Focus on location and population
Voluntary medical male circumcision

Voluntary medical male circumcision is a priority programme in areas with high HIV prevalence and low rates of male circumcision. It is a high-impact, one-time procedure that reduces HIV acquisition risk by approximately 60%.

The primary preventative effect of male circumcision is for female-to-male sexual transmission, but high coverage can create a protective effect for entire communities. In Uganda, circumcision coverage in non-Muslim men increased from 9% to 26%. Every 10% increase in circumcision coverage was associated with a 12% reduction in HIV incidence (1).

Figure 13

CHAPS-supported voluntary medical male circumcision in Gauteng, South Africa, 2012 and 2014

Exponential scale-up of circumcision in southern Africa has been driven by innovation and partnership. In Gauteng, South Africa, the public health system is overstretched. Private clinics are being leveraged for scale-up. The two maps show the number of circumcisions in the province performed in 2012 and 2014 by public and private clinics being supported by the Centre for HIV and AIDS Prevention Studies (CHAPS). The contribution of the private sector has grown considerably to 30% of circumcisions in the province.
In 2011, 14 countries in eastern and southern Africa were prioritized for circumcision scale-up, with a target of 80% coverage of eligible males by the end of 2016. Reaching this initial five-year target will require roughly 20.8 million voluntary medical circumcisions.

As of December 2014, over 9 million medical circumcisions had been performed in the priority countries. Significant progress has been achieved, but coverage varies substantially between countries. Ethiopia and Kenya have exceeded their 80% coverage targets, and by July 2015, the United Republic of Tanzania had nearly reached its target. However, five countries—Lesotho, Malawi, Namibia, Rwanda and Zimbabwe—still have very low coverage, ranging from 6% to 26%.
Accelerating male circumcision through private sector engagement in Johannesburg

Orange Farm—a township in Gauteng province on the outskirts of Johannesburg that was founded by laid-off farm workers in the late 1980s (2)—could be considered the birthplace of the use of voluntary medical male circumcision to prevent HIV transmission.

The township was the location of the first of three randomized control trials that proved the preventative effect of the procedure (3). Following the trial, the researchers established the Centre for HIV and AIDS Prevention Studies (CHAPS) in 2010 to contribute their experience to South Africa’s roll-out of a national medical male circumcision programme.

Within two years, the programme had expanded from one public health facility in Gauteng province to 20. At the same time, the public health system was grappling with the rapid expansion of antiretroviral therapy and a dire shortage of health-care workers, placing it under immense strain and causing delays in the provision of services. A significant number of lower-income patients were moving to private providers for more convenient health care.

To ensure continued expansion of the circumcision programme, CHAPS and the National Department of Health turned to the private sector. Programme managers strategically selected private-sector clinics by reviewing the geography, demographics, infrastructure and service availability in Gauteng and other priority areas. They then conducted baseline assessments of candidate facilities in order to evaluate their service delivery and management conditions (4). After confirming that a strict set of conditions had been fulfilled, CHAPS trained the chosen private providers to deliver free voluntary medical male circumcision.

CHAPS reimburses private providers at a slightly lower rate than what the providers themselves would normally charge. Providing the circumcisions for free creates additional demand, however, and the higher volume generates economies of scale that ensure the service remains profitable for the clinics. In one clinic, the number of circumcisions performed daily increased from 20 to as many as 114 (5). In addition, 33% of new patients who come in for circumcision return for additional paid medical services or refer others to the clinic (4).

CHAPS has so far trained and partnered with 12 private practitioners (4). Between 2012 and 2015, a total of 247,355 medical male circumcisions were performed by CHAPS; private practitioners collectively performed 57,696 of this total. The percentage of circumcisions performed by the private partners increased from just 5% during the final two months of 2012 (when the programme began) to 16% in 2013, and then 29% in 2014 (4). Of these, 97% were performed in Gauteng (Figure 13).

The partnership has benefited from cross-pollination. CHAPS has contributed its innovative, World Health Organization-recommended MOVE approach for high-volume, high-quality circumcisions; the private clinics have contributed aggressive marketing and demand-creation strategies that include short message
service (SMS), billboards, radio and print advertising, and the use of branded vehicles to recruit and transport patients to service locations.

High-performing clinics have achieved impressive numbers: the first private practice included in the programme has performed over 15,000 medical male circumcisions since 2012. A newer, mobile-based practice and provider performed nearly 6,500 procedures in rural areas in just one year (4).

Due to the great success of the private-provider model, CHAPS has supported the launch of a similar programme in Swaziland, and it also provided initial advice to partners of Namibia's HIV programme.

**Reaching men in rural areas of the United Republic of Tanzania through mapping**

In 2010, the regions of the United Republic of Tanzania now known as Iringa and Njombe had some of the lowest circumcision prevalence (29%) and the highest HIV prevalence (approximately 16%) in the country (6). Circumcision was only offered within health facilities on scheduled days. Men in rural areas, where demand was high, could not access these services and it was quickly realized that a new approach was required to meet the 2015 targets for the region (7).

In 2012, mobile and campaign services were strategically implemented in rural areas with the aid of a geographic information system (GIS). Service coverage, HIV prevalence, demographic and facility data were geospatially mapped and overlaid, revealing underserved populations (7).

Open-source database software and Google Maps were used to update the maps regularly and link geocoded information, including project monitoring data, road conditions, infrastructure and facility resources. Outreach teams were able to identify low-performing sites quickly and focus on service provision in that area. Road condition information facilitated decision-making on when and where to deliver outreach services (7).

The proportion of circumcisions performed in rural versus urban areas radically changed after the outreach campaigns were initiated. In 2011, similar proportions of circumcisions had been performed in urban (52%) and rural (48%) areas; by 2012, the proportion of circumcisions in rural areas increased to 88%, reaching 93% in 2014. By 2014, 267,917 men had been circumcised in Iringa and Njombe, with 259,144 of them aged 10–34 years. This meant that 98% of the target for the two regions was met (7).

The success of the strategy demonstrates how GIS-aided geographical focusing can optimize service delivery and stimulate Fast-Track scale-up.
Circumcision provides a gateway to HIV testing and treatment in Maseru, Lesotho

Since its start in 2012, Lesotho’s voluntary medical male circumcision programme has rapidly expanded to a total of 18 hospitals and private clinics, as well as outreach sites at more than 100 health centres.

In light of historically low rates of linkage to care among newly diagnosed men in Lesotho and high HIV prevalence in Lesotho—an estimated 23.4% of adults aged 15–49 were living with the virus in 2014— the circumcision programme aims to ensure that clients are tested for HIV and initiate antiretroviral therapy if they are found HIV-positive.

Up to the end of 2014, nearly 85,000 men received voluntary medical male circumcision as part of comprehensive HIV prevention services, and about 56% of these clients were tested for HIV and received the results. Newly diagnosed clients were initially given a referral slip and asked to enrol in HIV care at the location of their choice. A review conducted in 2013, however, found that a high percentage of these individuals were lost to follow-up. To improve the situation, active linkages to care and treatment were introduced in October 2013 and, after a successful pilot, expanded in March 2014.

The most sophisticated linkage system is used in the capital, Maseru, at private clinics run by Jhpiego, an international non-profit health organization affiliated with Johns Hopkins University. Circumcision clients who test HIV-positive are offered a CD4 test using a point-of-care machine that provides results during the same visit. They are then offered the option to enrol into care at the private clinic itself, or to be referred to free services at a public facility or a specialized antiretroviral therapy clinic run by the AIDS Healthcare Foundation (AHF). If the client requests to be referred to the AHF clinic, he is provided with transportation. Clinicians and counsellors from both clinics cross-check information and follow up to retain these patients and ensure continuity in HIV care and treatment.

Among the 6540 men who were circumcised at the two clinics between October 2013 and August 2015, 83% were tested for HIV, resulting in 337 new diagnoses (6% of the men tested). Among those new diagnoses, 78% had a CD4 test and received the results—more than twice the percentage of patients at six district hospitals without point-of-care CD4 testing. This result reinforces how the percentage of patients lost to follow-up at various steps of the continuum of care cascade can be greatly reduced by providing rapid test results, active referrals and rapid treatment initiation.

The experience shows that voluntary medical male circumcision can be leveraged to dramatically increase HIV testing and treatment among previously undiagnosed men and male adolescents. Immediate initiation of all people diagnosed with HIV, in line with the World Health Organization’s latest guidelines, should be considered to further avoid loss of these newly diagnosed men to follow-up.
Non-surgical devices boosting scale-up in Zimbabwe

Circumcising an additional 10 million men by 2020 will require more efficient methods of service delivery. Non-surgical procedures have the potential to accelerate scale-up by making the procedure quicker, easier to perform, more acceptable to the patient and more cost-effective.

In Zimbabwe, the PrePex device was introduced in April 2014 as an alternative method to surgery. PrePex works by compressing the foreskin between a ring and an elastic band, allowing it to be removed without incisions or sutures. The device addresses some patient concerns about circumcision, including fear of having a surgical operation or of losing wages due to an inability to work for several days after the operation. In a survey of 500 men who had undergone a PrePex circumcision, 465 (93%) said they would recommend PrePex to their peers (11).
More than 12 000 men in Zimbabwe have benefitted from a PrePex circumcision since its introduction, and its use is steadily increasing as additional clinics and mobile teams are trained. The service is being integrated into primary health-care facilities with nurses as the main providers, which will create additional efficiencies. Additional demand is being generated by a “Ring” awareness campaign conducted by Population Services International.

**Fast-Track lessons learned**

Voluntary medical male circumcision is on the Fast-Track. Three million circumcisions were performed in priority countries in 2014 alone, nearly one third of the total since 2011. This increase shows that large, healthy populations can be effectively reached with HIV prevention services. High-performing national programmes have excelled at building public trust and expanding medical capacity in low-resource settings by partnering with the private sector. Moreover, voluntary medical male circumcision programmes can be leveraged to help increase HIV testing and treatment enrolment of men and boys in order to achieve the 90-90-90 treatment targets.

The challenges will be to increase coverage in lower-performing countries while maintaining the rate of scale-up in higher-performing countries. The demand is largely there, but financial resources from external donors have flatlined. Similar to antiretroviral therapy, programmes must transition from rapid scale-up to sustainability.

New non-surgical devices are now being rolled out as an alternative to surgical circumcision. These devices are simple, less resource-intensive, usable by non-physician providers, acceptable to clients and providers, and as safe as standard surgical male circumcision. Innovations such as these will help countries circumcise an additional 27 million men by 2020. In the long term, lessons also need to be learned from countries where male circumcision is part of societal traditions, such as in many countries in West and central Africa.
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