Finding the missing children: Proven Strategies for Increasing Identification of HIV+ Children

October 2017
Agenda

- Background
- Results to date
- Lessons learned and reaching the 1st 90
Finding HIV+ children is relatively harder given low prevalence.

Estimated HIV Prevalence for adults and children
Eastern and Southern Africa, 2016

1 in 15 adults are HIV+

1 in 149 children are HIV+

In resource-limited settings, prioritizing and targeting case finding can help.

Source: CHAI analysis using World Bank Population Data, ESA countries only, and PLHIV from UNAIDS 2017 Gap Report
WHO guidelines clearly state where to offer pediatric testing...

<table>
<thead>
<tr>
<th>WHO Testing Guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>In all settings:</strong></td>
</tr>
<tr>
<td>✓ Presenting with sign and symptoms that suggest HIV</td>
</tr>
<tr>
<td>✓ Attending TB clinics and malnutrition services</td>
</tr>
<tr>
<td>✓ Exposed infants born to HIV-positive mothers</td>
</tr>
<tr>
<td><strong>High prevalence settings:</strong></td>
</tr>
<tr>
<td>✓ With parents or siblings receiving any HIV service</td>
</tr>
<tr>
<td>✓ Attending pediatric inpatient health services</td>
</tr>
<tr>
<td>✓ Receiving orphan and vulnerable children services</td>
</tr>
</tbody>
</table>

...but *how* can countries implement these guidelines?
Agenda

- Background

- Results to date

- Lessons learned and reaching the 1st 90
CHAI has generated evidence on several pediatric testing strategies

<table>
<thead>
<tr>
<th>Country</th>
<th>Program Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zimbabwe</td>
<td>OPD Screening among children aged 5-19 using 5 questions</td>
</tr>
<tr>
<td>Malawi</td>
<td>Family referral slips provided to children and sexual partners of HIV+ clients for testing</td>
</tr>
<tr>
<td>Zambia</td>
<td>Piloting of different community based testing approaches</td>
</tr>
<tr>
<td>Lesotho</td>
<td>Community based testing</td>
</tr>
<tr>
<td>Uganda</td>
<td>Coordination and M&amp;E support for IPs to roll out peds testing strategies</td>
</tr>
</tbody>
</table>

The diagram above illustrates the different strategies and their implementation across various countries.
Zimbabwe: OPD Screening

Overview

Guidelines

• HTC should be offered to all children

Barriers

• Testing of children in OPD is low due to high volumes and limited test kits and HR
• No operational guidance on testing strategies

Intervention (16 facilities)

• HCWs trained to administer a 5-question algorithm to clients, aged 5-19, attending OPD
• Clients responding yes to 1+ questions were offered a test

<table>
<thead>
<tr>
<th>For children and adolescents aged 5 – 14 years, ask:</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Has the child ever been admitted to hospital?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Has the child had recurring skin problems?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Has 1 or both of the child’s natural parents died?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Has the child experienced poor health in the past 3 months?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Only for adolescents aged 15 – 19 years, also ask them:

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Have you experienced any symptoms and/or signs of an STI, such as vaginal/urethral discharge or genital sores?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Zimbabwe: OPD Screening

Results: 71% more children tested & 69% more children identified

The HIV Screening Algorithm has now been adopted in the National Operational and Service Delivery Manual and HTS Guidelines

Pre-Intervention: Dec’15 - Feb’16 (Phase 1); Mar ’16- May’ 16 (Phase 2)
Post-Intervention: May’16- Jul’16 (Phase 1); mid-Oct’16 – mid Jan’16 (Phase 2)
Malawi: Index case testing

Overview

Guidelines

• All HIV+ patients should be given a FRS for all children and partners with unknown status
• HIV-positive PW who have other children should be given FRS for all their children

Barriers

• Poor understanding by HCWs of when to issue FRS for index case testing
• Low return rates of children coming for testing after being issued FRS

Intervention (84 facilities)

3 different SOPs rolled out on issuance, documentation of the slip, and matching the slip with current records once a patient returns for testing
Malawi: Index case testing

**Results:** FRS testing increased 5.5x in facilities that received SOPs

**The FRS SOPs have been adopted into the current HTS curriculum**

*All facilities in the country except mentorship facilities **Pre-mentorship: Oct 2016, Post Mentorship: Dec 2016*
**Zambia: Pediatric PITC**

**Overview**

**Guidelines**
- PITC guidelines from 2009 state that every child should know their HIV status but the key challenge was implementation

**Barriers**
- Training on pediatric PITC was insufficient and not scaled
- Weak guidance on how to operationalize PITC
- Registers did not emphasize PITC
- Lack of national PITC reporting tools
- Infrastructure and human resource constraints

**Intervention (30 facilities)**

**Operational guidance**
- SOPs on conducting PITC at each entry point

**Extra HR Capacity**
- 3-4 lay counselors per facility to test children

**Training**
- One-time training conducted for HCWs on pediatric PITC

**Mentorship**
- Routine mentorship conducted
Zambia: Pediatric PITC

Results: After 8 months, close to 100% entry points are now testing

Proportion of entry points conducting testing; 30 facilities
Pre-Intervention: August 2015 – April 2016; Post-Intervention: May– December 2016

- **OPD**
  - Pre: 30, 100%
  - Post: 30, 100%

- **TB**
  - Pre: 18, 69%
  - Post: 25, 96%
  - Not Testing: 3, 20%

- **Nutrition**
  - Pre: 15, 62%
  - Post: 23, 96%
  - Not Testing: 1, 4%

- **Inpatient**
  - Pre: 30, 100%
  - Post: 15, 100%
Lesotho: Mobilizing HIV Identification and Treatment (M-HIT)

Overview

Barriers
- Significant gaps found in the continuum of care for children with no consistent alternatives to facility testing

Intervention (2 districts)
- The M-HIT project commenced in October 2015 and will end in March 2018
- Operating in 2 of the 10 districts with the highest HIV prevalence and unmet HTC needs
- 6 community-based testing strategies deployed to specifically target children:
  - Mobile Outreach Clinic
  - Targeted Testing
  - Community Testing
  - Facility Index Testing
  - Door to Door (D2D) Testing
  - Door to Door Index Testing
Lesotho: Mobilizing HIV Identification and Treatment (M-HIT)

**Results:** 47,823 children were tested, with a 0.43% positivity yield

### HIV+ Identifications by Strategy

- **Facility yields** were only slightly higher at 0.85% in the same districts between January 2016 and March 2017
- **MOCs** account for 48% of all identifications
- **Majority** of children found HIV+ had **no previous testing history**
- **64%** of children were in **age group 5-14**.

*MHIT Strategies began implementation in Oct 2015, with the exception of Targeted Testing, which began in Mar 2016.*
Uganda: Unfinished Business partner consortium

Overview

- Children generally were not being prioritized at facilities

Intervention (21 districts)

- Unfinished Business program runs from October 2015 - March 2018
- Program operated by 4 IPs in 21 districts that were found to hold 53% of Uganda’s total pediatric scale-up potential
- CHAI’s role is to provide coordination, M&E, and reporting support
- A package of interventions rolled out to improve pediatric and adolescent identifications:
  - Peds HTS Training Curriculum
  - Additional HR Capacity testing volunteers strategically placed in key entry points
  - Other testing strategies evening/weekend HTS, home-based HTS, KYCS campaigns
Uganda: Unfinished Business partner consortium

Results: A combination of strategies to find HIV+ children

### Average Testing Volumes through UB Strategies – Peds and Adolescents

**Apr 2016 to Mar 2017**

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Peds</th>
<th>Adolescents</th>
</tr>
</thead>
<tbody>
<tr>
<td>IPD</td>
<td>3,341</td>
<td>1,742</td>
</tr>
<tr>
<td>OPD</td>
<td>12,105</td>
<td>599</td>
</tr>
<tr>
<td>Nut</td>
<td>245</td>
<td>126</td>
</tr>
<tr>
<td>TB</td>
<td>139</td>
<td>434</td>
</tr>
<tr>
<td>KYCHS</td>
<td>7,349</td>
<td>941</td>
</tr>
<tr>
<td>YCC</td>
<td>1,105</td>
<td>1,193</td>
</tr>
<tr>
<td>HBHCT</td>
<td>8</td>
<td>5,197</td>
</tr>
<tr>
<td>Outreaches</td>
<td>9,225</td>
<td>6,617</td>
</tr>
<tr>
<td>Index Case Testing</td>
<td>6,177</td>
<td>43</td>
</tr>
</tbody>
</table>

### Average Yields through UB Strategies – Peds and Adolescents

**Apr 2016 to Mar 2017**

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<th>Peds</th>
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<tr>
<td>IPD</td>
<td>0.8%</td>
<td>1.6%</td>
</tr>
<tr>
<td>OPD</td>
<td>2.9%</td>
<td>2.8%</td>
</tr>
<tr>
<td>Nut</td>
<td>2.8%</td>
<td>1.2%</td>
</tr>
<tr>
<td>TB</td>
<td>5.0%</td>
<td>1.2%</td>
</tr>
<tr>
<td>KYCHS</td>
<td>19.1%</td>
<td>1.2%</td>
</tr>
<tr>
<td>YCC</td>
<td>1.1%</td>
<td>1.1%</td>
</tr>
<tr>
<td>HBHCT</td>
<td>2.2%</td>
<td>0%</td>
</tr>
<tr>
<td>Outreaches</td>
<td>1.0%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Index Case Testing</td>
<td>6.1%</td>
<td>2.3%</td>
</tr>
</tbody>
</table>

*Year 2 = Apr 2016 to Mar 2017*
Unfinished Business focus facilities only represent 6% of Uganda’s facilities.

UB facilities are testing and identifying more children relative to rest of country.

UB focus facilities show higher growth in testing and identification volumes, compared to non-focus facilities within UB districts and non-UB districts.

*Source: DHIS2; Year 2 = Apr 2016 to Mar 2017
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- Lessons learned on reaching the 1st 90
We have identified several lessons learned through our work...

- **Testing strategies can be prioritized based on country context**: in lower prevalence settings, it may make sense to start with facility-based strategies. In higher prevalence, a combination of targeted facility and community strategies.

- **A comprehensive approach** is needed to activate entry points for pediatric testing: HTS policy, clear operational guidance, training, mentoring, tracking.

- **Institutionalizing pediatric testing takes time**: shorter in lower volume settings like TB, but more time in relatively higher volume settings like inpatient wards.

- **A targeted testing approach in OPD** can help optimize time and limited resources.

- **Index case testing** is a powerful tool and can be implemented through simple trainings; however more community level follow-up is needed.

- **Community-based testing** may result in lower identification rates, but can be useful to find children who would not otherwise show up at a facility.
Thank you to the Ministries of Health and partners for their collaboration in implementing this work and to the CHAI country teams for their dedication.

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