The role of the private sector in developing and introducing innovations

Mikkel Vestergaard Frandsen
Supportive Health Policy

Effective Technology

Scalable Service Delivery

Efficient Program Management

Global Economics of Policy & Development Financing

Technology innovation, Product design, and scalable manufacturing and logistics

Integrated Health Service Delivery Economics

Management and Monitoring Economics
In 2008, Vestergaard partnered with the Kenyan Ministry of Health and Ministry of Public Health to implement a campaign designed to help the Government meet their ambitious targets for HIV testing and to invest in the health of the community at large.
Increasing rates of VCT to at least 80%  

Addressing high rates of diarrheal illness, low child health indicators and HIV outcomes  

The Integrated Prevention Demonstration, a seven-day long campaign held in Kenya in September 2008, combined voluntary HCT with distribution of an evidence-based CarePack® containing multiple interventions for the prevention of malaria, diarrhea and HIV.
Developing the CarePack

**MALARIA**

**Target:** Universal coverage of LLINs.

**Status:** Campaign only targeted pregnant women and children <5.

**Gap:** No campaign targets adult population.

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**DIARRHOEA**

**Problem:** 1.8 million people, mostly children under 5, die each year from diarrhoeal diseases.

**Status:** Clean water has a big impact, however coverage remains low.

**Gap:** No long-lasting, clean drinking water intervention that could be scaled up in the developing world setting.

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**HIV /AIDS**

**Target:** Universal access to treatment, and thus testing.

**Status:** 83% or approximately 1.2 million HIV-infected Kenyans do not know they are infected and need CD4 monitoring to start ARVs.

**Gap:** Innovative ways to break stigma and get CD4 testing out of health settings.
Key Statistics

Target population 51,178 sexually-active 15-49 years
Total cost $1,958,000
Cost per person $41.66 ($32 at scale)
Total tested 47,007
Tested in age group 15 to 49 41,040 (>80%)
Testing for the first time 81%

Women
- 28,906
- Women diagnosed HIV+ 1,448 (5.0%)

Men
- 18,101
- Men diagnosed HIV+ 508 (2.8%)

Lowest HIV prevalence by age 15-19 years (0.8%)
Highest HIV prevalence by age 30-39 years (6.7%)
HIV+ put on cotrimoxazole 96%
Linking Research to Program Implementation

Rapid Implementation of an Integrated Large-Scale HIV Counseling and Testing, Malaria, and Diarrhea Prevention Campaign in Rural Kenya


A Qualitative Assessment of Participation in a Rapid Scale-Up, Diagonally-Integrated MDG-Related Disease Prevention Campaign in Rural Kenya

Timothy De Ver Dye†*, Rose Apondi†, Eric Lugada*

Predictors of Linkage to Care Following Community-Based HIV Counseling and Testing in Rural Kenya

Abigail M. Hatcher · Janet M. Turan · Hannah H. Leslie · Lucy W. Kanya · Zachary Kwema · Malory O. Johnson · Starley B. Shade · Elizabeth A. Bukusi · Alexandre Doyen · Craig R. Cohen

Community-based multi-disease prevention campaigns for controlling human immunodeficiency virus-associated tuberculosis

Results of 589 individuals included:

- After controlling for baseline CD4 count, individuals receiving the intervention were 27% less likely to reach the endpoint of a CD4 count <350 cells/mm³ (HR: 0.73; 95% CI: 0.57–0.95)
- CD4 decline was also significantly less in the intervention group (54 vs. 70 cells/mm³/year, p¼0.03)
- Incidence of malaria and diarrhea were significantly lower in the intervention group.

Provision of bednets and water filters to delay HIV-1 progression: cost-effectiveness analysis of a Kenyan multisite study. – Kern E. et.al

The cost per death averted was US$3,100 and the cost per disability-adjusted life year (DALY) averted was US$99
Assessing the Economics of this Model

Integrated HIV Testing, Malaria, and Diarrhea Prevention Campaign in Kenya: Modeled Health Impact and Cost-Effectiveness

James G. Kahn¹, Nicholas Muraguri², Brian Harris¹, Eric Lugada³, Thomas Clasen⁴, Mark Grabowsky⁵, Jonathan Mermin⁶, Shahnaz Shariff²

Results:

- Per 1000 participants, projected reductions in cases of diarrhea, malaria, and HIV infection avert an estimated:
  - 16.3 deaths,
  - 359 DALYs and
  - $85,113 in medical care costs

Earlier care for HIV-infected persons adds an estimated:
- 82 DALYs averted (to a total of 442), at a cost of $37,097 reducing total averted costs to $48,015

Accounting for the estimated campaign cost of $32,000, the campaign saves an estimated $16,015 per 1000 participants.

* James G. Khan, Nicholas Muraguri, Brian Harris, Erich Lugada, Thomas Clasen, Mark Grabowsky, Jonathan Mermin, Shahnaz Shariff
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If we are to achieve Fast-Track Cities

- 90% of people living with HIV (PLHIV) knowing their HIV status
- 90% of people who know their HIV-positive status on HIV treatment
- 90% of PLHIV on HIV treatment with suppressed viral loads
- Zero stigma and discrimination