ACCELERATING CHILDREN’S HIV/AIDS TREATMENT:

Post-program Learning & Knowledge

Satellite Session at AIDS 2018

Join us for a discussion on the best practices and learning from the Accelerating Children’s HIV/AIDS Treatment (ACT) initiative, a public-private partnership in nine sub-Saharan African countries that treated more than 560,000 children living with HIV from 2014 to 2016.

Chairs & Speakers

Saeed Ahmed | Anouk Amzel | Anna Grimsrud
Kate Harrison | Lauren Marks | Surbhi Modi | Suzue Saito
George Siberry | Heather Watts

Contact Details (no RSVP required)
info@tingathe.org

Light refreshments will be provided
# Accelerating Children’s HIV/AIDS Treatment (ACT): Post-program Learning & Knowledge

Satellite session at the 22nd International AIDS Conference - Wednesday, July 25, 2018

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<thead>
<tr>
<th>Time</th>
<th>Presentation</th>
<th>Speaker</th>
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<tbody>
<tr>
<td>0:00-2:20</td>
<td>Audio introduction</td>
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<tr>
<td>2:21-5:55</td>
<td>Welcome &amp; Introduction</td>
<td>George Siberry</td>
</tr>
<tr>
<td>5:56-16:34</td>
<td>ACTing in partnership to accelerate impact</td>
<td>Kate Harrison &amp; Lauren Marks</td>
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<td>16:35-24:35</td>
<td>Community-based interventions to reach 95-95-95 for children and adolescents: An exploratory programmatic review from Lesotho</td>
<td>Anouk Amzel</td>
</tr>
<tr>
<td>24:36-34:17</td>
<td>Strategies for identifying and linking HIV-infected infants, children, and adolescents to HIV treatment services in resource limited settings</td>
<td>Heather Watts</td>
</tr>
<tr>
<td>34:18-41:31</td>
<td>Q&amp;A (15 minutes)</td>
<td>Various</td>
</tr>
<tr>
<td>41:32-49:47</td>
<td>Beyond early infant diagnosis: Changing the approach to HIV-exposed infants</td>
<td>Surbhi Modi</td>
</tr>
<tr>
<td>49:48-58:37</td>
<td>The case for family-centred differentiated service delivery for HIV</td>
<td>Anna Grimsrud</td>
</tr>
<tr>
<td>58:38-1:10:54</td>
<td>Pediatric HIV treatment gaps in seven East and Southern African countries: Examination of modeled data, survey data, and routine program data</td>
<td>Suzue Saito</td>
</tr>
<tr>
<td>1:10:55-1:13:54</td>
<td>Concluding remarks &amp; Announcements</td>
<td>George Siberry and Saeed Ahmed</td>
</tr>
<tr>
<td>1:13:55-1:26:49</td>
<td>Q&amp;A (15 minutes)</td>
<td>Various</td>
</tr>
<tr>
<td>1:26:50-1:29:09</td>
<td>Audio closing</td>
<td></td>
</tr>
</tbody>
</table>

Please download Accelerating Children’s HIV/AIDS Treatment (ACT): Post-program JAIDS supplement at:

[https://journals.lww.com/jaids/toc/2018/08152](https://journals.lww.com/jaids/toc/2018/08152)
Accelerating Children’s HIV/AIDS Treatment (ACT): Post-program Learning & Knowledge

Satellite Session @ the 22nd International AIDS Conference 2018

RAI Amsterdam, the Netherlands | Wednesday, July 25, 2018

ACTing in partnership to accelerate impact

KATE HARRISON
Avert (Formerly CIFF)
United Kingdom

LAUREN MARKS
Office of U.S. Global AIDS Coordinator & Health Diplomacy
United States
Community-based interventions to reach 95-95-95 for children and adolescents: An exploratory programmatic review from Lesotho

ANOUK AMZEL, MD, MPH
COMMUNITY-BASED INTERVENTIONS TO REACH 95-95-95 FOR CHILDREN AND ADOLESCENTS: AN EXPLORATORY PROGRAMMATIC REVIEW FROM LESOTHO

Anouk Amzel MD, MPH on behalf of co-authors
Meena Srivastava DO, MPH; Anthony Isavwa, MSPH; Jill Sanders, MD; Esther Tumbare MD, DMH, MPH; Ian Membe MPH; Justine Mirembe MD; Seema Ntjabane BNSc; Peter Raliile BA; Matsitso Mohoanyane BA; Victoria Ryan, MSPH

July 25, 2018
LESOTHO BACKGROUND

- Overall population 2,263,010
  - 1,009,495 under 24
  - 2.1% prevalence in <14
- 21,950 CLHIV and ALHIV (ages 0-24 years), with 13,935 on ART

2. [https://www.indexmundi.com/lesotho/demographics_profile.html](https://www.indexmundi.com/lesotho/demographics_profile.html)
3. [https://phia.icap.columbia.edu/countries/lesotho/](https://phia.icap.columbia.edu/countries/lesotho/)
## Adherence & Retention Services in Lesotho

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Eligibility Criteria</th>
<th>Estimated Enrollment*</th>
<th>Facilitated by:</th>
<th>Year Commenced</th>
<th>Intervention Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ariel Clubs</td>
<td>5-9yo On ART</td>
<td>1,157</td>
<td>Youth Ambassadors</td>
<td>2008</td>
<td>Ariel Clubs address psychological, physical, and spiritual needs of enrolled children during ART refill days. Referral to support services including community-based interventions occurs during meetings.</td>
</tr>
<tr>
<td>Teen Clubs</td>
<td>11-14yo On ART</td>
<td>2133</td>
<td>Mix of cadres, Teen Club</td>
<td>2015</td>
<td>Teen clubs are monthly peer support groups held at facility during non-clinical hours on the weekends and provide ongoing psychosocial support and adherence counseling.</td>
</tr>
<tr>
<td>Peer Support Groups</td>
<td>10-14yo On ART</td>
<td>1,635</td>
<td>Youth Ambassadors</td>
<td>2008</td>
<td>Children and adolescents meet at health facility during non-clinical hours on a monthly basis for their ART refills and psychosocial support. Youth ambassadors keep track of attendance and also identify patients that need referral to both psychologist and social worker for other support services.</td>
</tr>
<tr>
<td>Community Adherence Support</td>
<td>18-24yo Stable patients on ART living in the</td>
<td>92</td>
<td>ALHIV and Village Health</td>
<td>2016</td>
<td>CAGs are self-formed groups of 3 - 12 stable patients on ART from the same community. Patients meet on a monthly basis to provide peer support to one another and to organize their drug refills from the health facility. CAGs serve as a support system by which patients on ART support one another to access treatment; the model provides peer support and promotes disclosure thereby potentially decreasing discrimination and stigma on HIV in the community.</td>
</tr>
<tr>
<td>Groups (CAGs)</td>
<td>same village or close by with VL &lt;1000 copies/ml.</td>
<td></td>
<td>Workers</td>
<td></td>
<td>CAGs are self-formed groups of 3 - 12 stable patients on ART from the same community. Patients meet on a monthly basis to provide peer support to one another and to organize their drug refills from the health facility. CAGs serve as a support system by which patients on ART support one another to access treatment; the model provides peer support and promotes disclosure thereby potentially decreasing discrimination and stigma on HIV in the community.</td>
</tr>
<tr>
<td>Wise Ones Youth Groups</td>
<td>18-24yo On ART</td>
<td>72</td>
<td>Mix of cadres, Peer</td>
<td>2017</td>
<td>WiseOnes Youth Groups are monthly peer support groups held at the health facility during non-clinical hours on weekends and provide psycho-social support and adherence counseling.</td>
</tr>
<tr>
<td>CHW Active Tracing</td>
<td>All CLHIV and ALHIV</td>
<td>NA</td>
<td>CHWs</td>
<td>2008</td>
<td>CHWs track children and adolescents in the community with missed appointments and re-engage into care.</td>
</tr>
</tbody>
</table>
METHODS

• Data: Program-level retrospective chart data
• Population: ages 5 to 24 years
• Timeframe:
  • September 2017 data as part of routine annual results reporting to PEPFAR
  • October 1, 2016 and ending September 30, 2017
• Definitions:
  • Twelve-month retention and viral suppression defined per PEPFAR Monitoring, Evaluation, and Reporting (MER) guidance
  • Proxy viral coverage was ratio between PLHIV with a viral load in their chart and number of PLHIV on ART
• Review was conducted based on:
  1. District-level 12-month retention and viral suppression data (implementation districts only).
  2. Comparison of hospital-level 12-month retention and viral suppression data from implementation districts and non-implementation districts
3,102 patients newly initiated
- 12-month retention = 75%
11,377 patients on ART
- 5,365 (47%) had a viral load documented
- 4,641 (87%) had a suppressed viral load.
RETENTION RESULTS: Implementation vs. Non-Implementation District Hospitals

- 490 patients newly initiated on ART, with 346 (71%) implementation-district and 144 (29%) from non-implementation-district
- 353 (73%) and 90 (63%) respectively were still retained in care at 12 months.

<table>
<thead>
<tr>
<th>Hospitals within Implementation Districts (Maseru, Mafeteng, Mohale’s Hoek)</th>
<th>Hospitals within Non-Implementation Districts (Thaba-Tseka, Butha-Buthe, Mokhotlong)</th>
</tr>
</thead>
<tbody>
<tr>
<td># Hospitals</td>
<td>N*</td>
</tr>
<tr>
<td>5-9 years</td>
<td>4</td>
</tr>
<tr>
<td>10-14 years</td>
<td>4</td>
</tr>
<tr>
<td>15-19 years</td>
<td>5</td>
</tr>
<tr>
<td>20-24 years</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td><strong>253</strong></td>
</tr>
</tbody>
</table>

$Denominator includes patients who started ART between October 2015 and September 2016
*Numerator includes patients still on treatment 12 months later, between October 2016 and September 2017
VIRAL LOAD RESULTS: Implementation vs. Non-Implementation District Hospitals

2,403 patients on ART
• 1,702 patients from implementation district hospitals
  • 632 (37%) having recorded viral load result
  • 539 (85%) virally suppressed
• 700 patients on ART from non-implementation district hospitals
  • 220 (31%) having documented viral load result
  • 181 (82%) virally suppressed.

<table>
<thead>
<tr>
<th>Hospitals within Implementation Districts (Maseru, Mafeteng, Mohale's Hoek)</th>
<th># Sites</th>
<th>On ART</th>
<th>VL result in Record</th>
<th>Proxy VL coverage</th>
<th>Suppressed VL</th>
<th>% Virally Suppressed^</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-9 years</td>
<td>5</td>
<td>122</td>
<td>108</td>
<td>89%</td>
<td>89</td>
<td>82%</td>
</tr>
<tr>
<td>10-14 years</td>
<td>5</td>
<td>220</td>
<td>101</td>
<td>46%</td>
<td>91</td>
<td>90%</td>
</tr>
<tr>
<td>15-19 years</td>
<td>5</td>
<td>340</td>
<td>125</td>
<td>37%</td>
<td>97</td>
<td>78%</td>
</tr>
<tr>
<td>20-24 years</td>
<td>5</td>
<td>1020</td>
<td>298</td>
<td>29%</td>
<td>262</td>
<td>88%</td>
</tr>
<tr>
<td>Total</td>
<td>1702</td>
<td>632</td>
<td>37%</td>
<td>539</td>
<td>85%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hospitals within Non-Implementation Districts (Thaba-Tseka, Butha Buthe, Mokhotlong)</th>
<th># Sites</th>
<th>On ART</th>
<th>VL result in Record</th>
<th>Proxy VL coverage</th>
<th>Suppressed VL</th>
<th>% Virally Suppressed^</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-9 years</td>
<td>3</td>
<td>56</td>
<td>20</td>
<td>36%</td>
<td>12</td>
<td>60%</td>
</tr>
<tr>
<td>10-14 years</td>
<td>3</td>
<td>98</td>
<td>32</td>
<td>33%</td>
<td>24</td>
<td>75%</td>
</tr>
<tr>
<td>15-19 years</td>
<td>5</td>
<td>137</td>
<td>39</td>
<td>28%</td>
<td>29</td>
<td>74%</td>
</tr>
<tr>
<td>20-24 years</td>
<td>5</td>
<td>409</td>
<td>129</td>
<td>32%</td>
<td>116</td>
<td>90%</td>
</tr>
<tr>
<td>Total</td>
<td>700</td>
<td>220</td>
<td>31%</td>
<td>181</td>
<td>82%</td>
<td></td>
</tr>
</tbody>
</table>

^% virally suppressed represents # suppressed VL/VL result in record
CONCLUSIONS

1. Implementation districts
   • Retention rates in the implementation districts is reasonable, but can be improved
   • Viral load coverage is low, but suppression rates are high

2. Implementation vs non-implementation districts comparison
   • Significantly better retention in implementation district hospitals compared to non-implementation district hospitals
     • 10-14 year olds
   • Low viral load coverage in both types of district hospitals
     • Of those tested, high levels of viral suppression
KEA LEOHA
Strategies for identifying and linking HIV-infected infants, children, and adolescents to HIV treatment services in resource limited settings

HEATHER WATTS, MD
Strategies for Identifying and Linking HIV-Infected Infants, Children, and Adolescents to HIV Treatment Services in Resource Limited Settings

Heather Watts, MD on behalf of co-authors

Amy M. Medley, PhD; MPH Susan Hrapcak, MD; Rachel A. Golin, MD, MHS; Eric J. Dziuban, MD, DTM; D. Heather Watts, MD; George K. Siberry, MD, MPH; Emilia D. Rivadeneira, MD; Stephanie Behel, MPH

July 25, 2018
Background

- Great strides in reducing vertical transmission of HIV but still have over 150,000 new infant infections annually.
- Many older children remain undiagnosed and pediatric treatment rates lag behind adults.
- Accelerating Children’s Treatment partnership nearly doubled treatment of children in the nine focus countries.
- Many lessons learned to improve case finding and care for children living with HIV.
- Key groups: HIV-exposed infants, children missed in infancy, adolescents
Strategy 1: Targeted Case Finding and Linkage

Scale-up PITC within health facilities
- TB clinics,
- Pediatric inpatient wards,
- Malnutrition centers,
- Outpatient departments
- Mothers with unknown status in immunization clinics in high prevalence areas

Test all biologic children of adults and siblings receiving ART through family index testing

Optimize EID for HIV-exposed infants including POC

Test children of key and vulnerable populations

Implement risk screening for all orphan and vulnerable children (OVC)

Link all HIV-infected infants, children, and adolescents to HIV treatment services


**Efficient Targeting:** Testing coverage + low/decreasing yield for pediatric HIV testing in traditional streams

<table>
<thead>
<tr>
<th>PEPFAR</th>
<th>INPATIENT</th>
<th>INDEX</th>
<th>OUTPATIENT</th>
<th>TB</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% of Volume</td>
<td>POS rate</td>
<td>% of Volume</td>
<td>POS rate</td>
</tr>
<tr>
<td>Cameroon</td>
<td>12.5%</td>
<td>1.1%</td>
<td>5.8%</td>
<td>2.0%</td>
</tr>
<tr>
<td>DRC</td>
<td>15.5%</td>
<td>1.1%</td>
<td>4.8%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Kenya</td>
<td>3.5%</td>
<td>0.7%</td>
<td>8.2%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Lesotho</td>
<td>0.1%</td>
<td>4.7%</td>
<td>8.6%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Malawi</td>
<td>3.7%</td>
<td>2.3%</td>
<td>2.0%</td>
<td>4.7%</td>
</tr>
<tr>
<td>Mozambique</td>
<td>1.3%</td>
<td>3.9%</td>
<td>20.0%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Tanzania</td>
<td>6.4%</td>
<td>1.0%</td>
<td>11.0%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Zambia</td>
<td>4.3%</td>
<td>2.5%</td>
<td>13.9%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>0.1%</td>
<td>4.4%</td>
<td>0.7%</td>
<td>16.5%</td>
</tr>
<tr>
<td>MEAN</td>
<td>5.5%</td>
<td>2.0%</td>
<td>6.5%</td>
<td>4.8%</td>
</tr>
</tbody>
</table>

Encouraging results for Index-family testing – if scaled with fidelity
Efficient Targeting: Key strategy to find children with HIV is ensuring we test children of adults already in care for HIV

Index testing Coverage & Yield in Kinshasa and Haut-Katanga - 32 HF - FY16

- **Children initiated on ART**
  - Kinshasa: 64, Haut-Katanga: 50

- **Children enroled in care**
  - Kinshasa: 69, Haut-Katanga: 53

- **HIV+**
  - Kinshasa: 8.4%, Haut-Katanga: 6.8%

- **Children tested**
  - Kinshasa: 69%, Haut-Katanga: 73%, Kinshasa: 78%

- **Children <15**
  - Kinshasa: 1077, Haut-Katanga: 923

- **Adult patients**
  - Kinshasa: 3442, Haut-Katanga: 1571, Kinshasa: 1346

DRC: Index/Family Testing in 2 Areas

**Coverage & Positivity Rate**

- Kinshasa
  - Coverage: 64%
  - Positivity Rate: 8.4%

- Haut-Katanga
  - Coverage: 64%
  - Positivity Rate: 6.8%

*Courtesy: Tania Laure TCHISSAMBOU, ICAP Columbia University, DRC*
Family Index Testing: A high yield strategy to identify healthy children with HIV

Test children of HIV+ women, of HIV+ men if mother HIV+ or unknown status, or deceased, or with HIV+ siblings.

Several studies show family index testing can increase:

1. the number of children identified at a faster rate
2. the identification of healthy children living with HIV and
3. HIV testing yield [4% Ahmed, 7% Wagner, 12% Tonwe-Gold, 18% Kulzer]

Index case finding facilitates identification and linkage to care of children and young persons living with HIV/AIDS in Malawi

Saeed Ahmed1,2,*, Rachael A. Sabelli1,*, Katie Simon1,2, Nora E. Rosenberg3, Elijah Kavuta1, Mwelisa Harawa1, Spencer Dick1, Frank Linzie1, Peter N. Kazembe1,3 and Maria H. Kim1,3

Implementing family-focused HIV care and treatment: the first 2 years’ experience of the mother-to-child transmission -plus program in Abidjan, Côte d’Ivoire

B. Tonwe-Gold1,2,*, D. K. Elourevi1,2,*, C. A. Bosse1, S. Toure1, M. Koné1, R. Becquet2,3, V. Leroy2,3, P. Toro4, F. Dabis2,3, W. M. El Sade6 and E. J. Abrams4

Family model of HIV care and treatment: a retrospective study in Kenya

Jayne Lewis Kulzer1,2,*, Jeremy A. Penner1,2,*, Reson Marima1, Patrick Oyar1, Arbogast O Oyang1, Stanley B. Shade1,6, Cinthia C. Blat1,2, Lennah Nyabiage5, Christina W. Mwachari1,6, Helen C. Muttai1, Elizabeth A. Bukusi1 and Craig R. Cohen1,2

Active Referral of Children of HIV-Positive Adults Reveals High Prevalence of Undiagnosed HIV

Anjali D. Wagner, MPH, PhD,* Cyrus Mugo, MBC+B,† Irene N. Njoguna, MBC+B, MSc,‡ Elizabeth Maleche-Obumbo, MBC+B, MPH, MMed, FPMasa,† Kenneth Sherr, MPH, PhD,§ Irene W. Ingwari, MBC+B, MMed, MPH,|| James P. Hughes, PhD, MS,* Dalton C. Wamalwa, MBC+B, MMed, MPH,† Grace C. John-Stewart, MD, MPH, PhD,‡ and Jennifer A. Slyker, MSc, PhD*
Commitment to EID: Clinical trials in routine settings in Malawi and Mozambique have shown POC EID can dramatically increase the number of infants on ART and reduce the time to initiation. Unused Xpert capacity being tapped for EID.

**Malawi and Mozambique pilot results**
- Both countries achieved same day turnaround time from sample collection to results and results to ART initiation.
- Initiation rates by 2 months of age were roughly 90% in both countries in the POC facilities, compared to only 12.8% in Mozambique and 45.8% in Malawi in the standard of care (SOC) facilities (sending samples to the conventional lab).
- Infants initiated after POC EID had 50% higher retention on ART (62%) at three months than infants diagnosed by remote laboratory testing (43%).

<table>
<thead>
<tr>
<th></th>
<th>Malawi</th>
<th>Mozambique</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SOC</td>
<td>POC</td>
</tr>
<tr>
<td>Median TAT between sample collection and results received (days)</td>
<td>125 (84-185)</td>
<td>0 (0-0)</td>
</tr>
<tr>
<td>Median TAT between sample collection and ART initiation (days)</td>
<td>127 (44-154)</td>
<td>0 (0-1)</td>
</tr>
<tr>
<td>Proportion of HIV-positive patients initiating ART within 2 months (%)</td>
<td>12.8</td>
<td>89.7</td>
</tr>
<tr>
<td>Patient retention rate 3 months after ART initiation (%)</td>
<td>42.9</td>
<td>61.6</td>
</tr>
</tbody>
</table>

Source: CROI 2017, IAS 2017
**Commitment to EID**: POC EID increases infant ART initiation, reduces time to ART initiation, and improves result return rate compared to conventional EID

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Conventional EID (N=96 sites; n=2,900 infants tested)</th>
<th>Point-of-Care EID (N=245 sites; n=13,201 infants tested)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of results reaching the caregiver within 30 days</td>
<td>20.85%</td>
<td>99.73%</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Median turnaround time from blood sample collection to receipt of results by caregiver</td>
<td>55 days (IQR 31-78)</td>
<td>0 days (IQR 0-1)</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Median turnaround time from receipt of results to initiation on treatment</td>
<td>0 days (range: 0 – 75)</td>
<td>0 days (range: 0 – 83)</td>
<td>NS</td>
</tr>
<tr>
<td>Percent of identified HIV-infected infants initiated on treatment</td>
<td>69.44%</td>
<td>91.8%</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Median turnaround time from blood sample collection to ART initiation for infants identified as HIV-infected</td>
<td>49 days (IQR 30-67)</td>
<td>0 days (IQR 0-2)</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>
Testing children of female sex workers and persons who inject drugs often with increased yield.

Many of these children would qualify for testing as part of family index testing or OVC programs, but they are often overlooked.

In Cameroon, a program to test children of HIV-positive FSWs at community-based drop-in centers found a 6.1% prevalence. This area is understudied, but requires more investigation.
Efficient Targeting through the OVC Program: Critical role for OVC programs to ensure their beneficiaries have access to HIV testing and ART

Lesotho: OVC Cascade (2017)
Strategy 2: Address Unique Needs of Adolescents to Support HIV Case Finding and Linkage to Treatment

Adolescents remain the only group where HIV-related deaths are increasing.

Strategies for identifying ALHIV

- Testing in SRH clinics
- ANC/pregnancy testing
- Community, especially paired with other services, or school-based testing
- Index testing, especially with older partners
- Social network testing for high risk adolescents

Any adolescent testing must have increased support for linkage

- Increased adherence support e.g. buddy systems
- Sensitized health care workers
- Adolescent clinics and hours
Data systems can be optimized to maximize pediatric case finding and treatment

Age-disaggregated testing data can be used to assess yield and linkage to treatment

Sub-national and site-level data analysis can identify hot spots where new diagnoses of C/ALHIV are occurring and enable geographic targeting of HTS and treatment resources.

Strategic information can also inform quality improvement (QI). Benchmarks for pediatric testing and linkage can be monitored and used for QI.
# Age-disaggregated Data Allow Targeting by Age Band and Monitoring of Progress

## Mozambique Treatment New Data 2017-2018

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Operating Unit</th>
<th>Mozambique</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Semi-Fine Age</td>
<td>FY17 Q1 Results</td>
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Implementation of supportive policies is crucial to improve access to HIV testing and treatment services among C/ALHIV

- Age of consent for testing and treatment considerations
- Task shifting policies for both testing and treatment

Collaboration with community leaders and members, ALHIV networks, and civil society organizations is also essential to ensure HIV testing and treatment services meet the needs of C/ALHIV and their caregiver
Multiple competencies needed to assure quality HIV testing and treatment of infants, children, and adolescents

- Supply chain and forecasting for test kits, EID supplies, pediatric formulations
- Rapid test and EID testing quality assurance to assure accurate diagnosis
- Assurance of linkage to age-appropriate treatment
- Training of providers for competence and comfort in treating infants, children, and adolescents
Conclusions

Despite recent success in improving pediatric case finding, many C/ALHIV in resource-limited settings remain undiagnosed and at substantial risk for HIV-related mortality and morbidity.

To achieve epidemic control, national and regional programs will need to measure their progress towards achieving international benchmarks across all age and sex categories.

Strategies described here, if implemented at scale and with fidelity, can assist countries to achieve international benchmarks for pediatric populations.

Continued advocacy and global investments are required to eliminate AIDS-related deaths among children and adolescents.
Thank You!

PEPFAR
U.S. President's Emergency Plan for AIDS Relief

15 YEARS OF SAVING LIVES THROUGH AMERICAN GENEROSITY AND PARTNERSHIPS

#PEPFAR15
Beyond early infant diagnosis:
Changing the approach to HIV-exposed infants

Surbhi Modi, MD, MPH
Maternal and Child Health Branch Chief
Division of Global HIV & TB
Center for Global Health
U.S. Centers for Disease Control and Prevention
Building on Success of Prevention of Mother-to-Child HIV Transmission (PMTCT) Programming

- 1.4 million pregnant women living with HIV each year
- HIV-exposed infants are at risk of HIV acquisition while in utero, at birth and during breastfeeding
- PMTCT programs have had dramatic success but focused efforts needed to close EMTCT gap
- Additional attention needed for HIV-exposed uninfected infants

Global decline in new infant HIV infections
Uneven Progress with Infant HIV Testing

Figure 11. Infants born to women living with HIV receiving a virological test within the first two months of life, by country, 23 focus countries, 2016

Ongoing HIV Transmission During Breastfeeding

- HIV-exposed infants remain at risk of HIV during breastfeeding
  - Gaps in infant prophylaxis
  - Maternal factors (no ART or viremic episodes)
  - Incident maternal HIV infections (including gaps in early identification of infection)

- HIV-exposed infants also need access to routine infant care and other family support services

Source: UNAIDS 2017 Estimate
Comprehensive Package of Care for HIV-exposed infants

**Identification of HIV exposure and/or Infection**
- Early identification of HIV-exposed infants
- Early infant diagnosis and follow-up testing during breastfeeding until final diagnosis
- Linkage to antiretroviral treatment (ART) if HIV-positive
- New approaches, including birth testing and point-of-care virologic testing

**Prophylaxis medications**
- Infant antiretroviral prophylaxis (including enhanced postnatal prophylaxis)
- Cotrimoxazole prophylaxis
- Tuberculosis (TB) screening and TB preventive therapy, if indicated

**Family care and support**
- Ensure mother’s ART adherence and viral suppression
- Family HIV testing
- Caregiver counseling and education on postnatal care and HIV-exposed infant services
- Male partner engagement in health care

**Community linkages and referrals**
- Tracking of mother-infant pairs
- Linkage with community-based support systems and support groups
- Referral to social welfare programs

**Routine infant care**
- Monitor growth and development
- Infant feeding counseling and nutritional support
- Immunizations

**Mother-infant pair**

Photo credit: EGPAF
Case Study: Integrating Maternal and Infant Testing in Immunization Clinics in Kenya

- **Piloted in 556 facilities** in Western Kenya in 2016
  - 98% of 96,037 mothers had their HIV status ascertained at the 6-week OPV-1 visit
  - 12% (11,214) of all infants presenting for immunization services were HIV-exposed
    - Approximately 9% were newly identified
- **This strategy is being adopted as the national standard of care in Kenya**

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- David Sullivan, MD
- Helen Dale, BVSc, MBChB

Tools to support comprehensive HIV-exposed infant care, infant testing and DBS collection are available at:
http://childrenandaids.org/HEI_Toolkit

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.
For Family-centred differentiated service delivery for HIV

ANNA GRIMSRUD
International AIDS Society
The case for family centered differentiated service delivery

Anna Grimsrud
International AIDS Society
The Case for Family-Centered Differentiated Service Delivery for HIV

Anna Grimsrud, MPH, PhD,* Helen Bygrave, MBBS, MA,† and Lynne Wilkinson, LLB, MSc‡

Abstract: Differentiated care, or differentiated service delivery (DSD), is increasingly being promoted as one of the possible ways to address and improve access, quality, and efficiency of HIV prevention, care, and treatment. Family-centered care has long been promoted within the provision of HIV services, but the full benefits have not necessarily been realized. In this article, we bring together these two approaches and make the case for how family-centered DSD can offer benefits to both people affected by HIV and the health system. Family-centered DSD approaches are presented for HIV testing and antiretroviral therapy (ART) delivery, referencing policies, best practice examples, and evidence from the field. With differentiated family-centered ART delivery, the potential efficiencies gained by extending ART refills can both benefit clients by reducing the frequency and intensity of contact with the health service and lead to health system gains by not requiring multiple providers to care for one family. A family-centered DSD approach to differentiated service delivery (DSD), or differentiated care, puts the client at the center of care, focusing on meeting the needs and expectations of people living with and at increased vulnerability of acquiring HIV. Although DSD has only been recently articulated, a family-centered approach to HIV is not new; however, its application has been limited. The introduction of DSD into national programs provides an opportunity to redress how family-centered HIV care may be implemented and scaled up within national programs. Furthermore, a paradigm shift from recognizing that people are in families to leveraging the fact that people can receive services through families is necessary to scale up family-centered DSD.

Although DSD has been well defined and is increasingly recognized by different stakeholders, it is also critical to define “family” in the current social and epidemic contexts. Many “family-centered” interventions are limited to assessing the outcomes for mothers and children. Husbands and fathers...
Definition of “family”
Family-centered differentiated HIV testing

- Partner notification and index client testing
- Integration of HIV testing into maternal and child health (MCH) clinics and expanded program on immunization (EPI) services
- HIV self-testing
Barriers to differentiated ART delivery for children and adolescents
Barriers to differentiated ART delivery for children and adolescents

Policies restricting children and adolescents from longer ART refills and/or less frequent clinical consultations

**Stable**
- On current ART regimen for ≤12 months
- With no active OI’s (including TB) in the past 6/12
- Adherence to scheduled clinic visits for the past 6 months
- Most recent VL ≤1000 copies/ml
- Has completed 6 months of IPT.
- BMI ≤ 18.5
- Age ≤ 20 years.
Advocating for increased access to DSD for children and adolescents
3-6 monthly ART refills and clinical consultations for clinically stable children over two years of age

- The coloured horizontal bands delineate ART weight dosing bands.
- The pink and blue curves are the 50th percentile weight-for-age growth curves for girls and boys, respectively.
- Each time a growth curve crosses a weight band (as indicated by *), a change in ART dose would be anticipated.

In theory, only five changes in ART dose are expected before age 10 years:
- ~ three months
- ~ one year
- ~ three years
- ~ five years
- ~ seven years
Zvandiri—Bringing a Differentiated Service Delivery Program to Scale for Children, Adolescents, and Young People in Zimbabwe

Nicola Wills, BN (Hons), MPhil,* Tanyaradzwa Napei, BSc, BSS, MSc,* Alice Armstrong, BScN, MSc,† Helen Jackson, BA (Hons), Dip Hum Biol, MSc,‡ Tsetsi Apollo, MB ChB, MPH, MBA,§ Angela Mushavi, MB ChB, MMed (Pediatrics),§ Gertrude Neube, MHL,§ and Frances M. Cowan, MBBS, MRCP, MSc, MD, FRCP, FRCPE,‖

Health care worker-managed group

Family refill groups

Multimonth Prescription of Antiretroviral Therapy Among Children and Adolescents: Experiences From the Baylor International Pediatric AIDS Initiative in 6 African Countries

Maria H. Kim, MD, Msc,‖ Richard S. Wanless,* Alison Chantal Caviness, MD, PhD,* Rachel Golin, MD,‡ Anouk Amzel, MD,‡ Saeed Ahmed, MD, MSc,* Joseph Mhango, BSc, MSc,† David Damba,§ Angelina Kayaba, BS,|| Moses Chidota,§ Sandile Dlamini, BA,|| Nolwando Chidah, BEd, MBA,** Mokhlisi Mokhali, BSc,†† Nancy R. Calies, RN, MSN, PNP, ACRN, MPH,* and Elaine J. Abrams, MD,‡‡

Facility-based individual

Out-of-facility individual

Client-managed group

- Mobile outreach
- Fixed community ART refill distribution
- Home ART delivery
“It’s not about everybody getting the same thing, it’s about everybody getting what they need in order to improve the quality of their situation.” C. Parker
Online knowledge repository

www.differentiatedservicedelivery.org

- Global and country guidance
- ART delivery model examples & tools
- Published evidence & resources
Pediatric HIV treatment gaps in seven East and Southern African countries: Examination of modeled data, survey data, and routine program data

SUZUE SAITO
Lead Strategic Information Advisor, PHIA Project
ICAP at Columbia University
**Background**

- Remarkable success in the prevention and treatment of pediatric HIV infection
  - New infections reduced from 420,000 (260,000-620,000) in 2000 to 180,000 (110,000-260,000) in 2017
  - Deaths reduced from 270,000 (150,000-400,000) in 2000 to 110,000 (62,000-160,000) in 2017

- ACT initiative increased diagnosis and treatment coverage

- Large differences remain between the estimated number of children living with HIV (CLHIV) and those identified through national HIV programs

- Evaluate model-based estimates of CLHIV and reported numbers of CLHIV currently on HIV treatment with direct measurements using population-based surveys
Objectives

• Compare burden of pediatric HIV (Pediatric HIV prevalence and Number of CLHIV)
  o Model-based estimates vs. Population-based estimates
• Compare pediatric treatment coverage gap
  o PEPFAR program data vs. National program data vs. Population-based estimates
• Three types of data
  o Model-based estimates: UNAIDS Spectrum models
  o Population-based estimates: PHIA Surveys
  o PEPFAR and national program data: Data collected form HIV clinics
• Data from Lesotho, Malawi, Swaziland, Zambia, Zimbabwe, Tanzania and Uganda were used
Analysis

- Pediatric HIV prevalence and total number of CLHIV
  - 2016 UNAIDS Spectrum estimates vs. 2015-2017 PHIA surveys

- Pediatric treatment coverage gap
  - National program data (Spectrum) vs. PHIA surveys vs. PEPFAR
  - National program data: 100%- estimated treatment coverage
  - PEPFAR: 100%- estimated treatment coverage (used PHIA CLHIV as denominator)
  - PHIA: Proportion of PLHIV who were not on treatment

- Non-statistical comparison; describe programmatically important differences

- SAS 9.4 (SAS Institute, Cary, NC)
Pediatric HIV Prevalence (0-14y): Spectrum vs. PHIA

![Graph showing pediatric HIV prevalence](image-url)
Number of CLHIV (0-14y): Spectrum vs. PHIA

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<td>Zimbabwe</td>
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Number of CLHIV on ART (0-14y): PHIA vs. PEPFAR vs. Spectrum

- **Lesotho**
- **Malawi**
- **Swaziland**
- **Tanzania**
- **Uganda**
- **Zambia**
- **Zimbabwe**

**PHIA**

**PEPFAR**

**Spectrum**
Overall Treatment Coverage Gap: PHIA vs. PEPFAR vs. Spectrum

![Bar chart comparing treatment coverage gap across PHIA, PEPFAR, and Spectrum, with values 49, 48, and 38 respectively.]
Treatment Coverage Gap by Country: PHIA vs. PEPFAR vs. Spectrum
Discussion

• Notable treatment gaps among CLHIV remain in the 7 countries

• PHIA surveys largely confirmed the model-based estimates of CLHIV and program data of CLHIV on ART

• Importance to examine multiple sources and multiple indicators to obtain more accurate understanding of the response

• Spectrum treatment coverage gaps lower than PEPFAR & PHIA

• Known data quality issues in program data as well as low levels of precision continues to pose challenges for planners
Conclusion

• First examination of pediatric data pooling modeled, survey, and routine program data across multiple countries

• Too many children are still not being identified and treated in the many communities

• Maintain and escalate coverage of routine programs

• Accelerate efforts to prevent new infections
Acknowledgements

Co-authors

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Home institution
ICAP at Columbia University
Accelerating Children’s HIV/AIDS Treatment (ACT):
Post-program JAIDS Supplement

The two-year ACT Initiative, a public-private partnership in nine sub-Saharan African countries, achieved remarkable results:

- 16.4 million HIV tests conducted
- Nearly 470,000 children diagnosed with HIV
- More than 560,000 children treated for HIV

The eleven articles in this special-issue JAIDS Supplement highlight lessons and best practices that can be applied to improve pediatric HIV care globally

Access the supplement online at: https://journals.lww.com/jaids/toc/2018/08152