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# Expanding HIV Services through the Private Sector in Kenya: A Costing Study

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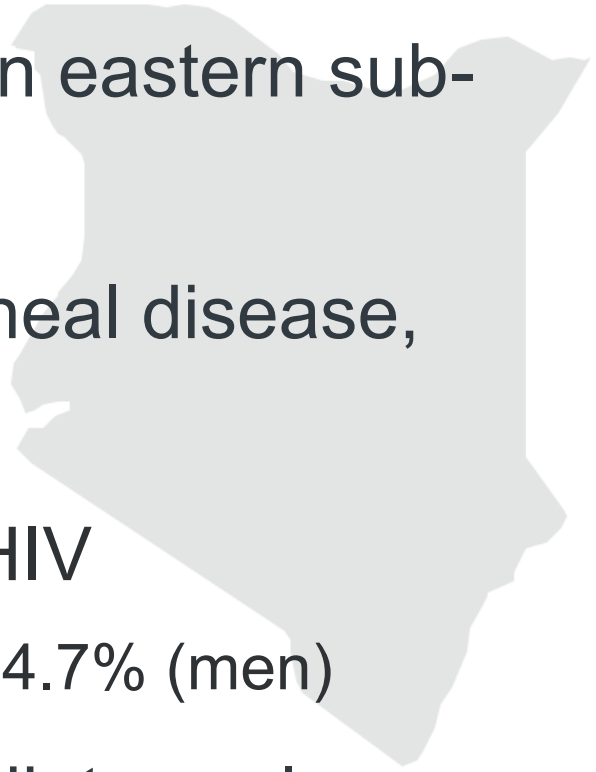
PEPFAR U.S. President's Emergency Plan for AIDS Relief

HP+ HEALTH POLICY PLUS

# Kenya Health Sector and HIV Context



- Lower-middle-income country in eastern sub-Saharan Africa
- Top disease burden: HIV, diarrheal disease, cardiovascular/heart disease
- ~1.5 million people living with HIV
  - Prevalence: 5.9–7.0% (women); 4.7% (men)
- 66% on ART, and needs immediate scale-up

# Financing for Health and HIV

- 2012/13 total health expenditure (THE) (US$2.7 billion)

| | 2009/10 | 2012/13 |
|---|---|---|
| % gov't funding as a source of THE | 4.6% | 6.1% |
| THE as % of GDP | 5.4% | 6.8% |
| % private sector as source of THE | 37% | 40%<br>**mostly out of pocket* |

- 2012/13 total HIV expenditure (US$511.9 million)
  - 19% of total health expenditure
  - 8.4% absolute Ksh increase, but decline from US$532.1 million in 2009/10

Source: 2012/13 Kenya National Health Accounts

# Current Challenges: The Need for Private Sector Engagement

## Public Sector Challenge

- Already congested, strained infrastructure and human resources
- Capital intensive infrastructure expansion not viable as near-term solution

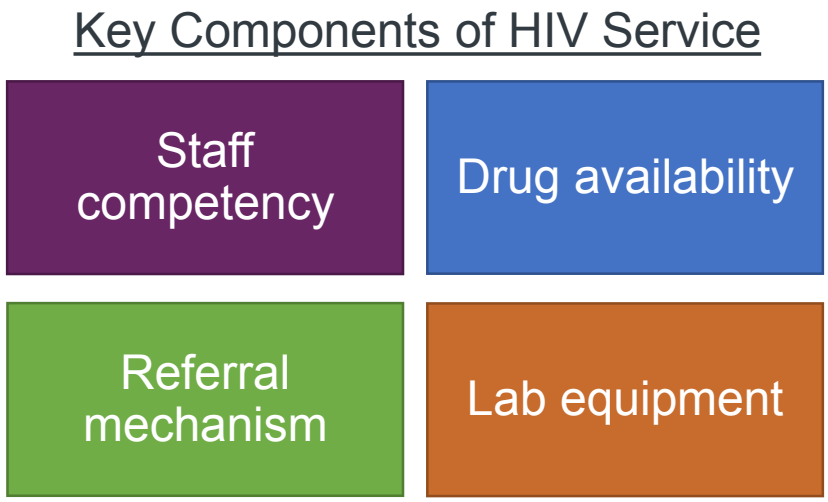
## Private Sector Solution

- Almost half of health facilities are private sector
- Sector continues to grow and already plays a significant role in healthcare provision

***Leveraging already established private sector infrastructure and human resources is a high potential strategy for rapid HIV service expansion.***

# Study Context and Objective

What would the public-private partnership to grow HIV services look like? (Contracting out? Referral mechanism?)




**Study Objective (costing component)**:

- To estimate the cost of providing HIV care and treatment services in the private for-profit sector
- To identify cost-related barriers to service provision and opportunities to enhance the sector's role in ART service provision

# Study Methodology

- Geographical target: 5 counties
- Provider target: private for-profit sector only
- Activity-based costing approach
  - Provider perspective
  - Direct service cost only; no overhead
- Data period: January–December 2015

# Facilities/Institutions Sampled

- 125 hospitals and clinics
  - Tier 2: 100 clinics
  - Tier 3: 16 hospitals
  - Tier 4: 9 referral hospitals
- 15 independent pharmacies including chemists
- 4 independent laboratories

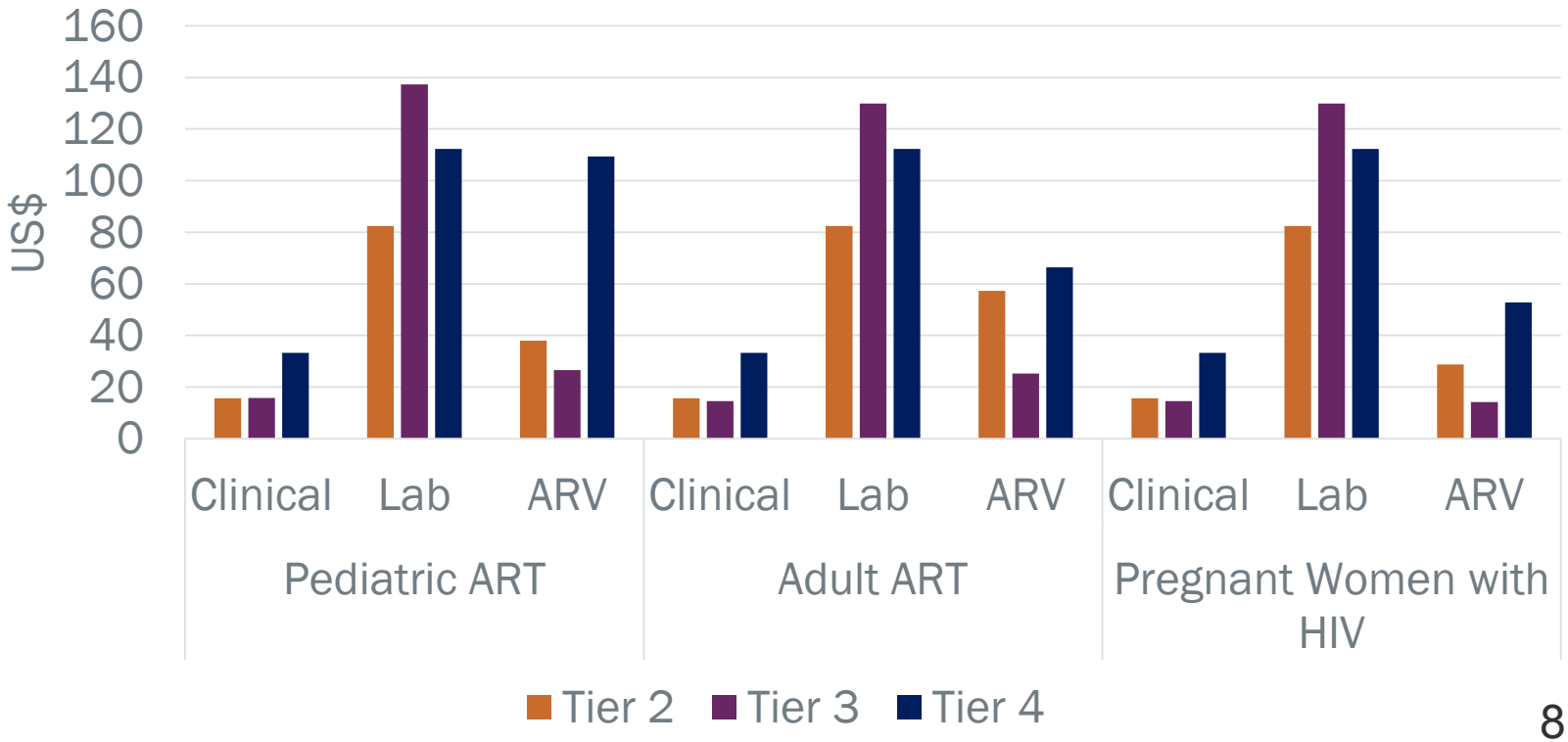
- Provides 7% of HTC in the counties
- …but only serve 4% of those on ART



Source: NACC, 2016. Kenya HIV County Profiles

# Direct ART Cost per Visit
## *by Tier and Client Type*

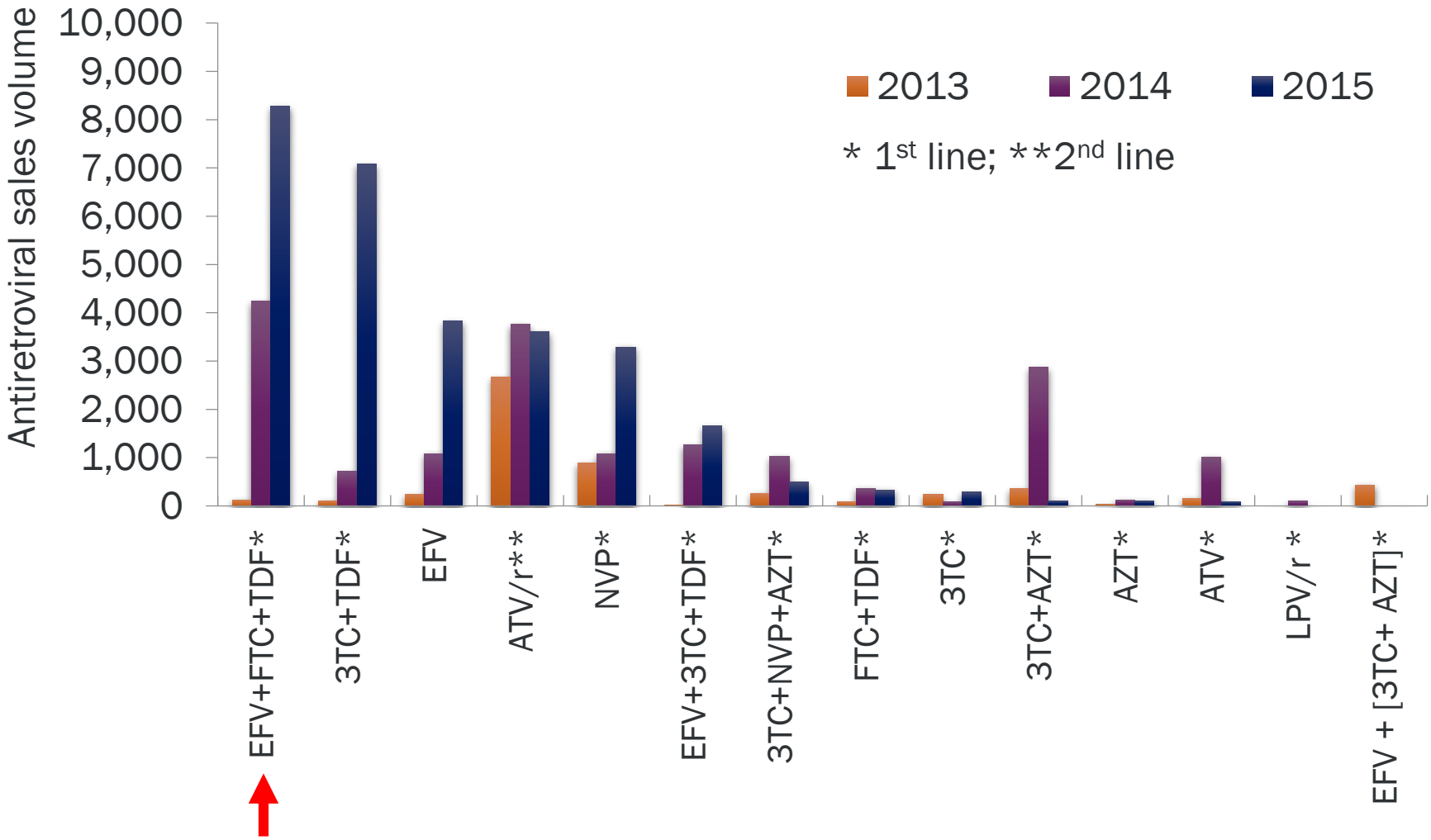
| | | | |
|---|---|---|---|
| Tier 2 | US$136 | US$155 | US$127 |
| Tier 3 | US$180 | US$170 | US$159 |
| Tier 4 | US$255 | US$212 | US$198 |



# Estimated Annual Cost of ART
## *Compared to Normative Costs*

| Type | Tier 2 | Tier 3 | Tier 4 |
|---|---|---|---|
| Average number of visits per year | 9 | 8 | 7 |
| Pediatric - Actual | US$1,224 | US$1,437 | US$1,784 |
| Pediatric - Normative | US$750 | US$867 | US$1,599 |
| Adult - Actual | US$1,398 | US$1,357 | US$1,483 |
| Adult - Normative | US$923 | US$819 | US$1,212 |
| Public Sector Cost Comparison | | | US$257 [$171 – 434] |

# Drug Availability through Commercial Sources



# Sample Drug Pricing

| Product | Brand | Lowest price (US$) | Highest price (US$) |
|---|---|---|---|
| EFV+FTC+TDF 600+200+300mg | Generic | $21.60 | $26.60 |
| EFV+FTC+TDF 600+200+300mg | Innovator | $68.90 | $75.60 |
| EFV+3TC+TDF 600+300+300mg | Generic | $9.50 | $20.00 |
| 3TC+NVP+AZT 150mg+200+300mg | Generic | $7.20 | $17.00 |
| ATZ/r 300+100mg | Generic | $22.80 | $39.00 |
| EFV 600mg | Generic | $8.00 | $9.50 |
| EFV 200mg capsules | Innovator | $44.20 | $48.60 |
| EFV 600mg tablets | Innovator | $26.60 | $29.20 |
| NVP 200mg | Generic | $4.00 | $9.50 |

# Contextualizing Costing Results

| | |
|---|---|
| Staff competency | Aware of treatment guidelines but not consistently applied |
| Drug availability | Difficult to access affordable drugs in alignment with treatment guidelines |
| Lab equipment | Lab equipment and reagents are especially expensive to procure |
| Referral mechanism | No strong links within and across facilities to ensure treatment continuity |

# Considerations for HIV Service Expansion in the Private Sector

- With 2016 treatment guidelines, ensure private sector inclusion
- Address market failures for essential ARV medicines and laboratory reagents
- Consider payment mechanisms that incentivize standardized care
- Better segment market to identify high-need areas that are prime for private sector expansion

# HP+

# HEALTH POLICY PLUS

*Better Policy for Better Health*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# Service Provision Model

| | |
|---|---|
| Stage 1: Reception | • Receptionist links the new client to the facility. |
| Stage 2: Triage | • Naive patient: Take client history; fill baseline questionnaire to enroll into treatment.<br>• Review vital signs to assess whether patient needs to see clinician.<br>• Continuing patient: Assess severity and adherence. |
| Stage 3: First Consultation and Examination | • Clinician examination; evaluate current status; TB, OI, STI, and cervical cancer screening.<br>• Continuing patient: Assess if any changes to treatment are required.<br>• PMTCT clients: additional screening for infections (syphilis and hepatitis B), hemoglobin levels, and blood grouping.<br>• Request lab tests. |
| Stage 4: Lab Test | • Conduct lab tests: CD4 count; PCR for VL; drug resistance testing; liver function test; renal function tests; HBsAg; urinalysis; GeneXpert for TB; CRAG. |
| Stage 5: Second Consultation, Education, and Prescribing | • Review results; prescribes ART and other drugs as necessary.<br>• Educate on self management.<br>• Assess and reinforce adherence; provides condoms.<br>• Provide nutritional advice and food supplement. |
| Stage 6: Dispensing | • Dispense drugs at pharmacy: ART; drugs for OIs; CPT and IPT; vaccines (HPV, HBsAg, pneumococcal, influenza); family planning. |

# Methodological Process

| | |
|---|---|
| Define service provision model | Action steps defined parameters for resource consumption data to be collected. |
| Tool development & testing | Costing data collection tool and interview questionnaire developed and tested in Nairobi. |
| Data collection & entry | Data collection team deployed over August and September 2016; data entered into Excel-based tool for analysis. |
| Data validation & supplement | Missing data on prices of drugs, medical supplies, and equipment were obtained through health quarters/suppliers. |
| Data analysis | Aggregated data was cleaned and analysed on SPSS and compiled by the research team. |