PLoS Medicine article on Human Resources for VMMC (part of the overall VMMC supplement published in November 2011)

- Conducted through USAID/MCHIP cooperative agreement

http://www.plosmedicine.org/article/info:doi/10.1371/journal.pmed.1001129?imageURL=info:doi/10.1371/journal.pmed.1001129.g002
Number of Adult VMMC Needed to Reach 80% Coverage and Avert an Estimated 3.4 million New Infections

Source: Njeuhmeli E, et al. (2011)
Key Elements of High Volume Quality Services

- Effective Communication Focused on Demand Creation
- Efficient Supply Chain System and Pooled Procurement to Decrease Commodities Costs
- Dedicated Human Resources (Task Shifting, Task Sharing)
- Dedicated Space

Efficient VMMC Program
Making Efficient Use of Human Resources

- According to WHO, sub-Saharan Africa has 3% of the world’s skilled health workforce but 25% of the world’s disease burden.

- Given all the competing demands, it is unfair to providers, clients, program managers and communities to waste the talents of our limited numbers of doctors, clinical officers and nurses. We need to use them efficiently!
In an Ideal World…

Slight scarcity can create demand and buzz for product
An (Almost) Ideal World

Steady Demand

Productive Providers
Strategies for Meeting Human Resource Needs in VMMC Programmes

- Task shifting
- Task sharing
- Expanding the size of the VMMC workforce
Task Shifting

- Nurses provide adult VMMC surgery in Ethiopia, Rwanda, Kenya, Tanzania, Mozambique and Zambia.
- Adverse events rates are similar for doctors, clinical officers and nurses once provider experience has been controlled for.
  - In other words….it’s the number of procedures conducted that matters, not the cadre of the provider.
In VMMC, task sharing is defined as shifting certain surgical steps to non-physician providers. The most complex steps (removal of the foreskin, hemostasis, mattress sutures) remain the responsibility of the doctor.
Figure 2. Conventional and modified surgical approaches to MC provision.

http://www.plosmedicine.org/article/info:doi/10.1371/journal.pmed.1001129
Problem Plaguing Many Countries

![Balance Scale Diagram]

- Demand
- Supply
When Demand is Low

Empty Waiting Areas

Idle Providers
Under Capacity Sites Are Expensive and De-motivating

<table>
<thead>
<tr>
<th>mixed site</th>
<th># circ/yr</th>
<th>unit cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>10% of max</td>
<td>2,640</td>
<td>$83</td>
</tr>
<tr>
<td>20% of max</td>
<td>5,280</td>
<td>$61</td>
</tr>
<tr>
<td>average</td>
<td>15,400</td>
<td>$47</td>
</tr>
<tr>
<td>80% of max</td>
<td>21,120</td>
<td>$45</td>
</tr>
<tr>
<td>max</td>
<td>26,400</td>
<td>$44</td>
</tr>
</tbody>
</table>

- Unit cost decreases with increased site utilization
- At 10% utilization the unit cost is almost double the unit cost at “average” site utilization
Training: Lessons Learned

- Training capacity has been developed at country level. Most programs have quite low rates of moderate and severe adverse events.

- HIV testing uptake is high in most programs; the minimum package is being delivered. Many countries use counseling-specific training package.

- Surgical training can be shortened if participants are only taught certain skills (task-sharing or MOVE approach).
  
  However, programs in which providers are limited to one role (i.e., suture nurse, recovery room) often face challenges with boredom, burnout and high turnover. Thus a short term savings in training might lead to longer term costs in recruitment and training.
Lessons Learned: Retaining and Motivating Human Resources

- In settings with high demand, sufficient counselors and motivated providers, multiple-bed sites can routinely conduct 50-100 (or more) circumcisions per day.
Lessons Learned: Keeping Providers Motivated

Work hard to match supply and demand

- Idle providers quickly become demotivated

In settings of high demand

- Catering meals in during campaigns can save time and foster team spirit
- If overtime is being paid to providers, be sure to pay it on time to all staff
Keeping Providers Motivated, cont.

- Rotate providers between roles (and even between sites) to reduce boredom
- Remind VMMC providers and clinic staff that a small number of VMMCs is needed to avert one new HIV infection.
- Thank them! They are saving lives and keeping families healthy and intact
Expanding the Size of the VMMC Workforce

- Targeted recruitment of recently graduated health workers
- Increased number of human resources allocated during periods of high demand (campaigns, winter, school holidays)
  - Overtime is often paid in this setting
  - Some HR are willing to work during annual leave (for extra pay)
- Identifying nurses or other healthcare workers who are no longer in the workforce
- Use of volunteer health professionals in selected settings
## Findings: Quantification of Nursing Workforce in Swaziland

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployed but registered with the Swazi Nursing Council</td>
<td>110</td>
<td>Breakdown: Zimbabwean: 57 (51.8%); Swazi: 32 (29.1%); Zambian: 4 (3.64%); Congolese: 4 (3.64%); Uganda: 1 (0.9%); Ghana: 1 (0.9%); Nigeria: 1 (0.9%); Unknown: 10 (9.1%)</td>
</tr>
<tr>
<td>Recently retired (within five years)</td>
<td>12</td>
<td>These nurses all indicated their interest in returning to work to support MC services</td>
</tr>
<tr>
<td>Newly graduating professional nurses</td>
<td>8</td>
<td>Eight graduating nurses indicated their interest in working on MC full-time</td>
</tr>
<tr>
<td>Swazi nurses working in the UK</td>
<td>5</td>
<td>These nurses all indicated their interest in returning to Swaziland to work to support the accelerated VMMC program</td>
</tr>
<tr>
<td>Newly graduating nursing assistants</td>
<td>17</td>
<td>These nursing assistants can staff recovery rooms or serve as bedside nurses (not anesthesia/suture nurses)</td>
</tr>
<tr>
<td>On-leave from public sector employment</td>
<td>Average of 107 per month</td>
<td>Most of these nurses are on vacation, not medical or maternity leave</td>
</tr>
<tr>
<td>Total</td>
<td>259</td>
<td></td>
</tr>
</tbody>
</table>
Conclusions

- Countries have experimented with many strategies to meet the human resource needs of the VMMC scale up.
- HR strategies must take into account the existing demand (and patterns of seasonal demand) in order to ensure that skilled healthcare workers recruited to VMMC are used efficiently.
Acknowledgements

- PLoS Medicine coauthors
- Emmanuel Njeuhmeli, USAID/Washington
- Ramona Godbole and Katharine Kripke, Futures Group
- Jabbin Mulwanda, Jhpiego/Swaziland (formerly Zambia)
- Hally Mahler, Tigistu Adamu and other MCHIP colleagues