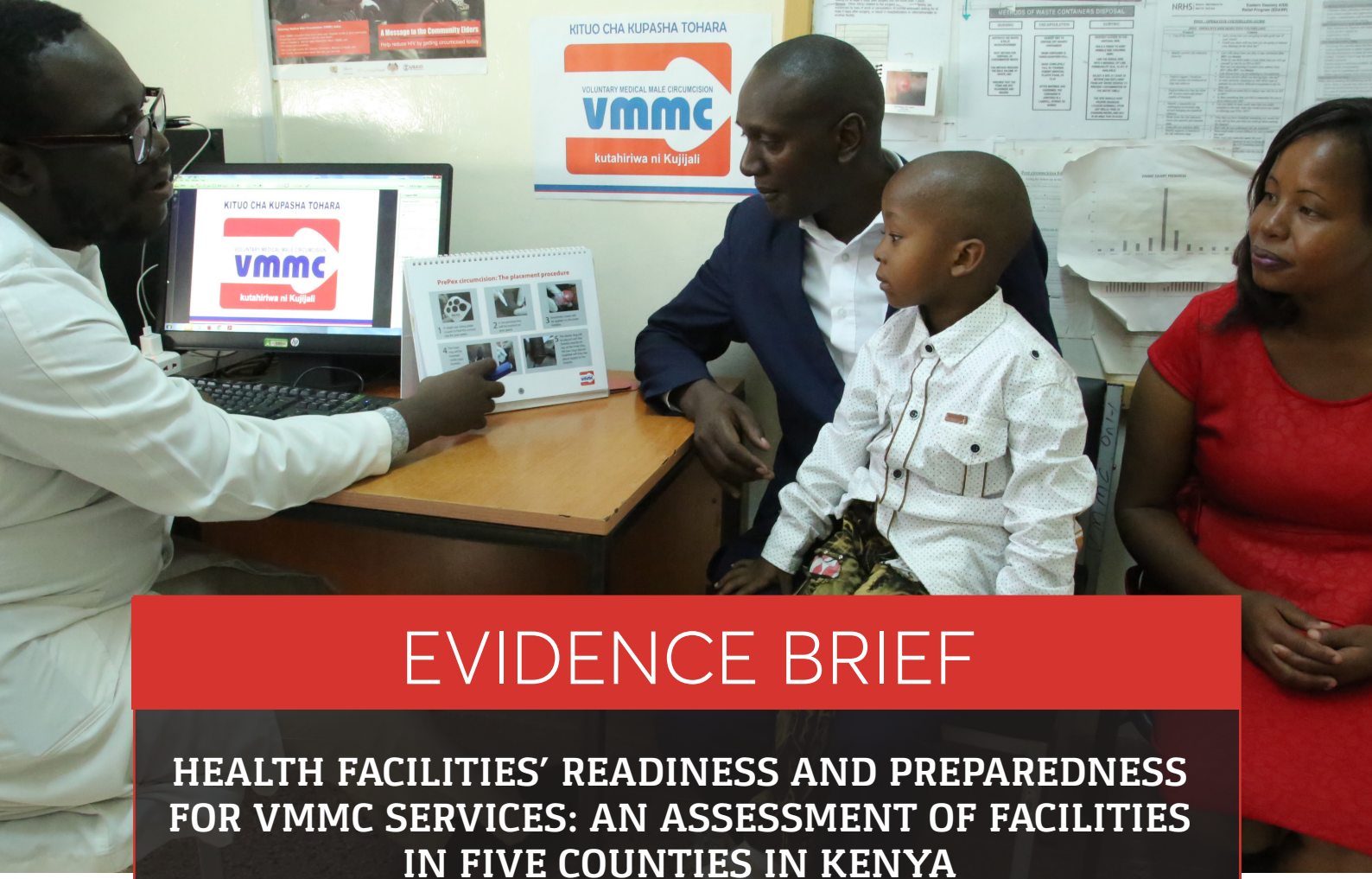

EVIDENCE BRIEF

HEALTH FACILITIES' READINESS AND PREPAREDNESS FOR VMMC SERVICES: AN ASSESSMENT OF FACILITIES IN FIVE COUNTIES IN KENYA

The HIV epidemic in Kenya exhibits extreme geographical disparities. National estimates and modelling indicate that 65% of the new adult infections occur in nine of the 47 counties. This has forced the national government to adopt a geographical prioritization approach in HIV prevention focusing on counties like Homa Bay, Siaya, Kisumu, Migori, Turkana, Kisii, Nyamira, Bomet and Nakuru, where the HIV incidence is high.

Voluntary Medical Male Circumcision (VMMC) is a simple, one-time intervention with immediate benefits for individuals and a high impact on the HIV epidemic [1]. Several conclusive studies in Kenya, South Africa and Uganda show that the medical circumcision procedure reduces men's risk of acquiring HIV infection, through vaginal sex, by about 60% [2]. In 2007, World Health Organization (WHO) and UNAIDS recommended VMMC as a key component of combination HIV prevention in countries with a high HIV prevalence and low levels of male circumcision [3]. Kenya's Ministry of Health (MOH) made VMMC a part of its national HIV prevention strategy and started its implementation in 2008 [4]. VMMC is prioritized in the Kenya AIDS Strategic Framework (2018/19 - 2024/25) as a key HIV prevention strategy for boys and men from 0-49 years [5].

Why this assessment?

The second phase of the Kenya National VMMC program (2014-2019) focuses on sustainability of results achieved in the earlier phase [6]. It aims to circumcise 1,001,757 men by 2019/20, expand adolescent male circumcisions, and progressively integrate VMMC services into routine health services. Government and local non-government partners have implemented the program with donor support. The Government of Kenya is now deliberating on sustaining the gains made in the last 10 years by increasing the county level ownership and leadership in VMMC programming and integrating the VMMC program within routine health services [7].

Improving outcomes in VMMC depends substantially on improving the coverage and quality of VMMC services. Efficient allocation of resources requires information about existing facilities that provide VMMC services. The readiness and preparedness of these facilities is essential for establishing and sustaining the programs in the long term [8].

In September 2016, the National STI and AIDS Control Program (NASCOP), under the Ministry of Health, Government of Kenya, with national VMMC Technical Support Unit (TSU) implemented by University of Manitoba and Partners for Health and Development in Africa and funded by Bill & Melinda Gates Foundation, undertook a mapping exercise in 12 counties to list all the facilities providing VMMC and assess their readiness and preparedness to provide services. This case study shares data from the five traditionally non-circumcising counties namely Kisumu, Siaya, Migori, Homa Bay and Turkana.

Objectives of the assessment

- Describe the geographical distributions of health facilities providing VMMC by type of facility and service delivery models
- Use analysed mapping data to improve VMMC services in the five priority counties
- Describe the VMMC facilities' readiness and preparedness

How was the assessment done?

Overall, 211 facilities in the five, traditionally non-circumcising counties were identified as providing VMMC services by the County Health Management Teams (CHMT). NASCOP, VMMC TSU and CHMT team visited each of the facilities and administered a standard questionnaire to verify the facilities along a variety of indicators. Some indicator information was also collected from monthly reports through DHIS2. The survey data was analysed and a GIS expert was involved to put the VMMC sites in a spatial map using ArcGIS software.

INDICATORS FOR FACILITY READINESS AND PREPAREDNESS ANALYSIS

Critical resources and infrastructure for performing male circumcisions

- **Well equipped surgery rooms**
  - Complete surgical male circumcision packs
  - Functional autoclave and sterilization
  - VMMC couch
  - Mayo tray
  - Stepping stool
  - Complete emergency VMMC box
- **Trained personnel**
- **Equipment for infection protection**
  - Functional incinerator and medical waste containers with lids

Other indicators

- **HTS/STI services**
- **VMMC program monitoring and evaluation tools such as:**
  - Minor theatre register
  - MOH 731 with filled VMMC section
  - Functional Clinical Quality Improvement/ CQI team
  - Infection Prevention Committee
  - Monthly data review meetings

What did the assessment find?

The assessment findings indicate that facility type, readiness and preparedness influence the number of male circumcisions conducted. The evidence supports the development of a county level strategic plan to expand service delivery points and improve the quality of VMMC services at these facilities.

FACILITY DISTRIBUTION AND CHARACTERISTICS

Most VMMC providing facilities are public, static and provided routine services

Most of the facilities, in the five traditionally non-circumcising counties, that provided VMMC data were public facilities[1]. VMMC was conducted mainly in Level 2 and 3 facilities and majority of the facilities were static[2]. Half or more than half the facilities provided routine VMMC services in three out of five counties.

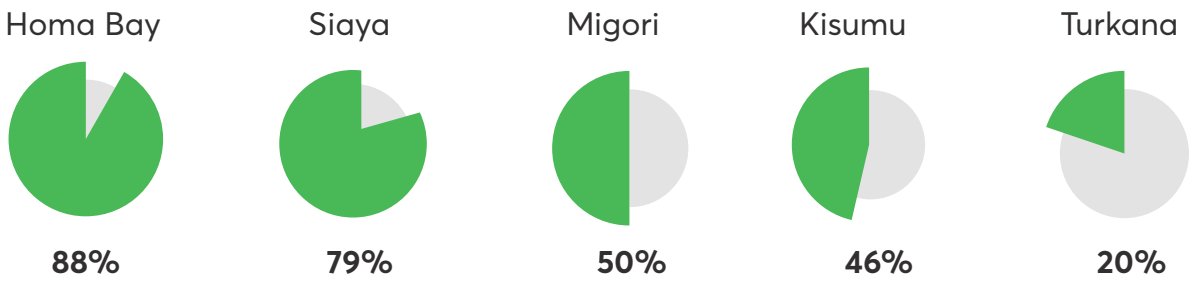

Figure 1: Percentage of facilities providing routine VMMC in specific counties

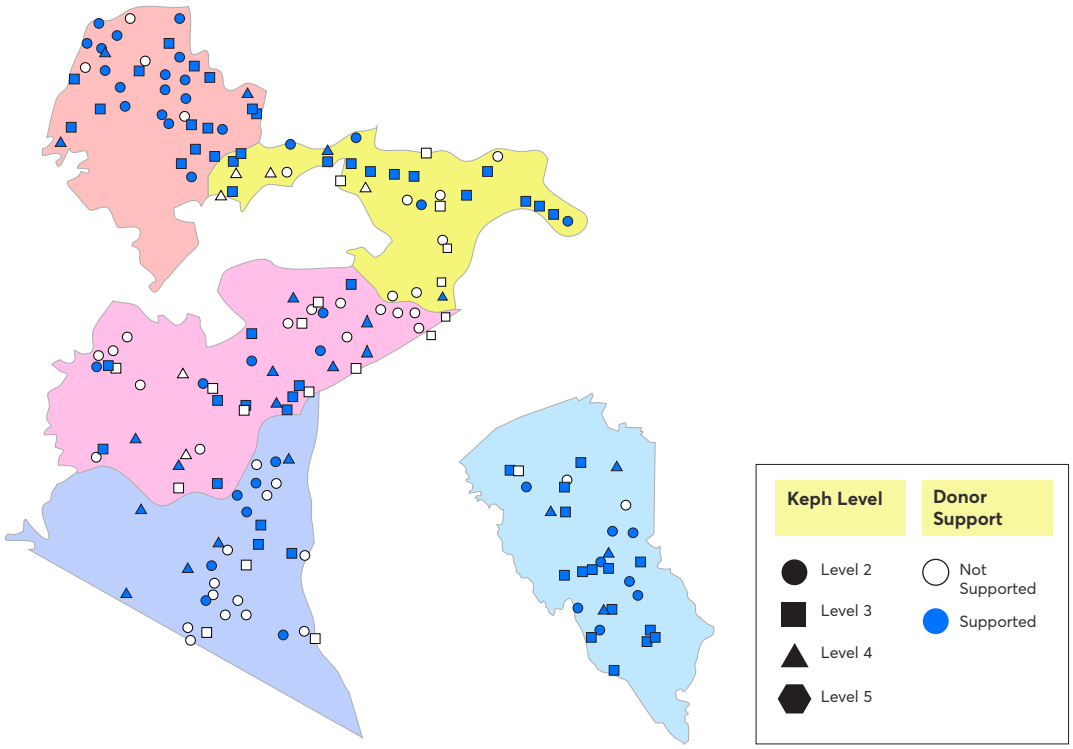

Figure 2: Distribution of VMMC services by level of facility

Majority of the facilities received donor support

About three quarters[3] of the VMMC facilities, across the five counties, received support from donors through implementation partners. Facilities in Turkana (75-91%) and Siaya (71-88%) received support on all categories such as equipment, human resource training and supplies of consumable kits. In contrast, only half or less than half of the facilities (20-53%) in Homa Bay, Kisumu, and Migori counties received the same.

[1] Level 2 facilities - Siaya (55%) and Migori (64%) - are community-based dispensaries and only for clinic outpatient, while Level 3 facilities - Turkana (56%) - provide basic primary healthcare.

[2] Homa Bay (82%), Kisuma (93%), Siaya (84%), Turkana (86%) and Migori (56%).

[3] 158 out of 211 facilities

FACILITY READINESS

Facilities had inadequate infrastructure and no trained personnel for providing VMMC services

Majority of the facilities in Homa Bay, Siaya, Migori and Turkana counties did not meet the acceptable standard of 70% equipment availability for facility readiness on providing good quality male circumcision services. Half of the facilities did not have basic equipments on-site, such as a Mayo Tray, Stepping Stool, or an emergency VMMC box. Majority (over 93%) of the outreach or non-routine and half of the static VMMC facilities did not have any surgical packs. Over 80% of the outreach, a quarter of the static and half of the non-routine and over 10% of the routine VMMC facilities did not have any trained personnel on male circumcision surgery. Table 1 shows the differences in facilities' readiness by county.

Table 1: Descriptive of the VMMC program indicators for facility readiness by county in 2016 (yellow >=75%, blue 60-74.9%, white or no highlight <59.9%)

Indicators			**Homa Bay N=56**	**Kisumu N=51**	**Siaya N=42**	**Migori N=36**	**Turkana N=36**
Facility Readiness: Availability of MC equipment	Basic Surgery Capacity	Surgical MC Packs	24 (43%)	17 (42%)	18 (50%)	21 (50%)	5 (14%)
		Trained Surgical Personnel	34 (61%)	33 (81%)	24 (67%)	25 (60%)	18 (50%)
		Functional Autoclave	36 (64%)	38 (93%)	22 (65%)	17 (47%)	30 (83%)
		Functional VMMC Couch	28 (50%)	30 (71%)	37 (88%)	19 (53%)	31 (86%)
		Emergency VMMC Box	21 (38%)	17 (42%)	16 (39%)	12 (34%)	13 (36%)
	Infection prevention	Functional Incinerator	7 (14%)	24 (59%)	20 (48%)	7 (19%)	14 (40%)
		Medical Waste Containers with Lids	37 (76%)	39 (95%)	33 (79%)	15 (42%)	31 (86%)

FACILITY PREPAREDNESS

Majority of the facilities did not have systems for clinical quality improvement or infection prevention

Half or less than half the facilities in Homa Bay, Migori and Turkana had HIV Testing Services (HTS), STI guideline or treatment available. Only half or less than half the facilities in Homa Bay and Turkana, less than 10% facilities in Migori, and a slightly higher proportion of facilities (49-78%) in Kisumu and Siaya had Clinical Quality Improvement (COI) and/or Infection Prevention Committee (IPC) program measures established.

Less than one third of the facilities in Homa Bay and Migori had STI treatment available. Half or less than half the facilities in Migori and Turkana had HTS and STI guideline available. Surgical circumcisions were the common procedure in most facilities except in Homa Bay, where a small number of device (9) and EIMC (10) circumcisions were conducted. Table 2 shows the differences in facilities preparedness by county.

Table 2: Descriptive of the VMMC program indicators for facility readiness by county in 2016 (yellow >=75%, blue 60-74.9%, white or no highlight <59.9%)

Indicators			**Homa Bay N=56**	**Kisumu N=51**	**Siaya N=42**	**Migori N=36**	**Turkana N=36**
Facility Prepared-ness	HIV/STI Services	HIV Test Service	33 (67%)	41 (100%)	41 (97%)	18 (50%)	20 (56%)
		STI Guidelines	30 (61%)	37 (90%)	32 (76%)	16 (44%)	14 (39%)
	Program Quality Control, Monitoring & Evaluation	STI Treatment	9 (21%)	37 (90%)	38 (91%)	11 (32%)	25 (69%)
		CQI team in place & functional	25 (39%)	26 (63%)	27 (64%)	3 (8%)	16 (44%)
		IPC in place & functional	23 (55%)	20 (49%)	33 (79%)	4 (11%)	17 (47%)
		Data review meetings	25 (61%)	29 (71%)	34 (81%)	8 (22%)	23 (64%)
		Minor theatre register in use	38 (88%)	29 (71%)	33 (79%)	17 (47%)	21 (58%)
		MOH 731 last 3 months	36 (84%)	39 (95%)	37 (88%)	17 (47%)	15 (42%)

COUNTY-WISE DIFFERENCES IN FACILITIES AND CIRCUMCISIONS

The number of facilities and circumcisions varied across counties. Homa Bay recorded the highest number of circumcisions at 39,885, as compared to Turkana at 13,161 VMMC. Half (50%) of the VMMC facilities in Turkana performed 16 or less circumcisions in 2016. The number of male circumcisions conducted in both Kisumu (HR = 2.36, 95% CI 1.31 – 4.27) and Siaya (HR = 2.09, 95% CI 1.04-4.22) county were more than double that in Turkana county. Table 3 shows the differences in the number of facilities and circumcisions across counties.

Table 3: Differences in the number of facilities and circumcisions across counties

Counties	Number of Facilities	Number of Circumcisions	Median
Homa Bay	56	39,885	776
Kisumu	41	35,212	673
Siaya	42	29,836	363
Migori	36	17,589	293
Turkana	36	13,161	16

FACILITY TYPE, READINESS AND PREPAREDNESS DETERMINED THE NUMBER OF MALE CIRCUMCISIONS PERFORMED

A greater number of circumcisions were conducted by static VMMC facilities (120,720) as compared to outreach facilities (282), and by those facilities which provided routine services (100,647) as compared to non-routine services (26, 275).

Facilities with complete surgical packs conducted 60% greater number of male circumcisions than those without.

The number of male circumcisions conducted by the facilities with HTS were 76% higher than those without HTS. The VMMC facilities with Infection Prevention Committees in place, as compared to those without, performed more than double the circumcisions (574 vs. 199) in 2016. Facilities with proper data reporting and monitoring process established, such as MOH 731, also outperformed those without by more than two times (585 versus 188).

Recommendations

Strengthen the existing static clinics/facilities to integrate VMMC within their routine services.

Improve the basic surgical infrastructure (equipment and materials), as well as the comprehensive infection prevention systems along with HTS services and data management systems.

Strengthen county Level 2 and 3 facilities as they are key to providing VMMC services.

Conduct staff training to increase human resources capacity for providing MC services.

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