The Value of Modeling and Costing Studies for Voluntary Male Medical Circumcision

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Research Questions

• Following recommendations from WHO-UNAIDS on Voluntary Medical Male Circumcision
  – What is the importance of VMMC within the prevention portfolio in each of the priorities countries
  – How much money is needed to scale up VMMC
  – What are the drivers of the unit cost of VMMC
  – What will be the impact of investment of resources
    • Reduction of incidence
    • Cost savings for the country
Activities done so far

- Development of the DMPPT in 2007
- Application of the DMPPT to all 14 countries in Southern and Eastern Africa
  - Results published in PloS Medicine in November 2011
- Implementation of facility-base costing studies in 9 of the 14 countries
- Modeling exercise to understand challenges and opportunities of the introduction of male circumcision devices
- Technical support to countries for costing implementation plan and generating data for decision-making during the process of development of country strategic document
- Funding gap analysis done in all countries
Voluntary Medical Male Circumcision: An Introduction to the Cost, Impact, and Challenges of Accelerated Scaling Up

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Voluntary Medical Male Circumcision: Modeling the Impact and Cost of Expanding Male Circumcision for HIV Prevention in Eastern and Southern Africa

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DMPPT Estimate of Number of Adult 15-49 years
VMMC needed per country to reach 80% coverage

<table>
<thead>
<tr>
<th>Country</th>
<th>Estimate of Number of VMMCs Needed</th>
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</thead>
<tbody>
<tr>
<td>Botswana</td>
<td>40,000</td>
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<tr>
<td>Ethiopia</td>
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<tr>
<td>Kenya</td>
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<tr>
<td>Lesotho</td>
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<td>Rwanda</td>
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<tr>
<td>South Africa</td>
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<tr>
<td>Swaziland</td>
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<td>Zambia</td>
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</tr>
<tr>
<td>Zimbabwe</td>
<td>1,912,595</td>
</tr>
</tbody>
</table>
13 Countries: Infant, Adolescent and Adult MC Required
Total – New HIV Infections Averted

- Male
- Female
HIV Infections Averted in Men and Women

- Botswana
- Lesotho
- Malawi
- Mozambique
- Namibia
- Nyanza, Kenya
- Rwanda
- South Africa
- Swaziland
- Tanzania
- Uganda
- Zambia
- Zimbabwe

Year

- Male HIV infections averted
- Female HIV infections averted
Risk Compensation needed to nullify VMMC's benefits in 13 Eastern and Southern African countries
PrePex implementation costing analysis

• What is the unit cost of VMMC in Zimbabwe?
  – forceps-guided surgery
  – mixed (integrating PrePex into an existing surgical MC program)

• What are the major cost drivers?

• What impact do the following have on unit cost?
  – % site capacity used
  – ratio of surgery vs. device-based circumcisions at mixed site
  – device cost
Male Circumcision Briefs

• 13 country briefs were first drafted in 2009 to highlight the economic and epidemiological impact of rapid scale up of VMMC

• This year, each of the briefs has been updated to include more current data estimates, as well as key messages and recommendations for Ministries and Donors

• Updated briefs are currently undergoing review and final versions will be publically available by November 2012
Data for decision making

- All countries in southern and eastern Africa have incorporated VMMC as an important HIV prevention intervention within their HIV Prevention Portfolio
- PEPFAR have allocated substantial funding to support country in accelerating VMMC scale up
- Joint strategic framework to accelerate the scale up of VMMC launched at ICASA 2011 by UNAIDS, WHO, PEPFAR, BMGF World Bank
- Call for action during AIDS 2012 conference
Thank you!

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