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#IAS2017 | @IAS_Conference
No conflicts of interest to declare
Background

Despite decreasing new HIV infections, pediatric HIV remains substantial

- 150,000 annual new HIV infections globally (<15 years)
- 1.8 million children living with HIV (<15 years)
- < 30% of children tested in Nyanza region of Kenya
- HIV testing - gateway to achieving 90-90-90
What was ACT?

Accelerating Children’s HIV/AIDS Treatment (ACT)

ACT is a public-private partnership between PEPFAR and CIFF

Strategic response to treatment gap

Initiate 300,000 with HIV on treatment in 9 priority countries in 2 years
Examine whether activities under the Accelerating Children’s HIV/AIDS Treatment (ACT) initiative increased testing and identification of children with HIV
Methods

- **Family AIDS Care & Education Services (FACES)**
  - KEMRI & UCSF collaboration
  - Comprehensive HIV prevention, care, and treatment program
  - 144 health facilities supported
    - Migori, Homa Bay, and Kisumu counties
    - Nyanza region of Kenya

- **Evaluation timeframe**
  - October 2015 – September 2016
Health Facilities

Characteristics

85% rural
Peri-urban 8%
6% urban

Health dispensaries 66%
26% comprehensive outpatient
Sub county hospitals and county referral hospitals 8%
Intervention Steps for Pediatric/Adolescent Testing

Family testing focus:
Family Information Table (FIT) utilization
FIT chart audits

Additional HIV counselors
Create HTC space

Community outreach testing
HIV-exposed infants’ caregiver text messages

Integrated intervention steps
Evaluation Methods

**Design**
- Convenience sample of clinics
- Sites assigned to intervention vs. control dependent on whether the intervention was actively being implemented in a given month
- This allowed determination of impact of individual intervention

**Data Collection**
- Facility level
- Tracking logs
- Number tested
- Number HIV positive
- Infants <18 months
- Children 18 months – 9 years
- Adolescents 10 years – 14 years

**Analysis**
- Intervention and control sites compared
- Negative binomial generalized estimating equations
- Adjusted for repeated measures, geographic location, health facility tier, and test kit stock-outs
Results: HIV Testing

HIV testing volume per month of ACT initiative, by age group

- <18 mos
- 18 mos - 9 yrs
- 10 - 14 yrs

# tested per facility

Results: Identification of HIV Positives

Yield of HIV+ children per month of ACT initiative, by age group

- <18 mos
- 18 mos - 9 yrs
- 10 - 14 yrs
# Results

<table>
<thead>
<tr>
<th>Age Group</th>
<th>October 2015</th>
<th>September 2016</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean number tested per facility per month</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 18 months</td>
<td>2.8</td>
<td>7.2</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>18 months to 9 years</td>
<td>44.8</td>
<td>142.0</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>10-14 years</td>
<td>30.1</td>
<td>123.3</td>
<td>&lt;.0001</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mean number identified HIV positive per facility per month</th>
</tr>
</thead>
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<tr>
<td>&lt; 18 months</td>
</tr>
<tr>
<td>18 months to 9 years</td>
</tr>
<tr>
<td>10-14 years</td>
</tr>
</tbody>
</table>
## Successful Interventions on HIV Testing*

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Intervention</th>
<th>IRR, 95%CI</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infants &lt;18 months</td>
<td>Family Information Table</td>
<td>2.89 (1.53, 5.49)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Children 18 months to 10 years</td>
<td>FIT chart audits</td>
<td>2.15 (1.36, 3.40)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Adolescents 10 to 14 years</td>
<td>HTC space improvements</td>
<td>1.45 (1.09, 1.93)</td>
<td>&lt;0.01</td>
</tr>
</tbody>
</table>

*Adjusted for repeated measures, geographic location, health facility tier, and test kit stock-outs
**Successful Intervention to Increase Identification of HIV Positives**

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<th>Intervention</th>
<th>IRR, 95%CI</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infants &lt;18 months</td>
<td>Family Information Table</td>
<td>8.71 (1.45, 52.4)</td>
<td>0.02</td>
</tr>
</tbody>
</table>

*Adjusted for repeated measures, geographic location, health facility tier, and test kit stock-outs*
Conclusion

Family testing works

Creating HTC space boosts adolescent testing

ACT interventions -> Large testing gains & HIV+ yield
Recommendations

- Optimize the family unit to increase testing reach and care cascade entry
- Don’t let the untested slip away, track closely and conduct chart audits for follow up
- Consider structural improvements to facilitate testing, especially among adolescents
- Try multi-faceted approaches to test children and adolescents
Acknowledgments

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- University of California, San Francisco (UCSF)
- Children’s Investment Fund Foundation (CIFF)
- FACES staff, clients and families

Learn more at: www.faces-kenya.org