Tracking with Recency Assays to Control the Epidemic (TRACE)

Using Data for Public Health Action

Update December 12, 2018
ECT I Countries at attainment

- National HIV program strategically implements at scale to maintain epidemic control
- Systems provide quality prevention activities/HIV services for positive long term client outcomes
- Case-based surveillance systems monitor, prevent, detect, respond to new HIV infections/drug resistance
- Country governments/non-government entities implement sustainable approaches to HIV resource utilization and financing
- Enabling policy and legal environment supports effective HIV prevention, care and treatment programs
- PEPFAR and Global Fund review and modify their support in a coordinated manner
What is epidemic control?
TRACE Initiative: Rationale and Goal

- In countries nearing HIV epidemic control*, establish a HIV recent infection surveillance system, in the context of HIV case surveillance, in routine HIV services to detect, characterize, monitor, and intervene on recent infection among newly diagnosed PLHIV in real-time.

*14 selected countries: Botswana, Cote d’Ivoire, Ethiopia, eSwatini, Haiti, Kenya, Lesotho, Malawi, Namibia, Rwanda, Tanzania, Uganda, Zambia, Zimbabwe
Recent infection testing among newly diagnosed PLHIV leverages *existing* systems for added public health and programmatic benefit.

**HTS client**

- **Rapid Test 1**
  - Report NEGATIVE: Non Reactive
  - Reactive
    - **Rapid Test 2**
      - Non Reactive
      - Reactive
        - Report POSITIVE
      - INDETERMINATE (Follow country guidelines)

**National HIV testing algorithm**

- **Test for recent infection**
  - Tested recent
  - Tested Long term
    - Viral load test
      - Confirmed recent (Tested recent + VL≥1,000 copies/mL)
        - Report RECENT

**Supplementary test for recent infection among newly diagnosed**

(Sedia Asante, Maxim Swift)

**Routine case finding strategies**

- National surveillance systems
- National M&E systems
How does HIV recency contribute to HIV case surveillance?

Key surveillance events along the course of HIV disease

- HIV infection
- Advanced HIV
- Death

HIV Case-based Surveillance

Surveillance
- Monitor trends in the proportion of recent infection among newly diagnosed individuals

# Recent infections
- Demographic characteristics
- Location
- Mode of transmission
- Use of interventions

Epidemiology
- Identify and zoom in on behaviors & locations associated with recent infections to inform prevention strategies

Results should not be used to direct patient care given research use of the test and pending WHO test prequalification.
Using Recent Infection Surveillance Data to Develop a Rapid Public Health Response

- Establish an alert system for recent infections to describe person, place, and time
- Investigate potential clusters to determine if there is an epidemiological link
- Review data
  - Epidemiological data
  - Site-level testing
  - Partner performance
- Offer rapid package of HIV services in area
  - Ensure accessibility of HIV services in areas
  - Optimize HIV testing modalities to identify undiagnosed in network
  - Link HIV-infected to treatment, suppress VL
  - Offer interventions to HIV-negative members to stop transmission

Confirmed recent infection cases in Central America, October 2017 to October 2018
HIV case-based surveillance

All populations
- Index partner testing
- Routine screening tool to target PITC and VCT
- Targeted demand creation
- Expanded moonlight testing
- Flexible HTS hours
- Expansion of self-testing

Men
- Couple testing
- Targeted moonlight testing
- HIV self-testing at hotspots
- Clients of FSW

Key Population (FSW/MSM)
- Social network testing
- HIV self-testing
- Mobile outreach
- KP-friendly services
- Self-testing

Women
- ANC/PMTCT
- Couple testing

AGYW
- DREAMS
- Adolescent friendly services

Children & OVCs
- Index testing for children of WLHIV
- PMTCT/EID
- Identify OVC for testing through risk screening
- Child friendly services

HIV case finding strategies

Recency testing of newly diagnosed
Where are we now with TRACE?

Jan 2018  COP 2018 funding level letters released
Feb/March 2018  COP 2018 RPM Ethiopia added as TRACE country
April 2018  COP 2018 approved TRACE ST3 established
May 2018  ISME orientation on TRACE
June 2018  TRACE countries begin planning calls
July 2018  TRACE in Central America highlighted as an Emerging Technology on PEPFAR Solutions Platform
August 2018  First TRACE protocol approved! (Rwanda)
Sept 2018  TRACE Community of Practice established (RCOOP)
Oct 2018  RCOOP Training Second TRACE protocol approved (Ethiopia)
Nov 2018  TRACE NOFO awarded to ICAP and UCSF
<table>
<thead>
<tr>
<th>Country</th>
<th>TRACE tests in FY19</th>
<th>Protocol Development</th>
<th>Planned Protocol Approval</th>
<th>Training Start</th>
<th>Implementation Start Date</th>
<th>First Summary Sheet</th>
<th>First MER Indicator Reported</th>
<th>Annual Report</th>
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<tbody>
<tr>
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TRACE Stakeholders

- PEPFAR country teams
- MOH
- Civil Society
- COP 2018 local IP(s)
- HQ Recency COOP
Questions?