# Pediatric First 2 90s:

## Assessment of HIV testing and linkage to care among infants and children in Zimbabwe

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### BACKGROUND

- Zimbabwe has a generalised HIV epidemic, with an adult prevalence of 16.7% (UNAIDS, 2014).
- 68 000 86 000 children aged 0-14 are estimated to be living with HIV in Zimbabwe, 5.5% of the estimated 1 400 000 people living with HIV (PLHIV) nationwide.
- Elimination of pediatric HIV and reaching 90-90-90 goals in Zimbabwe will require strengthening access to HIV testing and services (HTS) for children at all health care entry points and ensuring effective linkages to treatment and care for those testing HIV positive.

## **RESULTS** continued

#### HIV test results received

- Overall 78.8% (n=309) of all children tested for HIV had documented receipt of HIV test results.
- There was a decreasing trend of documented receipt of results as age increases, with children aged 10-14 having the lowest documented results receipt (67%).

Figure 3. HIV test yields Children Aged 0-14 years (N=396)

HIV test yields and linkage to care disaggregated by age, sex and entry point are not routinely reported in Zimbabwe's HIV Care and Treatment Program.

## OBJECTIVE

To establish current HIV test yields among children aged 0-14 years and documented linkage of those testing HIV positive to treatment and care from different health care entry points.

## **METHODS**

- We selected 11 prioritised health facilities in Makoni and Mutare Districts of Manicaland Province using a simplified probability proportional to size technique based on number of PLHIV accessing antiretroviral therapy (ART) over the previous year.
- In October 2015, we conducted a retrospective cohort analysis, tracing all individuals accessing HIV testing services from Jan-Mar 2015 through multiple facility-based registers.
- Available data for each patient entry aged 0-14 years was recorded including age, gender, entry point for HIV testing, receipt of HIV test result, whether HIV test was first or repeat test and HIV test method employed.





#### **HIV Positive Children**

- The majority of HIV positive children (77.3%; n=17) tested positive after receiving HIV testing for the first time.
- Among age groups with the highest HIV prevalence, the primary entry point for testing was Diagnosis (i.e., children being tested following presentation to care with other illnesses).

#### Linkage to HIV Care and Treatment

Among those testing HIV positive, linkage to care and treatment up to September 2015 was determined by patient identification in pre-ART and ART registers. De-identified data were entered into MSExcel and analyzed descriptively using StataV12.

## RESULTS

#### HIV test rates among children

Children aged 0-14 comprised 10.3% (392/3,816) of all HIV tests conducted at selected health facilities from Jan-March 2015. (Figure 2)

Figure 2. HIV testing, results received and positivity based on individual-level HTC cohort data (N= 3 816)

Number of clients tested for HIV (new+ retest)

Number of clients who received their results

Number of clients who tested HIV positive 1400



- Among all infants and children testing positive (n=24), 79.1% (n=19) appeared in pre-ART registers, and 50% (n=12) in ART registers.
- Older children aged 5-9 and 10-14 had poorest linkage to ART
- The majority of children failing to appear in ART registers tested HIV positive in diagnostic entry points and had no vital status or transfers documented.

## CONCLUSIONS

- We observed increasing HIV test yields and decreasing linkage to HIV care and treatment services among older children.
- The majority of children testing HIV positive were being tested for the first time in diagnostic entry points, indicating the potential value of routine HIV testing of all children presenting for inpatient and outpatient services in high prevalence settings such as Zimbabwe.
- Greater effort is required to ensure standard documentation procedures for entry codes, transfers and vital status outcomes among all children receiving HIV testing, care and treatment services.
- Achieving 90-90-90 in Zimbabwe will require differentiated models of care to effectively identify all children living with HIV, ensure their linkage to care and treatment, and long term retention and adherence.



#### HIV test yields among children

- A general increasing trend of HIV positive test results was observed in children with increasing age. (Figure 3)
- Infants less than 2 months tested in Early Infant Diagnosis (EID) had the lowest HIV test yield (1.9%) and children aged 5-9 years testing in diagnostic settings had highest test yield (10.6%).
- The overall positivity rate among children from 1 to <14 years was 7.3% (22/301).</p>
- 28% (7/25) of girls aged 10-14 tested were documented as being HIV tested while receiving antenatal, postnatal or family planning services.

#### Families and Communities for the Elimination of HIV – FACE HIV Program Improving access to HIV care and treatment in Zimbabwe



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