

# Lessons from the *Future of HIV Testing* expert consultation series

Lynne Wilkinson, IAS

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## Defining the future of HIV testing Expert consultation series







Purpose: To define a collective vision for how HIV testing services (HTS) should change in the context of an evolving epidemic and response in sub-Saharan Africa

- Convened by IAS the International AIDS Society, the World Health Organization
  (WHO) and the Bill & Melinda Gates Foundation (BMGF), with support from partners
  including the Global Fund, PEPFAR, and ministries of health
- Expert consultation three-part series late 2021
- 78 stakeholders working or living in 11 countries in sub-Saharan Africa





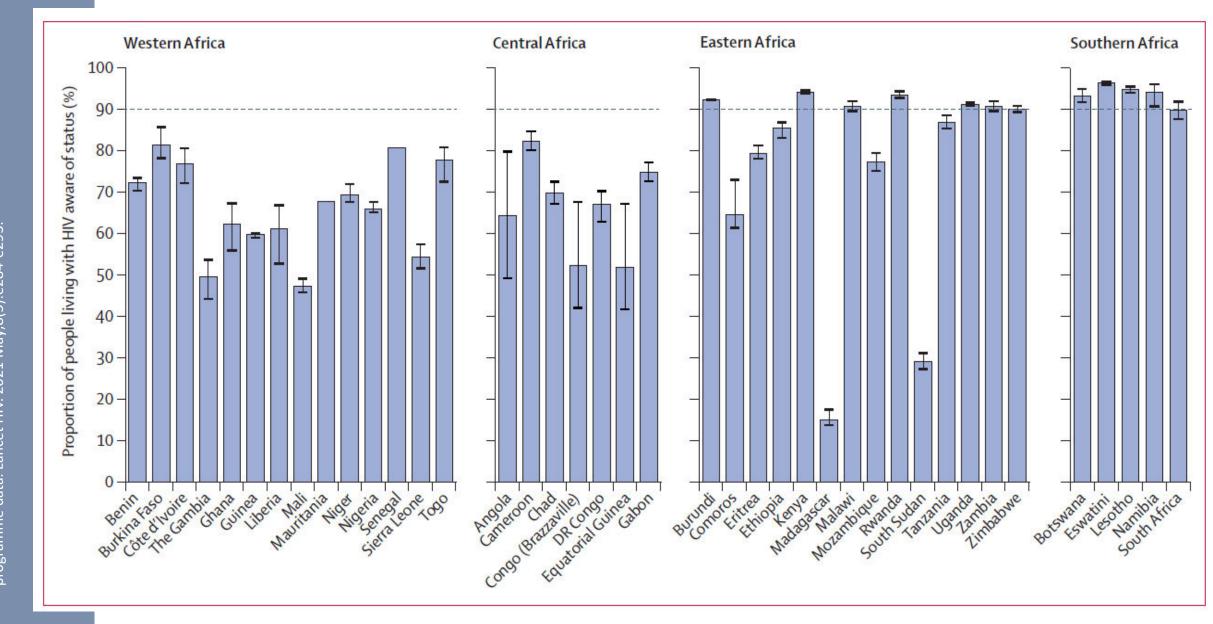
# State of HIV testing at the start of the consultation



# **Knowledge of HIV status**

Figure 3: National estimates of knowledge of HIV status in sub-Saharan Africa, 2020

Bars show the proportion of people living with HIV who know their HIV status, with 95% credible intervals represented with vertical lines. The horizontal dashed line represents a threshold of 90% knowledge of status.



# Knowledge of HIV status

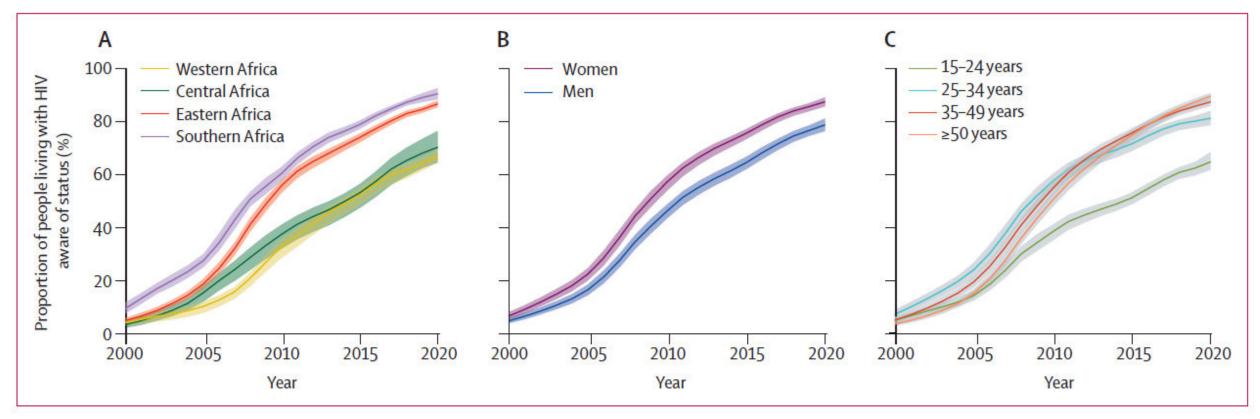


Figure 2: Progress and disparities in knowledge of HIV status in sub-Saharan Africa, 2000–20
Figure shows trends in proportion of people living with HIV who are aware of their HIV status in sub-Saharan Africa by region (A), sex (B), or age group (C). Shaded areas correspond to 95% credible intervals.



Giguère K, Eaton JW...Maheu-Giroux M. Trends in knowledge of HIV status and efficiency of HIV testing services in sub-Saharan Africa, 2000-20: a modelling study using survey and HIV testing programme data. Lancet HIV. 2021 May;8(5):e284-e293.

# Progress in timelines of HIV diagnosis - SSA

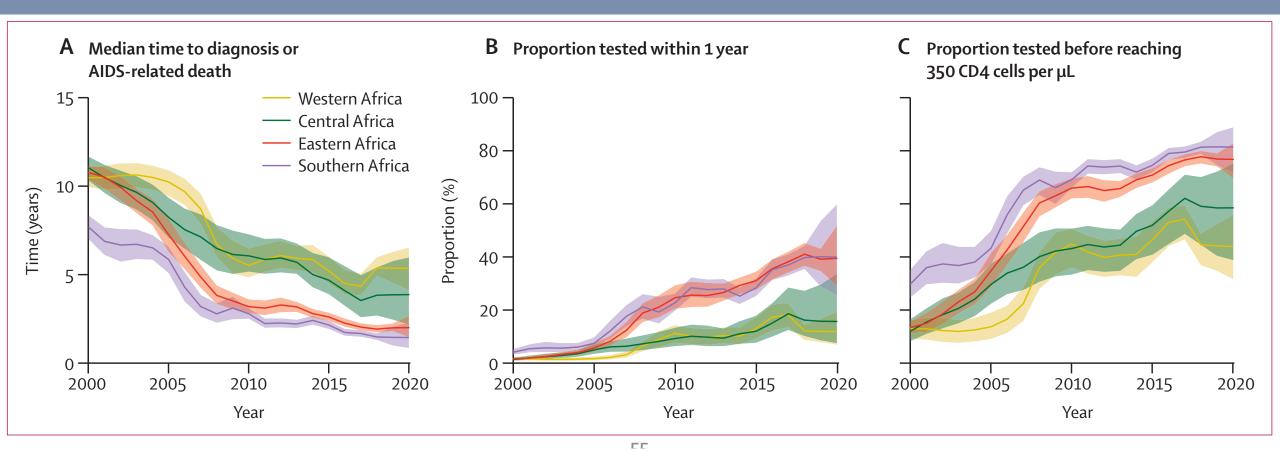


Figure 5: Progress in timeliness of HIV diagnosis in sub-Saharan Africa, 2000-20

Giguère K, Eaton JW...Maheu-Giroux M. Trends in knowledge of HIV status and efficiency of HIV testing services in sub-Saharan Africa, 2000-20: a modelling study using survey and HIV testing programme data. Lancet HIV. 2021 May;8(5):e284-e293.

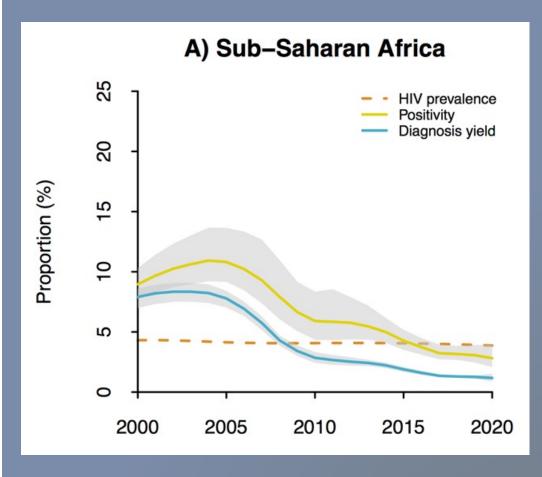


# High rates of retesting

- Estimates that in 2020, up to 58% of positive tests in SSA will have been done on previously diagnosed PLHIV.
- Multiple contributory factors:
  - Confirmation of initial results
  - Non-disclosure to health providers
  - Re-engagement into care

Figure S4. Trends in positivity and diagnosis yield, 2000-2020.

Positivity corresponds to the proportion of positive tests among all tests, while diagnosis yield corresponds to the proportion of new diagnoses among all tests. HIV prevalence is expressed among the total population 15+ years.



Giguère K, Eaton JW...Maheu-Giroux M. Trends in knowledge of HIV status and efficiency of HIV testing services in sub-Saharan Africa, 2000-20: a modelling study using survey and HIV testing programme data. Lancet HIV. 2021 May;8(5):e284-e293.

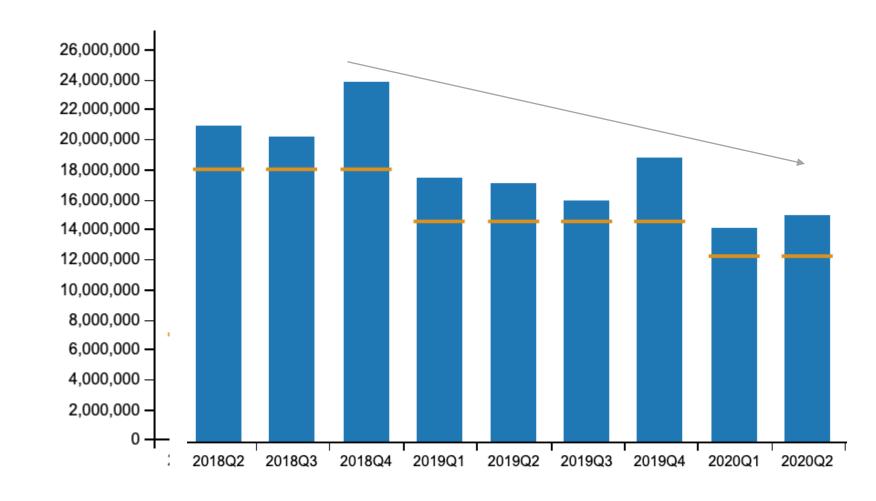


# Reductions in HIV testing (mostly PITC) before COVID-19

PEPFAR data 1 Jan 2018-Mar 2020

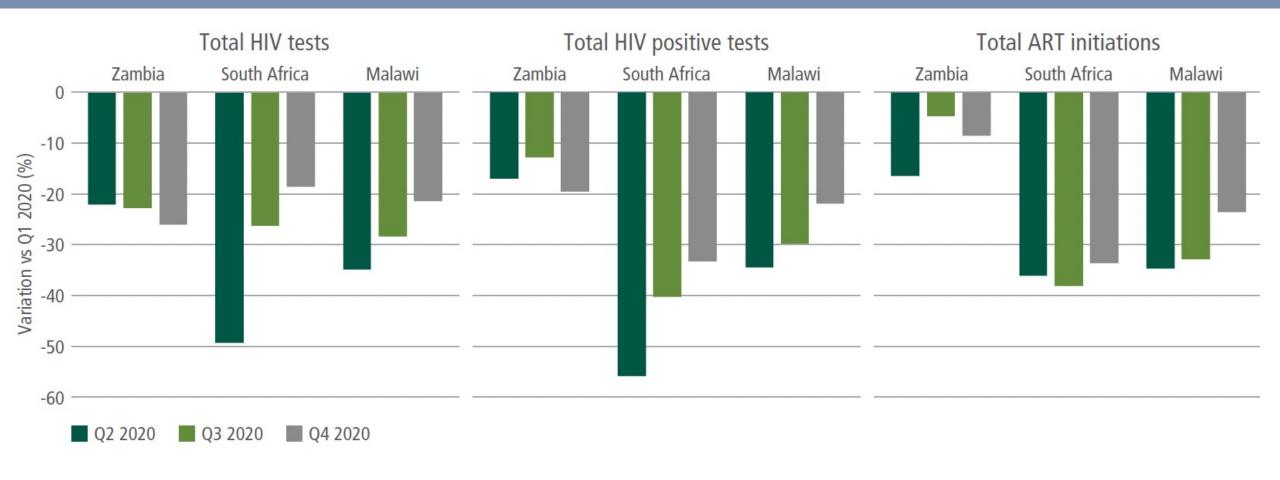
HIV testing in Africa vs target

https://mer.amfar.org/
(HTS\_TST)





# Reductions in HIV testing during early COVID-19 and impact

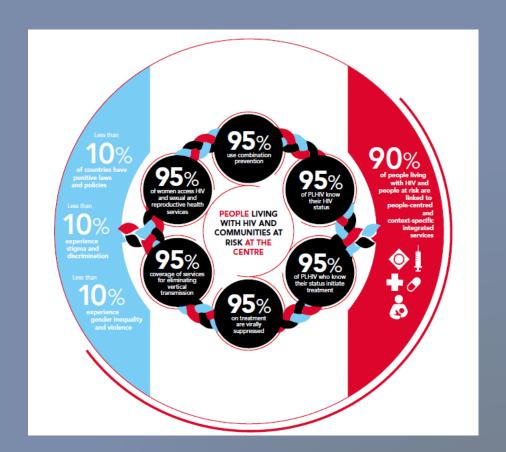


WHO, Assessment of HIV testing services and antiretroviral therapy service disruptions in the context of COVID-19: lessons learned and way forward in sub-Saharan Africa, Nov 2021.



### In summary....

- Close to reaching first 95 BUT not for all sub-groups and not in all SSA contexts
- Reductions in volume of facility-based testing in the last 3 years impacted achieving second 90
- Many people using testing to re-enter care





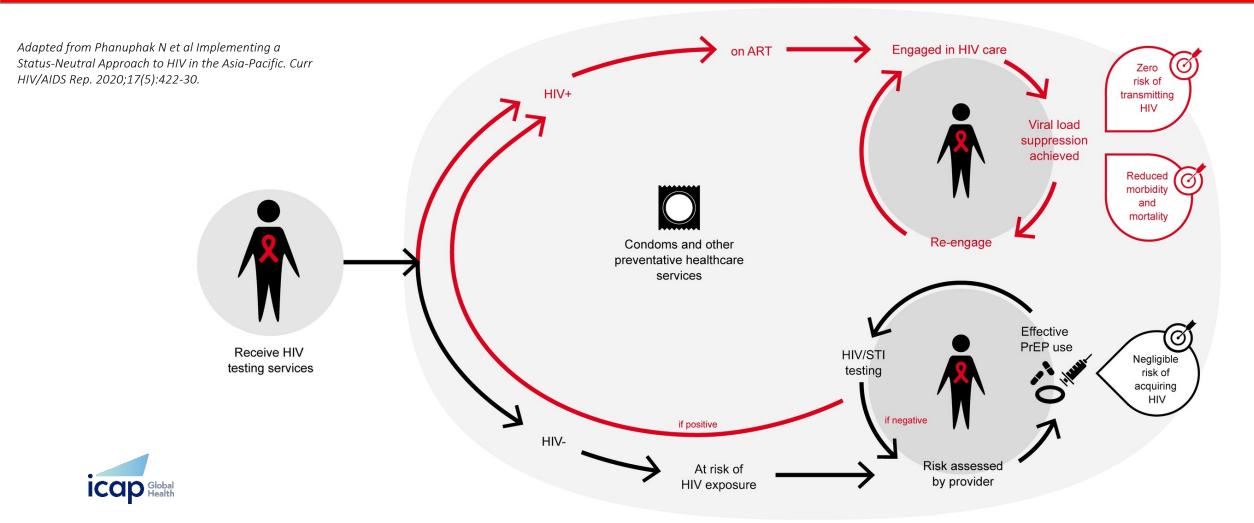


# What is needed in the next decade of HIV testing?



# The vision for HTS in sub-Saharan Africa towards 2030

<u>Broaden scope of HTS</u> towards "status neutral" testing that actively supports linkage and engagement of individuals in PREVENTION and TREATMENT programmes



## The vision for HTS in sub-Saharan Africa towards 2030

- Ministry-led and context specific
- Evidence based adaption to an evolving epidemic
- Committed to human rights
- Inclusive community engagement
- Metrics of success beyond positivity

<u>Broader scope</u> towards "status neutral" testing that actively supports linkage and engagement of individuals in PREVENTION and TREATMENT programmes

<u>Targeted HIV testing services</u> to increase knowledge of status among those more vulnerable to HIV acquisition and/or more likely to be associated with onward transmission through an innovative and strategic mix of modalities that evolve over time





# 10 key themes

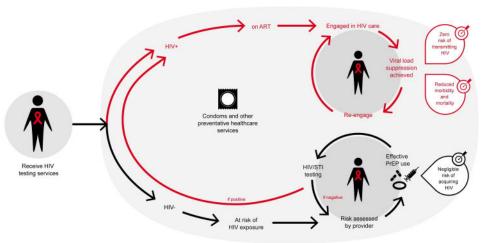


# 1. Broaden global understanding of HTS as a status-neutral approach requiring linkage and engagement in prevention and treatment services

#### Role in the future of HIV testing

Recognize the importance of HTS beyond HIV case finding

Emphasize importance of linkage and engagement in prevention and treatment, prioritizing people with vulnerabilities



#### **Shift towards**

- Value linkage and engagement in prevention services
- Maximize absolute number of HIV+ diagnosis
- HTS providers own responsibility for linkage to prevention & treatment services
- Evaluating HTS success against prevention and treatment targets
- Reduce cost of HIV test kits increase market diversity + monitor country utilization of global negotiated price reductions

#### Shift away from

- Yield/positivity and case identification as primary indicator of success
- Siloed linkage and engagement mechanisms

<u>Kenya:</u> Integrated PrEP provision to women & girls in MCH services

<u>Nigeria</u>: Using social media and peer navigation to link men at increased risk to prevention and treatment services



# 2. Realize the potential of HIV self-testing (HIVST)

### Role in the future of HIV testing

#### **Expand and scale HIVST to:**

- a. Reach untested populations within routine and specialized testing approaches
- b. Support uptake and sustained HIV prevention services



#### **Shift towards**

- Greater use within core (facility-based screening) and prioritized testing approaches (index testing, social network testing and targeted community-based testing)
- Addressing age of consent barriers
- Expanding effective and acceptable HIVST distribution approaches to reach untested & those benefit from regular testing
- Increasing population level HIVST literacy to increase use
- Increasing use for status monitoring among people who use PrEP to enable differentiated PrEP service delivery models
- Investing in simplified data collection for HIVST

- Shift away from
  - Narrow distribution through few channels
  - Distribution focused only on reaching untested
  - Complex and costly data collection about individual users to establish linkage and other outcomes of HIVST



<u>Malawi</u>: Utilizing HIVST within health facilities to increase testing of youth and men <u>Côte d'Ivoire</u>: Increased number of people diagnosed by increasing HIVST distribution <u>Zimbabwe</u>: Reaching populations less likely to test with peer delivered messaging & HIVST

## 3. Continue prioritizing low-barrier FACILITY HTS

#### Role in the future of HIV testing

Recognize that facility-based HTS is critical for people presenting at health facilities and is resource efficient.

Needed for index and social network testing services.

Based on context, other priority approaches should complement facility-based HTS.

#### Shift towards

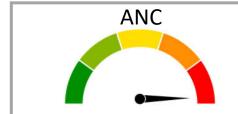
- Recognising each facility service entry point is an important testing entry point
- Routinely offer in all entry points with suboptimal coverage (e.g., STI, contraceptive services)
- Reinforce the availability of HTS on request at all health facilities
- Evaluate through a lens of treatment adjusted-prevalence

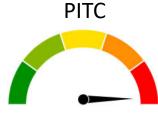
#### Shift away from

- Rationing of facility-based HTS
- Risk-related screening-out tools that may lead to missing cases and may stigmatize HTS

<u>Zambia</u>: Ensuring access to HTS at all health facilities, even during COVID-19
<u>Country case examples for Kenya-Malawi=South Sudan and Zimbabwe</u>: Using treatment-adjusted prevalence as a benchmark for anticipating positivity within a testing program

Mix of other modalities.....













# 4. Scale use of targeted testing approaches to reach individuals under tested

#### Role in the future of HIV testing

Dependent on gaps, epidemiology and context, increase investment and implementation scale of:

- a. index and social network testing
- b. targeted community-based testing approaches



#### **Shift towards**

- Define acceptable approaches for key populations and other underserved populations
- Involve communities in designing, delivering and monitoring community-led HTS
- Increase use of virtual platforms to empower and engage
- Use all data available to inform targeted testing

#### Shift away from

- General, "all population" community-based testing campaigns
- e Efforts focused on adolescents and young people without sufficient epidemiological rationale (e.g., high incidence)
- Low volume HTS investments covering small numbers of a key population group

<u>Uganda</u>: Increasing HIV testing among KP through peer-to-peer community-based HIVST distribution

<u>Côte d'Ivoire</u>: Peer recruitment strategies to engage vulnerable populations in HIV prevention and treatment services

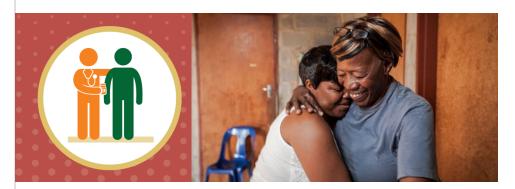


# 5. Reframe retesting among those previously diagnosed as an opportunity for essential (re)engagement

#### Role in the future of HIV testing

Understand and accept that a subset of people who know they have HIV will attend HTS for retesting.

Use HTS as an opportunity for those not on ART or who have disengaged from ART to (re)start treatment.



#### **Shift towards**

- Recognize retesting and 'diagnosis confirmation' as a legitimate and effective linkage strategy
- Accept and engage with people who use HTS as a means of returning to care
- Strengthen health information systems to identify individuals previously diagnosed who are re-engaging in care through HIV retesting

#### Shift away from

- Presuming that those testing HIV positive are newly diagnosed
- Considering retesting (apart from verification testing) among those who were previously diagnosed as always wasteful
- Not addressing underlying reasons for retesting among those previously diagnosed

South Africa: reviewing routine data to see the proportion of those initiating treatment who are not naive



# 6. Involve communities and invest in community-led monitoring

#### Role in the future of HIV testing

Increase community engagement through leadership and participation in HTS design, monitoring and adaption to ensure HTS meets the needs and preferences of people using the service and service delivery is adapted to reach those least likely to access care.



#### **Shift towards**

- Recommit to broader community engagement and participation in the policy development, programme design and demand creation for HTS
- Increase financial, technical expertise and political buy-in for sustained community-led monitoring of HTS
- Advocate for HTS quality-related indicators as part of community-led monitoring for both first time and repeat testers

#### Shift away from

- Neglecting the benefits of community leadership
- Community-led monitoring being limited to HIV treatment and facilitybased services

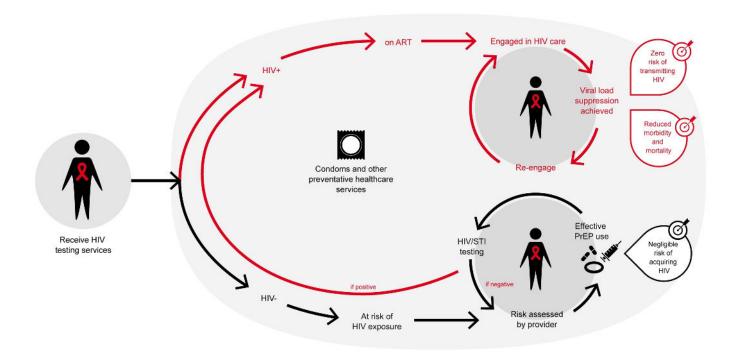
<u>Uganda</u>: Involved trusted community leaders in HTS – traditional leaders in offering and providing testing

<u>Sierre Leone</u>: Community treatment observatory supported increases in HIV testing among key populations and pregnant women



- 7. Integrate person-centred HTS into primary healthcare services that prevent, diagnose and treat a full range of health conditions
- 8. Expand use of virtual interventions and digital tools to support HTS
- 9. Improve community prevention and treatment literacy, including U=U messaging
- 10. Regularly update strategic mix of differentiated HTS





HIV testing to take a status-neutral approach to providing targeted HIV testing services

Adapted from Phanuphak N et al Implementing a Status-Neutral Approach to HIV in the Asia-Pacific, Curr HIV/AIDS Rep. 2020:17(5):422-30.

### Way forward

- Defining a shared vision for the future of HIV testing services is a critical first step
- Collaborating with communities, Ministries of Health, health workers, global funders, normative agencies and implementing partners is critical to translate this vision into practice.
- Aligning global funder investments
- Supporting country autonomy establish context-specific versions against which to assess, adapt and revise national HTS policies and program implementation.

# **Acknowledgements**

# **Consultation participants**

Angela Achrekar<sup>1</sup>, George Alemnji<sup>1</sup>, Florence Anam<sup>2</sup>, Helen Ayles<sup>3</sup>, Rachel Baggaley<sup>4</sup>, Amie Baldeh<sup>5</sup>, Solange Baptiste<sup>6</sup>, Taryn Barker<sup>7</sup>, Nelli Barriere<sup>5</sup>, Stephanie Behel<sup>8</sup>, Irene Benech<sup>8</sup>, Chelsea Bond<sup>9</sup>, Laura Broyles<sup>10</sup>, Davina Canagasabey<sup>11</sup>, Gabriel Chamie<sup>12</sup>, Thato Chidarikire<sup>13</sup>, Tina Chisenga<sup>14</sup>, Liz Crobett<sup>15</sup>, Gina Dallabetta<sup>9</sup>, Kathryn Dovel<sup>16</sup>, Jeff Eaton<sup>17</sup>, Peter Ehrenkranz<sup>9</sup>, Ben Eveslage<sup>18</sup>, Christophe Fraser<sup>19</sup>, Damian Fuller<sup>10</sup>, Geoff Garnett<sup>9</sup>, Catherine Godfrey<sup>1</sup>, Matthew Golden<sup>20</sup>, Rachel Golin<sup>1</sup>, Lina Golob<sup>5</sup>, Kristina Grabbe<sup>22</sup>, Kimberly Green<sup>11</sup>, Michael Grillo<sup>23</sup>, Anna Grimsrud<sup>5</sup>, Katherine Guerra<sup>24</sup>, Sarah Hamm Rush<sup>9</sup>, Nina Hasen<sup>25</sup>, Karin Hatzold<sup>25</sup>, Brian Honnerman<sup>26</sup>, Amy Huber<sup>27</sup>, Dane Ichimura<sup>9</sup>, Heather Ingold<sup>28</sup>, Andreas Jhan<sup>29</sup>, Cheryl Case Johnson<sup>4</sup>, Leigh Jonson<sup>30</sup>, Austin Jones<sup>26</sup>, Sara Klucking<sup>1</sup>, Catey Laube<sup>22</sup>, Susan Lorente<sup>31</sup>, Mathieu Maheu-Giroux<sup>32</sup>, Mary Mahy<sup>33</sup>, David Maman<sup>31</sup>, Susie McLean<sup>31</sup>, Sajay Menon<sup>9</sup>, Gesine Meye-Rath<sup>27</sup>, Maureen Milanga<sup>34</sup>, Khumbo Namachapa<sup>35</sup>, Getrude Ncube<sup>36</sup>, Emi Okamoto<sup>24</sup> Obinna Onyekwena<sup>31</sup>, Kaitlin Powers<sup>21</sup>, Josie Presley<sup>9</sup>, Miriam Rabkin<sup>37</sup>, Tanya Shewchuk<sup>9</sup>, Euphemia Sibanda<sup>38</sup>, Aayush Solanki, Christian Stillson<sup>24</sup>, Andrew Storey<sup>24</sup>, Jessica Sun<sup>9</sup>, Geoffrey Taasi<sup>39</sup>, Melissa Wilde<sup>9</sup>, Lynne Wilkinson<sup>5</sup>, Emma Williams<sup>10</sup>, Vincent Wong<sup>21</sup>, Sinokuthemba Xaba<sup>36</sup>, Nicole Young<sup>9</sup>, Irum Zaidi<sup>1</sup>

# **Authors of consultation synthesis**

Anna Grimsrud, Lynne Wilkinson, Peter Ehrenkranz, Stephanie Behel, Thato Chidarikire, Tina Chisenga, Rachel Golin, Cheryl Case Johnson, Maureen Milanga, Obinna Onyekwena, Maaya Sundaram, Vincent Wong and Rachel Baggaley

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# Thank you!

