IAS#: A-854-0221-03721

IAS2017
9TH IAS CONFERENCE ON HIV SCIENCE
PARIS, FRANCE | 23-26 JULY 2017

Evaluation of the Impact of the Accelerating Children's HIV/AIDS Treatment (ACT) Initiative on Pediatric and Adolescent HIV Testing and Yield in Western Kenya

26 July 2017

N. Okoko[1], A.R. Mocello[2], J. Kadima[1], J. Kulzer[2], G. Nyanaro[1], C. Blat[2], M. Guzé[2], E. Bukusi[1], C.R. Cohen[2], L. Abuogi[3], S.B. Shade[4]

1. Kenya Medical Research Institute (KEMRI), Nairobi, Kenya
2. Department of Obstetrics, Gynecology and Reproductive Sciences, University of California, San Francisco (UCSF), CA, USA
3. Department of Pediatrics, University of Colorado, Aurora, CO, USA
4. Department of Epidemiology and Biostatistics, UCSF, CA, USA

Conflict of Interest

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

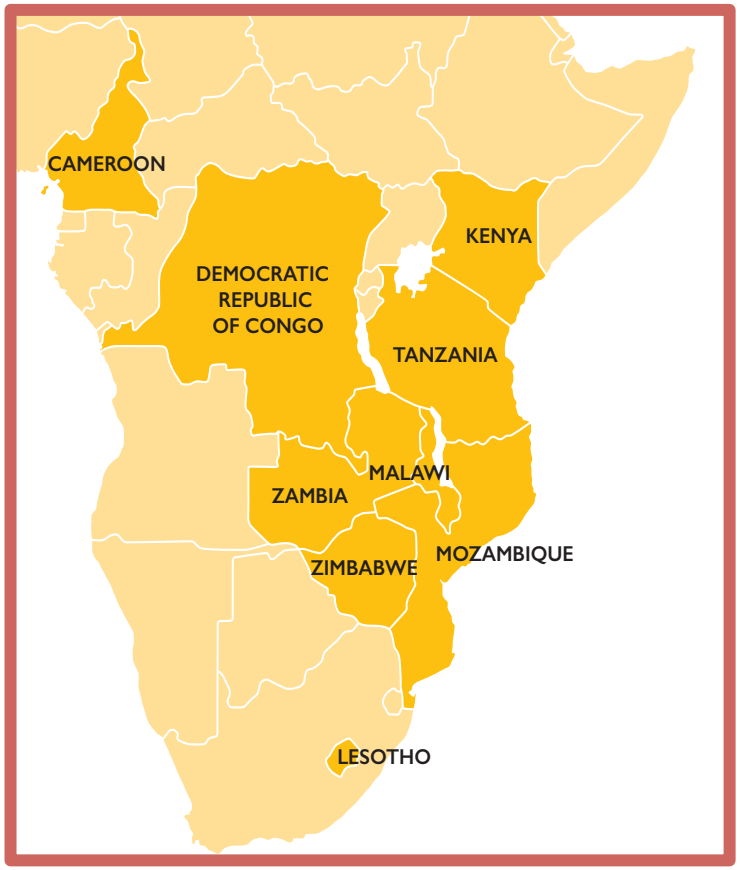
What was ACT?

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



faces
Family AIDS Care and Education Services

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

faces
Family AIDS Care and Education Services

Health Facilities

Characteristics

85% rural

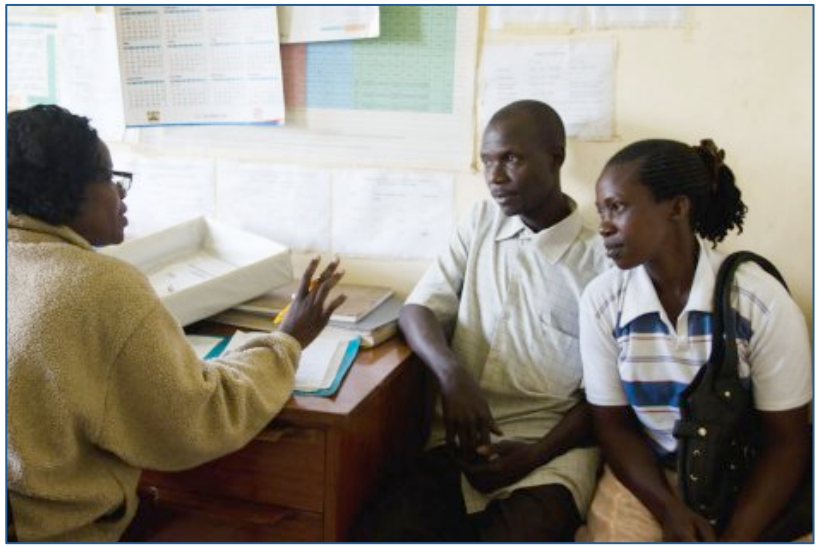
Peri-urban 8%

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

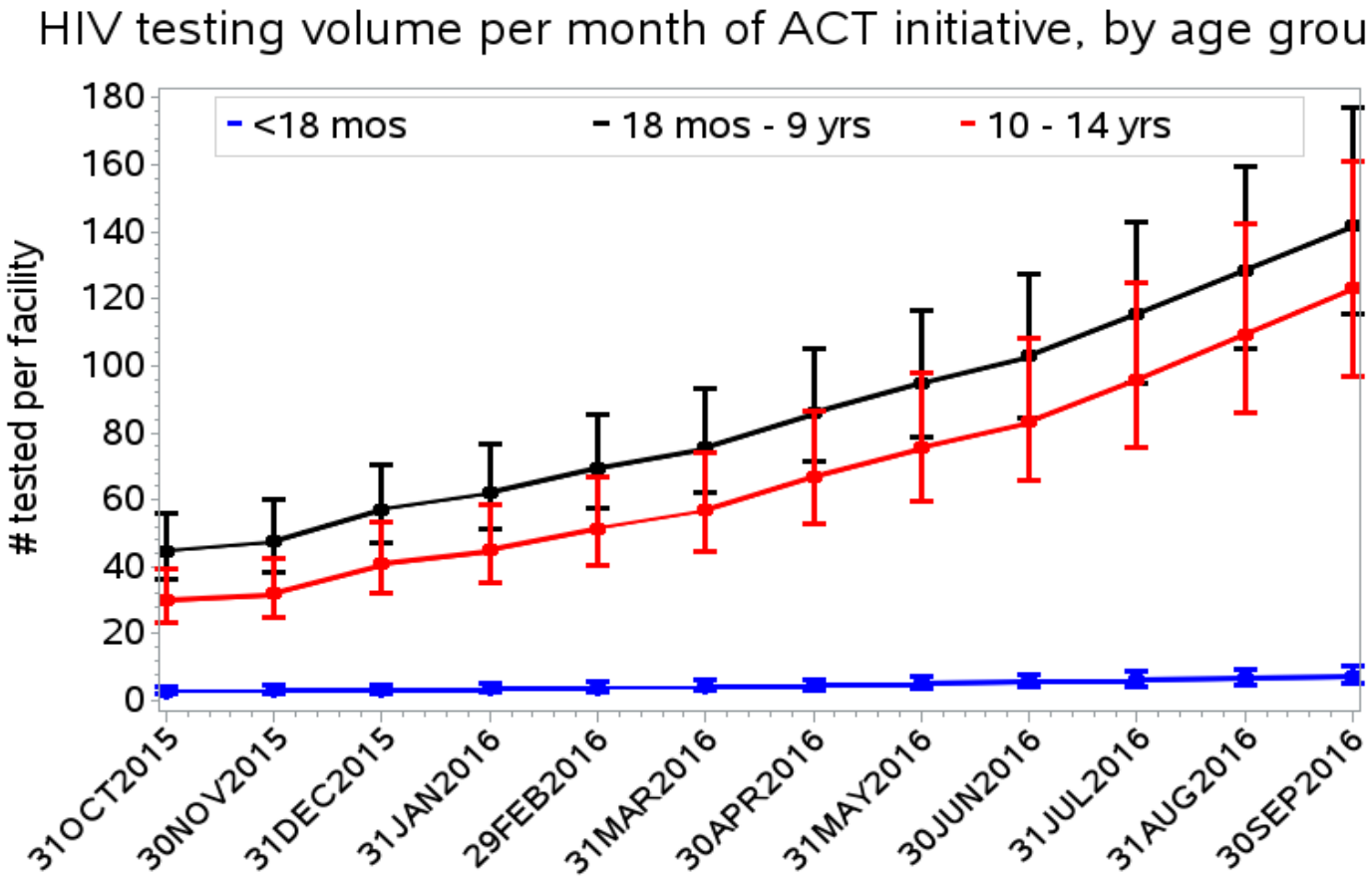
Data Collection

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

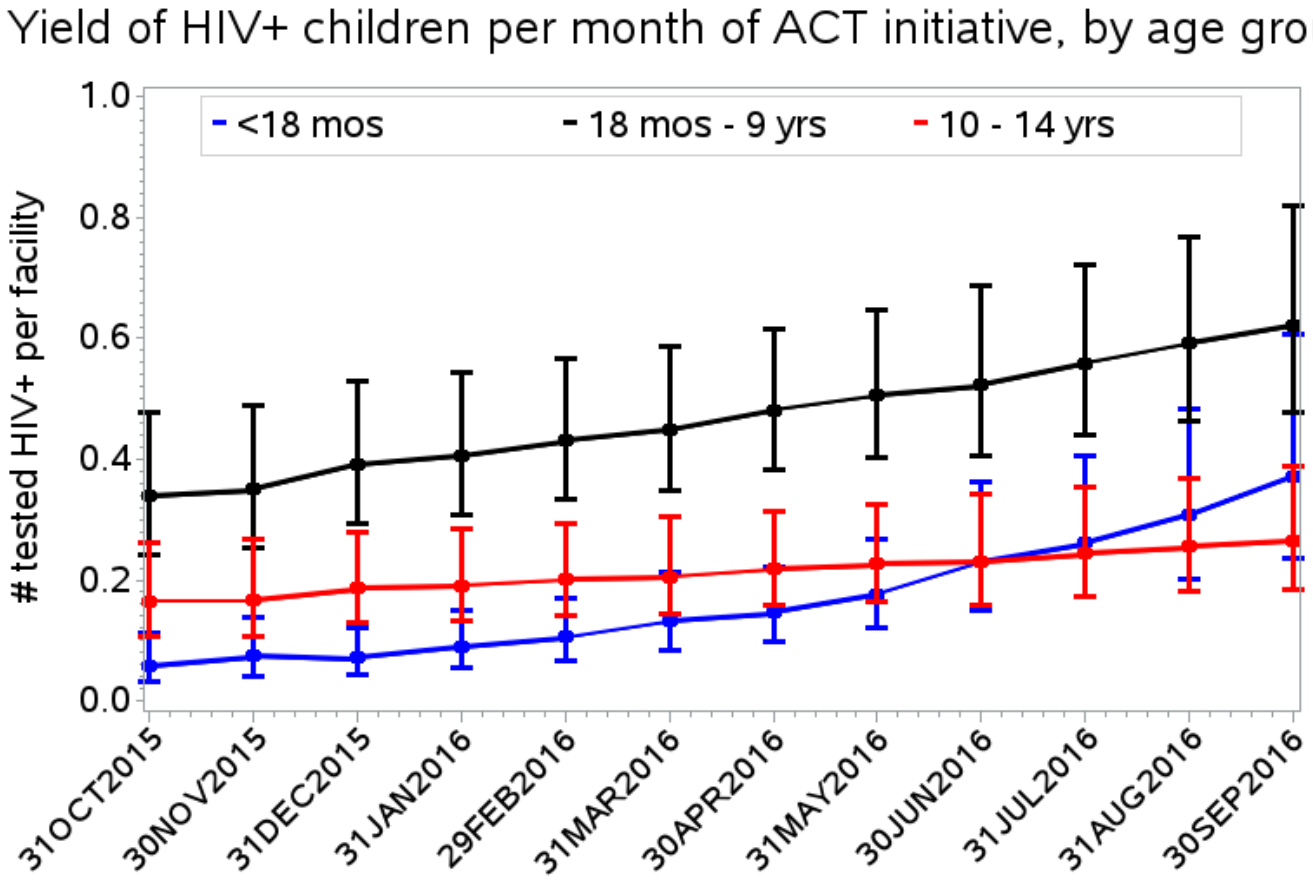
Analysis

- 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



Results: Identification of HIV Positives



Results

Age Group	October 2015	September 2016	p-value
Mean number tested per facility per month			
< 18 months	**2.8**	**7.2**	<.0001
18 months to 9 years	**44.8**	**142.0**	<.0001
10-14 years	**30.1**	**123.3**	<.0001
Mean number identified HIV positive per facility per month			
< 18 months	**0.06**	**0.37**	**<.0001**
18 months to 9 years	0.34	0.62	**0.002**
10-14 years	0.17	0.26	**0.03**

faces
Family AIDS Care and Education Services

Successful Interventions on HIV Testing*

Age Group	Intervention	IRR, 95%CI	p-value
Infants <18 months	Family Information Table	2.89 (1.53, 5.49)	<0.001
Children 18 months to 10 years	FIT chart audits	2.15 (1.36, 3.40)	<0.001
Adolescents 10 to 14 years	HTC space improvements	1.45 (1.09, 1.93)	<0.01

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

Successful Intervention to Increase Identification of HIV Positives

Age Group	Intervention	IRR, 95%CI	p-value
Infants <18 months	Family Information Table	8.71 (1.45, 52.4)	0.02

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

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

- Ministry of Health (MOH)
- Family AIDS Care and Education Services (FACES)
- Kenya Medical Research Institute (KEMRI)
- University of California, San Francisco (UCSF)
- Children's Investment Fund Foundation (CIFF)
- FACES staff, clients and families

Learn more at: www.faces-kenya.org