CROI 2016 Highlights on HIV testing services
Overview

• HTS coverage and focusing to achieve 1st 90
  – Coverage
  – Index patient, couples and partner HTS
  – Reaching men
  – Migrants
  – HIVST

• Quality of HIV testing services
Coverage & Focusing HTS
HTS (n=29,658) 16-64 yrs of age

- 6,739 (23%) were identified as HIV+
- 27% (4634/16,879) women and 17% (2,105/12,779) men
- Age of highest HIV prevalence in women was 40-44 (55%) and 45-49 (40%) in men
- Of 6739 HIV+ identified, 80% (5373) already knew their HIV+ status
- Need to focus on reach the undiagnosed & high risk groups
CROI #979 & 1062. Kenya/Uganda-Hybrid HTS (community census & mobilization, multi-disease campaign, home-based, men’s health/urgent care & follow-up) – 88% tested ≥ 1x w/ 9.7% HIV prev. in Y1 & Y2 inclu. transport, fisherfolk, & bar workers & #892 reported improved HTS uptake for adolescents.

Y1 - 94% adults HIV tested ≥ 1x & HIV prev. of 9.7% & Y2 - 79% adults HIV tested (HIV/-unknown status). Reported multi-disease services contributed to high repeat HIV testing coverage (91%).

Average HTS cost per person was $20.51 ($17.06 – $32.08 [SD = $3.84]), inclu. POC CD4 at $16 per test (represents 5-13% of total HTS cost). Cost tested at CHCs was $13.83 vs. $31.71 via HBT. Cost per HIV+ $231 (range: $87 – $1,245 [SD=$336]) varied due to HIV prevalence (e.g., HIV prevalence of 23.56% vs.1.62%).
Definitions of Partner Notification

Passive Referral: client is encouraged to disclose HIV exposure to partner(s) by themselves.

Contract Referral: client is encouraged to disclose HIV exposure to partner(s) by themselves until a specific time period, following which the provider contacts partner(s) and offers HTS while maintain anonymity of the index case.

Provider Referral: provider contacts the partner(s) immediately and directly following diagnoses and interview with index-case.
Assisted Partner Notification Services

Table 2: Effectiveness of aPS

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Immediate Arm (N=550)</th>
<th>Delayed Arm (N=569)</th>
<th>IRR (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number tested</td>
<td>392 (0.713)</td>
<td>85 (0.149)</td>
<td>4.83 (3.66-6.39)</td>
</tr>
<tr>
<td>Number newly tested</td>
<td>81 (0.147)</td>
<td>4 (0.007)</td>
<td>14.80 (5.35-40.93)</td>
</tr>
<tr>
<td>Number newly HIV+</td>
<td>136 (0.247)</td>
<td>28 (0.049)</td>
<td>5.00 (3.18-7.86)</td>
</tr>
<tr>
<td>Newly enrolled in HIV Care</td>
<td>88 (0.160)</td>
<td>19 (0.033)</td>
<td>4.43 (2.64-7.43)</td>
</tr>
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Intimate Partner Violence (IPV)

- At baseline 126 (11.3%) self-reported to be at moderate risk of IPV
- 67 (12.2%) immediate arm and 59 (10.4%) delayed arm
- At 6 weeks, there were 37 (3.3%) new IPV and 54 (4.8%) repeat IPV
- Two of these were possibly study related
  - One in each study arm
  - However, these incidents occurred before notification of partner

Source: Cherutich et al CROI 2016
Less Assisted Partner Notification

*Tanzania Experience*

57% of index partners successfully referred & 96% underwent HTS:

- **61.8%** newly diagnosed HIV-positive
  - Male partners = 53.5%
  - Female partners = 67.9%
- **36%** of partners were HIV-negative
- **63%** of HIV-positive partners were enrolled into care & treatment
- No serious IPV reported

*Source: Plotkin et al CROI #978 2016*
Index Patient HTS

- **CROI# 988**. HB-HTS for IPs and household members reported overall new 10% HIV positivity.
- 70% new diagnoses were among women & 22% (n=123) serodiscordant couples identified.
- Approach was highly acceptable, advised that HBCT include support for disclosure of HIV status and importance of HIV care and treatment for all HIV+ persons.
- **CROI#1063** modelling reports that HB-HTS focused on identifying SDC & immediate ART could avert more infections than just HB HTS alone.
Where are the men?

- Overall low-uptake, PopART data reports men are less likely to know HIV+ status than women and lower consent rates.

- "ManUp" campaign offered (non-HIV specific services (including eye testing, VMMC)—outreach to find men where they are. Weekends and evenings had higher uptake of men.

- Male provider may improve uptake—not statistically significant

- Couples and partner testing increased uptake of male partner testing in ANC and outside

- HIVST in Malawi had promising uptake among men

- Male-friendly or Male-only ART clinics to improve linkage?

- HIV services adapted to improve reach to men
Migrants

Reported 75% of migrant MSM and 50% of migrants acquire HIV post-migration (in Europe based on 2240 interviews)

Source: J. del Amo 2016
#973 Women at (ANC, PPC) and FSW at drop-in centres provided HIVST to male partner(s) and social networks. Reported high uptake by women & male partner(s). HIV positivity 4.4% of ANC and PPC participants' male partners & 14% of FSW male partners. Sex < likely when partner tested HIV+ vs HIV - (18% vs. 62%, p<0.01). Condom use among those reporting sex was > after partner tested HIV + vs. HIV -(100% vs. 44%, p<0.01).

#971 trans pops viewed HIVST positively but HTS & HIVST uptake was lower compared to MSM. Important to promote HIVST for trans people.

#970 reported 52% of MSM in China surveyed purchased HIVST—most under 30 yr & 93% met sex partner online. Reported 4.5% prevalence—all cases received confirmation & diagnosed HIV+.
Quality testing
&
Importance of retesting before ART initiation
Malawi Confirmatory Testing
(2\textsuperscript{nd} encounter)

- 1,470 (4.6\%) of 32,083 parallel tests in ‘previous positives’ not concordant positive (2015)

- Includes all clients with documented and/or self-reported past positive test

Source: A. Jahn CROI 2016
Quality testing & Retesting before ART initiation

- **CROI #513** reported “weak reactive lines” more likely to be “false positives” & confirmed HIV- in Uganda.

- **CROI #516** reported that in Mozambique of all 0.76% of PLHIV with full confirmatory retesting were reclassified HIV-negative and 0.2% had indeterminate.

- **CROI #786** in South Africa modelling reported without confirmatory EID testing, ~30% infants testing HIV+ & initiating ART could be HIV-uninfected in low-MTCT settings, & FP infants could comprise substantial fraction of program costs. Confirmation of HIV+ EID results are cost-saving compared to EID without confirmation.

- **CROI #510** in South Sudan reported high FP rate w/ EIA-testing algorithm alone. Suggests need to incorporate more specific assays in surveillance (equivalent of diagnostic algorithm) to confirm HIV status & ensure accuracy of HIV prevalence data.