

**Voluntary Medical Male Circumcision (VMMC) Tool F – Surgical Equipment and Procedures  
External Quality Assurance (EQA)**

**Site Name:** \_\_\_\_\_ **Reviewer's Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_

This Tool (F) aims to objectively assess resources and activities related to:

- Facilities and supplies, screening patients and preparation for surgery
- Surgical procedures for adults and adolescents
- Postoperative care and management of complications
- Prevention of infection

**Reviewer Guidance:**

The reviewer will record observations by marking “Y” for Yes (wholly adequate), or “N” for No (not wholly adequate) as noted on the form. In cases where the “N” is checked, the reviewer is asked to explain in the Notes section as appropriate.

Any additional general comments may also be recorded in the Comments/Notes section at the end.

For surgical services and clinical management, there are many considerations for each of the indicators. Several key elements are identified for the reviewer as a guide during observations. An indicator may be judged adequate overall, with comments identifying the strongest areas as well as problematic components, even though the overall performance may be within acceptable standards. When judged partially or wholly inadequate (N) overall, the specific component(s) that require change should be identified, as well as affirmation of those elements that are sound.

Please obtain permission from the clinical staff to observe the procedure. Then obtain verbal consent from the client (and from the parent/guardian if the client is a minor) to observe.

**For each item below, please check the correct box in the first column to indicate whether the provider asked about or performed the item (NOT whether the answer was “Yes”). In the second column indicate whether the provider documented the result.**

<b>Medical History</b>		<b>Did provider ask about or perform?</b>		<b>Did provider document the results correctly?</b>	
		<b>Y</b>	<b>N</b>	<b>Y</b>	<b>N</b>
<b>Medical History</b> – Does the client currently have or did he recently have any of the following:		<b>N/A</b>			
<b>For post-pubescent clients only</b>	F1. Any discharge from the tip of penis?				
	F2. Any pain or burning on urination?				
	F3. Frequent urination?				
	F4. Any swelling/redness of the foreskin or penis?				
	F5. Any ulcer or warts anywhere on penis?				
	F6. Any problems with sexual function?				
F7. <b>Medical History</b> – Does the client have allergies to any medication?					
F8. <b>Medical History</b> – Has the client had any previous surgeries? <i>If NO, skip to F10.</i>					
F9. <b>Medical History</b> – Has he had any complications including prolonged bleeding?					
F10. <b>Medical History</b> – Has the client ever had prolonged bleeding after cuts, dental extractions, or nose bleeds?					
F11. <b>Medical History</b> – Does the client have diabetes?					
F12. <b>Medical History</b> – Does the client have any history of anemia?					
F13. <b>Medical History</b> – Does the client currently have any other serious chronic illness? (It is NOT necessary to ask about HIV status).					
F14. <b>Medical History</b> – Does the client have a history of keloid scarring? (history of keloids is a contraindication to circumcision at the VMMC site)					
<b>Physical Exam</b>					
F15. <b>Physical Exam</b> – Was the weight obtained? <i>If NO, skip to F17.</i>					
F16. <b>Physical Exam</b> – If YES, what was the weight (kg)?					
F17. <b>Physical Exam</b> – Was the temperature obtained?					
F18. <b>Physical Exam</b> – Was the blood pressure obtained?					
F19. <b>Physical Exam</b> – Did the examiner ask the client to point out any scars from previous surgery or injury? (The examiner should look at any scars to ensure there are no keloids which would be a contraindication to circumcision)					
F20. <b>Physical Exam</b> – Was the penis examined, lifting and moving as needed to visualize all sides? (Done to rule out current STIs and anatomic abnormalities)					
F21. <b>Physical Exam</b> – Was an attempt made to retract the foreskin and visualize the urethra? (For phimosis, adhesions, hypospadias/epispadias)					

F22. <b>Physical Exam</b> – Was the scrotum examined, lifting and moving as needed to visualize all sides? (Done to rule out disorders such as hydrocele)				
F23. <b>Physical Exam</b> – Was eligibility for VMMC assessed by VMMC provider? (the operating provider should always personally examine to confirm eligibility prior to beginning the procedure)				

Sources: PEPFAR Operational Guide for Voluntary Medical Male Circumcision Services: *A service guide for site operations*; Uganda Standard MC Record; WHO Manual for Male Circumcision under Local Anesthesia.

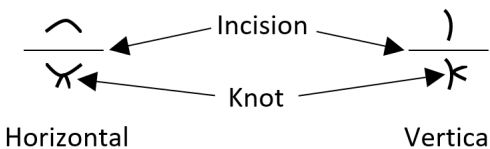
### Surgical Preparation and Procedures

**All questions should be answered YES if the item is fully complete, and NO if any part is not.**

Surgical Preparation and Procedures	Y	N	Notes
<i>Note: Local anesthetic may be injected before or after skin preparation. If adhesions or phimosis prevent the provider from easily retracting the foreskin, local anesthetic should be administered and given time to take effect prior to retracting the foreskin or separating adhesions and commencing skin preparation.</i>			
F24. <b>Surgical Preparation and Procedures</b> – Was the client’s name and age verified?			
F25. <b>Surgical Preparation and Procedures</b> – Was consent verified?			
F26. <b>Surgical Preparation and Procedures</b> – Did the provider correctly perform all surgical scrub elements?			
F27. <b>Surgical Preparation and Procedures</b> – Did the provider remove all jewelry? (If no jewelry worn, write N/A in the notes section).			
F28. <b>Surgical Preparation and Procedures</b> – Did the provider first wash his/her hands and arms up to the elbow with non-medicated soap?			
F29. <b>Surgical Preparation and Procedures</b> – Did the provider scrub with medicated soap or alcohol including all sides of each finger?			
F30. <b>Surgical Preparation and Procedures</b> – Did the provider keep his/her hands above the elbows until gloved?			
F31. <b>Surgical Preparation and Procedures</b> – Did the provider avoid touching anything, except drying towel, until gloved?			
F32. <b>Surgical Preparation and Procedures</b> – Did the provider don gloves without letting skin touch the outer surface?			
F33. <b>Surgical Preparation and Procedures</b> – Did the provider replace gloves if punctured? (If NO puncture, write N/A in the notes section).			
F34. <b>Surgical Preparation and Procedures</b> – Was the client asked whether they were allergic to iodine antiseptic prior to applying povidone-iodine (7.5% - 10%), and if allergic, was or chlorhexidine gluconate (2% - 4%) used instead?			
F35. <b>Surgical Preparation and Procedures</b> – Did provider check for physiological adhesions and if adhesions are detected, does provider			

administer anesthesia before continuing cleaning? <i>In case of adhesions, SKIP to question F46, follow anesthesia questions, then return to F36. Adhesions can usually be separated easily by applying gentle pressure on them using a moist gauze swab or a blunt probe.</i>			
	<b>Y</b>	<b>N</b>	<b>Notes</b>
<b>F36. Surgical Preparation and Procedures</b> –Was antiseptic applied to client moving outward from the glans and inner foreskin, to the outer foreskin, shaft and scrotum, and peripheral genital area, including lower thighs and suprapubic area, without letting cleaned skin touch uncleaned skin?			
<b>F37. Surgical Preparation and Procedures</b> – Did the provider apply antiseptic three times?			
<b>F38. Surgical Preparation and Procedures</b> – Did the provider wait ≥2 minutes before cutting for disinfectant action?			
<b>F39. Surgical Preparation and Procedures</b> – Did the provider drape the client correctly? (Draping extends up to mid-chest, down to mid-thighs, and laterally over sides of the bed).			
<b>F40. Surgical Preparation and Procedures</b> – Did the provider remove and replace gloves after skin preparation?			
<b>F41. Surgical Preparation and Procedures</b> – Did the provider wear face mask and protective eyewear throughout the procedure?			
<b>F42. Surgical Preparation and Procedures</b> – If the provider wore protective eyewear, did the lenses remain clean and clear throughout the procedure? (poor visualization of the operative field can lead to poor operative technique and increased risk for adverse events.)			
<b>F43. Surgical Preparation and Procedures</b> – Did the operative field have adequate lighting during the entire procedure? (poor lighting can increase the risk of adverse events)			
<b>Retraction and Marking</b>			
<b>F44. Retraction and Marking</b> – Did the surgeon retract the foreskin fully (using artery forceps to dilate and separate adhesions if needed)?			
<b>F45. Retraction and Marking</b> – Did the surgeon mark the circumcision line at the corona with a pen or forceps?			
<b>Anesthetic</b>			
<b>F46. Anesthetic</b> Were early symptoms of anesthetic overdose explained <b>to client</b> e.g., metallic taste in the mouth, numbness, light-headedness, dizziness, itching, or shortness of breath?			
<b>F47. Anesthetic</b> – Did the provider open a NEW vial of anesthetic for the observed client?			

F48. <b>Anesthetic</b> – Was only lidocaine <u>without</u> epinephrine, with or without bupivacaine used?			
F49. <b>Anesthetic</b> – For clients receiving lidocaine alone, what was the volume (ml) AND strength of the lidocaine injected (%)?	_____ml _____%		
F50. <b>Anesthetic</b> – Does this equate to no more than 3.0 mg/kg based on the weight recorded in F14? (Indicate N/A in the notes if client did not receive lidocaine alone).			
F51. <b>Anesthetic</b> – For clients receiving lidocaine with bupivacaine, what was the volume (ml) AND strength of the lidocaine injected (%)? (Write N/A in notes if client did not receive lidocaine with bupivacaine).	_____ml _____%		
F52. <b>Anesthetic</b> – For clients receiving lidocaine with bupivacaine, what was the volume (ml) AND strength of the bupivacaine injected (%)? (Write N/A in notes if client did not receive lidocaine with bupivacaine).	_____ml _____%		
	<b>Y</b>	<b>N</b>	<b>Notes</b>
F53. <b>Anesthetic</b> – Does this equate to no more than 2.0 mg/kg and 0.5 mg/kg of lidocaine and bupivacaine, respectively? (Write N/A in notes if client did not receive lidocaine with bupivacaine).			
F54. <b>Anesthetic</b> – Was a 23-gauge needle inserted at the 11 and 1 o'clock positions?			
F55. <b>Anesthetic</b> – Was advancement around side of penis and injection each time performed? (without unnecessary additional sticks)			
F56. <b>Anesthetic</b> – Was aspiration performed before injection at each new site?			
F57. <b>Anesthetic</b> – If client expressed pain during the VMMC procedure, did the provider wait for drug to take effect if applicable, then give additional anesthetic if needed (up to max safe dose)? (If no pain, N/A in notes).			
F58. <b>Anesthetic</b> – Did the provider use a NEW needle AND syringe (no 'double-dipping') to withdraw the additional anesthetic? If additional anesthetic was not required, ask the provider what technique would be used in this situation, and answer this question based on description.			
<b>Surgical Technique</b>			
F59. <b>Surgical Technique</b> – Did the surgeon follow method-appropriate procedures?			
F60. <b>Surgical Technique</b> – What was the surgical start time: (first cut)?			____ : ____ (circle one) AM PM
F61. <b>Surgical Technique</b> – Prior to using diathermy or placing hemostatic sutures, did the provider compress the operative site with a dry gauze for 2-3 minutes? (doing this will often control small areas of bleeding without the need for sutures or diathermy)			
F62. <b>Surgical Technique</b> – Was haemostasis maintained with vessel clipping and tie-off as needed, or diathermy for small vessels?			

F63. (If diathermy not used, skip to F64) <b>Surgical Technique</b> – Did the provider avoid all diathermy use in the frenulum? (using diathermy in the frenulum may put client as risk for a fistula)			
<b>Suture Technique</b>	<b>Y</b>	<b>N</b>	<b>Notes</b>
F64. <b>Suture Technique</b> – Was suturing material 3-0 or 4-0 chromic gut, vicryl (polyglactin) or vicryl rapide?			
F65. <b>Suture Technique</b> – Did suture technique include first aligning the midline skin raphe with the frenulum?			
F66. <b>Suture Technique</b> – Did suture technique include the correct mattress sutures at 3, 6, 9 and 12 o'clock? (horizontal mattress at the frenulum (just under the meatus) and vertical mattress for the other three points)  			
F67. <b>Suture Technique</b> – Did suture technique include $\geq 2$ simple interrupted sutures in each quadrant?			
F68. <b>Suture Technique</b> – Were all sutures placed using needle holders (not fingers)?			
F69. <b>Suture Technique</b> – Was surgical time documented correctly?			
F70. <b>Suture Technique</b> – What was the wound closure time (final suture):			___ : ___ (circle one) AM PM
<b>Dressing Material and Application</b>	<b>Y</b>	<b>N</b>	<b>Notes</b>
F71. <b>Dressing Material and Application</b> – Did the provider first ensure bleeding was stopped (with manual pressure if needed)?			
F72. <b>Dressing Material and Application</b> – Were the dressing materials used petroleum-jelly-impregnated gauze and dry sterile gauze?			
F73. <b>Dressing Material and Application</b> – Did the provider first wrap petroleum gauze around the wound?			
F74. <b>Dressing Material and Application</b> – Was the dressing applied by then covering petroleum gauze with dry sterile gauze, and taping up against abdomen but allowing circulation?			
<b>All questions should be answered YES if the item is fully complete, and NO if any part is not.</b>			
<b>Surgical Preparation and Procedures</b>			
<b>Disinfection</b>	<b>Y</b>	<b>N</b>	<b>Notes</b>
F75. <b>Disinfection</b> – Did the staff dispose of personal protective equipment correctly?			

F76. <b>Disinfection</b> – Were all needles and syringes disposed of safely? (in sharps container, no two-handed recapping, no reuse, no disassembling before disposal, without overstuffing)			
If disposable instruments used, proceed to question F77. If only reusable instruments were used, please skip to question F78 and ensure instrument reprocessing tool (Tool C) completed.			
F77. <b>Disinfection</b> – Were used disposable instruments placed in high-level chemical disinfection?			
F78. <b>Disinfection</b> – Was lidocaine vial disposed of? <i>If YES, skip question F79.</i>			
F79. <b>Disinfection</b> – Ask provider how opened lidocaine vials are handled after first use. Does the procedure ensure that no vial which might have had ‘double dipping’ is later used for another client?			
<b>Additional Comments/Notes:</b>			