Voluntary Medical Male Circumcision (VMMC) in 2014: Seeking Implementation Efficiencies to Maximize Impact

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Outline

• Progress to date
• Efficiencies
  – Supply side efficiencies/solutions
  – Demand side efficiencies/solutions
• Refocusing goals on reduced incidence
• VMMC in the prevention/care continuum
• Summary of lessons learned & questions remaining (not exhaustive)
Progress to Date

- Annual and cumulative PEPFAR results

**Annual VMMC No.**

<table>
<thead>
<tr>
<th>US Government Fiscal Year</th>
<th>Millions</th>
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<tbody>
<tr>
<td>FY 2007-09</td>
<td>0.07</td>
</tr>
<tr>
<td>FY 2010</td>
<td>0.22</td>
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<tr>
<td>FY 2011</td>
<td>0.57</td>
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<tr>
<td>FY 2012</td>
<td>1.13</td>
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<tr>
<td>FY 2013</td>
<td>2.23</td>
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<tr>
<td>Q1 FY 2014</td>
<td>0.56</td>
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</table>

**Cumulative VMMC No.**

<table>
<thead>
<tr>
<th>Date</th>
<th>Millions</th>
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<tbody>
<tr>
<td>At Sept 30 2009</td>
<td>0.07</td>
</tr>
<tr>
<td>At Sept 30 2010</td>
<td>0.29</td>
</tr>
<tr>
<td>At Sept 30 2011</td>
<td>0.87</td>
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<tr>
<td>At Sept 30 2012</td>
<td>2.00</td>
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<td>At Sept 30 2013</td>
<td>4.23</td>
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<td>At Dec 31 2013</td>
<td>4.79</td>
</tr>
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Figure 4. Scale-up of voluntary medical male circumcision program and coverage in 14 priority countries: growth scenarios, 2008-2016. Source of 2008–2012 data is the WHO 2012 VMMC report [38]; 2013 figures are estimates, and 2014–2016 figures are projections. In the “no growth” scenario, the program continues to perform the same numbers of circumcisions each year as in 2013. In the “current growth” scenario, the program continues the trend of historical growth rate.
Efficiencies in Context of Program

VMMC Supply  VMMC Demand
Supply-Side Efficiencies

- Models for Optimized Volume and Efficiency (MOVE)
  - Modified service delivery configurations (staff, infrastructure, flow) to minimize surgeon’s per/case time
  - Increase platform capacity to absorb high demand periods
  - Efficiency dependent upon high demand
Anecdotal Evidence of Efficiency

Total: 4702 Circumcisions in Pilot Sites to Date
Multi-country operations research study evaluating MOVE implementation

- Safety
- Quality
- Efficiency
- Scalability

Published PLoS ONE, May 2014

Demand-Side Efficiencies

• Increase intention among target audiences
  – Which messages/channels resonate with specific groups?
• Increase predictability of demand and the associated activity costs
• Normalize/smooth demand for VMMC
• Complement existing public health social and behavior change communications with novel approaches to increasing demand
Novel Approaches

- Understand target audience in a broader context, e.g., as a consumer market (not just a population at risk of HIV)
  - Consumers make decisions about services and products (beyond just being targeted with health messages)
  - Messages and channels selected to be evocative and aligned with identity, self image, and aspirations (beyond just directive and rational instructions)
  - *Eureka:* public health objectives may not be (often likely are not) the same as individual’s objectives

- Utilize methods/metrics from marketing & advertising domain for real-time monitoring of consumer responsiveness
Solutions Spanning Supply & Demand

- Non-surgical devices
- Improving acceptability/accessibility of service platform
  - Distinct locations for adults vs. adolescents
  - Outreach/mobile services for hard-to-reach populations
- Supply models flexible to demand fluctuations
Solutions for Both Supply & Demand

- Non-surgical devices (numerous evaluations underway)
  - Easier to implement?
    - Nurse-based model equals larger HR pool
    - Less time required of clinicians
    - May not need sterile surgical field
    - Easier to dial-up/back, integrate within health facilities
  - More acceptable?
    - Circumvent fears/concerns
      - Pain, bleeding, time off of work
    - Mobilize new audience segments
Integrating VMMC into HIV Continuum

- Linking with other interventions as sources of referral to VMMC
- VMMC case-finding/referral from VMMC to HIV care & treatment *
- Scale-up of VMMC with other interventions in key communities/populations
  - Where is incidence high, MC uncommon, and ART coverage low?

* Kikaya V, et al., Voluntary medical male circumcision programs can address low HIV testing and counseling usage and ART enrollment among young men: lessons from Lesotho. PLoS ONE, May 2014 | Volume 9 | Issue 5 | e83614
Refocus on Epidemic Impact

- Mathematical modeling to compare impact across groups of males (age, region, risk)
  - Magnitude/immediacy of incidence reduction
  - Cost per HIV infection averted and total program cost
  - Number of circumcisions to prevention 1 HIV infection

- Possible to circumcise fewer men & still preserve impact
  - Example: Circumcising 15-24 yr olds (~60% of target population) still results in ~80% of infections averted
Lessons (and Questions) Learned

• There are unknowns, and moving forward in the face of some uncertainty is necessary

• The most successful programs are led and managed by the partner country governments
  – How are constrained ministries best capacitated to coordinate programs?

• Targets galvanize action; funding enables results

• Where there are health risks, safety/quality must trump speed and cost
  – What are the best methods to institutionalize quality assurance/continuous quality improvement?
Lessons (and Questions) Learned

• Supply-side efficiencies can be achieved while maintaining quality and safety
  – Will innovations/devices afford novel service configurations, e.g. home-based/employer-based placement/removal?

• Service supply should be designed to receive/make client referrals
  – What facilitates linkages between/among programs?

• Improving uptake may require broader perspective than conventional public health approaches
  – What insights may be gained from marketing & advertising, behavioral economics, other disciplines (in both creating and monitoring demand)?
Lessons (and Questions) Learned

• Clients are human and behave as such
  – How is partial protection best communicated to mitigate risk compensation? Which counseling techniques instill healthier male sexual norms?

• Supply and demand solutions don’t equate to efficiency unless supply and demand are matched
  – What service models and messages/media channels are more easily titrated?

• When rapidly expanding, it’s easy to lose sight of the goal; not all circumcisions are equal (in impact)
Thank you!