

Integrating HIV Clinical Services in Primary Health Centers in Rwanda

Effect on the quantity of non-HIV
services delivered

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The Debate

“[E]fforts to combat HIV/AIDS have so far managed to bring more money to the field but have not always had much beneficial impact on public health outside their own niche.”

*Garrett, Laurie. The Challenge of Global Health.
Foreign Affairs 2007*

“We conclude that improving AIDS prevention and treatment can help to reinvigorate flagging efforts to promote universal primary health care.”

*Walton D et al. Integrated HIV Prevention and Care
Strengthens Primary Health Care: Lessons from Rural Haiti.
J of Public Health Policy 2004*

Hypothesis and Approach

Hypothesis: Non-HIV primary health care services increase with the introduction of basic HIV care

Approach: Compared quantity of non-HIV primary health care services delivered **prior to** and **after** the introduction of basic HIV care using data from primary health centers' Monthly Activity Reports for the National Health Information System

Mukoma Health Center Patient Waiting Area



Before HIV renovation work
October 2006



Renovations still in progress:
February 2007

Definitions

Basic HIV care = counseling and testing, PMTCT, and preventive therapy with cotrimoxazole at a minimum

Non-HIV services delivery =

- (i) General services (in- and out-patient, lab tests)
- (ii) Reproductive health services (ANC, deliveries, family planning)
- (iii) Services for children (nutrition, immunization, growth monitoring)

Definitions

Prior to the introduction of basic HIV care =

Time 1: The six month period prior to the first client tested for HIV at the PHC

After the introduction of basic HIV care =

Time 2: Dec 2005-May 2006, all PHCs having at least 6 months experience offering the basic HIV package

The Sample

Inclusion criteria:

- FHI partner (for ease of data collection)
- Primary health center
- At least 6 months experience offering the full package of basic HIV care

Exclusion criteria:

- Hospital
- < 6 months experience offering basic HIV care
- Offers partial package of basic HIV care

The Sample

	Public	FBO	Combined
Number of sites	9	21	30
Average # months <i>mutuelle</i> (primary health insurance) in place	26.7	33.1	31.7
Average # months PBF (performance-based financing) in place	6.4	7.1	6.9
Average # months offering HIV basic care	11.3	18.5	16.3

Analyses

- 1** Calculated mean quantities of non-HIV services delivered/PHC/month for **Time 1** and **Time 2** periods
- 2** Compared these **Time 1** and **Time 2** means and tested for significant differences
- 3** Conducted regression analysis controlling for months' experience with: (a) mutuelle; (b) PBF; and (c) delivery of HIV basic care
- 4** Compared outcomes in public sector and FBO PHC

ANC visits/PHC/month

	Time 1	Time 2	p value	Independent effects
1 st tri visit	5	10	.001	HIV exp (p=.010)

ANC visits/PHC/month

	Time 1	Time 2	p value	Effects
1 st tri visit	5	10	.001	HIV exp (p=.010)
2 nd tri visit	36	52	<.001	HIV exp (p=.004)
7-8 mo visit	51	54	.514	--
9 mo visit	15	17	.699	--
All 4 visits	3.2	5.2	.013	None
Coverage rate (all 4 visits)	3.0%	4.7%	.016	HIV exp (p=.019)

ANC services/PHC/month

	“Prior to” Time 1	“After” Time 2	p value	Independent effects
New clients	74	84	<.001	None
Coverage rate (new clients)	68%	81%	<.001	PBF (p=.007)
Syphilis screening	1	79	<.001	HIV (p <.001)

Family Planning Uptake and Deliveries/PHC/month

	Time 1	Time 2	p value	Independent effects
New FP users	9	13	.012	HIV exp (p <.001)
Returning FP users	91	141	.002	HIV exp (p <.001)
Total FP uses	100	155	.001	HIV exp (p <.001)
Deliveries at PHC	17	23	<.001	Mutuelle (p=.049)

Nyabinoni Primary Health Center Maternity Ward



Before integration of HIV care



Nyabinoni renovations underway;
this photo of typical upgrades is
from Nyarusange Health Center

Vaccinations and Growth Monitoring in Children/PHC/month

	Time 1	Time 2	p value	Ind. effects
Vaccinations completed	72	79	.019	None
Vaccination coverage rate	79%	87%	.025	Mutuelle (p=.049)
<u>Growth monitoring</u>				
New	109	106	.869	--
Returning	653	929	.001	Mutuelle (p=.002)
Total	760	1,038	.001	Mutuelle (p=.012)

In- and out-patient care and non-HIV lab tests/PHC/month

	“Prior to” Time 1	“After” Time 2	p value	Independent effects
Total out-patient consultations	943	1,173	.003	None
Total hospitalizations	79	93	.066	--
Non-HIV lab tests performed	545	645	.039	None

Rutobwe Primary Health Center Lab



Before HIV renovation work

October 2006



After HIV renovation work

April 2007

Findings in sum....

1. Of 22 key non-HIV primary health services delivered, only one decrease observed (not significant)
2. Of 21 service delivery increases observed, 17 were significant ($p \leq .05$)
3. Of these 17 services, significant effects from:
 - HIV experience for 7 services
 - No effect for 5 services
 - Mutuelle experience for 4 services
 - PBF experience for 1 service

Other Suggestions and Lessons

- Beyond PHC-level care, examine HIV “spill over” hospital setting
- Beyond RH, examine impacts on care for STIs, TB, and malaria
- Beyond quantity, examine improvements in the quality of non-HIV patient care
- Beyond services, examine costs of introducing HIV services, distinguishing: (a) HIV-specific costs and (b) non HIV-specific costs
- Examine client and provider satisfaction
- Improvements come over time – consider extended evaluation time frame

