

## Abstract

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### Key Messages

-HIV-related deaths have more than tripled since 2000, making it the number 2 cause of death among adolescents worldwide<sup>1</sup>.

-Many young people, particularly those who are at risk for HIV and reproductive health-related problems, do not seek traditional facility-based health services.

-Nearly 35% of the global burden of HIV/AIDS has roots in adolescence<sup>2</sup>.

-In Zambia, only 6 in 10 adolescent girls and 5 in 10 adolescent boys aged 15-19 years have ever been tested for HIV and know their HIV status<sup>3</sup>.

-Strengthening youth-friendly HIV testing services (HTS) in health facilities will increase adolescent HIV testing to about 90% and foster the achievement of 95 95 target.

adolescents and young people have not rapidly decreased to flatten the epidemic curve. The combination of the increasing number of young people between the age of 15 – 24 years and the slow HIV response for this age-group will affect the progress toward HIV epidemic control.

Zambia has one of the highest HIV incidences among adolescents and young people in Sub-Saharan Africa<sup>4</sup>. Particularly, because of their vulnerable social and economic status, adolescent girls and young women (AGYW) are the most affected group<sup>5</sup>. Young people are often forgotten in national HIV and AIDS plans, which typically focus on adults and children. Consequently, there is a lack of youth-friendly health services.

There were approximately 3.5 million young people between the age of 15 and

died from an AIDS-related illnesses<sup>6</sup>. Young people between the ages 10-24 years are more likely to engage in risky sexual behaviour than older people.

The barriers to young people obtaining services include:

-The need for all adolescents under the age of 16 years to gain parental or guardian consent prior to testing in Zambia<sup>7</sup>,

-Fear of a positive test,

-Association of HIV testing with high-risk behaviour,

-Stigma,

-Perceived risk with respect to sexual exposure,

-Lack of information,

-Difficulty accessing testing services and poor attitudes of healthcare providers<sup>8-9</sup>.

In a widespread randomized trial, the HPTN 071 (PopART) study, conducted over 3 years in Zambia and South Africa; many challenges for ensuring Universal HIV testing and treatment, at population level were noted. These include:

-Unavailability of many men during home visits

-Slower linkage to care and ART initiation

-Lower overall coverage in young people  
These obstacles often lead to underutilization of HIV testing services, which subsequently result in delayed diagnosis, late initiation of ART, poor health outcomes, and increased risk of HIV transmission.

Knowledge on HIV transmission is crucial to enable people avoid HIV infection. This is especially true for young people, who are more likely to acquire HIV because they may be involved in shorter relationships with more partners or may be engaged in other high-risk behaviours<sup>4</sup>.

Furthermore, according to the latest



### Problem Statement

HIV/AIDS poses a significant threat as public health problem and achieving HIV epidemic control by 2030 remains a challenge. The new HIV infections among

24 years living with HIV worldwide in 2016<sup>6</sup>, most of these were in Sub-Saharan Africa. In the same year, around 140,000 young people (15-24 years) in Zambia were living with HIV and 1,900 of them

Zambia Demographic Health Survey (ZDHS, 2018), there is a disparity in annual HIV retest percent between female and male adolescents aged 15-24 years (72.2% females and 54.4% males).

workers to successfully ensure that AYLHIV thrive. There is urgent need to establish/ strengthen adolescent friendly health spaces at health facility, and to train healthcare workers to deliver youth

will an increase in HIV test kits.

3.Introduction of routine adolescent testing in communities.

What: Out-of-facility services for this group need to be implemented/ strengthened in many different settings. Such services must aim to reach young people where they are, for example in schools, work places, youth centres, and on the street. For the assessment of this option, we used home based community testing approach.

Why: Community-based HIV testing services can contribute to increased testing coverage, early HIV diagnosis and treatment, and reduced HIV transmission and incidence<sup>6</sup>. Home-based HIV self-testing in rural Malawi increased testing by 20%, including in men and adolescents, compared to the percentage achieved by facility-based HTS. The addition, the distribution HIV self-testing kit to home-based HTS provided by community health workers (CHW) in urban Zambia further increased knowledge of status by 3% for all age groups. In our model, introduction of routine adolescent testing in communities would result in 779 new HIV positive adolescents identified annually of whom 708 would be initiated on treatment, and 527 adolescents would have their viral load suppressed.

Feasibility: Low. The cost of implementing this option is very high. This strategy will require community sensitization, funds, transport, and additional human resource. Furthermore, it will require a reinforced legal framework, placement of more trained counsellors, and an increase in HIV test kits.

#### Recommendations and next steps

-Strengthening Youth friendly HIV testing at the facility is more cost-effective and feasible option to increase the number of adolescents to undertake an HIV test. Implementation of this option will help identify the number of adolescents with HIV and ultimately will reduce transmission.

-Facilities that provide routine adolescent care and treatment should be assessed and improved to ensure the inclusion of adolescent friendly considerations, such as separate clinic space whenever possible or separate waiting areas within adult or pediatric clinics. Clinic staff and peers need to be trained in youth friendly

**Table 1: Recent HIV tests among young people**

Background characteristic	Women age 15-24 who have had sexual intercourse in the past 12 months:		Men age 15-24 who have had sexual intercourse in the past 12 months:	
	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of women	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of men
<b>Age</b>				
15-19	65.3	1,230	40.4	912
15-17	59.3	490	33.6	360
18-19	69.4	740	44.8	553
20-24	76.0	2,198	63.1	1,479
20-22	75.3	1,334	60.9	891
23-24	77.1	864	66.3	588
<b>Marital status</b>				
Never married	69.5	1,393	51.5	1,873
Ever married	74.0	2,035	64.9	518
<b>Total 15-24</b>	<b>72.2</b>	<b>3,428</b>	<b>54.4</b>	<b>2,391</b>

Zambia DHS 2018

#### Policy Options

In order to enhance the uptake of HIV testing among adolescents and young people in Zambia, improve ART initiation and improve VL suppression resulting in less transmission, the following policy options are proposed:

##### 1. Routine adolescent HIV testing services (Status Quo)

What: Routine adolescent HIV testing simply entails maintaining the current status quo. This entails riding on the current government HTS strategy in health facilities as adolescents seek for medical care.

Why: Maintaining the status quo means that adolescents will only get a chance to access HTS as and when they go to the health facilities for healthcare.

Feasibility: High

##### 2. Introduction of Youth-Friendly HIV testing services in healthcare facilities

What: Adolescent and young people living with HIV (AYLHIV) need additional support and understanding from caregivers, peers, as well as Health care

friendly services.

Why: Youth-friendly HTS are designed to address the structural, socio-cultural and individual barriers faced by youth in accessing high quality sexual and reproductive health (SRH) services<sup>7</sup>. An Assessment of adolescent and youth friendly services in primary healthcare facilities in two provinces in South Africa yielded a 95% for HIV screen and test by adolescents<sup>12</sup>. Further, the assessment concluded that Youth friendly HIV testing at the facility is more cost-effective than youth friendly testing in the community. This is because most resources are already available at the facility<sup>12</sup>. In our model, Provision of streamlined and targeted youth-friendly approaches for different age bands and sex in healthcare settings would identify 1650 new HIV positive among adolescents annually, 1426 adolescents of them would be initiated on treatment, and 1024 adolescents would have their viral load suppressed.

Feasibility: MEDIUM to HIGH. This strategy builds on the government's decision to identify HIV positive adolescents through routine HIV testing services in health facilities. However, it

approaches.

HTS modality	Routine HTS	Facility youth friendly HTS	Community youth friendly HTS
Annual # New HIV positive identified	681	1650	779
Total costs (USD)	78,254	205,343	1,013,883
Cost per person tested positive	115	124	1302
Annual # New positive initiated on RX	213	1426	708
Total costs (USD)	134,699	583,233	265,874
Cost per person initiated on ART	632	409	376
Annual # of viral load suppression	68	1024	527
Total costs (USD)	136,734	598,552	1,217,271
Cost per person with VLS	642	420	1719
Political Feasibility			
Operational Feasibility			

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