have sex with males (M/TSM) and people who inject drugs (PWID) who comprise a significant proportion of new infections. But in working with and among key populations, women—especially female partners of MSM and people who inject drugs—cannot be left behind if the country is to prevent further increase of HIV infection among pregnant women. This also takes stock of recent programmatic reforms and offers evidence to guide program and policy development. It documents the gains from recent enhancements to the country's provision of HIV services (i.e. piloting of the rapid HIV diagnostic algorithm) and highlights persistent challenges in terms of linkage to care and viral load testing.

The Philippine HIV Epidemic and Response: An Overview

The most recent estimates[1] show that as of December 2016, there were 56,000 people living with HIV (PLHIV). This will almost triple to 142,000 by 2022 if the coverage and effectiveness of the country's HIV prevention and treatment programs remain constant in the next five years [Figure 1].

As of December 2016, the HIV/AIDS and ART Registry of the Philippines (HARP) has recorded a cumulative total of 39,622 diagnosed HIV cases since January 1984. This represents an increase from 1 case per day in 2008 to 27 cases per day in 2016.

In response to the magnitude of the epidemic, the Philippine Health Sector Plan (2015-2020) adopted the 90-90-90 target of the UNAIDS which stipulates that (1) 90% of people living with HIV should know their status or have been diagnosed; (2) 90% of those who know their status should be on antiretroviral therapy (ART); and (3) 90% of those on ART should be virally suppressed by the year 2020.

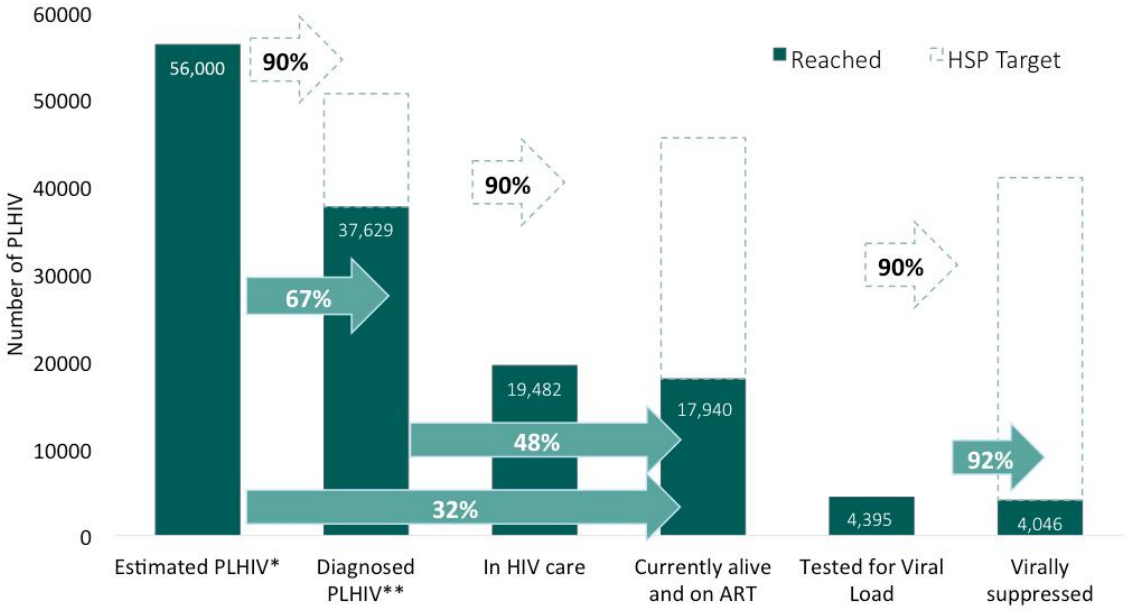


Source: Spectrum-AIDS Epidemic Model (AEM), May 2017

Figure 1. Projected estimated PLHIV, 2010-2022

[1] Most recent estimates were updated in May 2017 using December 2016 data from the HIV/AIDS and ARV Registry of the Philippines

Much remains to be done in achieving these targets [Figure 2]. While there was an 18% increase in diagnosis from 2015 to 2016—indicating an improvement in targeted HIV testing—of the estimated 56,000 PLHIV, approximately 33% remain undiagnosed in 2016.



Sources:
* Spectrum-AIDS Epidemic Model (AEM), May 2017 & HIV/AIDS and ART Registry of the Philippines (HARP), December 2016
**Does not include those reported to have died in the HIV/AIDS and ART Registry of the Philippines as of Dec. 2016. Given underreported cases of mortality, the number of diagnosed PLHIV may include those who have already died. The proportion may thus be higher than the reported figure.

Figure 2. Philippine HIV care cascade, January 1984-December 2016[1]

Timely HIV testing is a challenge as well. In 2016, almost three of five cases (58%) were classified[2] as advanced HIV disease (i.e. CD4<200 cells/µL) while 21% were late HIV diagnoses (i.e. 200≤CD4≤350 cells/µL). The national median baseline CD4 count was constant for 2015 and 2016 at 133 cells/µL and 132 cells/µL, respectively. This is markedly below the incremental target of 300 cells/µL set by the Health Sector Plan 2015-2020 for 2016.

Even more concerning, only 32% of the estimated PLHIV are on life-saving antiretroviral treatment. This represents 48% of those who have been diagnosed. One of the main factors resulting in the country's poor treatment initiation is linkage to care[3] which was only at 52% in 2016. A sizeable proportion of diagnosed PLHIV are thus lost to follow-up, losing the opportunity to be immediately enrolled into ART.

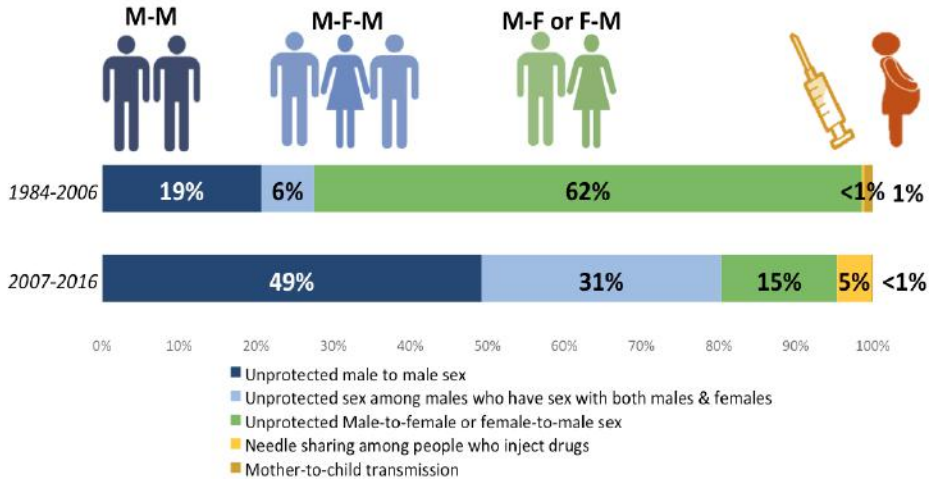
Finally, in achieving the target of 90% viral suppression among PLHIV on treatment, the main challenge the country currently faces is the low rate of viral load testing. While recorded viral suppression among those tested was high at 92%, only 24% (4,395) of the 17,940 PLHIV on ARV by the end of 2016 were tested for viral load.

Timely testing among key populations at higher risk, poor linkage to care and treatment, and limited viral load testing coverage are the main barriers in achieving the said targets.

[2] Classification was limited to cases wherein baseline CD4 test was conducted six months prior to or after diagnosis.
[3] Linkage to care is defined as returning to a facility for ART eligibility assessment following diagnosis.

Young key populations disproportionately bear the burden of the expanding HIV epidemic in the Philippines

The burden of the country's concentrated epidemic continues to be borne by key populations, specifically, males and transgender women who have sex with males (M/TSM), people who inject drugs, and sex workers. Apart from the shift from the previous heterosexual transmission to male-to-male sexual transmission, HARP data from 2007-2016 also show a rise in cases because of needle-sharing among people who inject drugs (PWID) [Figure 3].

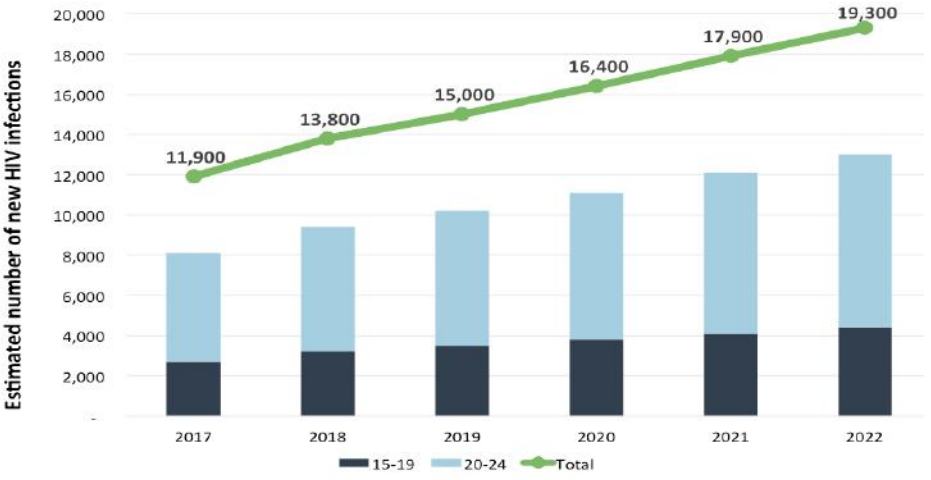


Source: HIV/AIDS & ART Registry of the Philippines (HARP), December 2016

Figure 3. Modes of HIV transmission, 1984-2016

While the disproportionate burden of HIV on the country's key populations has long been established, more recent evidence points to the growing need to urgently address the escalating problem among young key populations. AIDS Epidemic Modeling estimates using the 2013-2015 IHBSS data show that seven of ten (68%) of new HIV infections are among young M/TSM who are 15 to 24 years old [Figure 4].

Understanding the nuances across these different key populations and age groups is thus critical in addressing the complex challenges of the Philippine HIV situation. The following sections provide best available data to further identify gaps in keeping PLHIV within the HIV treatment and care cascade and helping key populations manage their risks for HIV infection.



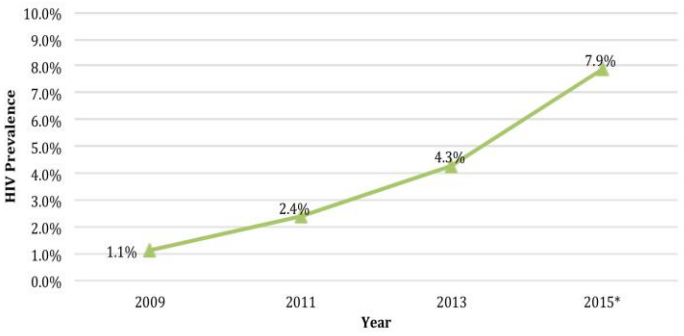
Source: Spectrum-AIDS Epidemic Model (AEM), May 2017

Figure 4. Estimated new HIV infections among 15 to 24 years old, 2016-2022

Males and transgender women who have sex with males (M/TSM)

The HIV prevalence among M/TSM in 2015 in the ten sentinel sites was 7.9%, showing an upward trajectory from 2009 [Figure 5].

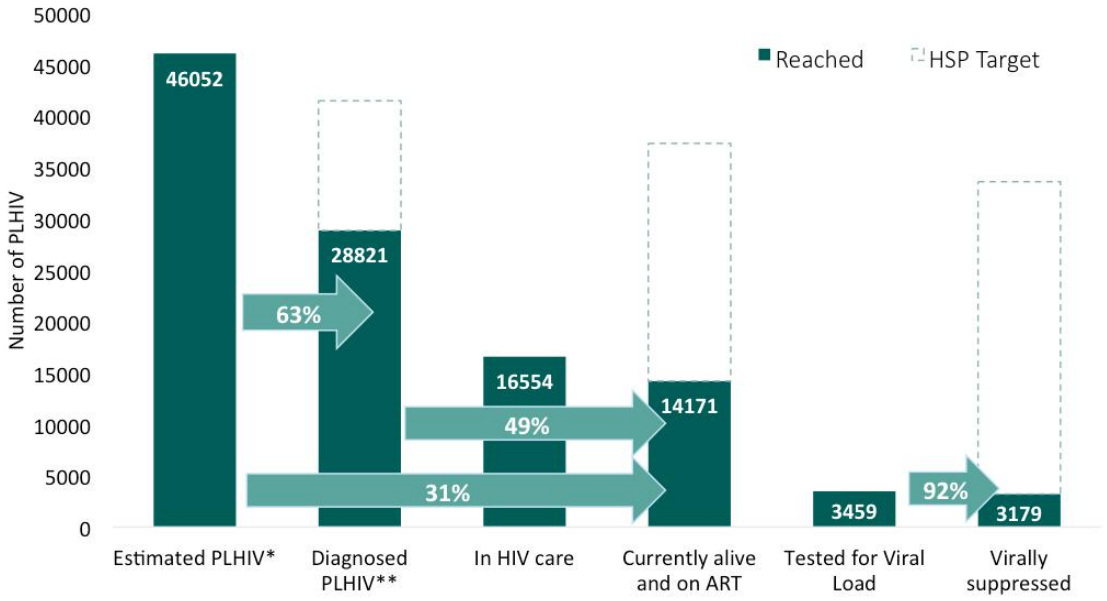
The M/TSM HIV care and treatment cascade[4] shows slight deviations from the national cascade [Figure 6]. The percentage of M/TSM diagnosed of those estimated to be living with HIV is not only below the national target, it is also lower than the aggregate national figure (63% vs 67%).



*HIV prevalence is weighted.
Data is an aggregate of sentinel sites only, not all IHBSS sites. The sentinel sites include Angeles, Baguio, Cebu, CDO, Davao, Gen San, Iloilo, Zamboanga, Pasay, and Quezon City.

Source: Integrated HIV Behavioral and Serologic Surveillance (IHBSS), 2015

Figure 5. HIV prevalence among MSM and TGW who have anal sex, 2009-2015



Sources:
* AIDS Epidemic Model (AEM) as of May 2017 & HIV/AIDS & ART Registry of the Philippines (HARP), December 2016
**Does not include those reported to have died in the HARP by Dec 2016. Given underreported cases of mortality, the number of diagnosed PLHIV may include those who have already died. The proportion may thus be higher than the reported figure.

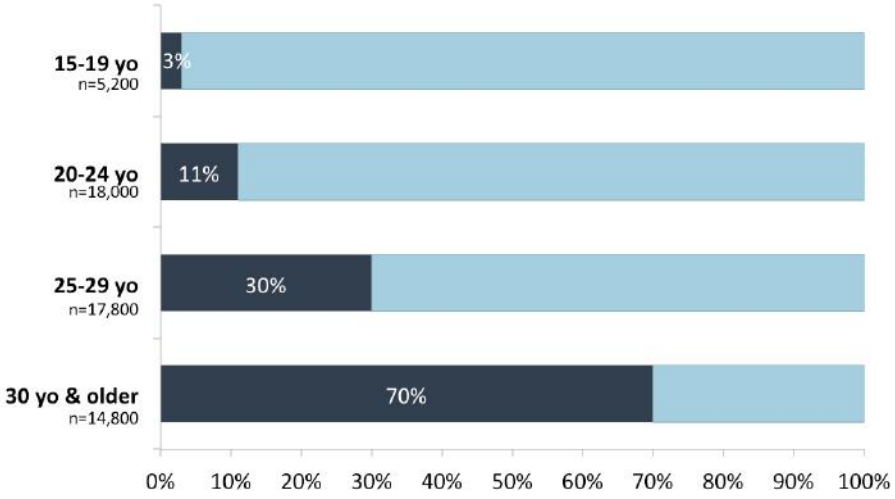
Figure 6. MSM and TGW HIV care cascade, January 1984-December2016

Late (21%) and advanced (58%) HIV diagnoses mirror the national aggregate figures for 2016, with the median baseline CD4 for M/TSM in 2016 at 135 cell s/µL. This was a slight increase from 130.5 cells/µL in 2015. Meanwhile, 31% of the estimated M/TSM living with HIV are on treatment. Notably, relative to the national aggregate figures, a larger percentage of diagnosed MSM have been linked to care (57% vs. 52%) and have been started on treatment (49% vs. 44%). Again, viral load testing and viral suppression is consistent with the national aggregate figure at 24% and 92%, respectively.

[4] Five percent of PLHIV in care and on ART do not have available data for classification of key populations

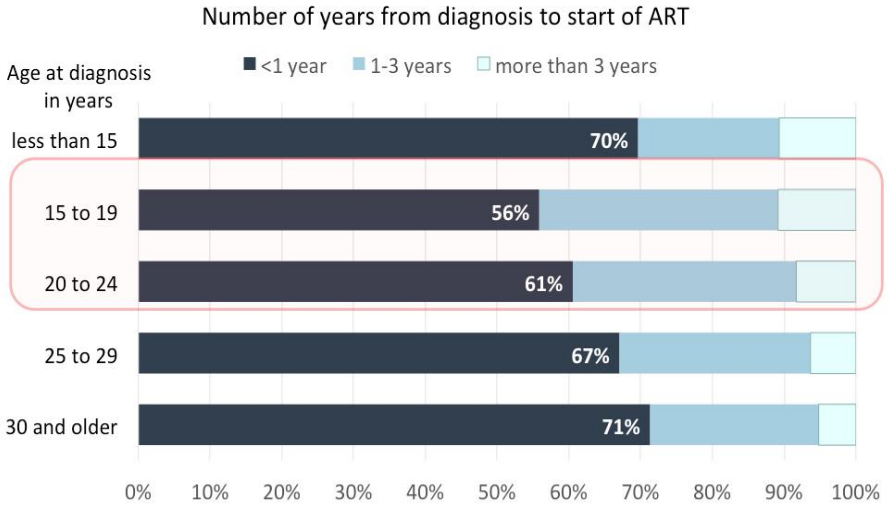
Disaggregating the M/TSM cascade further into age groups surfaces the disadvantageous position of young M/TSM aged 15-24 in terms of diagnosis, linkage to care, treatment, and viral load testing. Of the reported diagnosed cases (N=28,821), the proportional share of MSM aged 15-19 is only 4% (N=1,040) while that of MSM aged 20-24 is 26% (N=7,593).[5]

Meanwhile, of those diagnosed, M/TSM aged 15-19 have the lowest proportion of those linked to care and treatment. This is again consistent with estimates saying that young PLHIV, in general, not only have the lowest proportion of those on ART among those diagnosed [Figure 7], they also start with ART later compared to PLHIV from other age groups [Figure 8]. Restrictive policies preventing young key populations engaged in risky behaviors to avail of testing and treatment services is a significant contributor to this persistent issue.



Sources: Spectrum-AIDS Epidemic Model (AEM), May 2017 & HIV/AIDS & ART Registry of the Philippines (HARP), December 2016

Figure 7. Estimated proportion of PLHIV on ART by age group (current age), 1984-2016



Source: HIV/AIDS and ART Registry of the Philippines (HARP), December

Figure 8. Proportion of PLHIV on ART by time to ART initiation and age group*, 1984-2016

[5] Age disaggregation used age at diagnosis.

Given the ongoing risks young M/TSM find themselves in, it is thus incumbent on the HIV response to urgently address barriers to service uptake among young people—young M/TSM, in particular. Data from the 2015 IHBSS show that condom use during last anal sex is only at 40%, among young M/TSM aged 15-24, indicating a high likelihood of onward transmission. This can be said to be highly influenced by two factors: the two-year delay for half the sample in the onset of protective behaviors following sexual debut at 16 years old and the difficulty of young people to access condoms. Almost two-thirds of young M/TSM, aged 15-24 reported not having access to condoms, which is more than double the percentage of those aged 25 and above (Figure 9)

On top of effective preventive behavior change strategies, young M/TSM will also benefit from intensified targeted testing and treatment. The first step towards this end is ensuring awareness of available free services. Most recent data from the 2015 IHBSS show that comprehensive knowledge among 15-24-year-old M/TSM and awareness of public facilities offering HIV services are both low at 35%. An even smaller proportion (6%) are aware that HIV treatment is available for free.

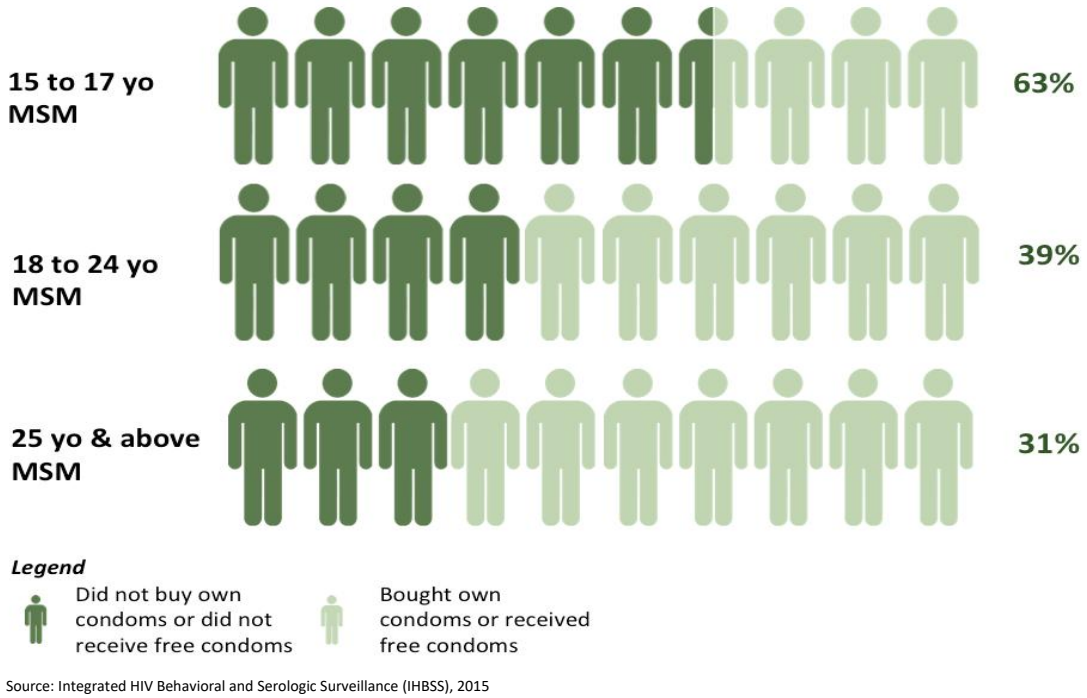
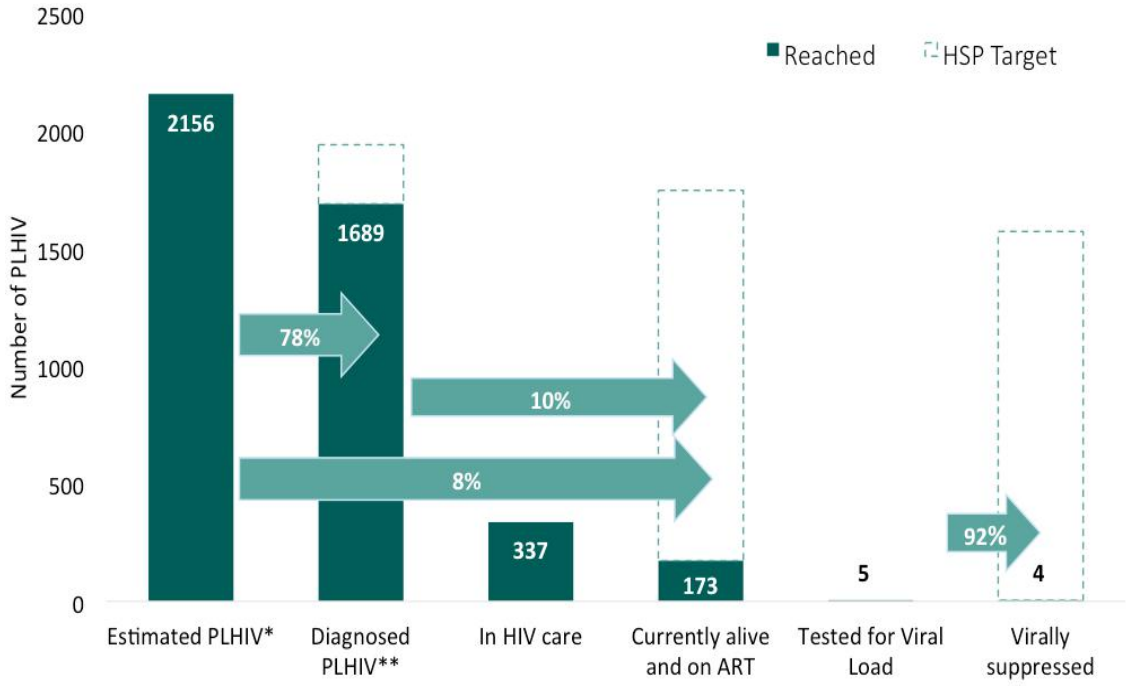


Figure 9. Percentage of MSM having difficulty accessing condoms by age group, 2015

People who inject drugs (PWID)

The PWID HIV care and treatment cascade presents a rather different picture from the national cascade [Figure 10]. Of the estimated PWID living with HIV, 78% have been diagnosed. While short of the 80% target set by the Health Sector Plan, this is 11 percentage points higher than the total percentage of diagnosed cases in the country. However, the country's efforts in providing treatment to PWID living with HIV demand urgent attention. Only 8% of the estimated PLHIV have been started on antiretroviral treatment, which represents 10% of the total diagnosed cases among PWID. Testing for viral load is even much lower at 3% of those on treatment and viral suppression is only at 80%, failing to meet the country target of 90%.

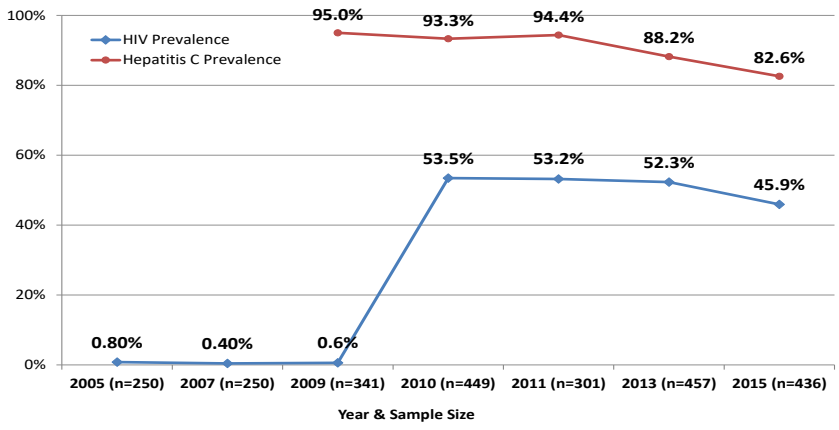
Similar to young MSM and TGW, young PWID experience more challenges in navigating the constellation of services post-diagnosis. Only 13% of young PWID aged 15-19 were successfully linked to care and only 4% were started on treatment. This highlights the urgency of crafting youth-friendly services even for PWID.



Sources:
* AIDS Epidemic Model (AEM) as of May 2017 & HIV/AIDS & ART Registry of the Philippines (HARP), December 2016
**Does not include those reported to have died in the HARP by Dec 2016. Given underreported cases of mortality, the number of diagnosed PLHIV may include those who have already died. The proportion may thus be higher than the reported figure.

Figure 10. PWID HIV care cascade, January 1984-December 2016

Trend data from 2010 to 2015 show that prevalence figures for both HIV and Hepatitis C have plateaued since the sharp increase from 1% in 2009 to 54% in 2010 that coincided with a Hepatitis C outbreak among PWID in the same year [Figure 11]. Thus, the need to secure the gains from the increase in the use of sterile injecting equipment (64% of PWID) found in the 2015 IHBSS cannot be emphasized enough if the country is to prevent another spike in HIV prevalence among PWID. However, condom use among PWID also require urgent attention. Condom use among PWID is low at 15%, which is consistent with city-specific data from Cebu and Mandaue. Interventions to increase condom use among PWID are critical given that one in five diagnosed PWID since 2013 reported ever engaging in male-to-male sex while one in ten said that they have been involved in sex work.

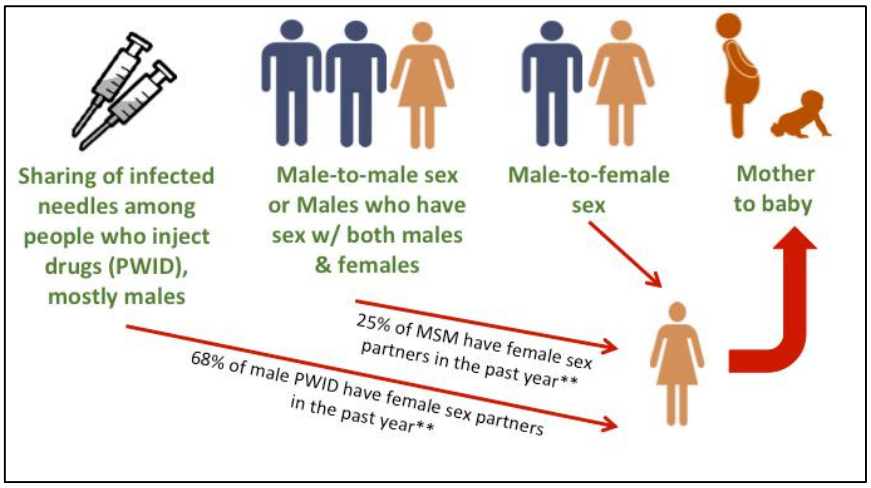


Source: Integrated HIV Behavioral and Serologic Surveillance (IHBSS), 2005-2015

Figure 11. HIV & Hepatitis C prevalence among PWID in Cebu City, 2005-2015

We need to halt the onward HIV transmission among pregnant partners of key populations and their children

A more recent challenge that the country has had to face is the increasing number of pregnant women diagnosed with HIV. These women may be female partners of males who inject drugs, of MSM, of male clients of sex workers, or are members of the key populations themselves [Figure 12]. Since 2015, the Philippine guidelines recommend providing lifelong ART to all pregnant and breastfeeding women living with HIV (WLHIV) regardless of CD4 count or WHO clinical stage.

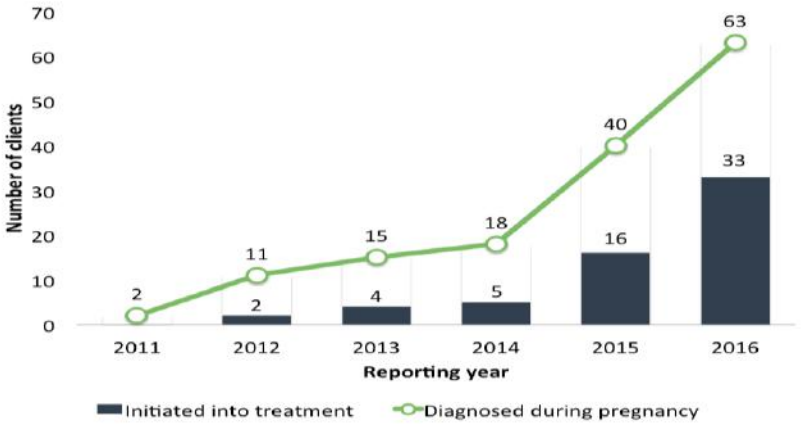


Source:
* HIV/AIDS & ART Registry of the Philippines (HARP), December 2016
**Integrated HIV Behavioral and Serologic Surveillance (IHBSS), 2015
Note: 2015 IHBSS data have been adjusted using Time Location Sampling (TLS) weights for M/TSM, and Respondent Driven Sampling (RDS) weights for male PWID

Figure 12. HIV modes of transmission to mothers and their children, 2015

By the end of 2016, 177 pregnant women were diagnosed with HIV, of whom 149 were newly-diagnosed during the pregnancy or upon delivery.[6] From one case per month in 2012 the country recorded 5 cases per month in 2016 (Figure 13). Moreover, of the total reported pregnancies from 2011 to 2016, only 34% (N=60) were initiated on ART.

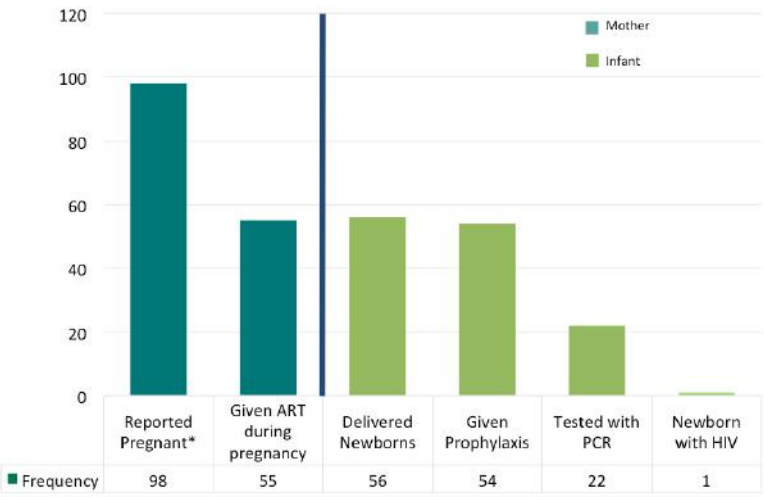
Focusing on 2016 cases, the 98 reported pregnant women living with HIV accounts for only 26% of the estimated 371 mothers estimated to need prevention of mother-to-child transmission (PMTCT) services for the year. Furthermore, of the reported pregnant cases in 2016 (N=98) alone, 67 were ever on treatment (Figure 14). In 2016 however, only 12 were started on treatment prior to reported pregnancy. The rest of the reported pregnant women were lost to follow-up (N=31), started on treatment during (N=43), or after the reported pregnancy (N=12).



Source: HIV/AIDS and ART Registry of the Philippines (HARP), December 2016

Figure 13. PMTCT service coverage among pregnant women living with HIV (N=149) [2011-2016]

[6] The 28 cases who were diagnosed prior to reported pregnancy were all recorded in 2016. One of these cases was diagnosed during a previous pregnancy from 2011-2015. Data for diagnosis prior to pregnancy is not available for 2011-2015.



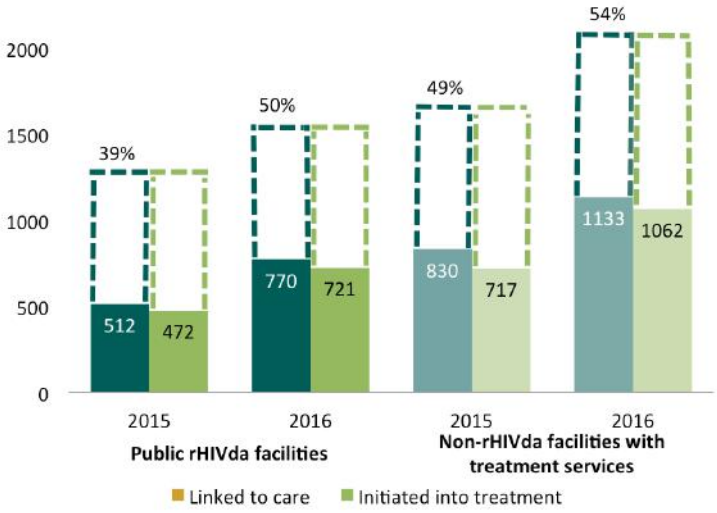
Source: HIV/AIDS and ART Registry of the Philippines (HARP), December 2016

Figure 14. HIV care cascade for mother-to-child transmission, 2016 (N=98)

Notably, only 32% of the cases from 2011-2015 were still on treatment by the end of 2016. Much as the increase in the proportion of pregnant WLHIV initiated into treatment merits consideration of programmatic enhancements, the high loss to follow-up in the said time period is cause for concern and demands further strengthening of the maternal health component of HIV care.

Figure 14 also shows that 56 (57% of pregnant WLHIV) have already delivered[7] and 54 of the newborns (96%) were given prophylaxis. However, only half of the 56 babies delivered were provided with early infant diagnosis through polymerase-chain reaction (PCR) testing.

The country's programmatic response to address poor linkage to care has been a step in the right direction



*Increase across facilities were all found to be statistically significant at p<0.001
**Data is from 6 public rHIVda facilities and 24 non-rHIVda facilities with treatment services
Source: HIV/AIDS and ART Registry of the Philippines (HARP), December 2016

Figure 15. Linked to care and initiated to treatment among diagnosed, by year (2015 vs. 2016)*

Linkage to care and treatment initiation continue to be a major gap in the country's HIV cascade. More than half of those diagnosed as of 2016 have yet to start treatment. Acting on evidence, the DOH instituted three main programmatic reforms in 2016. First, the national HIV program developed and piloted the rapid HIV testing algorithm (rHIVda) in eight facilities which were treatment facilities as well. This aimed to reduce long waiting periods by decentralizing confirmatory HIV testing previously solely done by the national reference laboratory. Second, the 28-fold increase in diagnosed cases from 2009 to 2016 created the much needed impetus for the national program to aggressively increase the number of facilities offering treatment and care particularly within priority areas for HIV intervention (PAHI). This aimed to decongest the overburdened facilities, create better working conditions for health providers, and thereby improve the quality of care received by clients. The number of treatment facilities has increased more than three-fold from 18 in 2013 to 55 in 2016. Third, in June 2016, the DOH released Department Circular 2016-0171, directing all treatment facilities to immediately start baseline testing following a reactive screening result. The circular aimed to immediately conduct baseline tests for all HIV-positive clients.

[7] Twelve women were still pregnant by the end of 2016. One had an abortion and 29 were lost to follow-up.

At the national level, linkage to care figures rose from 48% in 2015 to 52% in 2016. Linkage in public rHIVda facilities and non-rHIVda facilities with treatment services showed a similar upward trend [Figure 15].

The improvement was most pronounced among public facilities implementing rHIVda, the aggregate of which yielded an 11- and a 10-percentage point increase in linkage and treatment initiation, respectively. Exceptional among the public rHIVda facilities were the Cebu Social Hygiene Clinic, Quezon City's Klinika Bernardo and the Davao Reproductive Health and Wellness Center, all of which increased linkage by at least 14 percentage points, within merely a year of implementation. Moreover, following rHIVda implementation, public rHIVda facilities reduced the time gap between diagnosis and linkage by 21 days and between diagnosis and ART initiation by 20 days.

The new testing algorithm had an impact on linkage for public testing facilities with a high client load. That being said, linkage to care and treatment initiation figures even in rHIVda facilities still fall short of the UNAIDS 90-90-90 target. The national program may benefit from further investigation of other barriers to linkage and treatment initiation that can be promptly addressed.

Forging the road ahead

As the epidemic continues to evolve, new challenges to the country's HIV response emerge. Taking stock of these challenges, the 6th AIDS Medium Term Plan and the 2017-2020 Health Sector Plan both provide a blueprint towards the goal of ending AIDS by 2030. The four-pronged focus geared towards increasing knowledge and preventing new infections among young people, specifically young key populations; testing and treating 90% of PLHIV; and eliminating mother-to-child transmission directly addresses the issues identified in this report [Figure 16].

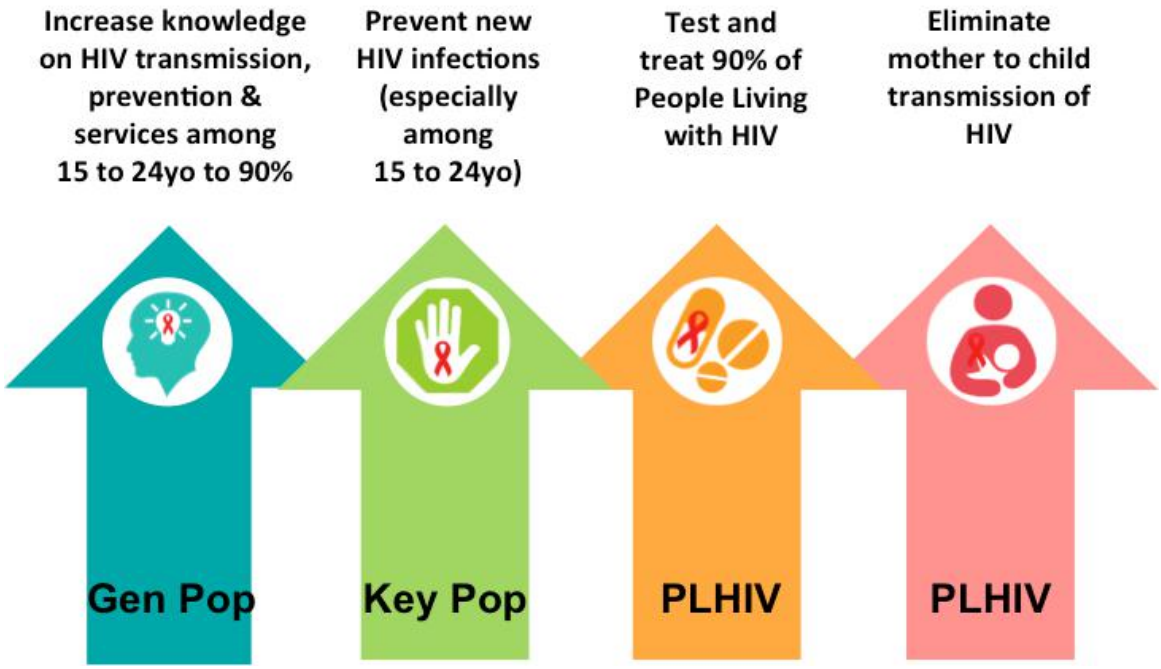
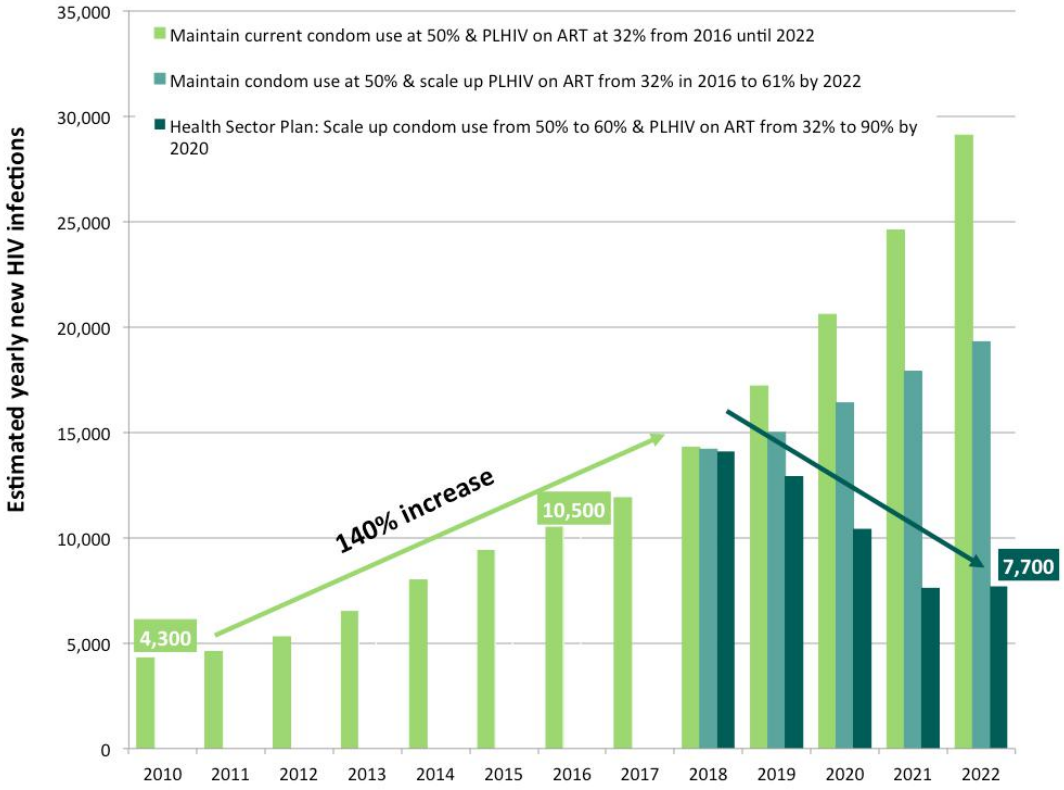


Figure 16. 6th AIDS Medium Term Plan (AMTP6) Targets (2017-2022)

Indeed, the Philippines is at another important juncture that demands urgent solutions. Solutions that are both holistic and targeted in its approaches are critical now, more than ever. AIDS Epidemic Model projections provide evidence in choosing different combination strategies to this end. For instance, enhancements such as the scaling up of condom use from the current 50% to the 60% target of the Health Sector Plan and automatically enrolling every diagnosed PLHIV to life-saving treatment (treat-all strategy) can help halt and reverse the trajectory of the country's epidemic (Figure 17).

There is in the end, a cause for optimism. Harnessing the varied strengths of the different stakeholders—from the public health and non-health sectors, private actors, civil society, and development partners—will be a crucial push towards ending AIDS by 2030.



Source: Spectrum-AIDS Epidemic Model (AEM), May 2017

Figure 17. Projected new HIV infections by HIV response scenario, 2018-2022

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