Frequently Asked Questions on Non-Surgical Devices for Voluntary Medical Male Circumcision (VMMC) for HIV Prevention
June 2013

1) What is the PrePex device?

The PrePex device involves a ring inside the foreskin on the shaft of the penis and an elastic ring placed over the ring that compresses the foreskin, cutting off its blood supply through pressure. The device has to be worn for a week during which the foreskin tissue dies, allowing for its removal with minimal bleeding. Sutures (stitches) are not routinely needed. PrePex is the only non-surgical VMMC device to date that is currently prequalified by the World Health Organization (see below).

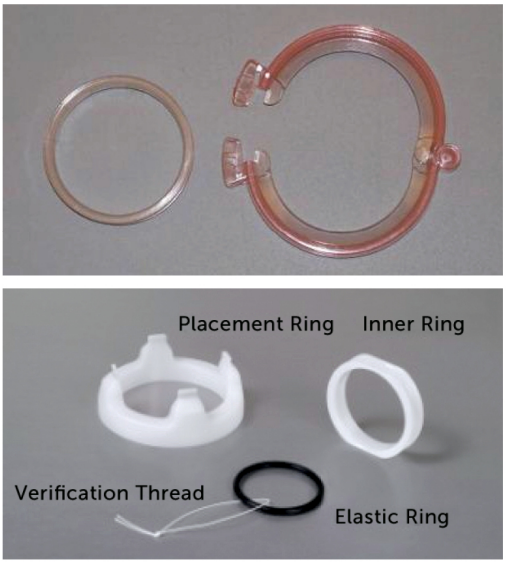
2) Are there other VMMC devices—and do they all work the same way?

There is a range of non-surgical devices for VMMC. Another ring-based device, Shang Ring, is also being assessed for WHO prequalification. The Shang Ring also eliminates the need for sutures. In this case, the foreskin is sandwiched between two concentric plastic rings. This device also remains on for one week.

A device known as the Tara KLamp uses a different mechanism. Based on limited available data, this device has been found to have safety issues. It's important to understand that each non-surgical device works differently and they are not identical or interchangeable. Since only PrePex is prequalified by the WHO, it is the only device that can be used in donor-funded programs for HIV prevention. Other funds, including national budgets, can also be used to purchase the device.

Non-surgical Devices for VMMC

The PrePex device (bottom) and Shang Ring (top) are two of the non-surgical devices in development.



AVAC Report 2012: Achieving the End – One Year and Counting, www.avac.org/report2012.

3) What are the differences between surgical and non-surgical methods for VMMC?

To date, VMMC for HIV prevention in adult men has involved a simple surgical procedure in which injectable anesthesia is administered, the foreskin is removed and the wound is closed using sutures. The surgical procedure is relatively quick—usually around 20 minutes. (For any form of VMMC, HIV testing and counseling, which take additional time, are key.) Wound healing takes several weeks. Non-surgical devices like PrePex eliminate the need for sutures and take even less time than surgery, but the device must remain in place for a week, and wound healing takes slightly longer than with surgery. Both surgical and non-surgical VMMC can be performed by mid-level health providers, e.g., nurses who have received appropriate training. Non-surgical devices like PrePex could potentially simplify the experience and reduce the burden of labor for health care workers in resource-limited settings. Injectable anesthesia is not used in placement of PrePex. Neither surgical nor non-surgical VMMC is painless and both procedures have the potential for complications (adverse events). In the

case of PrePex, this includes displacement of the device or the device being removed early, in which case the foreskin would need to be removed surgically.

4) What does WHO prequalification mean?
Prequalification of a device or medicine means that the WHO has determined that it meets standards for international use. The process involves review of a range of data about a medicine or product. When a commodity is WHO prequalified, it has met international standards of quality, safety and demonstrated efficacy and this helps donors and countries that do not have stringent regulatory capacity make informed decisions about purchasing medicines and devices. Manufacturers apply for prequalification and must provide extensive information about the product's quality, safety, manufacturing process and efficacy, which is evaluated by staff from WHO and experts from national regulatory authorities worldwide.

The WHO prequalification program began in 2001 focusing on HIV medicines and has expanded to other diseases. PrePex is the first prequalified male circumcision device. Shang Ring has submitted a comprehensive dossier of data to WHO for review and possible prequalification.

Prequalification is important because it paves the way for procurement by countries and international donors. It means that we can take steps to find out how PrePex might help meet the goals of VMMC for HIV prevention. It is the beginning—not the end—of a process.

5) What data were used for prequalification of the PrePex device?
Prequalification is based on a review of data from clinical trials of a product, and inspection of the manufacturing processes and facilities for that product. It also includes a review of the regulatory dossier containing comprehensive information the product that has been prepared by the manufacturer or developer. For PrePex, the main clinical trials were done in three countries— Rwanda, Uganda and Zimbabwe and involved a total of 2,417 men who were at least 18 years old.

6) What are the key points from the PrePex prequalification announcement?
- PrePex is safe and effective in men 18 and over.
- It can be placed by appropriately trained physicians and mid-level providers.
- Surgical facilities need to be in place (within 6-12 hours reach) to handle adverse events.
- Monitoring is key to find out about safety outside of clinical trials and with larger numbers of men.

7) Will non-surgical devices replace surgical VMMC?
No. There are pros and cons to each type of procedure, and we don't yet know which will be most preferable, feasible and affordable in a given context. Having more options may increase overall demand for the service. The ideal scenario is one in which awareness of and demand for VMMC increases, regardless of the procedure used. There may be men who are not eligible for PrePex and will need to be circumcised by a surgical method.

8) Can traditional practitioners use these devices?
No, the WHO prequalification statement says that the devices need to be placed by trained doctors or other mid-level health professionals.

9) What happens now?
Prequalification paves the way for PrePex to be used in VMMC programs. But prequalification does not address several key issues, including:

- ***Acceptability:*** How the device will be viewed by men and women—will it be acceptable or preferable to surgical VMMC? Important information on this issue will come from planned and ongoing implementation trials funded by PEPFAR and/or the Bill and Melinda Gates Foundation.
- ***Pricing:*** The device cost is one key driver of whether it is adopted or not. While the price is not yet set, the manufacturer has indicated a range of USD$17-20 per device. The quoted price could come down via bulk purchasing agreements or a decision on the part of the manufacturer. UNITAID, which finances the WHO prequalification program, has issued a statement that PrePex must be affordably priced[1]. Advocates should track and engage with these developments.
- ***Decision-making:*** How countries should decide to add devices to existing surgical programs and how to allocate or seek resources for surgical versus non-surgical programs.
- ***Marketing***: How to market the device to maximize uptake and safe, effective outcomes.

10) What are key issues for advocates?

- ***Managing expectations***: Non-surgical devices have the potential to expand the reach and acceptability of VMMC. But there are pros and cons to surgical and non-surgical procedures. It is not a given that non-surgical procedures will be simpler, cheaper, more acceptable or increase demand for services or completely replace surgery. Advocates need to be at the forefront of deliberate, context-specific discussions about program design and resource allocation.
- ***Cost of the device:*** The PrePex device is the sole product of its manufacturer, Circ MedTech Limited. Private sector partners and product developers are fundamental to the successful development of new HIV prevention tools; however, it is critical that PrePex's manufacturer sets a fair price that constitutes responsible use of public sector resources and facilitates widespread use of the device for greatest public health impact. Optimally, circumcision using a device should be less expensive than surgery because the device appears to be simple and inexpensive to produce. While it involves additional commodities, PrePex, does not require injected local anesthetic and extensive surgical supplies or a sterile environment, although surgical facilities do need to be available for back-up.
- ***Cost of product introduction:*** The cost of the device is only one component of the cost of program. Other costs include staff salaries, commodities besides the device (gloves, gauze, HIV test kits, etc.), marketing and communications, and more. Different research groups have different predictions about how the cost of programs using devices will compare to the cost of surgical programs.
- ***Demand:*** Demand is the most important driver of cost of services and efficiency of programs. It also is an essential determinant of the speed of scale-up and the impact of VMMC on HIV incidence. Regardless of technique used, methods to better increase demand for VMMC as part of comprehensive HIV prevention are urgently needed.

11) What can advocates do?

- ***Find out what's happening in your country or community—and inform the conversation***. Is there an implementation pilot study? Have relevant officials (e.g., National VMMC coordinator) begun to consider whether to introduce devices, and what information are they basing their decision on?
- ***Ask for transparent information on the cost of introducing the device.*** You can address questions about the cost of the device directly to the PrePex manufacturer, government,

[1] http://www.unitaid.eu/en/resources/press-centre/releases/1221-who-approval

PEPFAR, or raise the issue in an editorial or letter to the editor in a newspaper. Even more important is to track and ask for research on the true cost of VMMC using PrePex compared to surgery. The modeling data on this question are mixed. Most data show there is little or no cost savings with non-surgical devices, but "true" cost looking at actual public health programs cannot be ascertained until the device is in use.

- ***Share accurate information.*** Help guide conversations about the pros and cons so that civil society and other stakeholders can come to informed positions on the best next steps.
- ***Advocate for increased funding and planning for VMMC programs—including surgery and, where appropriate, new devices.*** Governments need to commit more resources to VMMC programs either from PEPFAR, national health budgets and/or seek these resources in applications to the Global Fund to Fight AIDS, Tuberculosis and Malaria. Encourage providers to use only devices that have been assessed and demonstrated to be safe and of good quality, such as those that have been prequalified.

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More information on devices and the prequalification process is available at *www.who.int/diagnostics_laboratory/evaluations/prequalification_status/en/index.html*.

More information on voluntary medical male circumcision, VMMC devices and programs at *www.avac.org/vmmc*, *www.truthaboutvmmc.org* and *www.malecircumcision.org*.

About AVAC: Founded in 1995, AVAC is a non-profit organization that uses education, policy analysis, advocacy and a network of global collaborations to accelerate the ethical development and global delivery of AIDS vaccines, male circumcision, microbicides, PrEP and other emerging HIV prevention options as part of a comprehensive response to the pandemic. More at *www.avac.org*.