

Evaluating The Implementation And Impact Of The Adolescent Package Of Care At Health Facilities In Former Nyanza Province, Kenya

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Background

- Youth represent 40% of new HIV infections worldwide.
- Adolescent tailored services are desirable to reach this population. In 2015 Kenya's National AIDS and STD Control Program (NAS COP) introduced an adolescent package of care (APOC) guidelines, including a checklist to act as a guide to providers.
- This evaluation assessed the impact of APOC on: visit adherence, family planning (FP) uptake, and viral load (VL) suppression



Photos: FACES older adolescents

Methods

- Health care providers were trained on APOC from November 2015-December 2016
- Random sample of adolescent (9-19 years) encounters (30-40/site/quarter) obtained from electronic medical records following APOC training to audit charts
- Chart audits were conducted to assess:
 - Availability of adolescent checklist in files
 - Use of the checklist for the selected patient visit
 - Completion of all selected 15 checklist assessments like support groups, Tanner's staging, reproductive health, drug abuse
- Utilization score (0-10 scale) was generated from checklist chart audit
- Included 16 FACES supported sites in Kisumu, Migori and Homabay counties
- Checklist utilization trends over time were tested using p-trend test. Data extracted from electronic medical records (EMR): demographics, appointments, family planning (FP) and viral load (VL)
- Generalized estimating equations for logistic regression used to assess effect of checklist utilization on outcomes: FP uptake, VL suppression, and appointment adherence

Results

- A total of 2,055 clinical encounters for 957 HIV-infected adolescents were analyzed for checklist implementation
- Assessed visit adherence and FP uptake in 19,301 encounters for 2,739 HIV-infected adolescents and 1,372 VL tests for 1,305 adolescents
- Median age was 13 years (IQR 11,17)
- Females comprised 60%
- VL suppression increased over time, as did APOC checklist utilization
- Increased APOC checklist utilization was not associated with change in visit adherence
- Checklist score was inversely associated with VL suppression over time.

Table 1. Implementation of Adolescent Checklist

Measure	Q1 (Nov-Dec 2015) n (%)	Q2 (Jan-Mar 2016) n (%)	Q3 (Apr-Jun 2016) n (%)	Q4 (Jul-Sep 2016) n (%)	Test for trend p-value
Checklist available in patient file ¹	168/178 (94.4%)	236/259 (91.1%)	216/248 (87.1%)	232/272 (85.3%)	<0.001
Checklist used in visit ²	154/345 (43.6%)	281/503 (55.9%)	282/497 (56.7%)	307/494 (62.2%)	<0.001
Checklist completion ³	105/154 (68.2%)	213/281 (75.8%)	229/282 (81.2%)	240/307 (78.2%)	0.017

Denominators:

¹Number of the files assessed for checklist availability

²Number of encounters sampled randomly whose files were available

³Total number of encounters assessed and documented in a checklist



Photos: FACES younger adolescents

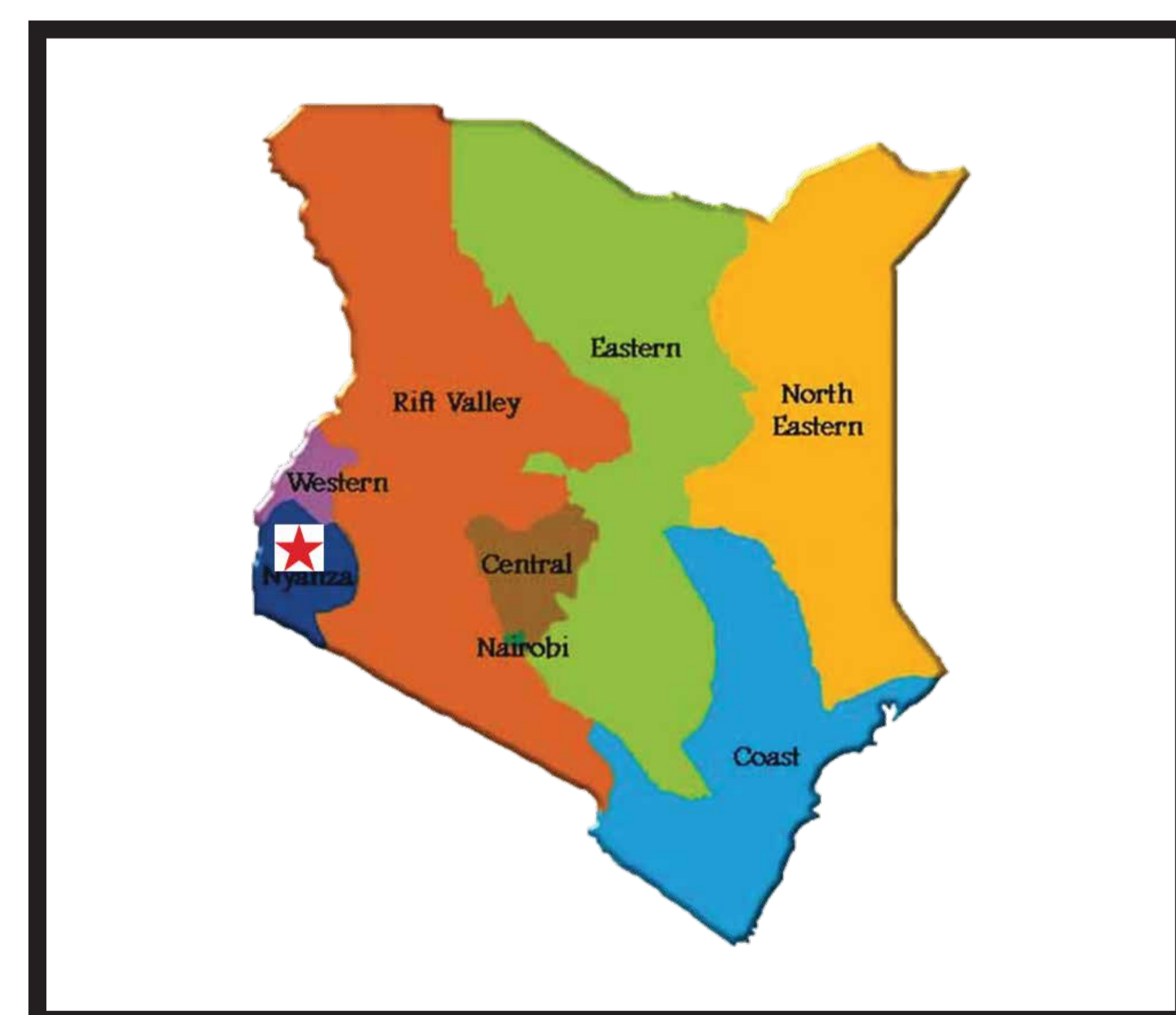
Conclusions

- Observed increased VL suppression and FP uptake during scale-up of the APOC
 - outcome were not associated with increased utilization of the APOC checklist
- Explanation of results include:
 - Factors not ascertained by APOC checklist determine clinical outcomes
 - Possibly the checklist doesn't represent what the providers/clinics actually do
 - Require better methods for tracking how adolescent services are provided, e.g. post-visit surveys
- Further investigation for additional APOC elements are needed to assess full implementation and impact of APOC on adolescent treatment outcomes

Table 2. Association of checklist utilization on patient clinical outcomes over time

Variable	**Viral load suppression	Visit Adherence	Family planning uptake
	aOR, 95% CI, p-value	aOR, 95% CI, p-value	aOR, 95% CI, p-value
Age (yrs)			
9-14	ref	ref	ref
15-19	1.05 (0.86, 1.28), 0.59	0.68 (0.58, 0.81), <0.01	17.48 (9.69, 31.58), <0.01
Gender			
Male	ref	ref	ref
Female	1.15 (0.96, 1.38), 0.12	1.03 (0.98, 1.09), 0.21	4.07 (2.94, 5.63), <0.01
Checklist usage (1-10 scale)	1.46 (1.21, 1.76), <0.01	0.84 (0.73, 0.96), 0.02	1.18 (1.01, 1.38), 0.03
Quarter (1 - 4)	1.54 (1.09, 2.20), 0.01	0.96 (0.79, 1.17), 0.71	1.50 (1.19, 1.89), <0.01
Checklist usage * Quarter	0.87 (0.80, 0.95), <0.01	1.05 (0.99, 1.10), 0.06	0.93 (0.89, 0.98), <0.01

**VL assessed quarter 1-3. *Interaction term



Photos: Map of Kenya showing Nyanza Region

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Other info

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