They are likely to be there: Family testing approach to facilitate achievement of 90:90:90 strategy among children in Kenya

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HIV burden in Kenya

1.6 million
Kenyans were living with HIV in 2013

191,840
Children (0-14 years) were living with HIV in 2013

National HIV Prevalence is 6%

5.6% | 7.6%

New HIV infections

101, 560 Kenyans were infected with HIV in 2013

12,940 children were infected in 2013

50,530 women were infected in 2013

38, 090 men were infected in 2013

Background

- In Kenya, fewer than half of all children 18 months to 14 years old with a HIV-positive parent have ever been tested for HIV
- Strategies to identify and test children at risk for HIV are especially critical in the Nyanza region, where the HIV prevalence is nearly three times the national average at 15.1%
- This study examined the impact of a family-centered approach to reach children (0-14 years) with HIV testing

Prior Family Approach Evaluation Findings

Family Model of HIV Care and Treatment: A Retrospective Study in Kenya

Data collected September 2007-2009

1 site

- 284 index led to 1.7 children at risk identified
- 484 children Identified
- 276 (57%) tested
- 50 (18%) HIV positive
- 43 (86%) enrolled

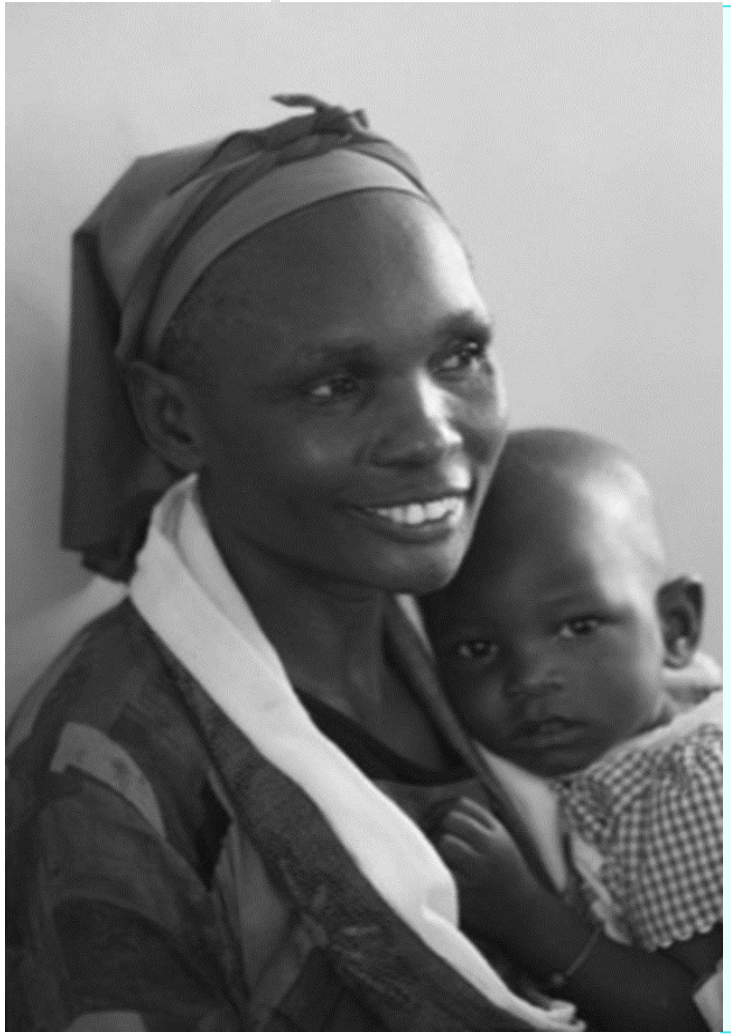
Evaluation and Utility of a Family Information Table to Identify and Test Children at Risk for HIV in Kenya

Data Collected June – August 2012

5 sites

- 384 index Led to 2.43 children at risk identified
- 933 children identified
- 739 (79%) tested
- 65 (7.4% HIV positive; 17 (2.3%) HEI
- 60 (95%) of 63 index with HIV positive and HEI reported enrolled/HEI monitored

Family Model of Care



Family Model of Care Approach

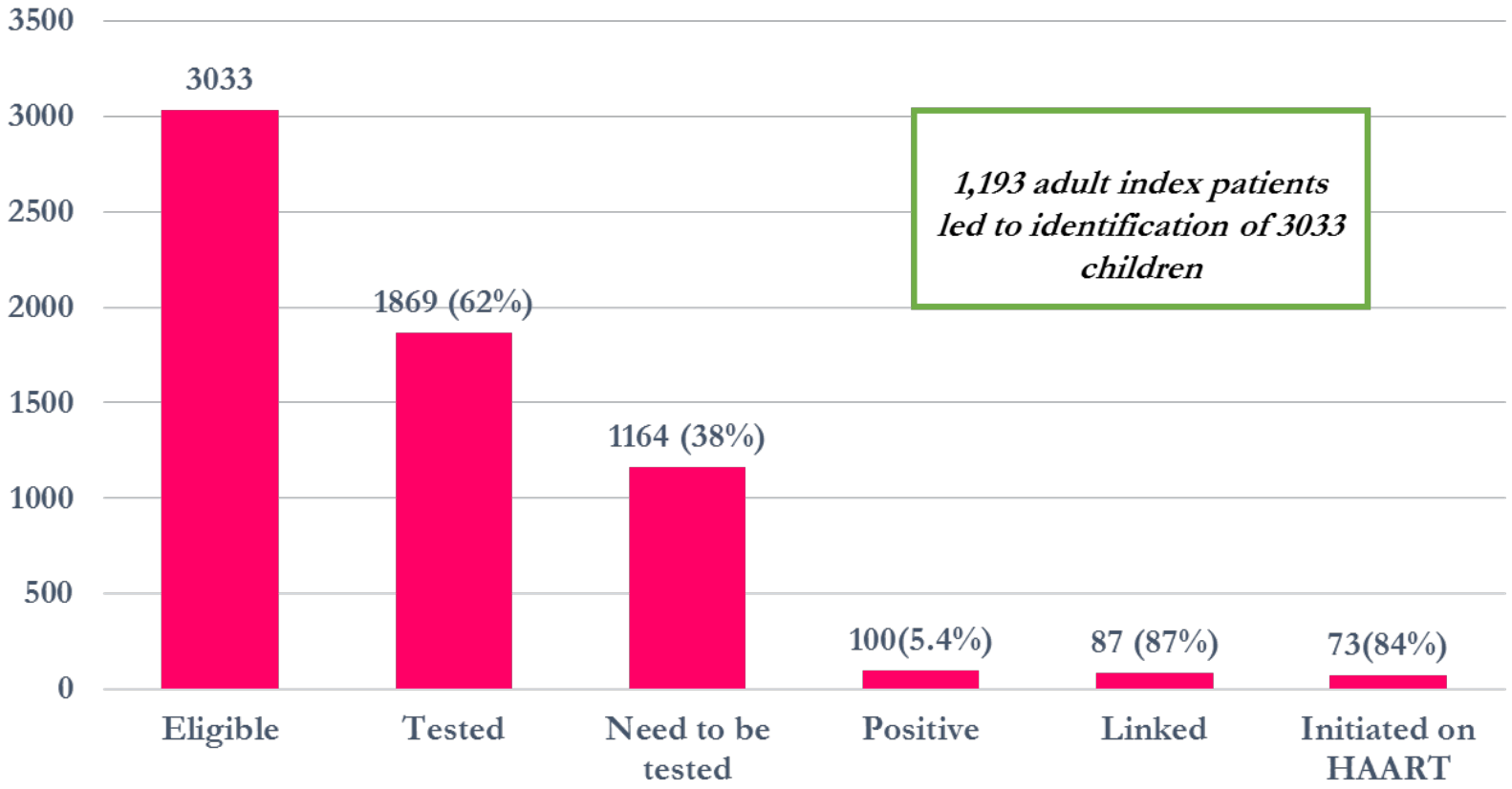
Enroll index patient → Assisted disclosure → Test all family members → Enroll all HIV+ family members

- Family-centered counseling and education
- Family-centered clinic appointments and follow up
- HIV prevention services
- Comprehensive HIV Care and Treatment
- Counseling and support groups (eg. FP, psychosocial)
- Caregiver, Adolescent, and Children's Clubs
- Continuous family testing review and follow up

Methods

- Retrospective review of clinical records
- Convenience sample of 60 high-volume clinics across three Nyanza counties: Kisumu, Homabay, and Migori
- Adult index patients who enrolled in HIV care May–July 2015 were followed until October 2015
- Family member testing status, results, and enrolment and ART initiation for those positive were abstracted and summarized and p-trends and chi-square were conducted
- **Comparison of positivity proportion among children to:**
    1. 1. Prior studies that used the family approach in the same region,
    2. 2. Outpatient and inpatient testing data performed in the same region from July–September 2015, respectively

Family Approach to Identify, Test, and Enroll Children (0-14) May – Oct 2015 (60 sites)



Geographical Positivity Variation

County	Child HIV positivity	HIV positivity range
Kisumu 10 sites	22/416 (5.3%)	0 – 15%
Homa Bay 20 sites	27/593 (4.5%)	0 – 100%* * 1 small site with 1 positive/1 tested explains 100%
Migori 30 sites	51/860 (5.9%)	0 – 36%

Comparison: 3 Approaches

Testing Approach for Children (0-14)	Time Period	Number of Sites	HIV Positivity Yield
Family Approach	May – Oct 2015	60	**100/1869 (5.4%)**
Outpatient	Jul – Sep 2015	148	**309/46,002 (<1%)**
Inpatient	Jul – Sep 2015	148	**24/1,636 (1.5%)**

Positivity among children reached through the family approach were higher than inpatient (1.5%) or outpatient (<1%) testing rates (p<0.001)

Conclusion

- The family approach leads to high identification, linkage, and ART initiation for HIV-positive children
- Although HIV positivity among children were lower than observed in previous family approach studies and appear to be declining, it continues to have a higher yield in comparison to program-wide inpatient and outpatient testing
- The family approach offers an important entry point for identification of children and adolescents at risk of HIV and the opportunity for targeted follow-up through the HIV care cascade

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