Improving Capacity to Trace and Test Children of Index Patients in Sedibeng District

Best Practices and Innovations in Paediatric HIV and TB Care and Treatment

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Background

- Globally new HIV infections have declined 47% since 2010, while coverage of ART in HIV-infected pregnant women rose from 47% to 76% over the same period\(^1\)
- Despite low perinatal HIV incidence (1.5% in SA, 2016), there are HIV-infected older children who remain untested and present only when symptomatic
  - As many as 2/3 of children continue to start ART with severe immunodeficiency\(^2\), and mortality rates among these children are high\(^3\)
- Not all HIV-exposed infants are identified by PMTCT programmes
  - Lack of integration between PMTCT and HIV/ART services in children result in late/missed diagnoses of HIV infection in children

1. UNAIDS, “Global AIDS Update, 2017”
Methods

• BroadReach supports **32 health facilities in Sedibeng District** in Gauteng Province with USAID support.

• BroadReach, in collaboration with SFH, conducted a training of 35 nurses and lay counsellors in tracing and testing **contact partners and children** of HIV-infected patients in March, 2017.

• We evaluated the number of children of index cases who were identified, the positivity of those children and the proportion of those initiated on ART from April - August 2017.
How does contact testing for children in health facilities work?

• Counsellors and nurses were trained to reach female patients at each visit (including new HIV diagnosis, pre-ART and ART consultations and lab visits) to ask them:
  ▶ How many partners have you had in the past 12 months? Do they know their HIV status?
  ▶ How many children do you have? Do you know their HIV status? How old are they?

• If they had partners and/or children who have not yet been recently tested, they counsel them on the importance of getting their partners and children tested for HIV

• Women have the option of testing their children immediately (if the children were there with them) or
  ▶ Ask them to bring children in for HTS together (with partners, if available) or
  ▶ Children >12 years old can test on their own (depending on maturity level)

• During their training, nurses and counsellors were provided with a script and role play sessions to improve their ability to discuss HTS with children and partners
Process Map for HIV Contact Testing: Children of HIV-positive Mothers

Woman tests HIV positive or on ART:
1. How many children do you have? Ages?
2. Have they been tested for HIV?

Identify any children that require HIV testing:
3. What ages are the children?

If child over 12 years
Assess the child's level of maturity and knowledge of HIV

Decide if child is mature enough to consent to HIV testing

- Child is mature and ready for testing: obtain written consent from child
- Child is not mature, obtain consent from parent/caretaker

If HIV positive
Ask the child whether they want the parent/caretaker present for the counselling and testing

Counsel child and/or parent/caretaker and test the child for HIV

If HIV negative
Provide re-testing at 6-weeks if recent sexual exposure, especially in the older child

Give age appropriate counselling for child and parents,
Refer male children for VMMC

If HIV negative
Obtain consent from the parent/caretaker, give an explanation to child that is age appropriate

Children over 12 years can legally give their own consent

All children of HIV-infected women should be tested and have a known HIV status
Results
Results

• Nurses and counsellors in 10 BroadReach supported facilities tested 203 children of HIV-infected women
• 65 children were HIV-infected
• Positivity of children=32% (95% CI=26-39%)
  ▶ 50% of children were 10-14 years old
  ▶ 27% were 12-59 months old
  ▶ 11.5% were 5-9 years old
  ▶ 11.5% were <12 months old
• In total, 13 families tested together with their children (13%)
• Over 95% of children diagnosed initiated ART within 2 weeks (n=62)
Scalability

• Considering the success following our training and pilot, we expanded this training and mentorship to other District teams in high impact facilities in:
  ▶ Alfred Nzo (Eastern Cape)
  ▶ Gert Sibande (Mpumalanga)
  ▶ Harry Gwala, King Cetshwayo and Ugu (KwaZulu-Natal)

• BroadReach is working to integrate partner and children contact tracing and testing into HTS and ART programmes District-wide to reach children and partners of HIV-infected patients (newly diagnosed and those already on ART)

• To ensure scalability, we will work with Department of Health to develop guidelines and standards for tracing and testing of children and partners of HIV-infected patients and integrate contact testing training into existing trainings where possible
Costing implications

<table>
<thead>
<tr>
<th>Training</th>
<th>Item</th>
<th>Cost</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary costs for 2 day training of nurses and lay counsellors</td>
<td>Salary costs for 2 day training of nurses and lay counsellors</td>
<td>R 40 286</td>
<td>For 35 people for 2 day training (included supervisors and DOH staff)</td>
</tr>
<tr>
<td>Venue and material costs</td>
<td>Venue and material costs</td>
<td>R21 840</td>
<td>2 day training in Sedibeng</td>
</tr>
<tr>
<td>Total Training Costs</td>
<td>Total Training Costs</td>
<td>R62 126</td>
<td></td>
</tr>
<tr>
<td>Cost per partner and child tested</td>
<td>Cost per partner and child tested</td>
<td>R 199</td>
<td>313 people tested HIV+ (including 248 partners)</td>
</tr>
<tr>
<td>Cost per HIV+ child identified</td>
<td>Cost per HIV+ child identified</td>
<td>R 956</td>
<td>65 case identified in 5 months</td>
</tr>
<tr>
<td>Cost per HIV+ child initiated on ART</td>
<td>Cost per HIV+ child initiated on ART</td>
<td>R 1002</td>
<td>62 children initiated ART within 2 weeks (95.4%)</td>
</tr>
</tbody>
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- The total cost for the provider training and service delivery was R271,428 labour costs + R62,126 (training costs) = **R333,554**
  - R1066 per **partner or child** diagnosed (n=313)
  - R1013 per **child initiated on ART** (n=62)
Lessons learnt

• Patients often bring their partners and children with them for clinical consultations or drug pick up, but are not invited to get tested.

• Providers often forget to ask about testing older children (>2-years).

• Following counselling, most HIV-infected mothers brought their children to the clinic; we did not conduct child contact tracing through the phone or home visits.

• Acceptability of testing older children was high among HIV-infected mothers and parents.

• BroadReach will work with the Department of Health to provide training and mentorship throughout the District to ensure that all nurses and counsellors provide counselling to test all children of HIV-infected mothers.
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Presenter: Dvora Joseph Davey, BroadReach South Africa

Take home points:

1. Older kids are falling through the cracks: we identified that there are older HIV-infected who remain untested and present only when symptomatic.

2. HIV-infected mothers are willing to bring their children in for HTS if counseled on the importance of HIV testing of all children.

3. Positivity of children tested after testing or initiating their mother on ART (e.g. contact testing) was very high in Sedibeng:
   - 32% of those tested (n=65 of 203 children tested) and ART initiation was high in children (>95%)

4. There is an urgent need to provide training and guidance to health providers to provide contact partner and children tracing and testing to identify children (and sex partners) who are at high-risk of being HIV infected but may not know their HIV status
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