

# GHSC-PSM VOLUNTARY MEDICAL MALE CIRCUMCISION (VMMC) REFERENCE GUIDE

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The USAID Global Health Supply Chain Program-Procurement and Supply Management (GHSC-PSM) project is funded under USAID Contract No. AID-OAA-I-15-0004. GHSC-PSM connects technical solutions and proven commercial processes to promote efficient and cost-effective health supply chains worldwide. Our goal is to ensure uninterrupted supplies of health commodities to save lives and create a healthier future for all. The project purchases and delivers health commodities, offers comprehensive technical assistance to strengthen national supply chain systems, and provides global supply chain leadership.

GHSC-PSM is implemented by Chemonics International, in collaboration with Arbola Inc., Axios International Inc., IDA Foundation, IBM, IntraHealth International, Kuehne + Nagel Inc., McKinsey & Company, Panagora Group, Population Services International, SGS Nederland B.V., and University Research Co., LLC. To learn more, visit [ghsupplychain.org](http://ghsupplychain.org).

**DISCLAIMER:**

The views expressed in this publication do not necessarily reflect the views of the U.S. Agency for International Development or the U.S. government.

# INTRODUCTION AND OVERVIEW

## **GHSC-PSM Program Background**

The USAID Global Health Supply Chain Program—Procurement and Supply Management (GHSC-PSM) project connects technical solutions, experts, and proven commercial processes to promote efficient and cost-effective health supply chains worldwide. Our goal is to ensure uninterrupted supplies of health commodities to save lives and to create a healthier future for all. The project directly supports five global health areas of importance to the U.S. government:

- The U.S. President’s Emergency Plan for AIDS Relief to help reach the global 90-90-90 HIV/AIDS testing, treatment, and viral load suppression targets
- The U.S. President’s Malaria Initiative to reduce malaria deaths and substantially decrease Malaria morbidity, towards the long-term goal of elimination
- USAID’s population and reproductive health program to ensure that key reproductive health commodities are available for safe and reliable family planning
- USAID’s maternal, newborn, and child health program to help prevent child and maternal deaths
- Other public health threats as they emerge, with support for Zika and Ebola at this time
- Working across Africa, Asia, Central America, and the Caribbean, we operate in some of the world’s most challenging environments to ensure that lifesaving health supplies reach those most in need.
- The project purchases and delivers health commodities, offers comprehensive technical assistance to strengthen national supply chain systems, and provides global supply chain leadership. Since our launch, we have procured commodities for more than 50 countries, established 30 field offices, and provided technical assistance in supply chain functions in 40 countries.

## **Purpose and Intended Users**

This document is intended to serve as a reference guide to assist GHSC-PSM staff, VMMC implementing partners, USAID personnel, and other stakeholders of PEPFAR-funded VMMC programs to better understand PEPFAR’s recommended VMMC kit options and provide information necessary to effectively plan for procurements. The document includes overviews of the PEPFAR-approved VMMC kit options, information on kit costs, and associated procurement lead times.

# VMMC KIT AND DEVICE INFORMATION

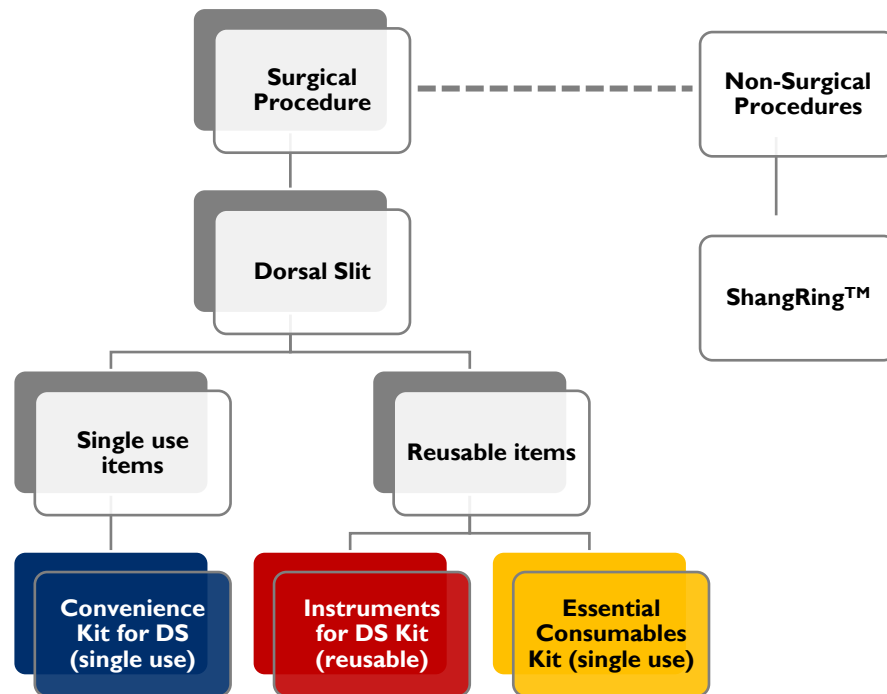
## Overview

GHSC-PSM provides supply chain technical information to support the Office of HIV/AIDS (OHA) VMMC Technical Cluster Team in its role of leading the procurement and supply chain management of VMMC kits and commodities for PEPFAR-funded programs. In May 2009, PEPFAR's interagency VMMC technical working group standardized the components included in each VMMC kit. This standardization allows GHSC-PSM to negotiate the lowest prices possible while maintaining the highest quality for the VMMC program. Therefore, when ordering kits and device for PEPFAR programs, partners are generally required to procure from the options below.

The PEPFAR VMMC TWG has agreed on the following VMMC kit and device options:

- Instruments for Dorsal Slit (DS) Kit  
*Requires Single Use Pack of Essential Consumables*
- Convenience Kit for Dorsal Kit
- ShangRing Device

Exhibit I. PEPFAR VMMC TWG Approved Kit and Device Types



Detailed descriptions for each VMMC kit and device, local anesthetic medications used for VMMC procedure along with associated price and lead time information, can be found throughout this document. If you have any questions concerning the VMMC program, products, or procurements please contact Sheriff Bangura ([shbangura@ghsc-psm.org](mailto:shbangura@ghsc-psm.org)).

**Note on ordering VMMC Kits:** It is important to emphasize that VMMC kits are custom-designed specifically for this program. Individual kit components cannot be removed, supplemented, or

substituted. In addition, orders are subject to administrative, manufacturing, and transportation lead times which should be considered when planning and placing orders.

## Reusable Instruments vs. Single Use Surgical Kits

A key program decision centers on whether to use disposable single use VMMC kits that include all the surgical instruments and consumables required to perform one VMMC procedure in a sterile package, or to prioritize the use of reusable surgical instruments that can be sterilized and reused multiple times and are paired with a consumables pack of single use supplies (gauze, needles, scalpel blade, gloves, etc.).

Several program considerations as well as advantages/disadvantages of each kit type should be considered during planning and procurement. See the following table from PEPFAR’s Best Practices for Voluntary Medical Male Circumcision Site Operations Guide for information to aid decision making.<sup>1</sup>

Table 1. Advantages and Disadvantages of Single Use and Reusable VMMC Kits

|               | SINGLE USE VMMC KITS WITH DISPOSABLE INSTRUMENTS   | VMMC KITS OF REUSABLE INSTRUMENTS  |
|---------------|--|--|
| ADVANTAGES    | <ul style="list-style-type: none"> <li>• Ensure high-quality, sterile content in both non-hospital and hospital settings</li> <li>• Are logistically and operationally easier, especially in mobile outreach services</li> <li>• Reduce initial startup program costs</li> <li>• Eliminate autoclave maintenance, personnel, training, and other costs</li> <li>• Can combine consumables, disposable instruments, and even client education materials into one kit</li> <li>• Can be bundled to ease ordering and managing of supplies</li> <li>• Increase service delivery efficiency</li> </ul> | <ul style="list-style-type: none"> <li>• Well-maintained reusable instruments are easier to use than disposable plastic and stainless-steel instruments</li> <li>• Build health system capacity and infrastructure</li> <li>• Employ local personnel</li> <li>• Create less waste and there is less need for waste management procedures</li> <li>• Require fewer long-term resources to procure additional instruments</li> </ul> |
| DISADVANTAGES | <ul style="list-style-type: none"> <li>• Create substantial amounts of waste, including stainless steel instruments that require smelting or burying, thus raising environmental concerns</li> <li>• Limit the flexibility of clinicians to use their preferred equipment and surgical method</li> <li>• Are prone to having contents pilfered which could compromise the sterility of the remaining components</li> </ul>   | <ul style="list-style-type: none"> <li>• Require additional staff time for cleaning, sterilizing, and packaging instruments, and monitoring procedures</li> <li>• Require autoclave availability and regular maintenance for sterilization</li> <li>• Require water and power supply at site of autoclaving</li> <li>• May require additional time for procurement, because kits are secured from multiple sources</li> </ul>      |

<sup>1</sup> [PEPFAR’s Best Practices for Voluntary Medical Male Circumcision Site Operations](#)

# VMMC KIT AND DEVICE OPTIONS

## Instruments for Dorsal Slit Kit

The Reusable, Non-Sterile, Instruments for Dorsal Slit Kit includes a set of metal surgical instruments sufficient for the dorsal slit procedure. In addition to the reusable instruments, programs should procure the “Single Use Pack of Essential Consumables” for every procedure intended to be completed using the reusable instruments. Following proper sterilization and maintenance procedures, the instruments can endure up to 100 – 150 cycles<sup>2</sup> before disposal, depending on the quality of the instrument steel. This pack provides all the standard consumables necessary to perform a procedure. The surgical instruments included in this kit are listed in Table 2.

Pharmaceuticals, such as approved injectable anesthetics, are not included in the kits as they fall under a different set of packaging, shipping, and regulatory requirements. These items are available for purchase separately, please refer to ‘Local Anesthetics’ section for more details.

Table 2. Reusable Instruments for Dorsal Slit Kit

| Item | Product                               | Component Specification   | Qty |
|------|---------------------------------------|---|-----|
| 1    | Autoclave Storage Box                 | Estimated Dimensions: 5"W x 10"L x 2"H  | 1   |
| 2    | Dissection Scissors – Slightly Curved | Total Length: 13-15 cm<br>Also known as Tissue Dissecting slightly curved scissors. Example: Slightly Curved Metzenbaum | 1   |
| 3    | Suture Scissor                        | Total Length: 12-15 cm<br>Sharp enough to cut tissue Example: straight mayo suture scissors                             | 1   |
| 4    | Needle Holder                         | Total Length: 12-14 cm<br>Working Surface: 20 mm Example: Baumgartner Needle Holder                                     | 1   |
| 5    | Metal Tissue Forceps                  | Total length: 12 cm<br>Tip: 1 x 2 – delicate tips<br>Also known as Adson Forceps  | 1   |
| 6    | Mosquito Clamp Straight               | Total length: 12-14 cm<br>Also known as “Snaps”, Mosquito Forceps, Hemostatic Forceps                                   | 4   |
| 7    | Mosquito Clamp Curved                 | Total length: 12-14 cm<br>Working Surface: 20-30 mm<br>Also known as "Snaps", Mosquito Forceps, Hemostatic Forceps      | 1   |
| 8    | Hemostatic Clamps                     | Total Length: 13-15 cm<br>Working Surface: 40 mm<br>Also known as "Artery Forceps for Dorsal Slit VMMC"                 | 2   |

*\*Reusable kits need not be sterile. The master label shall include the following text: “Non-Sterile Kit: Requires Sterilization Prior to Use.”*

**Shelf-Life:** *The instruments for Dorsal Slit Kit shall have a minimum shelf-life of 24 months from the date of manufacture unless otherwise agreed in the Subcontract between Procurement Agent and the supplier.*

<sup>2</sup> Based on programmatic experience with reusable instruments in VMMC.

## Essential Consumables Kit

This kit contains essential single-use consumables for use with Instruments for Dorsal Slit Kit (Reusable, Non-Sterile). The consumables are packed into a multipurpose recyclable plastic container. The pack is wrapped in surgical crepe paper (60 cm x 60 cm) and is ethylene oxide (ETO)-sterilized in a 0.3µ sterilization indicator bag. Expiration date is indicated on the sterilization bag. The components in the kit are listed in Table 3.

Table 3. Single Use Pack of Essential Consumables

| Item | Product                            | Component Specification   | Qty |
|------|------------------------------------|---|-----|
| 1    | Multipurpose Container Tray        | <ul style="list-style-type: none"> <li>Stable Plastic Recycle Tray of a virgin plastic (minimum 700 micron), with 4 Compartments:</li> <li>Compartment 1 = 13 X 26 cm</li> <li>Compartment 2 = 5 X 8 cm</li> <li>Compartment 3 = 5 X 5 cm</li> <li>Compartment 4 = 5 X 13 cm</li> <li>Total Tray size: 26 X 18 cm</li> </ul>  | 1   |
| 2    | O-Drape                            | <ul style="list-style-type: none"> <li>Dimensions: 100 cm X 75 cm</li> <li>Disposable</li> <li>One side absorbable and one side impermeable. The two different sides should be fused together and not lint.</li> </ul> <p>Note: The O-hole should be closer to the center, and the drape should be folded in such a way that the O is visible with the fluid-resistant side exposed without unfolding/touching the drape.</p> | 1   |
| 3    | Gauze, Plain                       | <ul style="list-style-type: none"> <li>Dimensions: 100 X 100mm</li> <li>12 ply</li> <li>Also known as Gauze Swabs</li> </ul>  | 20  |
| 4    | Gauze, Petroleum Jelly Impregnated | <ul style="list-style-type: none"> <li>Dimensions: 10cm X 10cm</li> <li>1 Ply</li> <li>Packaging: In foil pack.</li> <li>Also known as Paraneet Gauze</li> </ul>  | 1   |
| 5    | Syringe                            | <ul style="list-style-type: none"> <li>Size: 10 mL</li> <li>Disposable</li> </ul>   | 1   |
| 6    | Injection Needle: 21 g             | <ul style="list-style-type: none"> <li>Gauge: 21G</li> <li>Length: 1.5 inch</li> </ul>  | 1   |
| 7    | Injection Needle: 25 g             | <ul style="list-style-type: none"> <li>Gauge: 25G</li> <li>Length: 1.5 inch</li> </ul>  | 1   |
| 8    | Suture                             | <ul style="list-style-type: none"> <li>Size: 4-0</li> <li>Suture length: 75 cm</li> <li>Suture Material: Braided Synthetic Polyglactin 910 (e.g., Vicryl Rapide™)</li> <li>Needle type: 3/8 Circle Reverse Cutting</li> <li>Needle length: 19 mm</li> <li>Color: natural (undyed)</li> </ul>  | 2   |

| Item | Product                   | Component Specification   | Qty     |
|------|---------------------------|---|---------|
|      |                           | <ul style="list-style-type: none"> <li>Packing: Individually packed in sterile medical grade pack</li> <li>Must conform to US FDA-recognized edition of the USP or equivalent standards.</li> <li>USP 42-NF37:2019 Sutures - Diameter &lt;861&gt;</li> <li>USP 42-NF37:2019 Sutures - Needle Attachment &lt;871&gt;</li> <li>USP 42-NF37:2019 Tensile Strength &lt;881&gt;</li> </ul>                                       |         |
| 9    | Surgical Gloves: Size 7.0 | <ul style="list-style-type: none"> <li>Latex or Nitrile</li> <li>Size: 7.0</li> <li>Sterile</li> <li>Non-powdered</li> <li>Sealed</li> <li>Packing: Individually packed in an ETO penetrable envelope or pouch</li> <li>Must conform to ASTM D3577-09 (2015) standards</li> <li>Properly labeled with the size on the glove packaging or alternatively printed on the glove wrist and visible during kit opening</li> </ul> | 2 Pairs |
| 10   | Surgical Gloves: Size 7.5 | <ul style="list-style-type: none"> <li>Latex or Nitrile</li> <li>Size: 7.5</li> <li>Sterile</li> <li>Non-powdered</li> <li>Sealed</li> <li>Packing: Individually packed in an ETO penetrable envelope or pouch</li> <li>Must conform to ASTM D3577-09 (2015) standards</li> <li>Properly labeled with the size on the glove packaging or alternatively printed on the glove wrist and visible during kit opening</li> </ul> | 1 pair  |
| 11   | Surgical Gloves: Size 8.0 | <ul style="list-style-type: none"> <li>Latex or Nitrile</li> <li>Size: 8.0</li> <li>Sterile</li> <li>Non-powdered</li> <li>Sealed</li> <li>Packing: Individually packed in an ETO penetrable envelope or pouch</li> <li>Must conform to ASTM D3577-09 (2015) standards</li> <li>Properly labeled with the size on the glove packaging or alternatively printed on the glove wrist and visible during kit opening</li> </ul> | 1 pair  |
| 12   | Apron, Disposable         | <ul style="list-style-type: none"> <li>Material: Plastic</li> <li>Minimum thickness: 2 mil / 50 micron</li> </ul>   | 2       |
| 13   | Alcohol Swabs             | <ul style="list-style-type: none"> <li>Dimensions: 1 ¼ inch x 2 ½ inch</li> <li>Saturated with 70% Isopropyl Alcohol</li> <li>Disposable</li> </ul>   | 2       |



| Item | Product                         | Component Specification   | Qty    |
|------|---------------------------------|---|--------|
|      |                                 | <ul style="list-style-type: none"> <li>Individually packaged</li> </ul>   |        |
| 14   | Surgical Paper Tape             | <ul style="list-style-type: none"> <li>Type: Surgical grade</li> <li>Width: 12 mm</li> <li>Length: 3 meter</li> </ul>   | 1 roll |
| 15   | Examination Gloves: Medium      | <ul style="list-style-type: none"> <li>Latex or Nitrile</li> <li>Size: Medium</li> <li>Sterile</li> <li>Non-powdered</li> <li>Must conform to ASTM D3578-05 (2015) standards</li> <li>Properly labeled with the size on the glove packaging or alternatively printed on the glove wrist and visible during kit opening</li> </ul>   | 1 pair |
| 16   | Examination Gloves: Large       | <ul style="list-style-type: none"> <li>Latex or Nitrile</li> <li>Size: Large</li> <li>Sterile</li> <li>Non-powdered</li> <li>Must conform to ASTM D3578-05(2015) standards</li> <li>Properly labeled with the size on the glove packaging or alternatively printed on the glove wrist and visible during kit opening</li> </ul>   | 1 pair |
| 17   | Surgical Crepe Paper            | <ul style="list-style-type: none"> <li>Wrapping: Surgical blue crepe paper.</li> <li>Dimensions: 60 cm X 60 cm</li> </ul>   | 1      |
| 18   | Sterility Indicators            | <ul style="list-style-type: none"> <li>Kit must contain at least 3 ETO sterility indicators:</li> <li><i>Exterior Indicator:</i> on the exterior of the kit but inside the sterility indicator bag. This indicator may be a Class I chemical indicator tape.</li> <li><i>Top Indicator:</i> Placed immediately on top of the kit components. This sterility indicator may be a chemical indicator strip Class 4 or a Class 5 indicator.</li> <li><i>Middle or Bottom Indicator:</i> Placed anywhere within the middle or bottom of the kit. Sterility indicator may be a chemical indicator strips Class 4 or a Class 5.</li> </ul> | 3      |
| 19   | Paper Towels                    | <ul style="list-style-type: none"> <li>Four pieces</li> <li>Note: for drying clean hands during preparation</li> </ul>  | 4      |
| 20   | Skin Markers                    | <ul style="list-style-type: none"> <li>Basic marker to be included in the pack</li> <li>This does not have to be sterile prior to ETO</li> </ul>  | 1      |
| 21   | Indicator Bag and Sterilization | <ul style="list-style-type: none"> <li>0.3<math>\mu</math> Sterilization Indicator Bag used for Kit ETO Sterilization.</li> <li>The expiration date of items with expiration date should be included.</li> </ul> <p><i>Note: All kits including items inside the kit must have an expiration date greater than 24 months from the date of manufacture.</i></p>  | 1      |

## Convenience Kit for Dorsal Slit

The Convenience Kit for Dorsal Slit (Single Use, Sterile) contains disposable (single use) surgical instruments as well as consumables for one procedure. Items in the kit are conveniently provided in a sterile four-compartment tray. The kit is wrapped in surgical crepe paper (60 x 60 cm) and is sterilized by ethylene oxide (ETO) in a 0.3 $\mu$  sterilization indicator bag. Expiration date is indicated on the sterilization bag.

Pharmaceuticals, such as approved injectable anesthetics, are not included in the kits as they fall under a different set of packaging, shipping, and regulatory requirements. These items are available for purchase separately, please refer to 'Local Anesthetics' section for more details.

Table 4. Convenience Kit for Dorsal Slit (Single Use, Sterile) Procedures

| Item | Product                            | Component Specification   | Qty |
|------|------------------------------------|---|-----|
| 1    | Multipurpose Container Tray        | <ul style="list-style-type: none"> <li>Stable Plastic Recycle Tray composed of a virgin plastic (minimum 700 micron), with 4 Compartments:</li> <li>Compartment 1 = 13 X 26 cm</li> <li>Compartment 2 = 5 X 8 cm</li> <li>Compartment 3 = 5 X 5 cm</li> <li>Compartment 4 = 5 X 13 cm</li> <li>Total Tray size: 26 X 18 cm</li> </ul>   | 1   |
| 2    | O-Drape                            | <ul style="list-style-type: none"> <li>Dimensions: 100 cm X 75 cm</li> <li>Disposable</li> <li>One side absorbable and one side impermeable. The two different sides should be fused together and not lint.</li> </ul> <p>Note: The O-hole should be closer to the center, and the drape should be folded in such a way that the O is visible with the fluid-resistant side exposed without unfolding/touching the drape.</p> | 1   |
| 3    | Gauze, Plain                       | <ul style="list-style-type: none"> <li>Dimensions: 100 X 100mm</li> <li>12ply</li> <li>Also known as Gauze Swabs</li> </ul>   | 20  |
| 4    | Gauze, Petroleum Jelly Impregnated | <ul style="list-style-type: none"> <li>Dimensions: 10cm X 10cm</li> <li>1 Ply</li> <li>Packaging: In foil pack</li> <li>Also known as Paraneet Gauze</li> </ul>   | 1   |
| 5    | Syringe                            | <ul style="list-style-type: none"> <li>Size: 10 mL</li> <li>Disposable</li> </ul>   | 1   |
| 6    | Injection Needle                   | <ul style="list-style-type: none"> <li>Gauge: 21G</li> <li>Length: 1.5 inch</li> </ul>  | 1   |
| 7    | Injection Needle                   | <ul style="list-style-type: none"> <li>Gauge: 25G</li> <li>Length: 1.5 inch</li> </ul>  | 1   |

| Item | Product                   | Component Specification   | Qty     |
|------|---------------------------|---|---------|
| 8    | Suture                    | <ul style="list-style-type: none"> <li>• Size: 4-0</li> <li>• Suture length: 75 cm</li> <li>• Suture Material: Braided Synthetic Polyglactin 910 (e.g., Vicryl Rapide™)</li> <li>• Needle type: 3/8 Circle Reverse Cutting</li> <li>• Needle length: 19 mm</li> <li>• Color: natural (undyed)</li> <li>• Packing: Individually packed in sterile medical grade pack</li> <li>• Must conform to US FDA-recognized edition of the USP or equivalent standards.</li> <li>• USP 42-NF37:2019 Sutures - Diameter &lt;86I&gt;</li> <li>• USP 42-NF37:2019 Sutures - Needle Attachment &lt;87I&gt;</li> <li>• USP 42-NF37:2019 Tensile Strength &lt;88I&gt;</li> </ul> | 2       |
| 9    | Surgical Gloves: Size 7   | <ul style="list-style-type: none"> <li>• Latex or Nitrile</li> <li>• Size: 7.0</li> <li>• Sterile</li> <li>• Non-powdered</li> <li>• Sealed</li> <li>• Packing: Individually packed in an ETO penetrable envelope or pouch</li> <li>• Must conform to ASTM D3577-09 (2015) standards</li> <li>• Properly labeled with the size on the glove packaging or alternatively printed on the glove wrist and visible during kit opening</li> </ul>   | 2 Pairs |
| 10   | Surgical Gloves: Size 7.5 | <ul style="list-style-type: none"> <li>• Latex or Nitrile</li> <li>• Size: 7.5</li> <li>• Sterile</li> <li>• Non-powdered</li> <li>• Sealed</li> <li>• Packing: Individually packed in an ETO penetrable envelope or pouch</li> <li>• Must conform to ASTM D3577-09 (2015) standards</li> <li>• Properly labeled with the size on the glove packaging or alternatively printed on the glove wrist and visible during kit opening</li> </ul>   | 1 pair  |
| 11   | Surgical Gloves: Size 8   | <ul style="list-style-type: none"> <li>• Latex or Nitrile</li> <li>• Size: 8.0</li> <li>• Sterile</li> <li>• Non-powdered</li> <li>• Sealed</li> <li>• Packing: Individually packed in an ETO penetrable envelope or pouch</li> <li>• Must conform to ASTM D3577-09 (2015) standards.</li> </ul>  | 1 pair  |

| Item | Product                    | Component Specification  | Qty    |
|------|----------------------------|--|--------|
|      |                            | <ul style="list-style-type: none"> <li>Properly labeled with the size on the glove packaging or alternatively printed on the glove wrist and visible during kit opening</li> </ul>   |        |
| 12   | Apron, Disposable          | <ul style="list-style-type: none"> <li>Material: Plastic</li> <li>Minimum thickness: 2 mil / 50 micron</li> </ul>  | 2      |
| 13   | Alcohol Swabs              | <ul style="list-style-type: none"> <li>Dimensions: 1 ¼ inch x 2 ½ inch</li> <li>Saturated with 70% Isopropyl Alcohol</li> <li>Disposable</li> <li>Individually packaged</li> </ul>   | 2      |
| 14   | Surgical Tape              | <ul style="list-style-type: none"> <li>Type: Surgical grade</li> <li>Width: 12 mm</li> <li>Length: 3 meter</li> </ul>  | 1 roll |
| 15   | Examination Gloves: Medium | <ul style="list-style-type: none"> <li>Latex or Nitrile</li> <li>Size: Medium</li> <li>Sterile</li> <li>Non-powdered</li> <li>Must conform to D3578-05 (2015) standards</li> <li>Properly labeled with the size on the glove packaging or alternatively printed on the glove wrist and visible during kit opening</li> </ul> | 1 pair |
| 16   | Examination Gloves: Large  | <ul style="list-style-type: none"> <li>Latex or Nitrile</li> <li>Size: Large</li> <li>Sterile</li> <li>Non-powdered</li> <li>Must conform to D3578-05 (2015) standards</li> <li>Properly labeled with the size on the glove packaging or alternatively printed on the glove wrist and visible during kit opening</li> </ul>  | 1 pair |
| 17   | Needle Holder              | <ul style="list-style-type: none"> <li>Total Length: 12-14 cm</li> <li>Working Surface: 20mm</li> <li>Serrated Jaws</li> <li>Disposable</li> <li>Example: Baumgartner Needle Holder</li> </ul>   | 1      |
| 18   | Metal Tissue Forceps       | <ul style="list-style-type: none"> <li>Total length: 12 cm</li> <li>Tip: 1 x 2 tooth – delicate tips</li> <li>Disposable</li> <li>Also known as Adson forceps</li> </ul>   | 1      |
| 19   | Mosquito Clamp Straight    | <ul style="list-style-type: none"> <li>Total length: 12-14 cm</li> <li>Working Surface: 30 mm</li> <li>Serrated Jaw</li> <li>Disposable</li> <li>Also known as Mosquito Forceps, Hemostatic Forceps. Example: Halstead Disposable Straight Mosquito</li> </ul>   | 4      |

| Item | Product                               | Component Specification   | Qty |
|------|---------------------------------------|---|-----|
| 20   | Mosquito Clamp Curved                 | <ul style="list-style-type: none"> <li>Total length: 12-14 cm</li> <li>Working Surface: 30 mm</li> <li>Serrated Jaw</li> <li>Disposable</li> <li>Also known as Mosquito Forceps, Hemostatic Forceps. Example: Halstead Disposable Curved Mosquito</li> </ul>  | 2   |
| 21   | Dissecting Scissors – slightly curved | <ul style="list-style-type: none"> <li>Total Length: 13-15 cm</li> <li>Also known as: Tissue Disposable Dissecting slightly curved Scissors. Example: Slightly curved Metzenbaum</li> </ul>   | 1   |
| 22   | Surgical Crepe Paper                  | <ul style="list-style-type: none"> <li>Wrapping: Surgical blue crepe paper</li> <li>Dimensions: 60 cm X 60 cm</li> </ul>  | 1   |
| 23   | Sterility Indicators                  | <ul style="list-style-type: none"> <li>Kit must contain at least 3 ETO sterility indicators:</li> <li>Exterior Indicator: on the exterior of the kit but inside the sterility indicator bag. This indicator may be a Class I chemical indicator tape.</li> <li>Top Indicator: Placed immediately on top of the kit components. This sterility indicator may be a chemical indicator strip Class 4 or a Class 5 indicator</li> <li>Middle or Bottom Indicator: Placed anywhere within the middle or bottom of the kit. Sterility indicator may be a chemical indicator strips Class 4 or a Class 5.</li> </ul> | 3   |
| 24   | Paper Towels                          | <ul style="list-style-type: none"> <li>Four pieces</li> </ul> <p>Note: for drying clean hands during preparation</p>  | 4   |
| 25   | Skin Markers                          | <ul style="list-style-type: none"> <li>Basic marker to be included in the pack</li> <li>This does not have to be sterile prior to ETO</li> </ul>  | 1   |
| 26   | Indicator Bag and Sterilization       | <ul style="list-style-type: none"> <li>0.3<math>\mu</math> Sterilization Indicator Bag used for Kit ETO Sterilization.</li> <li>The expiration date of items with expiration date should be included.</li> </ul> <p>Note: All kits including items inside the kit must have an expiration date greater than 24 months from the date of manufacture.</p>   | 1   |

**Shelf-Life:** The Convenience Kit for Dorsal Slit Kit shall have a minimum shelf-life of 24 months from the date of manufacture unless otherwise agreed in the Subcontract between Procurement Agent and the supplier.

## ShangRing Device

The ShangRing device, manufactured by Wuhu Snnda Medical Treatment Appliance Technology Co. Ltd, Wuhu City, China, is a sterile, single-use, disposable male circumcision device that consists of two concentric plastic rings: the inner and the outer ring. The inner ring is lined by a soft silicone pad. These rings are positioned to compress the foreskin of the penis—allowing it to be excised without stitches or significant bleeding—and are then left in place for 7–10 days before being removed.

The ShangRing is commercially available in 32 sizes with varying inner ring diameters: A4 (40 mm), A3 (39 mm), A2 (38 mm), A1 (37mm), A (36mm), B (35 mm), C (34 mm), D (33 mm), E (32 mm), F (31 mm), G (30 mm), H (29 mm), I (28 mm), J (27 mm), K (26mm), L (25 mm), M (24 mm), N (23 mm), O (22mm), P (21 mm), Q (20mm), R (19 mm), S (18 mm), T (17 mm), U (16 mm), V (15mm), W (14 mm), X (13 mm), Y (12 mm), Z (11mm), Z1 (10mm), and Z2 (9mm). The correct size is ascertained using a measuring tape (provided in the ShangRing package) wound around the coronal sulcus of the penis.

## VMMC KIT AND DEVICE PRICES

GHSC-PSM has long-term contracts with several major VMMC kit suppliers, guaranteeing a ceiling price for kits for the foreseeable future. The prices listed in Table 5 below are the maximum prices across all the GHSC-PSM suppliers.

Table 5. Maximum Price Per VMMC Kit

| Description                          | Unit of Measure | Unit price (USD) |
|--------------------------------------|-----------------|------------------|
| Reusable Instruments for Dorsal Slit | 1 Kit           | \$25.91          |
| Essential Consumables Kit            | 1 Kit           | \$6.75           |
| Convenience Kit for Dorsal Slit      | 1 Kit           | \$11.83          |
| ShangRing                            | 1 Kit*          | \$2,785**        |

\* One(1) kit of ShangRing contains: ShangRing (200 pieces, same size), measuring tape (200 pieces), band-aid (1,400 pieces), removal cutter, and removal key (4 sets each). The minimum order of one (1) kit is enforced; individual units cannot be ordered.

\*\* There is a discounted price of \$2,662 per kit for a minimum order of five (5) kits of the same size of the ShangRing device.

Actual prices for the kits may vary slightly up or down by order, but the above should be used for planning and budgeting.

## VMMC KIT LEAD TIMES

The lead time (in months) is GHSC-PSM's best estimate of the timeframe from receipt of a Requisition Order to in-country delivery of an order. The estimated lead time is comprised of the production plus delivery times and is confirmed once the Requisition Order is finalized.

Lead times for VMMC kits can vary significantly depending on the supplier of the product, the mode of shipment, the end destination, whether GHSC-PSM has unallocated stock of the item, etc. Therefore, for planning purposes please use the lead times for kit orders below in Table 6. Please reach out to your GHSC-PSM POC for a more detailed lead time estimate. GHSC-PSM has seen increasing lead times due to COVID-19. Operating units are advised to factor in the increasing lead times when placing orders.

Table 6. Lead Times in Months

| Direct Drop Country | RDC   |      | RDC  |      |
|---------------------|-------|------|------|------|
|                     | Sea   | Air  | Sea  | Air  |
| Botswana            | 8.25  | 7.5  | 3.5  | 3    |
| Ethiopia            | 8.5   | 6.5  | 3    | 2.25 |
| Kenya               | 8.25  | 7.75 | 2.75 | 3.25 |
| Lesotho             | 8.25  | 6.5  | 3    | 2.25 |
| Malawi              | 8.5   | 7    | 3.75 | 2.5  |
| Mozambique          | 10.75 | 8.75 | 5.25 | 4.5  |
| Namibia             | 8.25  | 7    | 3.5  | 2.5  |
| Rwanda              | 8.5   | 7    | 3.25 | 2.5  |
| South Africa        | 8.25  | 6.5  | 3.5  | 2.25 |
| Swaziland           | 8.5   | 7    | 4    | 2.5  |
| Tanzania            | 9     | 7.75 | 3.5  | 3.25 |
| Uganda              | 8.5   | 8.5  | 3.75 | 4    |
| Zambia              | 8.75  | 7.25 | 4    | 2.75 |
| Zimbabwe            | 8.75  | 7.5  | 4    | 3    |

**\*For ShangRing: The estimated lead time is between 3-4 months.**

“Direct Drop” refers to orders placed directly with the suppliers of VMMC kits. Orders are placed directly with suppliers when the lead time allows and when GHSC-PSM does not have adequate stock on hand in its warehouse (RDC). “RDC,” or Regional Distribution Center, refers to orders that can be fulfilled using stock on hand in GHSC-PSM’s RDCs. Stock will not always be on hand to fulfill an order.

**Shelf-life:** 3 years

## LOCAL ANESTHETICS

Local anesthetic is necessary for all clients. This may be administered using either an injectable anesthetic or a topical anesthetic cream. Local anesthetic must be planned for and procured separately from the VMMC kits and the ShangRing device. Please inquire with your local GHSC-PSM country office for availability from global wholesalers and anticipated lead times.

### Topical Anesthetic

This includes anesthetic cream containing Lidocaine 2.5% and Prilocaine 2.5%.

#### Lidocaine/Prilocaine 2.5% / 2.5% topical cream, 30gram tube

**Unit Cost:** Procured at \$5.40/tube.

**Lead Time:** Estimated at 4–6 months.

**Shelf-Life:** 3 years

### Injectable Anesthetics

The solution used for injection can be either plain lidocaine (2%) or a 50–50 mixture of lidocaine 2% and bupivacaine 0.5%.

#### Lidocaine 2%, 20ml vial

**Unit Cost:** Pack of 20 vials priced at \$10.67 per package.

**Lead Time:** Estimated at 9–12 months.

#### Lidocaine 2%, 30ml vial

**Unit Cost:** Pack of 25 vials priced at \$13.92 per package.

**Lead Time:** Estimated at 9–12 months.

**Shelf-Life:** 4 years

#### Bupivacaine 0.5%, 20 ml vial

**Unit Cost:** Pack of 20 vials priced at \$16.45 per package

**Lead Time:** Estimated at 9–12 months.

**Shelf-Life:** 3 years

## ADDITIONAL RESOURCES

Additional resources related to the VMMC program produced by GHSC-PSM and other agencies are listed below.

### Quantification of VMMC Commodities

Overview: This is a package of a guide and a basic quantification tool developed in Excel to assist with the quantification of VMMC commodities.

The guide and tool are being finalized and are not currently posted on the website. Please reach out to the contacts listed below for the most recent information.

Contact Information:

VMMC Technical Advisor ([shbangura@ghsc-psm.org](mailto:shbangura@ghsc-psm.org))

Forecasting and Supply Planning Team: ([HSS\\_FASP\\_HQ@ghsc-psm.org](mailto:HSS_FASP_HQ@ghsc-psm.org))

VMMC Team: ([HSS\\_VMMC\\_HQ@ghsc-psm.org](mailto:HSS_VMMC_HQ@ghsc-psm.org))

GHSC-PSM Plan Team: ([PSMPlan@ghsc-psm.org](mailto:PSMPlan@ghsc-psm.org))

### Voluntary Medical Male Circumcision: A Guide to Safer Health Care Waste Management Practices

Overview: A program management guide to safer health care waste management practices for voluntary medical male circumcision activities. [[Link](#)]

### Pepfar's Best Practices for Voluntary Medical Male Circumcision Site Operations: A Service Guide for Site Operations, Second Edition

Overview: This resource for site-level staff of implementing partners supported by the President's Emergency Plan for AIDS Relief (PEPFAR) offers guidance on proven approaches to providing high-quality voluntary medical male circumcision (VMMC) services at the facility or site level. The first edition covered all aspects of the planning, launch, and oversight of daily operations at VMMC sites. Given the maturation of VMMC programs since 2012, the second edition focuses on optimizing management of existing service locations, but also includes chapters for those establishing new sites. Each chapter of the guide is designed as a stand-alone resource, covering all aspects of each topic, including summaries of the essential information; links to tools, instruments, and guides; and case studies, where applicable.

[[Link](#)]

### Introduction and Use of Reusable Instruments in Voluntary Medical Male Circumcision Programs

Overview: This orientation and resource guide describes considerations for the planning, operation, and maintenance of a reusable surgical instrument inventory, drawing from the implementation experiences of programs that either always relied on reusables or transitioned away from single use surgical instruments.

The guide summarizes insights from the available literature, expert consultations on safe surgery, and program experience, including feedback from front-line health workers and program managers. It will be updated as more programs adopt reusable instruments. [[Link](#)]



## **Pepfar Male Circumcision Partners' Meeting: Commodities and Improved Coordination of Male Circumcision for Hiv Prevention**

Overview: This document provides additional context and information regarding the components of the standard VMMC kits and additional products. [\[Link\]](#)

## **WHO Prequalification of Male Circumcision Devices PUBLIC REPORT. Product: ShangRing. WHO reference number: PQMC 0003-003-00**

Overview: The report describes the device and summarises the assessment of the product dossier, the conclusions on the review of the clinical studies on efficacy and safety of the ShangRing, and the outcomes of the manufacturing site inspection. It also provides labeling information and instructions on use. [\[Link\]](#)

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