COST ANALYSIS OF FACILITY-BASED HIV TESTING MODELS IN KENYA; A CASE OF RIRUTA HEALTH CENTRE.

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DECLARATION

STUDENT'S DECLARATION

This dissertation is my original work and has not been presented for a degree in any other university.

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SUPERVISOR'S DECLARATION

This project has been submitted for examination with my approval as the candidate's University Supervisor.

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DEDICATION

To my beloved parents and my dear siblings. Thank you for your love, support and prayers.

To my dear husband Geoffrey Sigei, thank you for your support throughout my studies.

To my lovely daughters Abigael, Michelle and Imani, you mean the world to me. Thank you for your love and constant encouragement.

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LIST OF ABBREVIATIONS AND ACRONYMS

ANC	Antenatal Clinic
CCC	Comprehensive Care Centre
CWC	Child Welfare Clinic
HIV	Human Immunodeficiency Virus
HTS	HIV Testing Services
NASCOP	National AIDS and STI Control Programme
PITC	Provider-Initiated HIV Testing and Counselling
PLHIV	People Living with HIV
PMTCT	Prevention of Mother to Children Transmission
UNAIDS	The Joint United Nations Programme on HIV/AIDS
VCT	Voluntary Counselling and Testing

ABSTRACT

HIV testing is the first and essential step in HIV management. Awareness of HIV status is an important step in linking people to prevention, care and treatment services and reducing possible transmission of HIV. Despite this step being key in HIV management, there exist people living with HIV in Kenya who do not know their HIV status. There is need to identify cost effective HIV testing models that target to reach the unreached population and help reduce risk of HIV transmission. The aim of the study was to document HIV testing models and estimate unit cost of facility-based HIV testing. This study was conducted at Riruta Health Centre, Nairobi County. Process maps were used to document HIV testing and to capture all the resources used at the facility. Testing models were established through key informant interviews. Cost for HIV testing was estimated by considering cost of HIV test kits, consumables, space, furniture and cost of human resource. Overhead costs were applied at 10% of the total costs. An abstraction tool was used to collect retrospective data for all children and adults tested for HIV at the facility between July 2017-June 2018. Facility-based HIV testing was predominant at facility. However, it participated in community HIV testing when there was planned outreach by other institutions. A total of 30,665 HIV tests were done at the Voluntary Counselling and Testing Centers (VCT) and 237 at Antenatal Clinic (ANC) of the total tests done 600 were reactive. No data on HIV self-testing was documented for the period under study. Costs of test kits and consumables per a non-reactive test was Ksh189.30 compared with Ksh541.40 for a reactive test for general population. Testing costs at ANC were higher; Ksh.221.26 for a non-reactive test compared to Ksh.573.33 for a reactive test using HIV Syphilis duo test kit. There was a difference in the cost of HIV test based on the cadre of officer that performed the test; Ksh70.44 for HTS counselor compared Ksh104.64 for a registered Nurse. Costing information is useful for resource allocation and carrying out economic evaluations of HIV testing programs.

CHAPTER ONE: INTRODUCTION

1.1 Background

Human immunodeficiency virus (HIV) testing has seen major innovations such as self-testing and community-based testing. These innovations should be strategically linked to other HIV services to provide additional access for HIV treatment and prevention services. HIV self-testing provides additional access to HIV testing particularly for groups that are hard to reach with conventional provider-initiated testing such as men and adolescents. Different modalities for sale and distribution of HIV self-testing kits need to be tested and evaluated to maximize benefits and minimize harm in different settings [1] .

Testing for HIV is an important first step in HIV management. Early testing leads to early diagnosis and better health outcomes. Diagnosis is crucial to linkage to HIV management services. These include prevention, care and treatment services which will also reduce possible transmission of HIV. Early diagnosis reduces mortality and morbidity of people living with HIV (PLHIV) [2]. Despite the key role that HIV testing plays, and continued expansion of access to HIV testing services (HTS), there remains several PLHIV who are not aware of their HIV status. Almost 79% of PLHIV know their status globally. Sub-Saharan Africa HIV testing coverage study showed that about 54% of PLHIV know their status. This average falls below the joint United Nations Programme on HIV/AIDS (UNAIDS) 90% target for 2020 [3]. Recent statistics show that 89% of PLHIV in Kenya know their status and 77% of them are on treatment [4]. Focused interventions targeting men, adolescents, the poor and the least educated should be pursued to help reduce HIV testing gap. There is need to identify HTS approaches that are cost effective and will close the existing HIV testing gap.

1.2 HIV testing in Kenya

Kenya has adopted many HIV testing interventions to make HIV testing accessible to all. Some of the HIV testing approaches include enhanced diagnostic HIV testing provided at clinics, community mobile outreaches, workplace programs, voluntary counselling and testing (VCT) centers, home based testing, and periodic HIV testing campaigns.

For this study, HIV testing interventions shall be classified based on the settings where HIV testing is offered. These HIV testing models are classified into three broad categories:

- Facility-based model; which covers client-initiated and provider-initiated testing and counselling done at a facility. It includes VCT and integrated HTS in other clinics at the facility.
- Community based model; this covers static sites (VCT centers outside a health facility), outreaches like in schools, at homes, workplace HIV testing and any other campaigns done outside health facility.
- HIV self-testing is done at one's convenience. Individuals can perform HIV self-test and interpret the results at a private location of their choice.

This study sought to document HIV testing services provided at Riruta Health Centre in Nairobi County and estimate unit costs associated with facility-based HIV testing model.

1.3 Project objectives

1.3.1 Goal

To estimate the costs and cost drivers for HIV testing program which is key strategic information for the HIV Programming in Kenya.

1.3.2 Purpose

To evaluate costs of HIV testing models at Riruta Health Centre. Project output will be an estimate unit costs for facility-based HIV testing model used at Riruta Health Centre. This includes VCT services, prevention of mother to children transmission (PMTCT) services provided for antenatal and postnatal mothers and integrated HIV testing services in other clinics. Programme costs form part of economic evaluations which inform healthcare decisions.

1.3.3 Specific objectives

1. To document HIV testing models used at Riruta Health Centre
2. To estimate unit cost of facility-based HIV testing at Riruta Health Centre.

1.4 Significance of the study

This study estimated unit cost of facility-based HIV testing model used at Riruta Health Centre. Estimates of HIV testing costs are useful for a wide range of decisions which include; financial planning, resource allocation and to carry out economic evaluations of HIV Programme. Cost estimates are partial forms of economic evaluations; it will provide details on how interventions are implemented which is useful for assessing efficiency of service delivery. This study findings will inform HIV testing priority setting for the facility, implementing partners and the government to address program sustainability. The cost per yield estimate will inform the facility and HIV testing program on the choice of strategy with high yield, given the dynamics of HIV in different geographical settings and sub populations. The information may be used to decide on appropriate mix and volume of HIV preventive strategies to use and the best way to allocate them. It will also guide on the extent of resources required for scaling up or replication of HTS interventions.

CHAPTER TWO: LITERATURE REVIEW

2.1 HIV testing settings and process

HIV testing services are offered across majority of health facilities in Kenya. This includes facilities run by government, faith-based organizations, and private hospitals. Most facilities that offer HTS are supported by partners. HIV testing should be voluntary, conducted ethically in an environment where informed Consent, Confidentiality, Counseling, Correct test results and Connection – referral and linkage can be assured. The package of HIV testing services consists of a pre-test session, HIV testing and a post-test session. It includes an assessment for other health-related conditions or needs as well as referral and linkage to other appropriate health services.

HIV is a major cause of death in sub Saharan Africa. Kenya is one of the six HIV "high burden" countries in Africa with a national HIV prevalence rate of 6% and about 1.6 million PLHIV. HIV and AIDS account for 29% of annual deaths and contributes to 15% of the country's disease burden [5]. Kenya has continued to expand HTS access overtime to improve uptake of HTS targeting locations, populations and interventions that deliver the greatest impact.

There are several factors that may limit access to and uptake of HTS services. However, access to HTS in health facilities in Kenya has improved overtime. HTS at Antenatal clinics have effectively reached expectant women. People with conditions associated with HIV such as tuberculosis and sexually transmitted infections have better access due to Provider-initiated testing and counselling (PITC) services.

2.2 HIV testing gap

It is estimated that only 56% of people with HIV infection have been diagnosed in East and Southern Africa (90-90-90 progress report). There is growing need to fast track HIV testing to reach the 44% of population who are infected with HIV and are ignorant of their status.

Recent UNAIDS report showed that 88 % of men and 94 % of women in Kenya know their HIV status. HIV epidemic spreads differently across different populations. Except for mother to child transmission, spread of HIV varies with factors like gender and age. Girls, women and key populations such as sex workers, men who have sex with men, People Who Inject Drugs and people in prison are most affected by HIV [5]. HIV testing services should therefore be targeted so as to reach this populations.

Nairobi County has a population of 4,232,087 with HIV Prevalence rate of 6.1%. HIV prevalence among men is lower (4.7%) compared to women (7.6%). Nairobi County has the largest number of PLHIV in Kenya. According to 2014 estimates, it contributed to 11.3% of the total number of people living with HIV in Kenya [6]. According to KDHS 2014 survey, there was a 9% of women and 15% of men in Nairobi County who had never tested for HIV. The county needs to adopt more innovative strategies to bridge HIV testing gap. Key Populations are often stigmatized and criminalized in Kenya. These populations include female sex workers, men who have sex with men and people who inject drugs. These group are more likely to get and transmit HIV yet they have limited access to prevention, care and treatment services. The country should provide interventions to meet the needs for this group in order to win the fight against HIV.

2.3 Costing of HIV Programme in Kenya

Kenya, being a lower-middle income country, is yet to be self-sustaining in health financing hence HIV response is heavily dependent on partner support. HIV costing studies have been done globally and regionally. A one-year retrospective study that examined the relative costs of provider-initiated testing and counselling (PITC) services compared with voluntary counselling and testing (VCT) services was done in some facilities in Kenya and Swaziland. It analyzed financial and economic costs of the two methods of testing for HIV. Study findings showed that

PITC had a lower unit cost per client counselling and testing and per person testing HIV positive than VCT across all facility types in Kenya [7].

According to CDC, 2013 on cost of comprehensive HIV treatment in Kenya, the largest single cost component of HIV treatment was ARVs followed by personnel. The study concluded that pediatric unit costs were higher than unit costs of treatment for adults [8].

Owiti & Oleche, 2015 did a two-year retrospective study at Mbagathi District Hospital in Kenya. The study sought to estimate the cost of treatment of HIV positive adult on ART per outpatient visit and inpatient day of treatment from the health provider perspective. The study findings showed psychosocial care and support had largest proportion of labor costs per outpatient visit in the first quarter of treatment. Labor costs accounted for the highest proportion of treatment at 34% for inpatient costs. The cost of HIV treatment decreased overtime, with the first quarter of treatment having the highest cost for outpatient treatment. Annual average costs were higher in the first year of treatment [9].

Having reviewed literature, there is no documented study that specifically looked at facility-based costs for HIV testing models in Kenya. The project was consultatively agreed upon by the University of Nairobi and NASCOP to review the existing HIV testing models and to estimate their costs. Riruta Health Centre was chosen because it supports a high population of individuals living in the neighboring Kawangware slum and had three thousand three hundred forty-two patients on antiretroviral treatment as at end of July 2018.

Unit cost will guide HIV program stakeholders on planning for facility-based HIV testing and other models of HIV testing in Kenya.

CHAPTER THREE: PROJECT IMPLEMENTATION METHODOLOGY

3.1 Key institutional issues to be addressed.

Approvals from Nairobi county and Dagoretti North Sub County departments of health were sought. Stakeholder workshop was organized at Riruta Health Centre to brief facility team about the study and data collection process. Scheduling of time to do key informant interviews was done and communicated to the respondents prior to actual date of data collection.

3.2 Methods and procedures

This cost analysis study adopted a health provider perspective to estimate cost of providing HIV testing services at the facility. Full cost analysis was done considering financial and economic costs of providing HIV testing services. Micro-costing method was used to estimate costs of consumables, human resources, space and furniture costs. Resource use and expenditure data was used to estimate costs.

Process mapping helped to identify patient pathways and to document HIV testing resources which were measured and valued. Facility inputs which include human resources, consumables, space and furniture were identified. Human resources data was collected from the head of HIV testing services at the facility, and time spent by staff providing HTS was estimated. Data on consumables were collected from the key informant interviews while data on space and equipment was collected through both observation and key informant interviews. One-year retrospective data was collected for all patients that were tested for HIV from July 2017 to June 2018 at all HIV testing points at the health facility. Cost of HIV test was estimated using current market prices for test kits and consumables, tents and furniture and current market rate for salaries for human resources. Costs were reported in Kenya Shillings. Other administrative costs were not available for this study, an assumption of 10% of total cost of HIV testing was used for this study.

3.3 Data source

Primary and secondary data was collected. Observation and measurements, process mapping and key informant interviews were used for primary data collection. Nurse, data officer, clinical officer, pharmaceutical technologist, HTS counsellor, health records officers and facility in charge were interviewed. Key informant interviewees were purposively selected because they understand facility-based HIV testing at Riruta Health Centre. Secondary data sources were facility-based HTS registers and antenatal and post-natal registers, DHIS reports, archives, journals, published and unpublished reports. Kenya Medical Supplies Authority (KEMSA) rates were used to estimate the cost of test kits and consumables. The KEMSA rates are standard across the country because this government supplier charges a standard fee for warehousing and transport. Government rates were used to estimate cost of human resources, while cost of space and furniture was estimated using current market value rates.

CHAPTER FOUR: RESULTS

4.1 HIV testing models

Riruta Health Centre conducts facility-based HIV testing; client initiated and provider initiated. This model is integrated HTS with outpatient services, PMTCT and family planning clinics, Tuberculosis clinics, child welfare clinic (CWH), STI clinics and key population. The facility has an adolescent center/room where adolescents' services including HIV testing are offered. Index testing for clients who turn positive for HIV is done at the facility, index client is requested to come with spouse and children for testing at the facility.

Some staff reported that the facility participated in community-based HIV testing in collaboration with other stakeholders. The facility provided human resources and consumables whenever an outreach is organized at nearby schools, at HIV testing points targeting key population, and at nearby bus stage targeting drivers and touts. Health facility staff reported offering self-testing kits for clients at maternity and to emancipated minors. However, there was however no data for self-testing and community-based HIV testing for the study period.

4.2 HIV testing process and resources

HIV testing is done by a total of eight trained HIV testing counsellors in two designated semi-autonomous VCT rooms and six HIV testing tents at the health facility. This is where majority of HIV testing is done, both client -initiated and provider initiated. All clients screened and identified to qualify for HIV test at the out-patient clinic are referred to HIV testing tents and rooms; these include children who come for immunization who are screened and found eligible for HIV test. Pregnant and breast-feeding women are tested for HIV at a PMTCT room by a registered nurse. The nurse provides variety of services at PMTCT in addition to HIV testing services.

Package for HIV testing takes an average of half an hour; this involves pre-test counselling, testing and interpreting results, post-test counselling which takes a little longer for positive result, assessment for other related health condition, referral and linkage. HIV test is done in accordance with HIV testing algorithm provided for all clients using approved rapid test kit (Determine) and a confirmatory test is done using approved alternative rapid test kit (First Response). A client is declared to have positive result if the initial and confirmatory antibody screening tests are reactive. Clients who get HIV positive results are referred to the comprehensive care center where retesting using the same two-step antibody screening procedure is done to confirm HIV status before initiating the client in care and treatment.

HIV testing is done for children born to HIV positive mothers (HIV exposed infants). This is done at central HIV reference laboratories using HIV exposed infants' algorithm.

4.3 Number of clients tested

Riruta Health Centre had a total of 30,665 HIV tests done by the HTS within the study period. Majority 21,988 (72%) were repeat tests and 8,677 (28%) and were first tests. Testing for HIV at antenatal clinic from beginning of July to end of September 2017 was affected by nurse's strike, and there were no numbers reported during this period. However, a total of 237 tests were done at first antenatal clinic from beginning of October 2017 to end of June 2018. For the study period, a total of six hundred clients tested positive for HIV. These were 533 at VCT/HTS and 67 at antenatal clinic.

Riruta Health Centre had an average of 2,555 individuals tested monthly for the period under study, though with a wide range (1104- 7223) majority were repeat tests. On average, 44 individuals were reported to be HIV positive at VCT/HTS with approximate positivity rate of 2%. Antenatal clinic reported a monthly average of 7 expectant mothers (with a range of 4-11) who

were newly diagnosed having HIV; this is a positivity rate of 3% for the reporting period (beginning October 2017 to end of June 2018).

Riruta Health Centre facility-based HIV testing among general population for the period of July 2017 to June 2018.

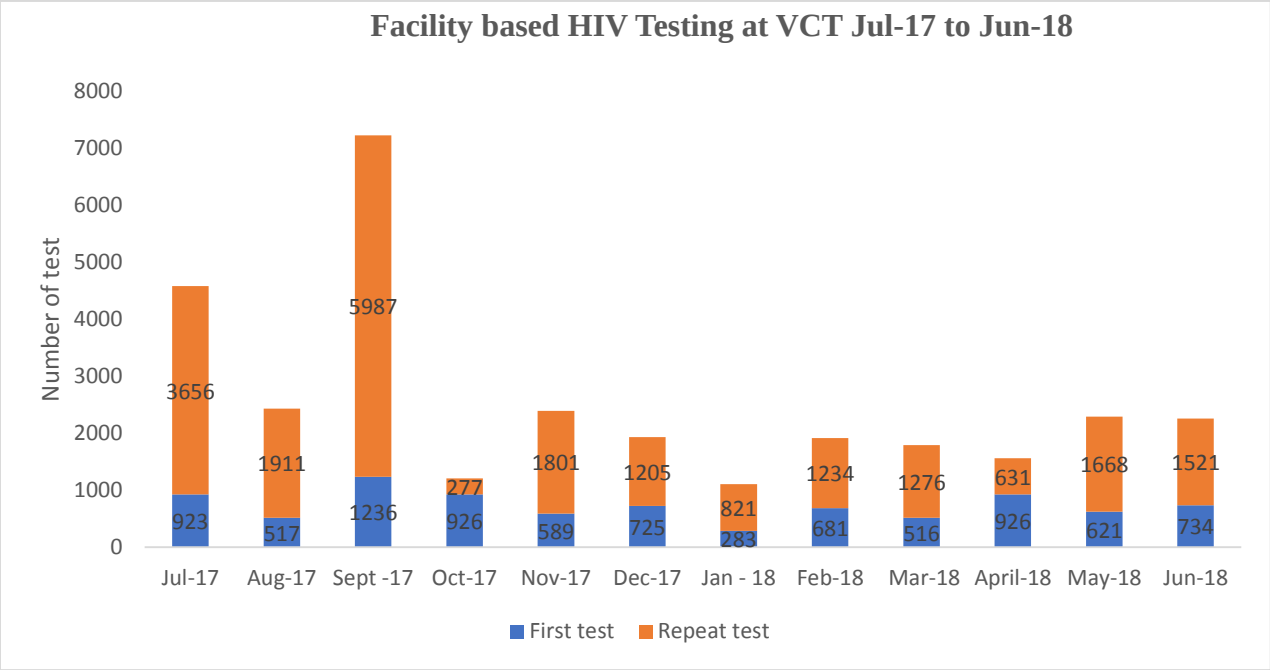

Figure 1: Number tested for HIV at VCT and HIV testing tents

Highest testing was reported in the month of September 2017. Majority of test done are repeat tests.

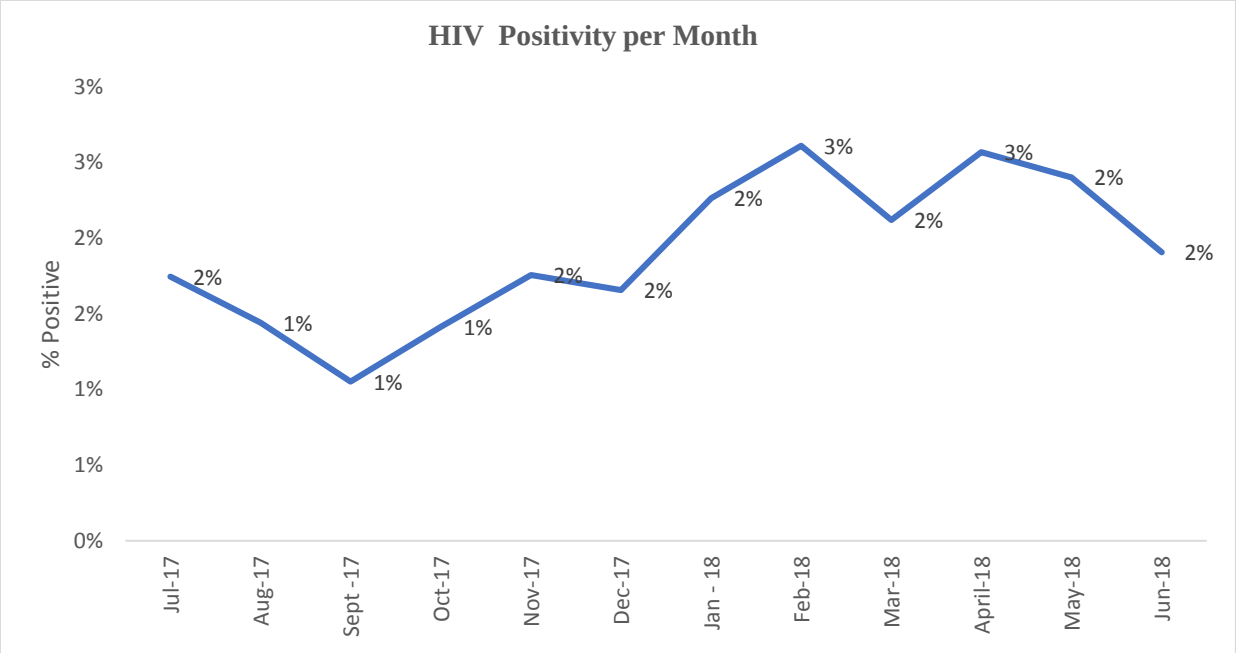

Figure 2: HIV positivity per month

An average positivity rate of 2% was reported, with the highest positivity rate of 3% reported on February and April 2018.

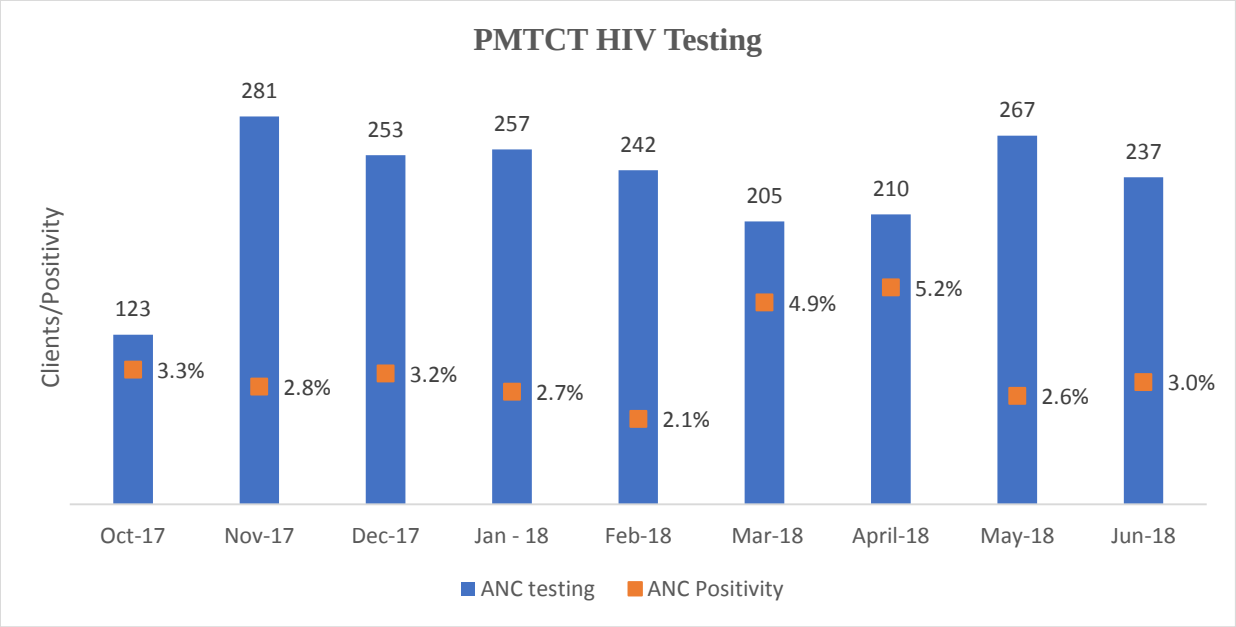

Figure 3: HIV testing at PMTCT

PMTCT HIV testing data was available from the month of October 2017. No data was available for July to September 2017 due to nurse's strike. A positivity rate of 4.9% and 5.2% was reported in the month of March and April 2018 respectively.

4.4 Unit cost of facility-based HIV test

Cost of HIV test kits and consumables, for a negative HIV test is Ksh.189. 30 compared with costs for HIV positive test of Ksh.541.40. This cost for a negative HIV rapid test is about three times cheaper than a HIV rapid test positive result. This is due to confirmatory test and re-testing at the comprehensive care clinic (CCC) before initiating the patient to care. For antenatal mothers, direct cost of a negative HIV test using a HIV Syphilis Duo test kit is Ksh.221.26 compared to a HIV positive test which will cost Ksh.573.33 for confirmed HIV positive result.

Resource use per person tested

Cost Components	Price (In 2018 $)	Price (Ksh)	Unit Cost (Ksh) Per Person Tested
Gloves (100 pack)	6.31	650.00	13.00
Cotton wool (25)	20.55	2116.44	84.66
Determine (pack of 100)	89.00	9167.00	91.67
First Response (pack of 30)	23.70	2441.00	81.37
VDRL-HIV Rapid Diagnostic Test Kit (duo test kit) (pack of 25)	30.00	3090.00	123.60
Self-test kit - oral (pack of 25)	68.75	7081.00	283.25
Sharps	10.19	1049.57	1,050.00
Dust bin	14.56	1499.68	1,500.00
HTS counsellor	0.68	70.04	70.04
Nurse	1.02	104.64	104.64
Space and furniture			37.74
Overheads (10 % of total costs)			

Table 1: Average cost per person tested

Indirect costs will increase cost of offering HTS services. Administrative cost of 10 % of the total cost was used to estimate overheads.

Unit cost of facility-based HIV testing per cost category in shillings.

HIV Testing Results	**Population Type**	**Consumables**	**Personnel**	**Total**	**Space & Furniture**	**Total**	**10% Overheads**	**Total HIV Testing Cost**
HIV Negative	CCC	189.33	70.44	259.77	37.74	297.51	29.75	327.26
	PMTCT	221.26	104.64	325.26	37.74	363.64	36.36	400.00
HIV Positive	CCC	541.14	70.44	611.58	37.74	649.32	64.93	714.25
	PMTCT	573.33	104.64	677.97	37.74	715.71	71.57	787.28

Table 2: Total cost for facility bsed HIV testing

CHAPTER FIVE: FINDINGS, DISCUSSIONS AND CONCLUSIONS

5.1 Lessons learnt

Having several fully operational facility-based HIV testing points at Riruta Health Centre provided an opportunity for increased uptake of both PITC and client-initiated HIV testing and counselling. The facility had a "LEAP surge" HIV testing campaign that targeted partners of clients who tested positive for HIV. The facility reported having a higher HIV testing yield during the campaign period. This campaign was a partner notification strategy that targets the network of sexual partners who have been exposed to HIV by the newly identified HIV positive clients. Testing at the adolescent friendly clinic, antenatal and postnatal clinics improves uptake of HTS and reduces chances of transmission of HIV from mother to child.

Riruta Health Centre should pursue scheduled community-based testing as an alternative model of providing HTS to population that does not visit the health facility. Sex workers and partners of ANC mothers who refuse to accompany their sexual partners should be issued with Self testing kits. These alternative models of HIV testing are likely to increase access and uptake of HIV testing services and possibly increase chances of case identification, expeditious referral and linkage to prevention or care and treatment.

5.2 Conclusion and recommendation

Cost of HIV testing in Kenya has significantly reduced overtime. Cost categories that were measures were, test kits and consumables, personnel costs and cost of space and furniture. Test kits and consumables were the highest cost drivers. Average cost of HIV test is higher at PMTCT compared to VCT/HTS. A reactive HIV test costed higher because of confirmatory tests that are done in line with HIV testing algorithm. Total cost per person tested was Ksh.327.26 for non-reactive test at CCC and Ksh.400.00 for non-reactive test at PMTCT. A reactive test at CCC

costed an average of Ksh.714.25 compared to Ksh.787.28 for a reactive test at PMTCT. Personnel cost per HIV test was standard at Ksh.70.44 for HTS counselor compared Ksh.104.64 for a registered Nurse. Overhead costs were applied at a standard rate of 10% on total cost of three cost categories.

Facility based testing did not include testing HIV exposed infants. Repeat tests formed over seventy percent of total numbers tested in the period under study. Repeat test formed the highest cost drivers due to the large numbers. New HIV testing strategies such as assisted partner notification have proven to increase chances of identification of new HIV positive clients who might otherwise not seek HIV testing services and yet they have been exposed to HIV.

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APPENDIX I: KEY INFORMANT INTERVIEW

MFL code	Date	Interview number

Introduction

This interview aims to identify HIV testing models used at Riruta Health Centre and costs of carrying out facility-based HIV test. The study will focus on HIV testing at different points at the facility, testing at different points out of the facility and HIV self-testing.

1. Who is your employer? (Check the response that applies)
    - o The Ministry of Health
    - o Implementing Partner (specify)_____
    - o Intern
    - o Volunteer
    - o Others (Specify)
2. What is your current position in this facility? (Check the response that applies)
    - o Medical officer
    - o Clinical officer

- Nurse
- Pharmacist
- Pharmaceutical technologist
- Laboratory Technologist
- HRIO/data clerk
- Nutritionist
- Adherence counsellor
- HTS counselor/ provider
- Others (specify)_____

Part A: HIV testing models

3. What are the various points for HIV testing at Riruta Health Centre?

- VCT Centre/tent
- Outpatient clinic
- Tuberculosis clinic
- STI clinic
- Adolescent Centre

- ANC clinic
- PNC clinic
- Others (specify) _____

4. In your opinion, do you think that the above testing points are adequate? Yes/No

5. In your opinion, do you think that there is an alternative testing point that the facility could explore? Yes/ No

   If Yes, where? _____

6. Does the facility conduct HIV testing services outside the facility? Yes/No

   If yes, where? _____

7. Out of the testing points listed in question one above, which one do you think has the highest number of people tested? _____

8. Which testing point has a higher positivity rate? _____

9. What was the average positivity rate for the past twelve months? _____

10. How can this positivity rate be improved?

Part B: Costs of testing models

11. State all the resources required to carry out HIV test at the facility.

    _____

12. State all resources are required for out of facility HIV testing?

    - Personnel
    - Transport
    - Test kits
    - Gloves
    - Laboratory package
    - Demand creation using PA system

13. In your opinion, between facility and out of facility testing, which model of HIV testing is more costly?_____
14. In your opinion, are the above stated models (facility-based and out of facility HIV testing) of HIV testing adequate? Yes/ No

    Explain your above answer_____

C: Facilities and Infrastructure

15. What facilities e.g. office space, tents, equipment and infrastructure are shared between HIV testing program and other programs at the hospital?

    _____

16. State other shared resources (e.g. human resources) between HIV testing program and the other departments within Riruta Health Centre.

    _____

17. We have reached the end of our interview. Do you have any additional suggestions for HIV testing program at Riruta Health Centre?

Thank you

APPENDIX II: PROCESS MAPPING DATA COLLECTION TOOL

Introduction: Thank you for participating. Please describe all the steps in the process of HIV testing, from the point of registration to the time they leave the facility. (one step at a time in order)

Step 1: _____

Step 2: _____

Step 3: _____

Part A: The People

List for each step the staff involved and their roles.

How many people have the same role like you in the facility?

How many people carry out this role at the same time as you?

Describe what you do at this step_____

On average, how long do you spend doing this activity for an average patient? _____minutes

How many hours a day do you spend performing this activity? _____hours

What percentage of the time is someone in your role engaged in this activity? _____%

How many days a week do you work? _____

What are your working hours on an average day? _____

Do you have a (lunch) break during the day? _____ If yes, how long? _____

Anything else you would like to add?

Summary of staff

Step	Name of process	Staff job title	Number of staff	Job group / Salary	Funded by
Step 1					
Step 2					
Step 3					
Step 4					

Part B: The Place

Where does this step take place?

Probe: Is there any other place that this step sometimes takes place?

Locations _____

No.	Name of process	Surface Area	Equipment and medical devices	Quantity	Funded by	Furniture	Quantity	Funded by
1.								
2.								
3.								
4.								
5.								

Other resources and additional costs

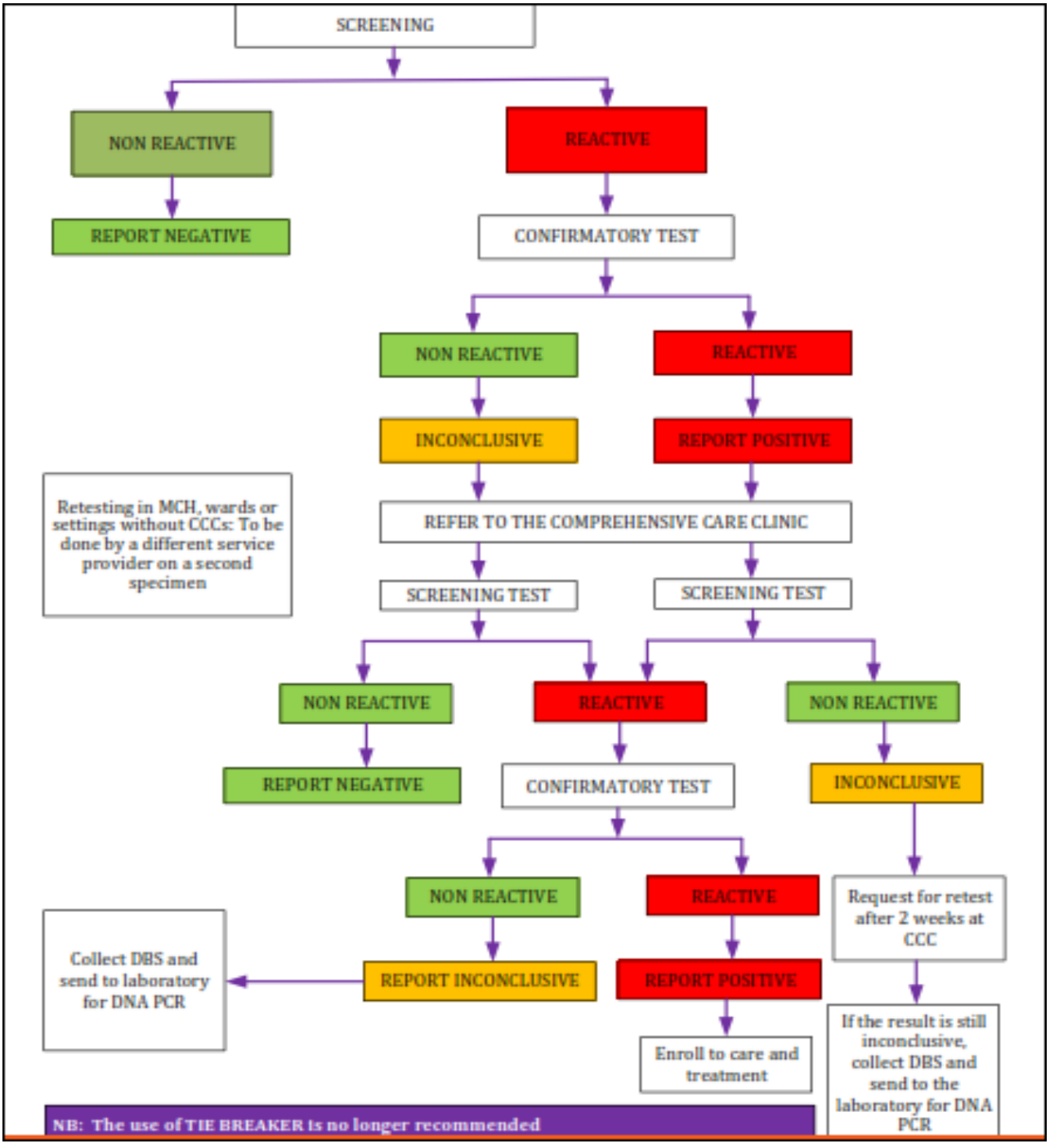
1. Total number of HIV testing points within Riruta Health Centre. (list all)
2. Total number of HTS counsellors
3. Total number of Screeners
4. Total number of nurse/clinicians that do HIV testing at the PMTCT section.
5. Do you have human resources training for HIV testing services providers? How many trainings have you had in the last twelve months?
6. Where are the personnel trainings carried out and who supports the trainings?
7. Who buys HIV testing tents and furniture?

APPENDIX III: DATA ABSTRACTION TOOL

HIV TESTING STUDY DATA COLLECTION TOOL - RIRUTA HEALTH CENTRE													
	HIV TESTING	**Jul 17**	**Aug 17**	**Sep 17**	**Oct 17**	**Nov 17**	**Dec 17**	**Jan 18**	**Feb 18**	**Mar 18**	**Apr 18**	**May 18**	**Jun 18**
HTS REGISTER	First Testing												
	Repeat Testing												
	Total Number Tested HIV												
	Male < 15 yrs. receiving HIV test results												
	Female <15 yrs. receiving HIV test results												
	Male 15- 24 yrs. receiving HIV test results												
	Female 15-24 yrs. receiving HIV test results												
	Male > 25 yrs. receiving HIV test results												
	Female > 25 yrs. receiving HIV test results												
	Total receiving positive HIV results												

	PMTCT												
ANC	ANC Testing for HIV - Initial												
	ANC Positive (New) to HIV Test												
	Infant ARV prophylaxis (issued at ANC)												
L&D	L&D Testing for HIV at Maternity - Initial												
	L&D HIV Positive (New) at Maternity												
	Infant ARV prophylaxis (issued at (L&D)												
PNC	PNC testing for HIV (within 72 hours)												
	PNC positive to HIV test (within 72 hours)												
	Infant prophylaxis at postnatal care												
	Total tested PMTCT												
	Total Positive PMTCT												
	Total infant prophylaxis												
	TOTAL TESTED RIRUTA												

APPENDIX IV: HIV TESTING ALGORITHM



Source: ART guidelines 2018