

THE PRESIDENT'S EMERGENCY PLAN FOR AIDS RELIEF

PEPFAR MALE CIRCUMCISION TECHNICAL WORKING GROUP

PEPFAR MALE CIRCUMCISION PARTNERS' MEETING: COMMODITIES AND IMPROVED COORDINATION OF MALE CIRCUMCISION FOR HIV PREVENTION

May 19-20, 2009
National Press Club
Washington, DC USA



USAID
FROM THE AMERICAN PEOPLE



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DISCLAIMER

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ABBREVIATIONS

ACHAP	African Comprehensive HIV/AIDS Partnerships
AED	Academy for Educational Development
BCC	Behavior change communication
C-CHANGE	USAID Communication for Change
CDC	United States Centers for Disease Control and Prevention
COP	Country Operational Plan
COSECSA	College of Surgeons of East, Central and Southern Africa
DOD	United States Department of Defense
EQA	External quality assurance
FBO	Faith-based organization
FHI	Family Health International
GH Tech	Global Health Technical Assistance Project
HIV	Human Immunodeficiency Virus
HPI	USAID Health Policy Initiative
ICT	Information and communication technologies
IEC	Information, education and communication
Jhpiego	Johns Hopkins Programs for International Education in Gynecology and Obstetrics
JHUCCP	Johns Hopkins University Center for Communication Program
MAP	Men as Partners Program (Kenya)
MC	Male circumcision
MC MOVE	Models for Optimizing the Volume and Efficiency of MC Services
MMC	Medical male circumcision
MOH	Ministry of Health
MSI	Marie Stopes International
NDOH	National Department of Health
NGO	Non-governmental organization
NIH	National Institutes of Health
OGAC	Office of the U.S. Global AIDS Coordinator
OR	Orange Farm
PEPFAR	The President's Emergency Plan for AIDS Relief
PSI	Population Services International
QA	Quality assurance

RCT	Randomized controlled trial
RH	Reproductive health
RHSP	Rakai Health Science Program
SANAC	South Africa National AIDS Committee
SCMS	Supply Chain Management System Project
STI	Sexually transmitted infection
TWG	Technical Working Group
UCSF	University of California San Francisco
USAID	United States Agency for International Development
UNAIDS	Joint United Nations Programme on HIV/AIDS
USG	United States Government
VCT	Voluntary counseling and testing
WHO	World Health Organization
ZPCT	Zambia HIV/AIDS Prevention, Care, and Treatment

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The workshop was organized by the President's Emergency Plan for AIDS Relief (PEPFAR) Male Circumcision Technical Working Group (TWG), including representatives from the Office of the U.S. Global AIDS Coordinator (OGAC), the United States Agency for International Development (USAID), the United States Centers for Disease Control and Prevention (CDC), the National Institutes of Health (NIH), and the U.S. Department of Defense (DOD), as follows:

1. OGAC: Nomi Fuchs-Montgomery
2. USAID: David Stanton and Emmanuel Njeuhmeli
3. CDC: Naomi Bock and Jason Reed
4. NIH: Melanie Bacon, Caroline Williams, Sheryl Zwierski, and Janelle Mingus
5. DOD: Anne Thomas

We gratefully acknowledge the World Health Organization (WHO) and the Joint United Nations Programme on HIV/AIDS (UNAIDS) representatives, Dr. Kim Eva Dickson, and Dr. Catherine Hankins, respectively, for their involvement and support of the TWG meeting.

The Bill & Melinda Gates Foundation and the Clinton Foundation were represented by Jessica Fast and Joanna Rosenblum, and by Kim Shaffer, respectively.

We acknowledge the following PEPFAR Male Circumcision Partners: Population Services International (PSI), Johns Hopkins Program for International Education in Gynecology and Obstetrics (Jhpiego), Family Health International (FHI), USAID Communication for Change Project (C-CHANGE), USAID Health Policy Initiative Program (HPI), Marie Stopes International (MSI), PEPFAR Supply Chain Management System Project (SCMS), University of California San Francisco (UCSF), Westat, EngenderHealth, African Comprehensive HIV/AIDS Partnerships (ACHAP), Johns Hopkins University Center for Communication Program (JHUCCP), Rakai Health Sciences Program (RHSP) in Uganda, and Progressus with the Orange Farm Project in South Africa for their active and productive involvement during the meeting.

We would like to recognize the fantastic job done by Jessica Fast, Sameer Sakallah, Kelly Curran, Dino Rech, Kristin Chrouser, Petra Stankard, Brian Pederson, Jabbin Mulwanda, Anne Thomas, Jason Reed, Naomi Bock, Janelle Mingus, and Emmanuel Njeuhmeli to finalize the list of commodities and product specifications after the meeting.

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EXECUTIVE SUMMARY

A workshop, “The PEPFAR Male Circumcision Partners’ Meeting on Commodities and Improved Coordination of Male Circumcision for HIV Prevention,” organized by the PEPFAR Male Circumcision Technical Working Group (MC TWG), with logistics support from the Global Health Technical Assistance Project (GH Tech), was held on May 19–20, 2009 at the National Press Club in Washington, D.C. The workshop objectives were: (1) to extend the dialogue and share experiences among donors, funders, and programs/partners; and (2) to discuss and recommend solutions for commodity and procurement issues that are the main constraints of scaling-up male circumcision (MC) implementation.

The workshop goals were twofold: (1) Presentation of updates of the PEPFAR Partners’ program implementation and challenges in the field to implement MC service delivery and (2) to prepare a list of options on commodities issues: specifically, a comprehensive list of commodities, refining kits, and modules options, and procurement and supply chain management issues.

Workshop participants included:

- Representatives from the PEPFAR MC TWG including OGAC, USAID, CDC, NIH, DOD
- WHO and UNAIDS
- The Clinton Foundation
- The Bill & Melinda Gates Foundation
- Representatives from the PEPFAR Male Circumcision Partners
 - Population Services International (PSI)
 - Jhpiego
 - Family Health International (FHI)
 - EngenderHealth
 - Marie Stopes International (MSI)
 - African Comprehensive HIV/AIDS Partnerships (ACHAP)
 - USAID Communication for Change (C-CHANGE)
 - USAID Health Policy Initiative (USAID HPI)
 - Johns Hopkins University Center for Communication Program (JHUCCP)
 - Rakai Health Science Program (RHSP)
 - Orange Farm (OR)
 - University of California San Francisco (UCSF)

The meeting was organized as a combination of presentations, question and answer (Q&A) sessions, interactive discussions, and moderated forums.

In her welcoming comments, Nomi Fuchs-Montgomery from OGAC said that PEPFAR continues to value and support MC and wants to increase the program pace and funding. She also said that OGAC was grateful for the collaboration with WHO/UNAIDS and the other donors. Following this welcome, David Stanton, United States Agency for International Development (USAID), greeted the participants and reviewed the objectives of the workshop. He said that the objective of the first day of the workshop was to give the partners a chance to showcase their MC implementation efforts and the donors the opportunity to question the partners.

I. DAY ONE PRESENTATIONS

Countries Support and Implementation/WHO-UNAIDS Materials / Website

Dr. Kim Eva Dickson, WHO, reviewed the background of WHO/UNAIDS involvement in MC. Thirteen countries have been identified as high prevalence “priority” countries. They are: Botswana, Kenya, Lesotho, Malawi, Mozambique, Namibia, Rwanda, South Africa, Swaziland, Tanzania, Uganda, Zambia, and Zimbabwe.

The UN partners are working together to:

1. Set global norms and standards,
2. Provide technical support to countries,
3. Conduct high-level advocacy and develop global communication strategies and messages, and
4. Coordinate the setting of global research priorities and develop systems for monitoring and evaluation of male circumcision services.

To this end, the UN partners are working together to develop resources supporting program scale-up through information/advocacy documents, guidance documents, tools, reports, and the MC Clearing House (www.malecircumcision.org). The Clearing House was launched in March 2009 and Dr. Dickson invited partners to submit materials for it and to use the toolkit.

She reviewed opportunities, such as increasing political support, UN leadership and coordination, increasing demand, growing donor support and interest among GFATM, PEPFAR, and the Bill & Melinda Gates Foundation. Because more implementing partners are working on MC, more technical support is available. Innovations in the field include: Models for Optimizing the Volume and Efficiency of MC services (MC MOVE), a volunteer program, MC devices, MC collaborating centers, communications across borders, and partnerships for progress.

Dr. Dickson said that the challenges to implementation include: human resource and health systems constraints, ensuring integration with other programs, rapid scale-up to maximize impact, communication, role of traditional providers, and implications for women (gender sensitivity).

PEPFAR Partners' Presentations

A. PSI

Steve Gesuale, PSI, represented PSI and the MC Partnership, a consortium of four organizations including PSI, Marie Stopes International, the Population Council, and Jhpiego.

The MC Partnership works in five countries: Botswana, Lesotho, South Africa Swaziland, and Zambia, where high MC demand but very limited supply of MC services exists.

The MC Partnership uses a multi-sectoral approach that works across all three sectors: public, private, and nongovernmental organizations (NGOs). The MC Partnership hopes to use social franchising principles to develop high coverage of safe, quality MC services in all three sectors. It is looking into obtaining a “seal of approval” for qualified sites.

Challenges identified by PSI include: a lack of human resources, risk compensation using information and communication technologies (ICT) materials, the impact on women, and the need for developing materials to target women.

B. Jhpiego

Jabbin Mulwanda presented with Kelly Curran of Jhpiego, an affiliate of Johns Hopkins University. Jhpiego has been supporting the development of MC policy, guidelines, and service delivery; training MC service providers and counselors; providing quality assurance and performance improvement; and conducting operations research. As of May 2009, Jhpiego was implementing or about to launch MC activities in the following countries: Botswana, Ethiopia, Lesotho, Mozambique, Namibia, Rwanda, South Africa, Swaziland, Tanzania, and Zambia.

The speaker highlighted the Zambia MC/MRH pilot which led to the development of Male Circumcision under Local Anesthesia and its associated learning resource package. The training package currently includes an adult MC course. In addition, Jhpiego also collaborated on several tools and documents that are available on www.malecircumcision.org, including the MC Operational Guidance and Quality Assurance Toolkit.

Jhpiego also participated in several international/regional MC meetings and conducted an MC technical update for the College of Surgeons of East, Central and Southern Africa (COSECSA).

Jhpiego will be developing and field-testing a newborn/pediatric MC courseware based on content from the reference manual.

C. USAID HPI and the Futures Group

Johannes Van Dam and Tanvi Pandit-Rajani presented key policy considerations: program effectiveness, service delivery, and evaluation for successful implementation. They reviewed their current program and the next steps for MC policy planning. The speakers first discussed programmatic effectiveness that begins with a policy dialogue and moves on to policy development and implementation. Next, they discussed service delivery using this approach. Then they looked at the key policy questions concerning evaluation.

Citing accomplishments to date, USAID HPI listed a regional study that it conducted to estimate the cost and impact of MC in Lesotho, Swaziland, and Zambia (2006-07) and the development of the MC Decision Makers’ Tool and the Policy Analysis Tool.

Next steps include applying the MC Decision Makers’ Tool at the provincial level in South Africa (summer 2009), with the possibility of including Malawi, Rwanda, and Zimbabwe. USAID HPI also wants to pilot the MC Policy Analysis Tool following discussions with UNAIDS, the United States Government (USG), and country partners.

D. EngenderHealth

Paul Perchal and Mark Barone of EngenderHealth gave a brief background on EngenderHealth’s MC efforts in Kenya, South Africa, and Tanzania. Their presentation focused on service delivery activities in Kenya, South Africa, and Tanzania; and research programs (the Male Circumcision Consortium Project and the Shang Ring Pilot Study). They use an integrated approach to service delivery using a supply-demand-advocacy model. The speakers presented the findings from site assessments of equipment/supplies.

The APHIA II Nyanza (Kenya) MC Service Statistics showed that the majority of circumcisions were performed on young men, ages 15–24. They discussed the Men as Partners (MAP) program as providing a great opportunity for synergy with MC activities. The speakers discussed some of the challenges and limitations.

Also discussed were three research studies that were undertaken as part of the Male Circumcision Consortium Project, the benefits of the Shang Ring for MC, and the upcoming pilot study of the Shang Ring.

E. FHI

Kwaku Yeboah presented FHI's MC work in Kenya, Rwanda, Tanzania, Uganda, and Zambia. FHI is currently applying WHO recommendations for MC, working with partners to answer key questions about MC, and supporting governments to offer MC services.

- **Kenya** is part of the Male Circumcision Consortium.
- **Uganda** is applying the WHO Situation Analysis tool and conducting research to better understand traditional MC.
- **Rwanda** has hosted meetings and human capacity building activities. The Ministry of Health (MOH) announced plans to adopt a neonatal MC policy in January 2009.
- **Tanzania** is a task force member for the development of a National Strategic Plan.
- **Zambia** is working on the follow on to Zambia HIV/AIDS Prevention, Care, and Treatment (ZPCT) Partnership.

F. JHU CCP

Stella Babalola and Richard Delate, JHU CCP, gave a presentation on its activities, providing a social and behavioral perspective on male circumcision. They began by describing the approach used in nine African countries: Ethiopia, Ghana, Liberia, Malawi, Mozambique, South Africa, Tanzania, Uganda, and Zambia. They described how JHUCCP designs communication programs through a strategic communication plan, their work in MC and communication, the formative research conducted in South Africa and Uganda, the strategic communication underway or planned in southern Africa, and the tools and resources on MC developed or being developed. Next steps mentioned by the speakers were the need to scale up interpersonal efforts to address perceptions about MC using existing campaigns targeting men.

G. USAID C-Change

Rose Mary Romano and David Hughes, Academy for Educational Development (AED), presented the USAID C-Change work on MC. Partners for Health and Development Communication (PHDC) is a new five-year, USAID-supported \$175 million global health and development communication initiative. AED's five regional partners are the Centre for Media Studies and New Concept Information Systems, India; Straight Talk and Social Surveys, Uganda; and Soul City, South Africa. Its U.S.-based partners include CARE International, Internews, Ohio University, the University of Washington, and IDEO. Additional resources are provided by the Communication for Social Change Consortium, the Communication Initiative, and Intel.

In Africa, C-Change is working in the Democratic Republic of Congo, Ethiopia, Kenya, Lesotho, Madagascar, Namibia, São Tomé, and Swaziland. In Lesotho, it is working on a program for Capacity Strengthening and Implementation for HIV and AIDS.

Potential Costing and Impact of Scaling-up Male Circumcision Service Delivery

John Stover, USAID HPI, and Emmanuel Njehumeli, USAID/Washington, gave an overview of USAID HPI's role in the design of MC roll-out strategies. They produced estimates of: new infections averted from 2009–25, the annual costs of MC services, the discounted cost per infection averted versus future treatment costs, and the annual number of MC procedures required.

They concluded that MC programs have a large potential impact and will be cost effective, and that program requirements will depend on the pace of scale-up and whether or not funders and health systems are prepared to provide up to 13 million MCs per year by 2012.

PEPFAR Future Directions of MC for HIV Prevention

Nomi Fuchs-Montgomery, OGAC, and Naomi Bock, CDC Atlanta, gave a summary of the evolution of PEPFAR support for MC since FY 2007. PEPFAR is now supporting MC activities in 14 countries and working with host countries, WHO, and other partners and donors in program planning and implementation.

Funding has grown exponentially over time from about US\$600,000 in FY 2007 to about US\$28 million in FY 2009. There is now donor collaboration with the Gates Foundation in several countries and PEPFAR support to WHO. The presenters mentioned many challenges that exist with roll-out, such as human resources, scale/pace of roll-out, and quality assurance. They are moving toward a two-pronged approach for building capacity and sustainability, while trying to provide some immediate assistance to meet demand

The speakers discussed the PEPFAR funding guidelines and the need for host country support, as well as the data requirements for tracking and reporting on the MCs performed. They discussed the priority populations—such as high-risk groups—and the importance of establishing targets. The issue of quality was also discussed. Sustainable services should focus on successive cohorts of either neonates or adolescents. To achieve the rapid roll-out response for “catch-up” MC, several factors are needed, including: a dedicated staff, volunteers, task sharing/shifting, and optimized facility space and patient flow. The speakers said that quality assurance was a major component of PEPFAR-supported programs. They asked if facilities and staffing are adequate to handle the rising scale and volume.

PEPFAR is coordinating with the Bill & Melinda Gates Foundation on service delivery and research funding in several countries in order to avoid duplication. The speakers also mentioned that political will is key to successful programs, pointing out the need for “Champions for an HIV-free Generation,” international opinion leaders who have successfully moved country's leadership toward more support of MC. They cited Kenya, where at 100 sites, 20,000 MCs were performed in six months.

PEPFAR MC TWG Panel Discussion

Nomi Fuchs-Montgomery from OGAC introduced the panel comprised of members of the PEPFAR Male Circumcision Technical Working Group, as follows:

- Nomi Fuchs-Montgomery, OGAC
- Emmanuel Njehumeli and David Stanton, USAID
- Jason Reed and Naomi Bock, CDC
- Janelle Mingus, Carolyn Williams, Sheryl Zwierski, and Melanie Bacon, NIH

- Anne Thomas, DOD

Jason Reed, CDC, gave a presentation to lead the panel discussion. He presented the key components of MC services delivery: scale of services, human resources constraints, quality assurance, and communications, HIV testing considerations, gender, and risk compensation. The panel then addressed the following nine topics:

1. Achieving Scale
2. Meeting Human Resource Constraints (Training)
3. Quality Assurance
4. Communication and Policy
5. Linkage
6. Gender Considerations
7. Neonates and Children
8. Monitoring & Evaluation
9. Traditional Circumcisers

II. DAY TWO PRESENTATIONS

Day Two Objectives

Emmanuel Njeuhmeli, USAID, reviewed the objectives for the second day of the meeting. These were to:

- Propose comprehensive lists of commodities that are needed for an MC site,
- Propose the contents of various MC kits, and
- Propose recommendations for improvements in the procurement and supply chain management systems.

To achieve these expected outcomes, a series of presentations, reviewed below, were made. Two working groups developed the list of commodities and kits, and made recommendations on procurement and supply chain improvements.

MC Procurement and Supply Chain Management: Supply Chain Management Systems (SCMS)

Dr. Sameer Sakallah, SCMS Project, presented background information about the project, including its experience, online catalog, and lessons learned. SCMS was established in 2005 to create sustainable solutions to supply chain challenges and is administered by USAID. It serves all USG agencies.

SCMS's mission is to strengthen or establish secure, reliable, cost-effective and sustainable supply chains to meet the care and treatment needs of people living with or affected by HIV/AIDS. The SCMS Project works in Botswana, Côte d'Ivoire, Ethiopia, Guyana, Haiti, Kenya, Mozambique, Namibia, Nigeria, Rwanda, South Africa, Tanzania, Uganda, Vietnam, Zambia, and Zimbabwe.

Items procured through SCMS and its new product lines were also presented. Dr. Sakallah discussed the E-catalog and its new categories under development.

The SCMS Project currently procures antiretrovirals, rapid HIV test kits, laboratory equipment, supplies and consumables, drugs for opportunistic infections and sexually transmitted infections (STIs), and other miscellaneous items such as vehicles. New product lines are food by prescription, home-based care kits, blood safety supplies, and male circumcision supplies.

Funders' Perspective on MC Kits and Commodities

A. The Bill & Melinda Gates Foundation

Kim Shaffer presented a brief overview of the Bill & Melinda Gates Foundation and their MC objectives to: catalyze scale-up of male circumcision; answer operational research questions including costing; and review whether MC devices are acceptable and safe. The foundation is looking to:

- Build on synergies and reduce duplication,
- Work in partnership with other funders, and
- Build an evidence base (including costing) to stimulate scale-up in other countries.

The Gates Foundation does not have a position on commodities and kits or experience with kits. Representatives are attending the meeting to listen to the presentation to learn more about the current status of MC activities.

B. The Clinton Foundation

Jessica Fast explained that the Clinton Foundation is exploring the feasibility of developing MC kits to facilitate access to supplies by:

- Developing product specifications,
- Forecasting demand,
- Engaging suppliers, and
- Negotiating price.

The work of the foundation to date has focused on developing product specifications.

The Clinton Foundation believes that kits are an appropriate option, but there are important items to consider:

Benefits

- Bundling eases ordering and managing of supplies.
- Packaging ensures disposable and consumable products are sterile.
- Kits increase the efficiency of service delivery.
- Kits facilitate dissemination of take-home educational materials.

Drawbacks

- Kits may be more expensive than buying supplies in bulk.
- Kits limit the flexibility of clinicians to use their preferred equipment.
- Components may be pilfered from kits, compromising sterility of the remaining contents.

To develop kit options, the foundation identified key factors that impact contents and outlined kits to address each combination of factors. They used the Orange Farm kit as the base kit and then determined how contents would change for each key factor. This resulted in draft contents for six preliminary kits.

C. PEPFAR: Stakeholders' Perspectives on MC Commodities Issues

Emmanuel Njeuhmeli said that PEPFAR and WHO are working to develop a number of models for optimized volume and efficiency. Task shifting and sharing, facility design, allocation of staff skills and time, clinical techniques, patient flow and scheduling, and supply chain management, including the use of MC kits, are all variables that may be optimized and work together to yield the best return.

To resolve issues related to MC commodities, it is important to examine all stakeholders' interests. Limited human and financial resources are available at the service facility level to allow them to manage MC commodities issues. Service facility staff has limited expertise in SCM, forecasting demand, knowledge of specifications, and efficient site organization. Medical suppliers have limited warehouse capacity to meet the increased demand and difficulties of sourcing items internationally.

Options for improvement include capacity building for an efficient SCM system, standardization of commodities, and a centralized procurement system. With WHO-UNAIDS support, PEPFAR is taking the lead in issuing supply chain management recommendations. The procurement process at high volume may reduce individual supply costs through vendor competition, and cost savings may offset the costs of bundling supplies into kits.

Clinical and Programmatic Perspectives and Experience on MC Kits and Commodities

A. PSI

Steve Gesuale noted that PSI has adopted the use of MC kits for sites in Zambia and Swaziland and that the kits have been very beneficial for its program. He pointed out that standardizing kits is challenging. Different types of kits are required for different procedures: forceps-guided, dorsal slit, or the sleeve method. He enumerated several challenges to standardization, such as the inclusion of pharmaceuticals (different countries have different pharmaceutical regulations), service provider preferences, and the need to build supplier capacity to meet demand.

Both local and international suppliers offer benefits. Knowing how to source basic, but high-quality, equipment from reliable suppliers is important, as is understanding how to manage multiple sites. It is easy to supply equipment to up to five sites. With the scaling-up, however, it becomes more difficult to have an efficient distribution system.

B. Jhpiego

Jabbin Mulwanda presented the Facility Readiness Assessment in Zambia conducted by Jhpiego. In Zambia, with the exception of MC pilot sites, most facilities provide MC mainly for medical indications. The service is provided for all ages and relatively few procedures are done. There is

no linkage between MC and other HIV or reproductive health services. However, HIV testing and STI services are available, but are not integrated into the current MC Service delivery.

In Zambia, there is need for increased buy-in by the MOH at all levels if MC services are to be scaled up and sustained. Tacit support is not enough. For massive scale-up, MC must be seen as a major priority at all levels of the health system. To scale up MC, health facilities will require a significant investment of infrastructure and equipment as well as supplies.

Kelly Curran presented an assessment of the situation in Mozambique, including a review of the needs of general and minor surgery services. All provincial, general, rural, and district hospitals of the countries were assessed. This resulted in the decision to do MC at certain locations in a pilot program integrated with other minor surgeries. Based on the results of that pilot, the MOH will decide whether or not to implement a full program.

C. Rakai Health Sciences Program

Stephen Watya presented the Rakai experience with MC kits. Rakai has no experience with commercial circumcision kits but it uses hospital packs designed for circumcision. The packs are prepared by the sterilization section of the operating theater. The packs are composed of sterile reusable drapes, gowns, and instruments; clean reusable caps and masks; sterile packs of consumable cotton gauze; sutures, local anesthetic, gloves, and syringes; and skin prepping and hand scrub solutions.

He described the advantages and disadvantages of this system. To address shortcomings, he suggested the following:

- Keep the number of instruments to a minimum.
- Include all the requirements in one pack.
- Have a central unit prepare packs for smaller circumcision centers.
- Develop a system for the collection of reusables.

He said that Rakai provides training through WHO and PEPFAR for doctors to provide MC services.

D. Orange Farm Trials

Dino Rech and Bertran Auvert presented the Orange Farm Trials experience with MC kits. Dr. Rech explained the background in the development of the Orange Farm kits. MC kits were identified as an important component (in the setting of Orange Farm) to cost-effective scale-up.

Explaining the benefits of surgical kits, Dr. Rech said that they ensure good quality, sterile content in both non-hospital and hospital settings. They are logistically and operationally friendly, and well-designed. This is especially important in African environments. He mentioned the cost savings in staff time and operational costs. However, there are some environmental and cost-benefit concerns.

He described the current MC kits being used in Southern Africa and showed a video on one type of kit. Dr. Rech explained the production and packaging of current Southern African kits and the characteristics of an ideal kit.

Hospitals are using kits more and more to maximize use of doctor time in many surgical settings where wards are not well controlled.

E. Kenya Male Circumcision Consortium

Michael Stalker presented information about the Male Circumcision Consortium in Kenya, a research-focused site funded by the Bill & Melinda Gates Foundation. Its commodities and supplies are based on the RCT and are procured on a larger scale. Kits are assembled locally. The public sector needs in Kenya are: MOH endorsement on the kit approach; to receive bulk purchasing discounts of commodities and supplies; to integrate kits into existing logistics systems; and to ensure the integrity of the kits at the facility level.

Advocacy with the MOH in Kenya is essential. Lessons learned from prior investments need to inform strategies and the private sector can be an important partner.

F. Cost-Efficiency Analysis of Options of MC Kits: University of California San Francisco

Jim Kahn designed a new spreadsheet model to assess and compare costs of kit and no-kit options. The analysis was done using the six kit options from Jessica Fast of the Clinton Foundation and data provided by Dino Rech of Orange Farm.

The cost data came from Priontex, UNIM via FHI, Dino Rech, and the Internet. The cost was divided into components (instruments, commodities) and processes (set up, sterilization, and supply management). Limitations of this model include opportunistic cost data, no assessment of shrinkage or stock-out risks, no negotiation of price quotes, and the fact that economies of scale and competition among suppliers were not considered in prices.

The decision on whether or not to use kits depends on the type of program being implemented. Many countries do not have the facilities to make the kits. Also, costs have not included those for transport.

Emmanuel Njuehmeli visited Priontex, a South African supplier. Priontex can produce 1500 kits per day, but has the capacity to expand production to up to 15,000 kits per day. Storage costs will need to be included in the local context.

REPORTS OF WORKING GROUPS

A. Supply Chain Management and Procurement: Reported by David Stanton, USAID

David Stanton described the properties of a highly functioning supply chain management system which ensures that an uninterrupted supply of products reach the intended recipients with minimal waste or leakage. As MC services become more widely available and the number of sites offering MC increases, it becomes more challenging for the program office to procure, stock, and deliver MC commodities. These challenges to supply chains in developing settings include: inaccurate quantification and forecasting, problems with suppliers, difficult customs processes, poor storage facilities, weak transportation systems, diversion of products, inadequate training, and a lack of information systems.

The working group described the issues critical to improving the supply chain management of male circumcision commodities. These include:

- Quantifying and Forecasting
- Quality Assurance
- Procurement
- Vendor capacity
- Customs Processes

- Distribution
- Use/Reuse
- Disposal issues
- MC supplies beyond kits (infection prevention items, clinical equipment, and furniture)

B. MC Commodities List, Refining Kits, and Module Options

This working group identifies three purchasing options for surgical instruments and consumables and three modules for infection prevention, equipment and emergency toolkit. The first purchasing option is comprised of a reusable surgical instrument for forceps guided inside an autoclave sterile box plus a kit of consumables. The second purchasing option is comprised of a reusable surgical instrument for dorsal slit and sleeve method inside an autoclave sterile box plus a kit of consumables. The third purchasing option is comprised of fully disposable surgical instruments and consumables into a kit for forceps guided.

Key MC commodities should be incorporated into lists of national essential medicines and equipment, and in the procurement and distribution systems used by service delivery sites. MC programs should decide whether or not to procure MC commodities as prepackaged disposable kits or as reusable surgical instruments.

Closing Remarks

The PEPFAR MC TWG thanked all attendees for their participation and determination to reach agreement on the list of commodities, refine the kit options, and provide clear options on procurement and the supply chain management system.

MEETING OVERVIEW

I. INTRODUCTION BY NOMI FUCHS-MONTGOMERY FROM OGAC

PEPFAR continues to value and support male circumcision (MC) and wants to increase the program pace and funding. An open and productive dialogue was the goal for the first day of the workshop. Commodity issues were discussed on the second day. The speaker mentioned that there would not be the same increase in PEPFAR funding year-to-year. OGAC is grateful for the cooperation with WHO and UNAIDS and other donors such as the Bill & Melinda Gates Foundation and the Clinton Foundation. The workshop objectives were to extend the dialogue among the PEPFAR MC TWG, UN agencies, the Bill & Melinda Gates Foundation, the Clinton Foundation, and PEPFAR MC Partners.

II. OBJECTIVES BY DAVID STANTON FROM USAID/WASHINGTON

The workshop had two purposes: (1) to bring together active MC partners to take stock and share experiences and (2) to spend a day discussing commodity and procurement issues that are the main challenges of scaling-up MC.

The Day One objective was to give the Partners a chance to showcase their activities and to provide the donors an opportunity to ask questions.

III. CONDUCT OF THE MEETING

The meeting was organized as a combination of presentations, question and answer (Q&A) sessions, interactive discussions, and moderated forums. It was designed to encourage information-sharing and questions. A report of this meeting and complete presentations are available at USAID HIV prevention male circumcision website, <http://www.register.pepfar.net/> and <http://www.malecircumcision.org>.

FIRST DAY OF THE MEETING: TUESDAY, MAY 19, 2009

I. SUPPORT AND IMPLEMENTATION/WHO-UNAIDS MATERIALS BY KIM EVA DICKSON FROM WHO

About 50% of males globally are circumcised mainly for religious, cultural, or social reasons. HIV infection is less prevalent in areas where male circumcision is common. Three randomized controlled trials among men in Kenya, Uganda, and South Africa demonstrated 60% lower incidence of HIV infection in circumcised men. In March 2007, WHO and UNAIDS convened an international consultation and subsequently released policy and program recommendations on MC and HIV prevention. Eleven conclusions and recommendations were detailed.

The WHO-UNAIDS recommendations cover communications, socio-cultural issues, human rights, gender, programming, health systems, resource mobilization, HIV-positive men, and research issues. According to WHO recommendations, promoting male circumcision should be recognized as an **additional** important strategy for the prevention of heterosexually-acquired HIV infection in men. Male circumcision should be provided with full adherence to medical ethics and human rights principles, including informed consent, confidentiality, and absence of coercion. Male circumcision should never replace other known methods of HIV prevention but rather should be considered as part of a comprehensive HIV-prevention package. Health services should be strengthened to increase access to safe male circumcision services. Male circumcision is safe when performed by well-trained medical professionals in properly equipped facilities. Also, countries with high HIV prevalence (above 15%), generalized heterosexual HIV epidemics, and low rates of male circumcision should urgently consider scaling-up access to male circumcision services. As a result, thirteen “priority” countries were identified: *Botswana, Kenya, Lesotho, Malawi, Mozambique, Namibia, Rwanda, South Africa, Swaziland, Tanzania, Uganda, Zambia, and Zimbabwe*.

UN agencies under WHO leadership have a joint work plan on male circumcision with the goal of assisting countries to make evidence-based policy and program decisions to **improve** the **availability, accessibility, and safety** of male circumcision and reproductive health services as an integral component of **comprehensive HIV prevention strategies**.

The objectives are to: (1) set global norms and standards, (2) provide technical support to countries, (3) conduct high-level advocacy and develop global communication strategies and messages, (4) coordinate the setting of global research priorities, and (5) develop systems for the monitoring and evaluation of male circumcision services.

The UN partners are working together to develop resources to support program scale up through information/advocacy documents, guidance documents, tools, reports, and the Male Circumcision Clearing House.

Landmark events and UN actions since 2005 and progress made on MC to present, including country-by-country monitoring, were reviewed. This included looking at how countries integrate MC as part of prevention programs. The need to strengthen health services including MC services was highlighted.

To date, Kenya has made a lot of progress. Botswana is moving forward; the speaker met with implementing partners in these countries in December 2008, and they launched the program in April 2009. WHO and UNAIDS helped to jumpstart male circumcision as a method of HIV prevention in Swaziland, where they are waiting for the policy and strategy to be approved. In Lesotho, there are challenges with traditional providers (this is also an obstacle in Namibia) in

terms of having trained workers; some guidance is needed from WHO on this issue. South Africa and Rwanda are moving ahead. It is important for each country to know where the other countries are in the implementation process.

Opportunities were reviewed, including increasing political support, UN leadership and coordination, increasing demand, and growing donor support and interest among the Global Fund to Fight AIDS, Tuberculosis, and Malaria (GFATM), PEPFAR, and the Gates Foundation. More implementing partners are working on MC so that additional technical support is available.

Innovations in the field include MC MOVE, a volunteer program, MC devices, MC collaborating centers, communications across borders, and partnerships for progress.

Challenges include: human resources and health systems constraints, ensuring integration with other programs, rapid scale-up to maximize impact, communication, the role of traditional providers, implications for women (gender sensitivity), and the pace of scale up.

II. PEPFAR PARTNERS' PRESENTATIONS

PSI by Steve Gesuale

PSI presented the Male Circumcision Partnership, a consortium of four organizations including PSI that provides service delivery and communications. Marie Stopes International provides service delivery; the Population Council provides research and monitoring and evaluation; and Jhpiego provides training, service delivery, and counseling and testing services.

The MC Partnership currently works primarily in Zambia and Swaziland and plans to extend to Botswana, Lesotho, South Africa, and Zimbabwe. This partnership allows for regional coordination and knowledge sharing. In many of these countries, there is high MC demand and a low supply of MC services. The MC Partnership is working with the MOHs on communications. In Lesotho, there are issues with traditional practitioners. In South Africa, PSI is working with the Orange Farm Trial and providing counseling and testing services. In Zimbabwe, the PSI is helping the MOH to establish services in some government hospitals.

The MC Partnership uses a multi-sectoral approach that works across all three sectors: public private, and NGO-based.

Public sector: The key challenges are human resources, overwhelmed partners, a lack of supplies, and other well-funded programs competing for space and time with providers. The Partnership has had great success at lower-level clinics in Zambia.

Private sector: This has been the most challenging and least successful channel. It is difficult to allow staff time off from work to attend training; there are pricing issues and high fees set by the private sector for MC. At private community clinics, the services are informal and inadequate quality assurance need close monitoring, however, the clinics are popular and attend to many MC clients. The MC Partnership has established relationships with some of these clinics, such as mine hospitals. These hospitals work regularly with high-risk groups. However, they face challenges in accessing clients because managers are often reluctant to give employees time to go to the clinic for MC and follow-up. They have been able to persuade some mines to give sick leave in advance for MC.

NGO-based: These partners are dedicated to MC and can run mobile operations. This has been most successful part of program and has included works with mission hospitals.

- The MC Partnership hopes to use social franchising principles to develop high coverage of safe, quality MC services in all three sectors. They are looking into obtaining a “seal of approval” for qualified sites.

Challenges include a lack of human resources. This could be improved if nurses are permitted to perform MC; risk compensation, integration of ICT materials; improving a cell phone follow-up program (using an SMS text message system to send out post-operative reminders to clients; they are expanding the SMS program for client feedback) and improving communication for women around MC.

Jhpiego by Kelly Curran and Jabbin Mulwanda

Jhpiego is an affiliate of Johns Hopkins University with thirty five years of experience in strengthening the performance of healthcare workers and health systems in Africa, Asia, Near East and Europe, Latin America and Caribbean, with its headquarters in Baltimore, Maryland, USA. Jhpiego focuses on translating research into practice and employs nearly six hundred staff members in fifty five countries.

Jhpiego’s role in male circumcision focuses on MC policy and guidelines development; service delivery with orienting managers and providers; procurement of key supplies and equipment (including infection prevention supplies); refurbishment of some sites; assistance with client record keeping and data collection; training MC service providers and counselors; quality assurance and performance improvement; and some operations research.

In 2002, Jhpiego co-sponsored the international consensus meeting on MC for HIV Prevention with USAID and PSI, and from 2003 to 2005, the organization implemented a pilot MC/male reproductive health project in Lusaka, Zambia, in collaboration with PSI and AIDSMark. In December 2005, WHO approached Jhpiego for assistance in developing an international reference manual, *Male Circumcision under Local Anesthesia*; in 2006-07, Jhpiego developed training materials to support the reference manual content.

Jhpiego has collaborated with WHO and UNAIDS on the development and implementation of the adult MC course that covers five competencies: group education; individual counseling; pre-surgical assessment; MC procedure; and post-operative care and counseling. In June 2007, the course was field-tested in Lusaka, Zambia; between March and June 2008, additional regional MC courses were conducted; in January 2008, Jhpiego conducted a regional MC Training of Trainers.

Additional collaboration with WHO and UNAIDS was done for the Development of the Male Circumcision Situation Analysis Toolkit, the Male Circumcision Quality Assurance Standards, and the Male Circumcision Operational Guidance. All tools are available online at www.malecircumcision.org. Jhpiego participated in international and regional meetings related to Documenting Newborn MC Practices in Nigeria, Operations Research, MC Communications, and MC MOVE. Jhpiego conducted the MC technical update for COSECSA.

Jhpiego is currently working on the development of newborn/pediatric MC courseware based on content in the reference manual and plans to field-test the newborn MC course in the near future.

In Zambia, Jhpiego is working in collaboration with PSI to integrate MC services into stand-alone voluntary counseling and testing (VCT) centers (New Start), including repurposing counseling rooms into procedure rooms, providing advice on procurement of supplies/equipment, developing emergency plans, training providers, and providing supportive supervision for providers. The PSI-led consortium is working to scale up MC in Swaziland and Zambia, focusing on engaging NGOs, faith-based organizations (FBOs), and the private sector in MC. Its partners include

Jhpiego, Marie Stopes International, and the Population Council, with major funding contributions by the Bill & Melinda Gates Foundation, and working in close collaboration with PEPFAR-funded MC programs in these countries.

Jhpiego is currently implementing PEPFAR-funded activities or programs in the following countries: Botswana, Ethiopia, Lesotho, Mozambique, South Africa, Tanzania, and Zambia. The current status is as follows:

- **Botswana:** Needs Assessment of the Botswana Public Health Care System's Ability to Expand and Strengthen Male Circumcision Services (A Facility Readiness Assessment).
- **Ethiopia:** The Federal MOH has made MC a component of a national prevention strategy. There is a focus on low MC prevalence regions and building the capacity of the Surgical Society of Ethiopia to provide MC training and technical assistance. The first MC training in November 2008 uncovered an unmet need for MC in Addis Ababa.
- **Lesotho:** Support MOH with MC scale-up (adult and newborn) and review national MC strategy documents. Six pilot sites were identified. Facility readiness assessments are planned for June 2009.
- **Mozambique:** Translate key MC tools into Portuguese and; focus on strengthening surgical services, including MC. A pilot is planned at four sites. An assessment of surgical capacity was completed.
- **South Africa:** Recruiting for a Biomedical Prevention Advisor will be seconded to the National Department of Health, providing support to the National Department of Health (NDOH) and the South Africa National AIDS Committee (SANAC) to develop a national MC policy.
- **Tanzania:** Adapt MC training materials to the Tanzanian context, An MC pilot is planned for high HIV/low MC prevalence regions.
- **Zambia:** Adapt MC training materials, develop a Male Reproductive Health Kit (with partners), establish MC training centers at all provincial hospitals and at the national military hospital, procure supplies and equipment for public sector sites, and conduct MC training nationwide.

Jhpiego is planning PEPFAR-funded MC programs or activities in the following countries:

- **Namibia:** The first adult MC training is planned for July 2009.
- **Rwanda:** Provide support to the Rwanda Defense Force MC Program.
- **Swaziland:** Scale up national MC in collaboration with MC Partnership; conduct a pilot test of the MC MOVE model.

One of the challenges presented was insufficient top-level political commitment. Tacit support is not enough: the speakers said that leadership is needed to take MC to scale. Improvement of political commitment and leadership would resolve many of the other challenges. Is the prospect of a massive MC scale up too overwhelming? Is it time to move from "This is *why* you should scale up MC" to "This is *how* you can scale up MC?" Another challenge is the poor condition of public sector surgical services in most countries in the region, including: dilapidated infrastructure, an insufficient number of instruments, an erratic supply of consumables, and inconsistent electricity supply to power lamps and autoclaves. Unpredictable and/or inadequate running water was also cited as a challenge. Another challenge noted was the providers and

managers who view MC as “extra work” rather than an integral component of a national HIV program. Some countries are not embracing task-shifting. There is a lack of dedicated MC services in public and FBO facilities. However, providers in dedicated MC services are reporting burnout and boredom in providing MC all day, every day.

Lessons learned to date included the following:

- Political commitment at all levels is critical.
- Participants with basic surgical skills can be trained to competency in two weeks.
- Training more than one provider per site is critical.
- Most sites need additional MC supplies and equipment.
- There is a need to invest in developing high-performing/high-volume sites for training.
- VCT counselors can play a key role in MC services as counselors/educators.

USAID Health Policy Initiative by Johannes Van Dam

HPI presented three key policy considerations: program effectiveness, service delivery, and the need for evaluations for successful implementation. They looked at where its program is at present and the next steps for MC policy planning.

The speakers first discussed programmatic effectiveness using an approach that includes policy dialogue, policy development, and policy implementation.

HPI then looked at the key policy questions concerning evaluation, as follows:

- Where to do MC, in terms of HIV prevalence and current MC coverage?
- Which age groups should be covered?
- What are the barriers to acceptability?
- What is the cost per procedure?
- What is the impact of MC at various levels of scale-up?
- How do we mobilize resources?
- What are the roles of the public and private sectors individually? Of public-private partnerships?
- What is the role of the traditional sector?
- Where services should be delivered in the health care system?
- What is the role of task shifting?
- Should only HIV-negative men be eligible?
- How can we position MC in an integrated or comprehensive approach?
- Baseline studies/data: how reliable are they?
- How do we include monitoring of quality of service delivery, including adverse events?

- How do we include monitoring of service uptake?
- How do we assess disinhibition in behavior?
- How do we assess or model cost per infection averted?

To date, USAID HPI has accomplished the following activities related to male circumcision:

- Conducted a regional study to estimate the cost and impact of MC in Lesotho, Swaziland, and Zambia (2006-07).
- Developed the MC Decision Makers' Program Planning Tool (2007) that is used to estimate the cost and impact of MC at various levels of scale-up. It uses Excel-based/SPECTRUM suite software. The tools have already been applied in Botswana, Namibia, and Uganda. Currently, country briefs are being developed for each of the 14 PEPFAR countries.
- Developed the Policy Analysis Tool (2007) that examines how to incorporate MC into existing policies/strategies as part of a holistic approach. What are potential barriers to policy implementation and how can they be addressed? What is the role of specific individuals/groups in policy dialogue/development and implementation?

In collaboration with WHO and UNAIDS, USAID HPI is planning the following:

- Apply the MC Decision Makers' Program Planning Tool in:
 - South Africa — provincial level (Summer 2009).
 - Malawi, Rwanda, and Zimbabwe are possibilities.

Pilot the MC Policy Analysis Tool

- Countries to be determined based on discussions with UNAIDS, U.S. Government, and country partners.

EngenderHealth by Paul Perchal and Mark Barone

EngenderHealth is a U.S.-based international nonprofit that works in partnership with governments, institutions, communities, and health care professionals to improve the quality of health care in the world's poorest communities. The organization has a long history of introducing new clinical contraceptives and other reproductive health technologies in resource-poor settings. Some examples are: female sterilization using minilaparotomy under local anesthesia, no-scalpel vasectomy, Norplant®, and manual vacuum aspiration for treatment of abortion complications. Currently EngenderHealth has programs in more than 25 countries, including MC work in Kenya, South Africa, and Tanzania.

EngenderHealth's work in MC includes service delivery, policy development, communications, and research. From FY 2008 to FY 2009, EngenderHealth received grants totaling \$3.6 million, including \$1.5million from USAID for MC-related activities.

In Kenya, EngenderHealth works at all level of the health system (district, sub-district, and mission hospitals, health centers, and dispensaries) with an integrative approach of service delivery for male circumcision through APHIA II, a USAID-funded project in western Kenya. In that province, EngenderHealth provides support to the MOH and to private and faith-based facilities to introduce MC for HIV prevention at 50 sites in four districts.

This integrative approach uses the Supply-Demand-Advocacy Model:

- Supply
 - Assess and upgrade sites
 - Provide start-up equipment and supplies
 - Provide training on MC
 - Facilitate task shifting to non-physician clinicians
 - Establish MC outreach services on pre-scheduled days
- Demand
 - Conduct district stakeholders meetings to raise awareness
 - Integrate MC messages into the full range of behavior change communication (BCC) and community mobilization activities
- Advocacy
 - Conduct orientations on MC for provincial and district officials
 - Advocacy work with community leaders
 - Provide technical support for provincial and district officials regarding MC guidelines.

The APHIA II Nyanza (Kenya) MC Service statistics showed that the majority of circumcisions were performed on young men, ages 15–24. From October 2008 to April 2009, APHIA II had performed 1,774 medical adult male circumcisions.

EngenderHealth developed and field-tested a needs assessment tool in Mwanza, Tanzania, in 2007. Its CHAMPION Project in Tanzania is currently conducting a national survey to help assess men’s attitudes, beliefs, and a practice regarding HIV prevention and gender, including MC. EngenderHealth is incorporating MC messages into MAP activities for PEPFAR-supported HIV prevention services in South Africa and Tanzania.

EngenderHealth identified the following challenges in its MC service delivery project: the limitations of task shifting versus having full-time dedicated MC staff, the lack of motivation of some health providers, an initially low uptake of HIV testing at the time of MC, an unreliable supply of consumables, a lack of specific instruments needed, instruments of poor quality or insufficient numbers for high volume, and a lack of support from some traditional leaders in non-circumcising communities.

EngenderHealth research activities on MC are part of the MC Consortium Project in Kenya. The organization is responsible for leading these three research studies: (1) assessing the human resource capacity and training needs to support MC rollout; (2) assessing the safety, efficacy, and cost of non-physician clinicians providing MC services; and (3) assessing the safety, efficacy, and cost of MC outreach services.

EngenderHealth is also piloting the Shang Ring in Nyanza Province. The Shang Ring is an MC device that was developed and is commercially available in China. A published study and other data suggest a good safety profile. Benefits of the Shang Ring include: simple design (easy to use, learn, and teach), short procedure time (3–10 minutes), minimal bleeding, tight seal along wound, suture-less closure with excellent cosmetic results, and a design that decreases the risk of serious surgical errors. EngenderHealth will examine the clinical outcomes and patient satisfaction in a small sample of Kenyan men to assess: safety, efficacy (in terms of successful circumcision), and

acceptability/satisfaction. The pilot will also lay the groundwork for a larger RCT, and a prospective, non-comparative study at one health facility. The study will enroll 40-50 men seeking MC; they will undergo MC with the Shang Ring and be followed for 6 weeks.

FHI by Kwaku Yeboah

FHI improves lives worldwide through research, education, and services in family health. FHI works to:

- Prevent the spread of HIV/AIDS and STIs and care for those affected by them
- Improve people's access to quality reproductive health and family planning (RH/FP) services
- Improve the health of individuals and families, especially those who live in resource-constrained settings.

FHI employs approximately 2,600 people in more than 54 countries and implements MC-related activities in Kenya, Uganda, Rwanda, Tanzania, and Zambia.

FHI is part of the "Male Circumcision Consortium," which is a partnership between the University of Illinois, EngenderHealth, the MOH of Kenya, and the Nyanza Reproductive Health Society to generate evidence to guide national efforts to expand the provision of safe and voluntary MC services in Kenya. The Male Circumcision Consortium objectives are to: support development of a national male circumcision strategy, expand a male circumcision research and training center, address misperceptions and misunderstandings about male circumcision,; and conduct research activities. Current research includes: integrating MC into the national health management information system (HMIS), understanding adverse events, examining community attitudes about MC for HIV prevention, testing mobile and outreach services,; and assessing the private sector's ability to provide male circumcision. Future research activities include the acceptability of neonatal MC, understanding partial protection, and an interest in device studies.

In Uganda, FHI applied the WHO Situation Analysis tool to conduct and complete a situational analysis followed by stakeholder meetings to disseminate the results. The results of the analysis show the following: widespread support for the promotion of medical male circumcision (MMC) as part of an HIV prevention strategy, greater support for MMC of sons than of adult males, and the need to develop a national policy. In the assessed districts, MMC services are performed and there is a need for more trained personnel, integration with prevention services and counseling, and promotion of level IV centers as an entry point. FHI is currently conducting research to better understand traditional MC; protocols are being finalized; and field work is to begin mid-summer 2009 to guide the rollout of MMC, including collaboration between traditional and more orthodox medical communities.

In Rwanda, FHI/Rwanda hosted a team consisting of surgeons, an epidemiologist, and an AIDS specialist from Canada. It also conducted a surgical exchange and demonstration of MC methods; held meetings with medical faculty, MOH leadership, program leaders, and UNAIDS staff to discuss MC for HIV/AIDS prevention; and reported a strong interest in neonatal MC and MMC for at-risk populations (members of the military, truck drivers, etc.). The MOH announced plans to adopt a neonatal MC policy in January 2009.

In Tanzania, FHI is a member of the Task Force for the development of a National Strategic Plan. It is working with other partners to provide guidance for the development of the plan and is looking to provide technical assistance in aspects of service delivery, e.g., communication and monitoring and evaluation.

In Zambia, FHI is working in partnership with the University Teaching Hospital for training and service delivery of medical adult male circumcision in five provinces in the ZPCT Partnership.

JHUCCP by Richard Delate and Stella Babalola

The Johns Hopkins University Center for Communication Programs (JHUCCP) currently works in nine countries in Sub-Saharan Africa, including Ethiopia, Ghana, Liberia, Malawi, Mozambique, South Africa, Tanzania, Uganda, and Zambia.

JHUCCP uses the Social Ecology Model and Communication for Social and Behavioral Change as well as the strategic communication P-Process, including analysis, strategic design, development and testing, implementation, monitoring and evaluation, and preplanning.

JHUCCP's work on male circumcision includes the following:

- **Supporting critical thinking on male circumcision and communication:** In South Africa, JHUCCP is working with the SANAC Communication Task Team and NDOH to integrate social and BCC as part of the National Policy. In Uganda, JHUCCP developed and launched a national communication strategy to guide the dissemination of information on MC. It conducted national mapping of all health facilities performing MC.
- **Analysis and formative research:** In Uganda and South Africa, JHUCCP conducted literature reviews on male sexual and reproductive health including male circumcision. In South Africa, the organization conducted qualitative and quantitative research to examine male circumcision issues.
- **Strategic Communication:** Campaigns on male norms and values are being undertaken in Malawi, Uganda, and Zambia, and are planned in South Africa. No mass media efforts are underway owing to a lack of services, but the foundation is there. The focus is primarily on the use of interpersonal communication and radio.
- **Development of MC tools and resources:** In Uganda, JHUCCP developed a brochure on male circumcision, and a module is being developed as part of the “Be a Man Campaign on Male Circumcision,” targeting men 15–24. In addition, a booklet is being written for health workers with frequently asked questions on MC. In Zambia, the *Handbook on Sexual and Reproductive Health for Men—“What Every Man Should Know,”* includes a chapter on MC. A film is being produced on male sexual and reproductive health with a focus on male circumcision. In South Africa, a *Brothers for Life Manual* is under development to target adult men over 30. Footballers for Life is targeting professional footballers and has integrated information on MC. The Community Health Media Trust's Treatment Literacy and Prevention Toolkit targets Community Health Workers and has been updated to reflect the latest evidence on MC. The Mindset Health Network contains material about male circumcision for HIV prevention developed particularly for professional health care workers.

USAID C-Change by Rosemary Romano and David Hughes

Partners for Health and Development Communication (PHDC), is a new five-year \$175 million global health and development communication initiative supported by USAID. The partnership is managed by the Academy for Educational Development (AED). One of the project's fundamental strategies is to have southern partners take the lead in supporting country-level strategies and capacity building. C-CHANGE's southern partners include: the Centre for Media Studies and New Concept Information Systems (both in India), Social Surveys and Soul City in South Africa, and Straight Talk in Uganda. The U.S.-based partners include: CARE International, Internews,

Ohio University, the University of Washington, and IDEO. C-CHANGE also draws on the services of resource partners from both the private and nonprofit sectors.

The program has a unique structure. It is a cross-bureau, cross-sector cooperative agreement. The overall strategic objective is to improve the effectiveness and sustainability of communication. The program's goal is to use communication to catalyze system-wide change. Rather than focusing on short-term changes in knowledge or specific behaviors, the goal is to bring about long-term change on a large, population-based scale. Interventions focus on influencing underlying individual and social norms that span multiple sectors.

The program will work in all the major health areas, including family planning and reproductive health, HIV/AIDS prevention and care, maternal and child health, tuberculosis, malaria, avian influenza, and other emerging health areas.

Associate awards can be made in the environmental arena, as well as in civil society and democracy and governance program areas. The program's cross-sector emphasis is not the only aspect of C-CHANGE that is fundamentally new. The program will also:

- Embrace a systems perspective, examining the wider context in which behaviors take place and influence multiple levels to bring about change.
- Target collective as well as individual behaviors and social determinants of those behaviors.
- Streamline communication tactics and tools (the unnecessary complexity and cost of some approaches has made it difficult to transfer skills and bring programs to scale).
- Aim to achieve both rapid results and long-term change.
- Engage the media as a partner and a catalyst for change—not simply as a channel for delivering messages.

C-CHANGE does not yet have experience working on male circumcision, but has plans to work on communication tools for MC with partners in Kenya and Namibia.

In Africa, C-Change is working in the Democratic Republic of Congo, Ethiopia, Kenya, Lesotho, Madagascar, Namibia, São Tomé, and Swaziland. In Lesotho, it is working on a program for Capacity Strengthening and Implementation for HIV/AIDS. In Namibia, it is working on a program for Capacity Strengthening for HIV/AIDS and with partners on communication tools for MC. The project is also developing regional tools and communication campaigns that can be adapted and used in several countries.

C-Change has found that information does not equal behavior change. It is also looking at the impact of communication on public health versus on an individual's health.

III. POTENTIAL COSTING AND THE IMPACT OF SCALING-UP MALE CIRCUMCISION SERVICE DELIVERY BY EMMANUEL NJEUHMELI, AND JOHN STOVER

John Stover of the USAID HPI and Emmanuel Njeuhmeli of USAID/Washington gave an overview of USAID HPI's role in supporting PEPFAR country teams and national programs in the design of MC rollout strategies. HPI staff estimate the impact of alternative strategies on a variety of items, prepare country briefs for each PEPFAR country, and illustrate the costs and service delivery requirements of different rates of scale-up. The presenters discussed their methods, such as the scaling-up coverage pattern and estimating country-specific costs. They produced estimates of: new infections averted from 2009–25; the annual costs of MC services,

which were dependent on targets set and the pace of scale-up; the discounted cost per infection averted versus future treatment costs; and the annual number of MCs required.

HPI concluded that MC programs had a large potential impact and will be cost-effective. Program requirements will depend on the pace of scale-up and if funders and health systems are prepared to provide up to 15 million MCs per year by 2012.

IV. PEPFAR UPDATE OF MC SERVICE DELIVERY BY NOMI FUCHS-MONTGOMERY AND NAOMI BOCK

In FY2007 before the normative guidance was issued, seven countries received resources from PEPFAR for preparatory activities. In April 2007, following the release of the normative guidance, countries received additional resources to respond to host country government interest. In FY 2008 and 2009, there were no funding limitations on male circumcision activities: activities must follow the lead of the host country government and be consistent with local norms and policies. PEPFAR is supporting male circumcision activities in 14 countries and working with host countries, WHO, UNAIDS, and other partners and donors in program planning and implementation.

PEPFAR's role in the MC rollout includes:

- Growing requests and support for MC activities:
 - FY 2006: ~\$600,000
 - FY 2007: ~\$16,000,000
 - FY 2008: \$26,694,448 with over \$11 million supporting direct circumcision services
 - FY 2009: ~\$28,000,000
- Donor collaboration with the Gates Foundation in several countries.
- PEPFAR support to WHO:
 - Both funding and technical assistance from PEPFAR MC Task Force
 - PEPFAR recommends using WHO tools/resources
- Technical assistance to assist host governments to manage the many challenges associated with rollout, including human resources, scale/pace of rollout, commodities, communication, and quality assurance.

The evaluation of service impact at the population level will take time.

For those countries where MC is an appropriate intervention, there has been progress, given that 2009 was the first year that PEPFAR had an MC budget code and that the previous year's activities reflect the attribution of MC activities across different program areas. PEPFAR recognizes the importance of the pace and scale of service delivery and is working with countries and WHO to explore various models. These include flying in doctors as in Operation Smile, and working with the private sector—moving to build capacity and sustainability while also trying to provide immediate assistance to meet demand.

The following are the PEPFAR funding guidelines:

- Host country support must be shown through such means as MC-specific language in a National Policy or Guidance, Partnership Framework, or a letter from the Minister of Health requesting USG assistance.
- PEPFAR funds cannot be used to train or equip traditional providers.
- Children should not receive MC under general anesthesia using PEPFAR funds.
- Countries are required to describe coordination with host country *and* other donors.
- Approaches to MC scale-up may be a focus of partnership frameworks.

Countries will track and report the number of male circumcisions performed, their safety, the coverage either in a geographic area or among target populations, and communications activities relating to males and females.

Countries are encouraged to prioritize services to high-risk populations based on local epidemiology for maximum impact on reducing HIV incidence. Impact is realized sooner when services are delivered to boys/men in age categories where HIV rates are on the increase (i.e., males who already are or soon will become sexually active). Regions of the country with higher HIV rates benefit more quickly, and targets for the number of males reached with services should be established and stated.

PEPFAR MC Strategy direction will focus on the quality of programs, including:

- **Quality:** Safety, a minimum package of services, and volume and coverage of MC services to achieve impact on HIV incidence.
- **Two-pronged approach** for MC program support with (1) **sustainable services** (focus on successive cohorts of either neonates or adolescents, a situational assessment on preferred population, policy/guidelines development, health care cadre allowed to provide neonatal MC, pre-service and in-service training, and service delivery) and (2) **rapid rollout response for “catch-up” MC** (dedicated staff, volunteers, task sharing, task shifting, optimized facility space and patient flow).
- **Quality assurance:** major component of PEPFAR-supported programs with a complementary dual approach featuring facility self assessment via the WHO Guide and Toolkit and external assessments via PEPFAR-supported external quality assurance (EQA) teams; standards are similar.
- **Donor coordination** with the Bill & Melinda Gates Foundation on service delivery and research funding in multiple countries.
- **Political will:** Endorsement of MC by opinion leaders and policy makers is a key to successful programs. “Champions for an HIV-free Generation” are international opinion leaders who have successfully moved their country’s leadership toward more support of MC.

V. PEPFAR MC TWG PANEL DISCUSSION

Nomi Fuchs-Montgomery from OGAC introduced the panel comprised of members of the PEPFAR Male Circumcision Technical Working Group, as follows:

- Nomi Fuchs-Montgomery, OGAC

- Emmanuel Njeuhmeli and David Stanton, USAID
- Jason Reed and Naomi Bock, CDC
- Janelle Mingus, Carolyn Williams, Sheryl Zwierski and Melanie Bacon, NIH
- Anne Thomas, DOD

Jason Reed, CDC, gave a presentation to lead the panel discussion on the following topics:

- ***Achieving Scale:*** The scope and pace of service delivery should be in line with country strategies. Targets should be quantified and meaningful. Efficiencies should be considered and implemented. In addition, technical assistance and tools should be used to assess targets and performance relative to scale and to modify practices for efficiency. Provide implementation support in two forms:
 - *Long-term:* Capacity-building support for sustainable services that will remain indefinitely (i.e., neonatal MC) and may broadly benefit the health system.
 - *Short-term:* Focused support for immediate, high-volume MC service delivery (i.e., adult MC) that will conclude once targets are met.
- ***Meeting Human Resources Constraints:*** Reducing the time a surgeon spends on a case by half is equivalent to hiring an additional surgeon. When people are in short supply, efficiency is the most accessible human resources solution. Service delivery should incorporate the sharing of clinical tasks to the maximum extent allowed. Consider all possible human resources sources (part-time, full-time, and volunteers). Staffing and training requirements should be quantified. Training must be complemented by initial and continuous assessments of provider competency. Consider regional, national, and program-specific training options.
- ***Quality Assurance:*** Complementary dual-approach with self-assessments (WHO Guide and Toolkit) and EQA audits (PEPFAR-supported audit teams). WHO Quality Assurance Standards and PEPFAR EQA activities are congruent. Service delivery programs should use both self-assessments and external assessments. PEPFAR EQA activities can be provided to service delivery sites funded by others, if requested. Quality is also about reaching service delivery volume with the potential for impact.
- ***Communication:*** PEPFAR and WHO support the media toolkit with partner input, and all key messages are tailored to required key audiences. Particular sensitivity is given to gender, development, and the tailoring of media based on the experiences of others, to avoid duplication of effort. Funding for communications should be balanced relative to funding for service delivery.
- ***HIV Testing Considerations:*** Work with VCT partners to implement the systematic referral for MC of men who receive HIV-negative test results. When providing HIV Testing and counseling on site, the Provider Initiated Testing and Counseling model is preferable to the VCT model. Linkages to HIV care and treatment are essential for the routine referral of persons testing positive for HIV. Request funding for HIV test kits, if possible.
- ***Gender Considerations:***
 - *Key communications messages:* There is a reduced risk of HPV/cervical cancer but no direct reduction of risk for women against HIV. Circumcised HIV-positive men can transmit HIV and circumcised HIV-negative men can acquire HIV: other risk-reduction strategies are necessary. MC is not female genital mutilation.

- *Counseling of men* is necessary to prevent gender-based violence, coercive sex, and risk compensation.
- *Formative research* is needed to assess the unintended consequences for women and men (disinhibition, sexual coercion, difficulty negotiating safer sex) with the data used to prevent and mitigate harmful consequences.
- *Male-friendly services* can promote healthy male norms linked with the MC rollout and the promotion of MC through services for women (i.e., family planning and maternal and child health care).
- ***Neonates and Children:*** The assent of the child is strongly encouraged, in addition to parental/guardian consent, in accordance with international normative guidance. MC should be deferred until the child’s maturity level permits the use of local anesthesia. MC consent for children without a guardian should be handled in a manner similar to other medical procedures in-country. The two-pronged implementation approach includes capacity-building activities that may be particularly well suited to neonatal MC programs.
- ***Monitoring & Evaluation:*** PEPFAR indicators were developed to be implemented in 2010. These indicators have been harmonized with WHO indicators. Programs are encouraged to conduct active surveillance for adverse events and linkages to care and treatment following referral (HIV and STI).
- ***Traditional Circumcisers:*** In areas where traditional foreskin cutting is common, programs may explore collaboration with traditional providers, where possible. Delivery of HIV-prevention information and education may be allowed in the traditional setting. Traditional ceremonies may allow for medical excision of the foreskin while maintaining all other aspects of the traditional ceremony. Specific uses of PEPFAR funding related to traditional circumcision are outlined in the 2009 Country Operational Plan (COP) Technical Considerations.

SECOND DAY OF THE MEETING: WEDNESDAY MAY 20

I. OBJECTIVES AND MEETING AGENDA BY EMMANUEL NJEUHMELI USAID/WASHINGTON

By the end of the second day, participants were asked to propose comprehensive lists of commodities needed for a male circumcision site. Options were to be presented either using kits or without using kits, with paramount importance placed on improving efficiency. The participants were to develop the contents of various MC kits. Suggestions on how to improve procurement and supply chain management was also expected from participants.

To achieve the expected outcomes, presentations were made from the donor perspective (by the Bill & Melinda Gates Foundation, the Clinton Foundation, and PEPFAR), and from the clinical and programmatic perspective (PSI, Jhpiego, RHSP, Orange Farm, Kenya Male Circumcision Consortium, and University of California San Francisco). Before these two sets of presentations, the SCMS Project presented on supply chain management.

Finally, the two working groups were assigned to work on either the list of commodities and kits, or on procurement and supply chain management.

II. PEPFAR SCMS PROJECT BY SAMEER SAKALLAH

The SCMS Project was established in 2005 to create sustainable solutions to supply chain challenges. It is administered by USAID and serves all USG agencies.

The SCMS Project strengthens or establishes secure, reliable, cost-effective, and sustainable supply chains to meet the care and treatment needs of people living with or affected by HIV/AIDS. In collaboration with in-country and international partners, the SCMS Project provides quality, best-value health care products to those in need. It deploys innovative solutions to assist programs to enhance their supply chain capacity and ensures that accurate supply chain information is collected, shared, and used. In addition, the SCMS Project provides procurement and delivery of HIV/AIDS medicines, test kits, and laboratory supplies and consumables at the best value. It also provides technical assistance to transform supply chain performance, supports health systems by strengthening supply chains, and uses global collaboration for long-term local solutions.

The SCMS Project works in Botswana, Côte d'Ivoire, Ethiopia, Guyana, Haiti, Kenya, Mozambique, Namibia, Nigeria, Rwanda, South Africa, Tanzania, Uganda, Vietnam, Zambia, and Zimbabwe.

The SCMS Project currently procures antiretrovirals, rapid HIV test kits, laboratory equipment, supplies and consumables, drugs for opportunistic infections and STIs, and other miscellaneous items (e.g., vehicles).

New product lines are food by prescription, home-based care kits, blood safety supplies, and male circumcision supplies. The cumulative procurement to date is more than \$418 million.

Its good procurement practices include:

- **Product standardization:** Many products are available in various varieties from numerous manufacturers.
- **Forecast/supply plan** (quantification): How many units of the product are needed over a specified period of time (e.g., quarter, 12 months, three years, etc.)?

- **Product specification:** Detailed specifications allow the project to quickly and cost-effectively procure items to satisfy the end user.

A direct correlation exists between the number of platforms in country and the number of times individual items are procured. Therefore, before the procurement process begins, product specification should be determined. Standardization is a key first step in optimizing and strengthening supply chains. Standardization should be followed by forecasting/supply planning (quantification).

The SCMS Project is working to develop an MC commodity list including kits and individual components. It can also provide technical assistance in product selection (standardization and specification) and in supply planning (quantification). The goal is to have an MC commodity page with all product specifications included in a new E-catalog currently under development.

The advantage of buying through the SCMS Project rather than through another agency is the leverage of volume: it provides the best value and negotiates well for price and value. The SCMS Project qualifies manufacturers and enforces strict delivery deadlines. Procurement delays are not treated lightly. The SCMS Project is a partnership of 16 organizations with different expertise. The United Parcel Service is one of the partners. Such collaboration improves the function of the entire SCM system. These partnerships are one of the SCMS Project's key strengths.

The SCMS Project serves all USG agencies in focus and non-focus countries. Proper planning needs to be made by country teams with the involvement of the MOH, PEPFAR Team, and the Central Medical Store. MC commodities need to be taken into consideration during the COP process, and resources allocated by the USAID mission through the SCMS Project for that purpose. The SCMS Project mechanism allows it to receive money from other donors through a bilateral contract such as the Global Fund. Governments can buy through the project as well.

The SCMS Project vision is that it will supply a variety of reputable commercial kits currently available. Whatever options are presented today, the project will include the kit, the individual components, and the ready-to-go kits from different manufacturers. The project wants it to be a two-way process. As things change over the course of the program, it can adapt and change what is offered. The goal is to provide good customer service.

III. FUNDER'S PERSPECTIVE ON MC KITS AND COMMODITIES

The Bill & Melinda Gates Foundation by Kim Shaffer

Ms. Shaffer presented a brief overview of the Bill & Melinda Gates Foundation.

The Gates Foundation Male Circumcision Strategy is to:

- Catalyze scale-up of male circumcision through a five-year grants partnership (with PSI, Jhpiego, and the Population Council) to scale up MC in Swaziland and Zambia. This grant started in late 2008. The Gates Foundation is also supports the Government of Botswana-scale-up through an ACHAP grantee.
- Answer operational research questions including costing. A five-year grant to the MC consortium in Nyanza Province in Kenya was signed in 2007. The MC partnership in Swaziland and Zambia will also answer operational research questions.
- Review whether MC devices are acceptable and safe.

The foundation seeks to build on synergies and reduce duplication, work in partnership with other funders, and build the evidence base (including costing) to stimulate scale-up in other countries.

The primary focus is on males 13–29 years and neonatal MC. The Gates Foundation focuses on target countries with high HIV prevalence and low MC coverage.

The Gates Foundation does not have a position on commodities and kits or any experience with kits. They attended the workshop to listen to WHO, UNAIDS, other funders and other organizations.

The Clinton Foundation by Jessica Fast and Joanna Rosenblum

The Clinton Foundation is exploring the feasibility of developing MC kits to facilitate access to supplies by:

- Developing product specifications: Are kits an appropriate option for supply procurement? Can consensus on kit content be achieved?
- Forecasting demand: Is the demand sufficient enough to encourage supplier engagement?
- Engage Suppliers: Are suppliers interested in entering the market for kits?
- Negotiate price: Can access to high-quality, low-cost kits for countries be assured?

To date, the work of the Foundation has focused on developing product specifications. It will present its progress on this key step during this meeting.

The Clinton Foundation believes that kits are an appropriate option, with the following important considerations:

- Benefits:
 - Bundling eases ordering and managing of supplies.
 - Packaging ensures that disposable and consumable products are sterile.
 - Kits increase the efficiency of service delivery.
 - Kits facilitate dissemination of take-home educational materials.
- Drawbacks:
 - Kits may be more expensive than buying supplies in bulk.
 - Kits limit the flexibility of clinicians to use their preferred equipment.
 - Components may be pilfered from kits, compromising sterility of the remaining contents.

To develop kit options, the foundation identified key factors that impact kit contents and designed kits to address those factors. The three key factors identified are: the surgical technique (dorsal slit, sleeve, or forceps guided), the use of reusable versus disposable instruments, and the use of electrocautery. The kit that Orange Farm developed and used was chosen as the base kit. A determination was then made as to how the contents would change for each key factor. This resulted in draft contents for six preliminary kits (1A, 1B, 2A, 2B, 3A, and 3B). The Clinton Foundation collected feedback from 12 different sites, including program details, to determine which kit would be appropriate for their situation and collected feedback on the contents of the six kits.

The Clinton Foundation is now ready to proceed with the following steps:

- Collect additional feedback on the contents of six preliminary kits,

- Consider suggested changes to the kits and make needed revisions, and
- Begin developing a demand forecast for MC kits.

During the discussion, the issues mentioned were academic drawbacks and pilfering, which may not be large problems. The benefits of kits are greater than their drawbacks. Some questions were raised concerning who will be developing the kits and whether different organizations would have different kit processes. It was agreed that it is cost-effective for all countries to choose one kit option instead of three or four different kits. It is very costly to have different kit options within one country or the region.

The Clinton Foundation sees its role in this process as a leader in the development of product specification, forecasting demand, and price negotiation with suppliers.

PEPFAR by Emmanuel Njeuhmeli USAID/Washington

The pace and scale at which men are circumcised is directly correlated to its impact on HIV incidence and cost effectiveness. PEPFAR and WHO are working to develop a number of models for optimizing volume and efficiency. Task shifting and sharing, facility design, allocation of staff skills and time, clinical techniques, patient flow and scheduling, and supply chain management—including the use of MC kits—are all variables that may be optimized and work in concert to yield the greatest return for investment of precious resources.

To resolve issues related to MC commodities, it is important to look at all stakeholders' interests. Limited human and financial resources are available at the service facility level for them to manage MC commodities issues. Service facility staffs have limited expertise in supply chain management, planning forecasting demand, knowledge of specifications, or efficient site organization. Building a site procurement system for a service facility is challenging, time consuming, and expensive.

Medical suppliers have limited warehouse capacity to meet the increased demand and difficulty of sourcing items internationally.

Options for improvement include capacity building for an efficient SCM system, standardization of commodities, and a centralized procurement system.

Such improvements will benefit all concerned. The Central Medical Store and implementing partners will benefit from planning assistance, better supplier access, and lower prices. Suppliers will increase their access to customers and boost sales and revenues. With more competition among the suppliers, donors and service facilities will benefit from lower prices and thus increase the number of males circumcised.

Today's agenda is critical to achieve this efficiency as PEPFAR needs to learn from its partners' experience, analyze the available data, and consider the following options:

1. Comprehensive list of commodities needed by a MC service delivery site,
2. Various options for an MC kit and the content of the various MC kits, and
3. Various options for improving the SCM system.

PEPFAR is taking the lead in issuing supply chain management recommendations with WHO-UNAIDS support. A high-volume procurement process may reduce individual supply costs through vendor competition, and cost savings may offset the costs of bundling supplies into kits.

Some important broad decisions regarding MC commodities and kits need to be made in advance by a country, program, or facility. A decision must be made as to whether there should be a single, completely disposable kit including the surgical instruments and consumables required to perform one MC procedure, hereafter referred to as a “fully disposable kit.” Orange Farm has experience developing, procuring, and using such a fully disposable kit. The Orange Farm Kit obviates the need for an autoclave and associated sterilization processes and expenses. However its kit requires some adaptation and flexibility from staff. The surgical instruments are intended to be single-use, and some may be made of plastic and/or be of lower quality. Also, Orange Farm’s kit does not include scissors, and so sutures are cut with the scalpel. It is not clear whether this kit can support MC by surgical methods other than Forceps Guided. Disposing of instruments after a single use means that a higher volume must be purchased. The added expense of purchasing and disposing of all supplies and instruments versus sterilization and reuse must be weighed against the added costs of disinfection and sterilization processes using an autoclave.

Alternatively, if a program prefers to use a combination of two kits that is comprised of a “pack” of single-use supplies (gauze, needles, scalpel blade, gloves, etc.) and a “pack” of reusable surgical instruments, then an autoclave and associated sterilization processes and expenses would have to be included. This is referred to as a “partially disposable kit.” The single-use supply pack could be standardized across all three surgical methods while the reusable surgical instrument pack would vary by surgical method. The added expense of sterilization and reuse must be weighed against the cost savings of a lesser number of surgical instruments, based upon the life/case-expectancy of each instrument.

IV. CLINICAL AND PROGRAMMATIC PERSPECTIVES AND EXPERIENCE ON MC KITS AND COMMODITIES

PSI by Steve Gesuale

PSI has adopted the use of kits for MC sites in Zambia and Swaziland. Although the kits have been very beneficial for its program, standardizing them across multiple platforms is challenging. Depending on the type of procedure (forceps guided, dorsal slit, sleeve method), different types of kits are required. In addition, it will be difficult to include any pharmaceuticals in a standardized kit because every country has different regulations on importing them. Surgeons’ personal preferences also make standardization difficult. Another difficulty is managing the supply chain itself. Using both local and international suppliers offers benefits. However, increasing the capacity of current suppliers to provide a bundled kit at an affordable price and on a recurring timeline will be a challenge. Quality assurance will also be critical to ensuring that kit contents are high-quality and reliable.

Kits must be distributed once they are imported into the country. Distribution must be done to multiple sites. It is easier to supply equipment to up to five sites. With the scaling-up of service delivery, there is a significant increase in the number of MC sites. Thus, it becomes increasingly important to address an efficient supply chain system.

Finally, while a centralized supply chain system has clear advantages, emergencies occur, and some offices may need to procure certain items locally.

Jhpiego by Kelly Curran and Jabbin Mulwanda

Jabbin Mulwanda presented the Facility Readiness Assessment in Zambia that was carried out by Jhpiego. In Zambia, most facilities provide MC mainly for medical indications with the exception of MC pilot sites. The service is provided for all ages and relatively few procedures are performed. There is no linkage between MC and other HIV or RH services. HIV testing and STI services are available, but have not been integrated into current MC Service delivery.

In all facilities assessed, at least one procedure room was available that could be used for MC. Renovations and extra space are needed at most sites to provide high-volume MC services. Equipment such as autoclaves and surgical beds is inadequate even at the provincial hospital level. Supplies are erratic for consumables such as gloves and lignocaine). Most providers and managers believe that there are too few human resources to adequately take on MC. Training would be needed for all providers. At present, doctors primarily perform MC; however, all facilities are in favor of task shifting. All providers surveyed said they would need extra compensation to provide MC, which is currently viewed as “extra work” by both managers and potential providers. Fees are in line with other similar services in the public sector. Costs ranges from free to US \$30. Even where it is “free,” patients are frequently asked to buy consumable supplies.

In Zambia, there is significant need for increased buy-in from the MOH at all levels if MC services are to be scaled up and sustained. Tacit support is insufficient. For massive scale-up, MC needs to be seen as a major priority at all levels of the health system. To scale up MC, health facilities will require a significant investment of infrastructure and equipment as well as supplies.

Kelly Curran presented the assessment of the current MC situation in Mozambique and the needs of general and minor surgery services. Because of concerns about the scarcity of surgical staff, the MOH is not in favor of expanding MC activities. The study was designed to answer some questions about the current situation of surgical services and to present short-term projections. All provincial, general, rural, and district hospitals of the countries—a total of 47 facilities—were assessed. The assessment resulted in the decision to perform MC along with other minor surgeries at certain locations in a pilot program. Based on the results of the pilot, the MOH will make a decision on whether or not to provide the full program.

Rakai Health Science Program by Stephen Watya

Rakai has no experience with commercial circumcision kits. The site uses hospital packs designated for circumcision. The packs are prepared by the sterilization section of the operating theater. The packs are composed of sterile reusable drapes, gowns, and instruments; clean reusable caps and masks; sterile packs of consumable cotton and gauze; sutures, local anesthetic, gloves, and syringes; and skin prepping and hand scrub solutions.

Pack 1 is composed of a drape, gown, and a hand drying towel. Pack 2 includes instruments, gauze, and cotton. Sutures, syringes, gloves, and local anesthetic are provided from the operating theater cupboard. Antiseptic is dispensed from large containers.

Based on the practice at Rakai, the following requirements need to be met for a site to use hospital packs:

- Storage space for sterile and non-sterile packs
- Equipped sluice room
- Equipped sterilization room
- Instrument tracking system
- Laundry
- Supplies from an operating theater cupboard

- Personnel: All the nursing staff should be trained in disinfection, decontamination, packing, and sterilization processes. The laundry should be managed by one individual. All nursing staff should be trained to track instruments.

The advantages of this system are:

- It provides a way of retraining and maintaining asepsis in health care systems.
- In case of a problem, the instrument set can be traced to the batch.
- The kits can be used for other surgical procedures other than MC.

The disadvantages are:

- It requires a large number of personnel.
- It requires a constant supply of power and water.
- The items are secured from multiple sources though there may be only one supplier.
- Some supplies have short expiration dates.
- Suppliers may wish to receive cash.

The possible modifications that can be done are:

- Minimize the number of instruments.
- Include all the requirements in one pack.
- Prepare packs for smaller circumcision centers at a central unit.
- Develop a system to collect the reusables.

Orange Farm by Bertran Auvert and Dino Rech

The Orange Farm (OF) Project – Bophelo Pele surgical goals are to provide sufficient MC procedures to significantly impact community HIV statistics. High Quality High Volume principles were developed and implemented to ensure cost-effective, safe scale up. MC kits were identified as an important component to cost-effective scale-up in the context of Orange Farm.

The first MC Kit was developed in 2004 in Orange Farm for the Orange Farm MC trial. This kit was tested using a randomized controlled trial (*African Journal of Urology* Vol.13, No 1, 2007). A second version of the kit was developed for the current Orange Farm implementation study.

Orange Farm views the benefits of surgical kits as follows:

- Ensure good quality, sterile content in both non-hospital and hospital settings. This is especially important in Africa due to:
 - Poorly monitored and run autoclave facilities,
 - Lack of expertise to calibrate autoclaves regularly,
 - Poorly monitored instrument quality due to resource limitations that affect surgical outcomes, and
 - Lack of clean water and regular electricity that are not uniformly available.

- Logistically and operationally friendly, ensures:
 - Easy stock room control, supply management control, and minimal shrinkage,
 - Improved supplier management that minimizes reliability issues or breakdowns in the supply chain, and
 - Easy mobile outreach services, especially in resource-poor settings.
- Well-designed MC kits are key in MOVE models. The kits minimize:
 - Staff time needed to prepare patients for surgery,
 - Staff time spent in the cleaning and packaging of instrument sets and drapes, and
 - Patient time spent in surgery, facilitating quicker turnover time of surgical bays.
- Program cost savings when using MC kits include:
 - Staff time savings:
 - Management
 - Medical
 - General
 - Setup and running cost savings:
 - Reduces initial setup costs,
 - Eliminates maintenance costs of autoclaves and washing facilities, and
 - Provides water and electricity savings.
 - Easy and convenient distribution of information: kits can be an ideal container for the distribution of vital information, which provides participants, families, and friends with basic knowledge of general health issues and HIV and MC topics.

Concerns around surgical kits are as follows:

- Environmental concerns about the increased production of plastic medical waste, and
- Ambiguity about the costs and benefits of purchasing kits compared to buying consumables in bulk and completing assembly on-site.

Projects using comprehensive MC kits with disposable instruments include Bophelo Pele (Orange Farm) and PSI Zimbabwe. Projects using MC kits comprised principally of consumables, along with separate reusable instrument sets, are the fixed PSI MC facilities in Zambia and planned fixed sites in Swaziland.

The following are the characteristics of the “ideal” MC kit, according to Orange Farm:

- Cost effectiveness:
 - The cost of a kit and its items should be kept to a minimum.
 - Instruments and disposables in the kit should be widely sourced and restricted to the basics needed to adequately and safely perform the MC procedures.

- Kit composition and cheaper alternatives for instruments should be continuously re-evaluated.
- Provision of good basic sterility:
 - Kit components must be sterile in order to provide a basic sterile operative field.
 - Kits should be packed in certified clean rooms.
 - Kits should include sterility verification checks so that the operators using them can proceed with confidence.
- Versatility:
 - Ideally, the kit needs to conform to one of three common surgical methods of performing MC: sleeve, dorsal and ventral slit, or forceps guided. The principal difference between the three methods is the surgical scissors required for the sleeve and dorsal and ventral slit methods.
- Synchronization between kits and the MOVE models for MC will be necessary to minimize the time required for opening and to optimize patient turnover times. Time efficiency should be an utmost priority in kit development.
- Inclusive and logistically friendly:
 - Kits include all instruments and disposable items required to perform an MC procedure, thus facilitating rural rollout.
 - Inclusive kits reduce staff costs and the need for sterilization facilities. They also improve control of supplies and instruments, minimizing shrinkage.

Kenya Male Circumcision Consortium by Michael Stalker of FHI

The Male Circumcision Consortium in Kenya is a research-focused site funded by the Bill & Melinda Gates Foundation. The commodities and supplies it uses are based on the Randomized Controlled Trial and can be procured on a large scale. Kits are assembled locally. The public sector needs: MOH endorsement of the kit approach, to receive bulk purchasing discounts of commodities and supplies, to integrate kits into existing logistics systems, and to ensure the integrity of the kits at the facility level.

The speaker found that advocacy with the MOH is essential. In addition, lessons learned from prior investments need to inform strategies and the private sector can be an important partner.

Cost-Efficiency Analysis of Options of MC Kits by Jim Kahn of University of California San Francisco

As requested by Emmanuel Njeuhmeli from USAID/Washington, Jim Kahn designed a new spreadsheet model to assess and compare costs of a kit (or no kit) option. The analysis used the six kits options from Jessica Fast of the Clinton Foundation. Data was from Dino Rech of Orange Farm.

The cost data came from Priontex, UNIM via FHI, Dino Rech, and the Web site. The costs were divided into components (instruments, commodities) and processes (set up, sterilization, supplies management). Limitations on this model include: opportunistic cost data, no assessment of shrinkage or stock-out risks, price quotes were not negotiated, and economies of scale and competition among suppliers was not considered in prices.

Jim Kahn, UCSF, presented a cost-efficiency analysis of various kit options, as noted in the table below:

	Forceps-guided	Dorsal slit/Sleeve
Disposable	1A (with electrocautery)	2A (with electrocautery)
	1B (no electrocautery)	2B (no electrocautery)
Reusable	3A (with electrocautery)	
	3B (no electrocautery)	

Jim Kahn noted that the costs depend on what type of program is being run to use or not use kits. Many countries do not have sufficient facilities to make the kits locally. Also, transport costs were not included in the costs.

Emmanuel Njeuhmeli visited a South African supplier, Priontex. Priontex produces 1500 kits per day, but has the capacity to expand production to produce up to 15,000 kits per day. In terms of storage costs, these considerations will need to be included in the local context, i.e., outside of South Africa.

Next Steps

The Clinton Foundation noted that prices quotes depend on competition and volume. In some cases, it may be possible to remove or replace the expensive items and reduce the total kit cost. PSI has information on the competitive bidding process it used for kits, which is similar to the Orange Farm method for a partial kit. Its prices are half or less than the quotes in Jim Kahn’s analysis. The partial kit includes purchase of reusable or sterile instruments amortized. The Orange Farm Kit for forceps which costs \$24 in Jim Kahn’s analysis can be procured at \$16, according to FHI. There may be nuances as to why costs differ. In addition to cost, there may be other issues to consider, such as mobile services. There is more to instrument processing than simply sterilization. The costs of decontamination have not been taken into account. The higher the volume of surgical centers, the more materials such as buckets, soap, and bleach must be bought.

A high-volume autoclave and reusable instruments are other options. The Netherlands may have cheaper instruments.

V. REPORTS OF WORKING GROUPS

Supply Chain Management and Procurement by David Stanton

A high-functioning supply chain management system ensures that an uninterrupted supply of products reaches the intended recipients with minimal waste/leakage. Efficient, organized, and secure supply chain management is critical to avoid stock-outs. As MC services are more widely available and the number of sites offering MC increases, it is more challenging to procure, stock, and deliver MC commodities. Challenges to supply chains in development settings include: inaccurate quantification and forecasting, problems with suppliers, challenging customs processes, poor storage facilities, weak transportation systems, diversion of products, inadequate training, and a lack of information systems. The issues outlined below provide background and suggestions to improve the supply chain management of MC commodities.

- Quantifying and Forecasting:** Accurate quantifying and forecasting is always a challenge because demand can change over time— but it is particularly difficult at the onset of service because there is no historical demand data. Although initial estimates are likely to be unreliable, forecasting should improve after at least three years historical data are collected. Program managers should understand the consequences of over-buying versus under-buying when forecasting early demand. Program managers and procurement staff should build capacity in the supply chain to handle increased demand for disposable instruments from programs that do not reuse instruments and increased sterilization capacities for programs that do reuse instruments. Such action is critically important to MC scale-up activities because current vendor capacity to supply these goods and services is extremely limited. More informed negotiation with suppliers may be achieved by consolidating forecasts from multiple organizations in multiple countries. Understanding the demand, capacity, and expectations of local sourcing should be part of the planning stage, before the supply chain management system is initiated. As forecast needs change, it is important to match demand and capacity of local procurement while maintaining quality. For example, managers should plan to adapt demand forecasts once the first wave of “early adopter” patients has been addressed. Precise usage records are needed for accurate forecasts and to avoid stock-outs.
- Quality Assurance:** Strong quality assurance processes should be implemented when vetting suppliers. Programs should consider using multiple suppliers rather than a single source to avoid stock-outs in the event the single supplier fails to deliver. Competition promotes improvements in quality, cost, and responsiveness.
- Procurement:** Procurement processes should be transparent and designed to give sufficient order lead time. Pre-negotiated plans that share commodities across organizations can mitigate the effects of occasional stock-outs. Program managers should recognize that “buying local” means using a local distributor: the manufacturer will most likely be international.
- Customs Processes:** Customs clearances and freight forwarding are other challenges related to procurement. It is important to be familiar with customs laws and to get “cost-landed” quotes from suppliers. Otherwise, the importation of MC commodities can be complicated and costly. When defining the kit, customs regulations should be kept in mind. For example, many countries have customs regulations related to specifications of pharmaceutical items. In those countries, it may not be possible to bundle pharmaceuticals with other MC supplies.
- Distribution:** Distribution systems are often problematic and can be an important cause of bottlenecks in supply chains. Strategies to guarantee efficient distribution should be planned before MC programs are scaled up. Bottlenecks are problematic because when supplies stock out, a program must either stop supplying the service or consider procuring supplies locally, where quality standards may not be up to par. Program managers should plan ahead to mitigate possible distribution challenges. Because responsibility for distribution issues can be difficult to distinguish, it is important to determine roles during the planning stages and to provide training to those involved, including managers, local administrators, and MC Service providers. The SCM program must be integrated into existing distribution processes and leverage the resources of organizations that successfully distribute supplies in the country, such as private and faith-based organizations. At the same time, all distribution efforts should seek to strengthen MOH distribution systems. Existing systems should be improved as the volume of supplies that programs require may overwhelm a system designed for fewer surgeries. Quality assurance is needed to ensure the adequate condition of the instruments when they reach their final destination. Program managers will need to ensure that all transportation (international and local) meets the minimum conditions for the product.

- **Use/Reuse:** Challenges at the point of use, such as the reuse of disposable instruments and lack of record keeping, should be addressed. Education and quality assurance measures should support policies that involve the use of disposable instruments. These should include disposal instructions that take into account infection control concerns and which mitigate the risk of reuse outside of an MC clinic. Quality assurance measures will also be critical for reusable instruments, including records tracking the regular maintenance of autoclave machines. The inconsistent application of such policies can affect the supply chain, leading to overstocks of supplies and wastage due to the expiry of commodities and the spread of infection.

MC Commodities List, Refining Kits and Modules Options

Key MC commodities should be incorporated into lists of national essential medicines and equipment, and in the procurement and distribution systems used by service delivery sites. MC programs should decide whether or not to procure MC commodities as prepackaged kits of disposable surgical instruments and consumables, or as bulk or reusable surgical instruments.

Recommendation for an MC Kit

- **Cost effective:** The cost of the kit and the items within it should be kept to a minimum. Disposable and reusable instruments and consumables should be widely sourced and restricted to the basics needed to adequately and safely perform MC procedures. Kit composition and less expensive but high-quality alternatives for instruments should be continuously explored.
- **Sterile:** All kit components must be sterile in order to provide a basic sterile operative field. Kits should be packed in certified clean rooms and include sterility verification checks so that the operators can use the kits with confidence.
- **Versatile:** The kit should conform to one of the three common MC surgical methods (i.e., sleeve, dorsal and ventral slit, and forceps guided methods). The principal difference between the three methods is the use of surgical scissors for the sleeve and dorsal and ventral slit methods.
- **Efficient to use:** Synchronization between kits and the MOVE models for MC will be necessary to minimize the time required for opening and to optimize patient turnover times. Time efficiency should be an utmost priority in kit development.
- **Inclusive and logistically friendly:** *Kits should include all disposable or reusable instruments and consumable items needed for an MC procedure*, thus facilitating rural rollout. If disposable instruments are used, an inclusive kit reduces staff costs and the need for sterilization facilities. It also facilitates control of supplies and instruments, thereby minimizing shrinkage.
- **Special considerations:** Double-gloving is recommended in some countries, resulting in the need to include four pairs of surgical gloves. *However, lignocaine, paracetamol, and iodine should not be included in sterile supply packs.* IEC materials may be attached to supply packs but not within them for sterilization reasons.

Advantages and Disadvantages of MC Kits with Disposable Instruments and with Reusable Instruments

	MC Kits with Disposable Instruments and Consumables	MC Kits with Reusable Instruments and Consumables
Advantages	<ul style="list-style-type: none"> • Ensure high quality, sterile content in both non-hospital and hospital settings. • Logistically and operationally friendly. • Facilitate supply management and stock room control because there are fewer individual supplies to control. • Minimize shrinkage by decreasing access points for the theft of components. • Improve supplier management, which minimizes reliability issues and breakdowns in the supply chain. • Easy to use with mobile outreach services, especially in resource-poor settings. • Key variable in MOVE models, which minimizes staff time needed to prepare patients for surgery and to clean and package instrument sets and drapes. • Reduce initial start-up program costs. • Eliminate autoclaves' maintenance costs and washing facilities, saving on water and electricity if the kit is completely disposable (i.e., no reusable instruments). 	<ul style="list-style-type: none"> • In case of emergency, surgical components could easily be used for procedures other than MC. • Modifications can be made to improve efficiency, including reducing the number of instruments, including all required elements in one pack, preparing the packs at a central unit for smaller circumcision centers, and developing a system for the collection of reusable instruments. • Increase the flexibility of programs to choose preferred instruments and supplies.
Disadvantages	<ul style="list-style-type: none"> • Environment concerns due to increased plastic medical waste if kits include disposable instruments. • Removal of surgical components for procedures other than MC de-sterilizes the remaining pieces in the kit and cause wastage. 	<ul style="list-style-type: none"> • Requires substantial resources including: adequate storage space for sterile and non-sterile packs, equipped sluice and sterilization rooms, a more complex instrument tracking system, laundry facilities, supplies from the operating theater cupboard, a constant supply of power and water, and more on-site personnel. • All nursing staff must be trained in the processes of decontamination, disinfection, packing, and sterilization, as well as in instrument tracking. • In resource-limited settings, autoclave facilities are often poorly monitored and managed, autoclaves are often poorly maintained, instrument quality is poorly monitored, and clean water and regular electricity are not uniformly available.

MC Commodities list Options

Three Kit Options including three Modules were proposed.

<u>Definitions</u>	
Consumables Pack:	Bundled consumable materials such as gauze, needles, scalpel blade, gloves, etc. that are used in an MC surgery and then discarded. Items are disposable.
Instrument Set:	Bundled surgical instruments that are used in an MC surgery. Items may be disposable or reusable.
MC Kit:	Combination of a consumables pack and instrument set. An MC kit is needed for each MC surgery performed
Module:	Bundled supplies that are used for infection prevention, furnishing of operating theatres, and management of emergency medical situations. Items may be disposable or reusable.

The three key factors identified that impact kit contents are: the surgical technique (dorsal slit, sleeve, or forceps guided); use of disposable versus reusable surgical instruments; and the use of electrocautery.

The group of experts agreed that the content of the consumables pack should be standard across all three surgical methods. Variability in the content of the instrument sets, however, was included to account for the different surgical instrument needs of the three surgical methods. All MC kits are able to accommodate the use of electrocautery.

- i. **Kit 1** includes the standard consumables pack and reusable surgical instrument set for **forceps guided** method (for detailed contents see annex 5: Kit Option 1).
- ii. **Kit 2** includes the standard consumables pack and reusable surgical instrument set for **sleeve resection** and **dorsal slit** methods (for detailed contents see annex 5: Kit Option 2).
- iii. **Kit 3** includes the standard consumables pack and disposable surgical instrument set for the **forceps guided** method (for detailed contents see annex 5: Kit Option 3).

Regardless of the kit number chosen, MC sites should also order Modules 1, 2 and 3.

- a. **Module 1** includes supplies needed for infection prevention
- b. **Module 2** includes operating theatre equipment
- c. **Module 3** include emergency medical management supplies

A country/program/facility may choose between the following three Kit Options for male circumcision commodities to efficiently run a site:

1. **Kit Option 1:** Kit 1 (standard consumables pack and reusable instrument set for forceps guided method) + Module 1 (Infection Prevention) + Module 2 (OR Equipment) + Module 3 (Emergency Medical Supplies)
2. **Kit Option 2:** Kit 2 (standard consumables pack and reusable instrument set for sleeve resection and dorsal slit methods) + Module 1 (Infection Prevention) + Module 2 (OR Equipments) + Module 3 (Emergency Medical Supplies)
3. **Kit Option 3:** Kit 3 (standard consumables pack and disposable instrument set for forceps guided method) + Module 1 (Infection Prevention) + Module 2 (OR Equipments) + Module 3 (Emergency Medical Supplies)

Currently, a fully disposable MC kit (disposable consumable materials *and* disposable surgical instruments) is only available for those using the forceps guided method. In the future, it may be possible to produce fully disposable MC kits for sleeve resection and dorsal slit methods, as well.

Reusable instrument sets in kits 1 and 3 would initially be sterilized and transported inside autoclaved sterile boxes. After their first use, instruments would be re-sterilized/autoclaved and re-bundled into instrument sets on site using autoclave storage boxes. The disposable instrument set in kit 2 would be discarded immediately after use and no reused.

Instrument sets and consumables packs comprising kits 1 and 3 include a mix of disposable and reusable contents. Initially, the number of kit 1 or kit 3 ordered would correlate directly with the number of MC surgeries a site anticipates providing (one kit per patient). Once a sufficient stock of reusable instrument sets are on hand and in circulation, only the supplies in the consumables pack would need to be continually ordered on a per surgery case basis. Alternatively, the entirety of kit 2 would continually be ordered on a per surgery case basis.

If reusable surgical instruments “sets” are to be used, it is important to include autoclave(s) in module 2. It may be possible to leverage buying power and/or price through mass purchasing of autoclaves (and other equipment). A centralized sterilization unit within a district or country may be adequate to handle the sterilization needs of the entire area.

There are some important broad decisions regarding the bundling of MC commodities into set + packs/kits that need to be made in advance by a country, program, or facility:

1. A decision will need to be made whether a fully disposable kit (kit 3) is desirable (Kit Option 3). There are many advantages to using a fully disposable kit however; opting for a fully disposable kit necessitates the use of forceps guided method only. Also, because the surgical instruments in the disposable instrument set 3 are intended only for single-use, some may be made of plastic and/or be of lesser-quality.

2. Alternatively, if a program prefers to use a kit where contents are comprised of a consumables pack and a reusable instrument set, (kits 1 or 2) then an autoclave and associated sterilization processes and expenses would have to be included (Kit Options 1 and 2).

KIT OPTION 1: SET OF REUSABLE SURGICAL INSTRUMENTS PLUS PACK OF CONSUMABLES

Needed for any site choosing to use forceps guided surgical technique. Need to add to this list Module 1, Module 2, and Module 3

Item #	Name of items	Product specification	Quantity (per Box)	Observation
Set of Reusable Surgical Instruments into Autoclave Storage Box				
1	Autoclave Storage Box	Size of box might vary based on the final selection of instruments (lengths can vary) as well as in-country pilot testing (as some tiny autoclaves might not accommodate a large box). Estimated size approximately Dimensions: 5"W x 10"L x 2"H.	1	
2	Combination Needle-Holder/Suture Scissors	Combination Needle-Holder/Suture Scissors: Total Length 13-15 cm, Working Surface approximately 20mm. Example Olsen-Hegar Needle Holder Scissors, 5.5 in (14cm).	1	If this instrument cannot be obtained affordably, then both suture scissors and a needle holder/driver will be required. Need either a combination needle-holder and scissor or separate needle holders and scissors—depends on price and availability.
	or Needle Holder	Needle Holder/Driver: Total Length 12-14 cm, Working Surface 20mm (Ex: Baumgartner Needle Holder).	1	
	and Suture Scissor	Suture Scissors: Total Length 12-15 cm, (Example: Mayo Scissors).	1	
3	Toothed Tissue Forceps	Toothed Tissue Forceps (Aka pick-ups, Dissection Forceps): Total Length 13 cm, working surface 15 mm serrated, (Example: Catalog Number EF 159988)	1	
4	Mosquito Clamp Straight	Mosquito Clamps Straight (Aka "Snaps", Mosquito Forceps, and Hemostatic Forceps): Total length 12-14 cm, Working Surface 20-30 mm. Example: Halstead Mosquito.	4	
5	Mosquito Clamp Curve	Mosquito Clamps Curve (Aka "Snaps", Mosquito Forceps, and Hemostatic Forceps): Total length 12-14 cm, Working Surface 20-30 mm. Example: Halstead Mosquito.	1	
6	Forceps Hemostatic Cross Clamp	Circumcision Forceps Hemostatic Cross Clamp: Total Length 20cm, Working Surface 64 mm, Example: Rochester Pean Forceps Code 14-405.	1	

KIT OPTION 1: SET OF REUSABLE SURGICAL INSTRUMENTS PLUS PACK OF CONSUMABLES

Needed for any site choosing to use forceps guided surgical technique. Need to add to this list Module 1, Module 2, and Module 3

Item #	Name of items	Product specification	Quantity (per Box)	Observation
Pack of Essential Consumables into Multipurpose Recycle Plastic Container Tray				
1	Multipurpose Container Tray	Stable Plastic Recycle Tray to conduct procedure, minimum 700 micron virgin plastic, with 3 Compartments (Compartment 1 = 13X26, Compartment 2 = 5X8, Compartment 3 = 5X5, Compartment 4 = 5X13 and the total size of the Tray is 26X18). Preparation and procedure	1	
2	O-Drape	Disposable O-Drape 100 cm X 75 cm (One side absorbable and one side impermeable. The two different sides should be fused together and not lint.)	1	
3	Scalpel Blade w/Handle	Disposable Scalpel and Handle (retractable and Lockable): Blade Type 23, Total Length 11 cm.	1	Example: Medisafe Safety Scalpel
4	Gauze, Plain	Gauze Swabs 100X100mm (12ply)	20	
5	Gauze, Petroleum Jelly Impreg	Paranet Gauze 10cmX10cm (1 ply)	1	
6	Syringe	Syringe 10 ml	1	
7	Injection Needles	Needle 21g and 23g 1.5 inch	2	
8	Suture, Braided/Absorbable	Suture 3/0 Braided Synthetic (polyglycolic acid suture) 75 cm, on Reverse Cutting Needle 26 mm	2	Ex: vicryl, polysorb
9	Surgical Gloves	Sterile Surgical Glove Size 8 and 7 1/2	2	
10	Apron, Disposable	Apron Plastic Disposable quality of the trash bag	2	
11	Alcohol Swabs	1 1/4" x 2 1/2", Isopropyl Alcohol 70%	2	
12	Surgical Tape	Surgical Paper micropore 12 mm, 1-3 meter in Length	1	
13	Sterile Prep Gloves	Examination glove large	1	
Packaging and Sterilization of the Pack				
14	Surgical Crepe Paper	Pack is wrapped in Surgical crepe paper 60 cm X 60 cm	1	
15	Indicator Bag and Sterilization	Pack ETO sterilized in a 0.3µ Sterilization Indicator Bag with mention of expiration date of items with expiration date. All items inside the Pack must have an expiration date greater than 2 years from the date of delivery, and the Pack should have an expiration date of 18 months from the date of delivery.	1	

KIT OPTION 1: SET OF REUSABLE SURGICAL INSTRUMENTS PLUS PACK OF CONSUMABLES

Needed for any site choosing to use forceps guided surgical technique. Need to add to this list Module 1, Module 2, and Module 3

Item #	Name of items	Product specification	Quantity (per Box)	Observation
These Items need to be order in bulk (Outside of the Set or Pack)				
1	Diathermy/Cautery Tips	Diathermy/electrocautery tips--AKA "electrodes" Blade-type configuration. Disposable.	N/A	Must be compatible with diathermy wand.
2	Lignocaine	Lignocaine 1% 20 ml Ampoule (1 Ampoule/1 MC) or alternatively, 5 ml amps (use 2-4 per MC).	N/A	1% is acceptable if marcaine is used--otherwise would recommend using 2% (Note: WHO training manual uses plain 1%).
3	Marcaine	Marcaine (bupivacaine hydrochloride) 0.5% 10cc bottles (need about 3cc per MC)	N/A	Longer-acting local anesthetic like marcaine is always used in combination with either lignocaine 1% or 2%.
4	Paracetamol	Sachet with 18 Tabs of 500 mg of Paracetamol (Quantity needed for 1 MC)	N/A	
5	Iodine	Povidine Iodine 100 ml Bottle (10% Povidine Iodine solution) (50-100 cc needed per MC)	N/A	
6	Compression Bandage	Bandage - Cohesive 7.5m x 4.5cm 1 X Roll Coban	N/A	
7	Sterile Gauze	Gauze Swabs 100X100mm (12ply) - STERILIZED	N/A	Excess quantity for instances of excess bleeding, where the 20 swabs in the kit will not suffice.
8	Suture - braided/absorbable	Suture 3/0 Braided Synthetic 75 cm, on Reverse Cutting Needle 26 mm (ex: vicryl, polysorb)	N/A	Excess quantity where more than 2 sutures are needed: this can be the case during trainings or if there is excessive bleeding.
9	Sterile Surgical Gloves	Range of sizes: 7, 7.5, 8, 8.5	N/A	For clinicians whose hands do not fit the sizes provided in the kit and instances where an additional individual needs gloves.

KIT OPTION 2: SET OF REUSABLE SURGICAL INSTRUMENTS PLUS PACK OF CONSUMABLES

Needed for any site choosing to use sleeve or dorsal slit surgical technique. Need to add to this list Module 1, Module 2, and Module 3

Item #	Name of items	Product specification	Quantity (per Box)	Observation
Set of Reusable Surgical Instruments into Autoclave Storage Box				
1	Autoclave Storage Box	Size of box might vary based on the final selection of instruments (lengths can vary) as well as in-country pilot testing (as some tiny autoclaves might not accommodate a large box). Estimated size dimensions approximately: 5"W x 10"L x 2"H	1	
2	Dissection Scissors	Tissue Dissecting Scissors: Total Length 13-15 cm. Example Metzenbaum Scissors Curved	1	
3	Combination Needle-Holder/Suture Scissors	Combination Needle-Holder/Suture Scissors: Total Length 13-15 cm, Working Surface approximately 20mm. Example Olsen-Hegar Needle Holder Scissors, 5.5 in (14cm)	1	If this instrument cannot be obtained affordably then both suture scissors and a needle holder/driver will be required. Need either a combination needle-holder and scissor or separate needle holders and scissors—depends on price and availability. Need either a combination needle-holder and scissor or separate needle holders and scissors—depends on price and availability.
	or Needle Holder	Needle Holder/Driver: Total Length 12-14 cm, Working Surface 20mm (Ex: Baumgartner Needle Holder)	1	
	and Suture Scissor	Suture Scissors: Total Length 12-15 cm, (Example: Mayo Scissors)	1	
4	Toothed Tissue Forceps	Toothed Tissue Forceps (Aka pick-ups, Dissection Forceps): Total Length 13 cm, working surface 15 mm serrated, (Example: Catalog Number EF 159988)	1	
5	Mosquito Clamp Straight	Mosquito Clamps Straight (Aka "Snaps", Mosquito Forceps, Hemostatic Forceps): Total length 12-14 cm, Working Surface 20-30 mm. Example: Halstead Mosquito	4	
6	Mosquito Clamp Curve	Mosquito Clamps Curve (Aka "Snaps", Mosquito Forceps, Hemostatic Forceps): Total length 12-14 cm, Working Surface 20-30 mm. Example: Halstead Mosquito	1	

KIT OPTION 2: SET OF REUSABLE SURGICAL INSTRUMENTS PLUS PACK OF CONSUMABLES

Needed for any site choosing to use sleeve or dorsal slit surgical technique. Need to add to this list Module 1, Module 2, and Module 3

Item #	Name of items	Product specification	Quantity (per Box)	Observation
7	Hemostatic Clamps	Hemostatic Clamps, Aka "Artery Forceps (for Dorsal Slit MC): Total Length 13-15 cm, Working Surface 40 mm. Example: Kelly Hemostat - Straight	2	
Pack of Essentials Consumables into Multipurpose Recycle Plastic Container Tray				
1	Multipurpose Container Tray	Stable Plastic Recycle Tray to conduct procedure, minimum 700 micron virgin plastic, with 3 Compartments (Compartment 1 = 13X26, Compartment 2 = 5X8, Compartment 3 = 5X5, Compartment 4 = 5X13 and the total size of the Tray is 26X18) Preparation and procedure	1	
2	O-Drape	Disposable O-Drape 100 cm X 75 cm (One side absorbable and one side impermeable. The two different sides should be fused together and not lint.)	1	
3	Scalpel Blade w/Handle	Disposable Scalpel and Handle (retractable and Lockable): Blade Type 23, Total Length 11 cm.	1	Example: Medisafe Safety Scalpel
4	Gauze, Plain	Gauze Swabs 100X100mm (12ply)	20	
5	Gauze, Petroleum Jelly Impreg	Paranet Gauze 10cmX10cm 1 Ply	1	
6	Syringe	Syringe 10 ml	1	
7	Injection Needles	Needle 21g and 23g 1.5 inch	2	
8	Suture, Braided/Absorbable	Suture 3/0 Braided Synthetic (polyglycolic acid suture) 75 cm, on Reverse Cutting Needle 26 mm	2	Example: vicryl, polysorb
9	Surgical Gloves	Sterile Surgical Glove Size 8 and 7 1/2	2	
10	Apron, Disposable	Apron Plastic Disposable quality of the trash bag	2	
11	Alcohol Swabs	1 1/4" x 2 1/2", Isopropyl Alcohol 70%	2	
12	Surgical Tape	Surgical Paper Tape micropore 12 mm, 1-3 meter in Length	1	
13	Sterile Prep Gloves	Examination glove large	1	

KIT OPTION 2: SET OF REUSABLE SURGICAL INSTRUMENTS PLUS PACK OF CONSUMABLES

Needed for any site choosing to use sleeve or dorsal slit surgical technique. Need to add to this list Module 1, Module 2, and Module 3

Item #	Name of items	Product specification	Quantity (per Box)	Observation
Packaging and Sterilization of the Pack				
14	Surgical Crepe Paper	Pack is wrapped in Surgical crepe paper 60 cm X 60 cm	1	
15	Indicator Bag and Sterilization	Pack ETO sterilized in a 0.3 μ Sterilization Indicator Bag with mention of expiration date of items with expiration date. All items inside the Pack must have an expiration date greater than 2 years from the date of delivery, and the Pack should have an expiration date of 18 months from the date of delivery.	1	
These Items need to be order in bulk (Outside of the Set or Pack)				
1	Diathermy/Cautery Tips	Diathermy/electrocautery tips--AKA "electrodes" Blade-type configuration. Disposable.	N/A	Must be compatible with diathermy wand.
2	Lignocaine	Lignocaine 1% 20 ml Ampoule (1 Ampoule/1 MC) or alternatively, 5 ml amps (use 2-4 per MC)	N/A	1% is acceptable if marcaine is used--otherwise would recommend using 2% (Note: WHO training manual uses plain 1%).
3	Marcaine	Marcaine (bupivacaine hydrochloride) 0.5% 10cc bottles (need about 3cc per MC)	N/A	Longer acting local anesthetic like Marcaine is always used in combination with either Lignocaine 1 or 2%.
4	Paracetamol	Sachet with 18 Tabs of 500 mg of Paracetamol (Quantity needed for 1 MC)	N/A	
5	Iodine	Povidine Iodine 100 ml Bottle (10% Povidine Iodine solution) (50-100 cc needed per MC)	N/A	
6	Compression Bandage	Bandage - Cohesive 7.5m x 4.5cm 1 X Roll Coban	N/A	
7	Sterile Gauze	Gauze Swabs 100X100mm (12ply) - STERILIZED	N/A	Excess quantity for instances of excess bleeding where the 20 swabs in the kit will not suffice.

KIT OPTION 2: SET OF REUSABLE SURGICAL INSTRUMENTS PLUS PACK OF CONSUMABLES

Needed for any site choosing to use sleeve or dorsal slit surgical technique. Need to add to this list Module 1, Module 2, and Module 3

Item #	Name of items	Product specification	Quantity (per Box)	Observation
8	Suture - braided/absorbable	Suture 3/0 Braided Synthetic 75 cm, on Reverse Cutting Needle 26 mm (ex: vicryl, polysorb)	N/A	Excess quantity where more than 2 sutures are needed. This can be the case during trainings or if there is excessive bleeding.
9	Sterile Surgical Gloves	Range of sizes: 7, 7.5, 8, 8.5	N/A	For clinicians whose hands do not fit the sizes provided in the kit and instances where an additional individual needs gloves.

KIT OPTION 3: KIT OF FULLY DISPOSABLE KIT OF SURGICAL INSTRUMENTS AND CONSUMABLES

Needed for any site choosing to use disposable instrument and forceps guided surgical technique.
Need to add to this list Module 1, Module 2, and Module 3

Item #	Name of items	Product specification	Quantity (per Kit)	Observation
Item 1 to 12 of the kit are disposable consumables				
1	Multipurpose Container Tray	Stable Plastic Recycle Tray to conduct procedure, minimum 700 micron virgin plastic, with 3 Compartments. (Compartment 1 = 13X26, Compartment 2 = 5X8, Compartment 3 = 5X5, Compartment 4 = 5X13 and the total size of the Tray is 26X18) Preparation and procedure	1	
2	O-Drape	Disposable O-Drape 100 cm X 75 cm (One side absorbable and one side impermeable. The two different sides should be fused together and not lint.)	1	
3	Gauze, Plain	Gauze Swabs 100X100mm (12ply)	20	
4	Gauze, Petroleum Jelly Impreg	Paranet Gauze 10cmX10cm (1 Ply)	1	
5	Syringe	Syringe 10 ml	1	
6	Injection Needles	Needle 21g and 23g 1.5 inch	2	
7	Suture, Braided/Absorbable	Suture 3/0 Braided Synthetic (polyglycolic acid suture) 75 cm, on Reverse Cutting Needle 26 mm	2	Ex: vicryl, polysorb

KIT OPTION 3: KIT OF FULLY DISPOSABLE KIT OF SURGICAL INSTRUMENTS AND CONSUMABLES

Needed for any site choosing to use disposable instrument and forceps guided surgical technique.
Need to add to this list Module 1, Module 2, and Module 3

Item #	Name of items	Product specification	Quantity (per Kit)	Observation
8	Surgical Gloves	Sterile Surgical Glove Size 8 and 7 1/2	2	
9	Apron, Disposable	Apron Plastic Disposable quality of the trash bag	2	
10	Alcohol Swabs	1 1/4" x 2 1/2", Isopropyl Alcohol 70%	2	
11	Surgical Tape	Surgical Paper Tape micropore 12 mm, 1-3 meter in length	1	
12	Sterile Prep Gloves	Examination glove large	1	
Items 13 to 18 into the kit are disposable surgical instruments				
13	Combination Needle Holder and Scissor	Combination Disposable Needle Holder/Suture Scissors: Total length 13-15 cm, Working Surface approximately 20 mm	1	Need either a combination needle-holder and scissor or separate needle holders and scissors—depends on price and availability. Need either a combination needle-holder and scissor or separate needle holders and scissors—depends on price and availability. Need either a combination needle-holder and scissor or separate needle holders and scissors—depends on price and availability.
	or Needle Holder	Disposable needle Holder: Total Length 12-14 cm, Working Surface 20mm (Example: Baumgartner Needle Holder)	1	
	and Suture Scissor	Disposable Suture Scissors: Total Length 12-15 cm, (Example: Mayo Scissors)	1	
14	Non-Toothed Plastic Forceps	Non-Toothed Plastic Forceps (Aka Pick-ups, Dissection Forceps): Total length 13 cm, Working Surface 15 mm Serrated, (Example: Catalog Number EF 15998B)	1	
15	Mosquito Clamp Straight	Mosquito Clamps Disposable Straight (Aka Mosquito Forceps, Hemostatic Forceps): Total length 12-14 cm, Working Surface 30 mm. Example: Halstead Disposable Straight Mosquito)	1	
16	Mosquito Clamp Curve	Mosquito Clamps Disposable Curved (Aka Mosquito Forceps, Hemostatic Forceps): Total length 12-14 cm, Working Surface 30 mm.	1	
17	Disposable Scalpel and Handle	Disposable Scalpel and Handle (retractable and lockable): Blade Type 23, Total Length 11 cm.	1	
18	Circumcision Forceps Hemostatic	Disposable Circumcision Forceps Hemostatic Cross Clamp: Total Length 20 cm, Working Surface 64 mm.	1	

KIT OPTION 3: KIT OF FULLY DISPOSABLE KIT OF SURGICAL INSTRUMENTS AND CONSUMABLES

Needed for any site choosing to use disposable instrument and forceps guided surgical technique.
Need to add to this list Module 1, Module 2, and Module 3

Item #	Name of items	Product specification	Quantity (per Kit)	Observation
Packaging and Sterilization of the Kit				
19	Surgical Crepe Paper	Kit is wrapped in Surgical crepe paper 60 cm X 60 cm	1	
20	Indicator Bag and Sterilization	Kit ETO sterilized in a 0.3µ Sterilization Indicator Bag with mention of expiration date of items with expiration date. All items inside the kit must have an expiration date greater than 2 years from the date of delivery, and the kit should have an expiration date of 18 months from the date of delivery.	1	
These Items need to be order in bulk (Outside of the Kit)				
1	Diathermy/Cautery Tips	Diathermy/electrocautery tips--AKA "electrodes" Blade-type configuration. Disposable.	N/A	Must be compatible with diathermy wand.
2	Lignocaine	Lignocaine 1% 20 ml Ampoule (1 Ampoule/1 MC) or alternatively, 5 ml amps (use 2-4 per MC)	N/A	1% is acceptable if marcaine is used-- otherwise would recommend using 2%. (Note: WHO training manual uses plain 1%.)
3	Marcaine	Marcaine (bupivacaine hydrochloride) 0.5% 10cc bottles (need about 3cc per MC)	N/A	Longer acting local anesthetic like marcaine is always used in combination with either lignocaine 1 or 2%.
4	Paracetamol	Sachet with 18 Tabs of 500 mg of Paracetamol (Quantity needed for 1 MC)	N/A	
5	Iodine	Povidine Iodine 100 ml Bottle (10% Povidine Iodine solution) (50-100 cc needed per MC)	N/A	
6	Compression Bandage	Bandage - Cohesive 7.5m x 4.5cm 1 X Roll Coban	N/A	
7	Sterile Gauze	Gauze Swabs 100X100mm (12ply) - Sterilized	N/A	Excess quantity for instances of excess bleeding where the 20 swabs in the kit will not suffice.
8	Suture - braided/absorbable	Suture 3/0 Braided Synthetic 75 cm, on Reverse Cutting Needle 26 mm (ex: vicryl, polysorb)	N/A	Excess quantity where more than 2 sutures are needed. This can be the case during trainings or if there is excessive bleeding.

KIT OPTION 3: KIT OF FULLY DISPOSABLE KIT OF SURGICAL INSTRUMENTS AND CONSUMABLES

Needed for any site choosing to use disposable instrument and forceps guided surgical technique.
Need to add to this list Module 1, Module 2, and Module 3

Item #	Name of items	Product specification	Quantity (per Kit)	Observation
9	Sterile Surgical Gloves	Range of sizes: 7, 7.5, 8, 8.5	N/A	For clinicians whose hands do not fit the sizes provided in the kit and instances where an additional individual needs gloves.

MODULE 1: INFECTION PREVENTION AND WASTE DISPOSAL

Needed for any site using disposable or reusable surgical instruments

Item #	Name of items	Product specification	Quantity per month for 8 beds site	Observation
1	Surgical Mask	Face Mask: 1 ply, disposable	320/month	
2	Surgical Cap	Surgical Cap: disposable	160/month	Could consider cloth caps (reusable): in this case, would need 2 per provider.
3	Biohazard Trash Bag, Small	15 liter size	800/month	Color coding for biohazard varies by country.
4	Biohazard Trash Bag, Big	50 liter size	400/month	Color coding for biohazard varies by country.
6	Medical Plastic Bin, Small	Plastic Pedal Bin 15 litres	10	Use with biohazard bag above.
7	Medical Plastic Bin, Big	Plastic Pedal Bin 50 litres	10	Use with biohazard bag above.
8	Buckets for instrument disinfection and soaking	10 liter size	20	
9	Instrument Brush	Instrument Brush 360 mm and Bristles of 120X50 mm	10	
10	Surgeon Nail Scrub Brush	TBD	10	
11	Protective Eyewear	Protective Eyewear (Goggles)	20	
12	Utility Glove	Utility Gloves Medium	10	
13	Surgical Scrub for providers	Chlorhexidine 4% solution	50	
14	Sharp Boxes	Capacity approximately 3 gallons but could vary by volume of MCs at the site.	16/week	For low resource and mobile settings, consider using cardboard version (used in Jhpiego trainings).

MODULE 1: INFECTION PREVENTION AND WASTE DISPOSAL

Needed for any site using disposable or reusable surgical instruments

Item #	Name of items	Product specification	Quantity per month for 8 beds site	Observation
15	Alcohol Hand Wash for providers	Contains isopropanol, ethanol, n-propanol or a combination of these ingredients.	25 litres	
16	Soap for scrubbing instruments	Best if contains enzymes that dissolve proteinaceous material.	25 litres	
17	Bleach for soaking instruments	Aka "jik" 3.5% sodium hypochlorite	50 litres	

MODULE 2: EQUIPMENT FOR MALE CIRCUMCISION SITES

Needed for any site using disposable or reusable surgical instruments

Item #	Name of items	Product specification	Quantity for 8 bed sites	Observation
1	Operating stool	Operating stools, adjustable height	8	Optional: depends on surgeon preference to stand or sit.
2	Operating Table	Table, examination, folding, 2-section with washable pad, minimum height of 68cm	8	
3	Standing Lamp	Standing one-bulb spotlight/lamp with adjustable arm	8	
4	Autoclave	Autoclave - size dependent on size of site	1	Optional for programs that use all disposable instruments.
5	Step Ladder	Step ladder, 1 step, anti-slip rubber, chrome plated steel, plastic covered feet	8	Optional
6	IV Stand	IV Stand, 2 hooks, on 5 castors, adjustable from 115 to 210 cm	1	Optional
7	Wheelchair	Wheelchair - removable arms and footrests	1	Optional
8	Recovery bed	Recovery bed with mattress	2	

MODULE 2: EQUIPMENT FOR MALE CIRCUMCISION SITES

Needed for any site using disposable or reusable surgical instruments

Item #	Name of items	Product specification	Quantity for 8 bed sites	Observation
9	Recovery chair	Recovery chairs	4	
10	Patient trolley	Patient trolley with siderails and washable pad, est. dimensions 183x69x87cm	1	Substitute spine board if mobile unit or static MC unit in rural area.
11	Instrument stand	Mayo stand (extends over the patient)	8	
12	Diathermy machine	Diathermy machine: monopolar (can have dual monopolar/bipolar if this does not increase cost)	8	
13	Diathermy plate	Diathermy (aka cautery, electrosurgery) plates (aka "patient return electrodes" or "grounding pads")		In the U.S., these are almost always disposable adhesive pads. However metal plates are available internationally for the same purpose and are reusable. Best to get a machine that uses plate that do NOT require the addition of a gel or a wet cloth in order to be effective. Example Sutron 80 diathermy plates can be used without water or gel.
14	Diathermy pencil	Diathermy (electrocautery) pencil (wand)		

MODULE 3: MC EMERGENCY TOOLKIT

Needed for any site using disposable or reusable surgical instruments

Item #	Name of items	Product specification	Quantity Per Toolkit	Observation
1	Emergency Trolley	Cart with labeled drawers, including mechanism for plastic tab "locks"	1	Note, for mobile MC units, this will need to be in a portable "jump bag".
2	Adrenaline	Adrenaline 1mg/ml, 1ml	Box of 10 Ampules	
3	Atropine	Atropine 500 mcg/ml	Box of 10 Ampules	
4	Glucose	Glucose 50%	50ml/bottle	
5	Sodium Chloride	Sodium Chloride 0.9% IV Solution - 1 Liter Bottle or bag	5	
6	Non - Rebreather Oxygen Mask and Oxygen Tubing	Non-Rebreather Oxygen Mask and Oxygen Tubing	1	Otherwise known as guedel airways or OPAs
7	Ambubag	Ambubag-adult size face mask with Reservoir Bag and Oxygen Tubing	1	
8	Pen Torch	Pen Torch Battery Operated	1	
9	Oropharyngeal airway	Oropharyngeal airway, transparent, size 3 (96mm)	1	
10	Oropharyngeal airway	Oropharyngeal airway, transparent, size 4 (103mm)	1	
11	Oropharyngeal airway	Oropharyngeal airway, transparent, size 5 (120mm)	1	
12	Glucometer	Glucometer	1	
13	Glucometer Strips	Glucometer strips	10	
14	Sphygmomanometer	Sphygmomanometer, aneroid, 300mm Hg, with adult cuff (for arm diameter approximately 9-14 inches)	1	
15	Stethoscope, Binaural	Stethoscope, binaural, standard, dual head	1	
16	Tourniquet	Small Elastic Tourniquet/Band, 90x5cm	1	
17	Laryngoscope	Laryngoscope Battery Operated with three blades (#1, #2, #3) either Miller or MacIntosh	1	

MODULE 3: MC EMERGENCY TOOLKIT

Needed for any site using disposable or reusable surgical instruments

Item #	Name of items	Product specification	Quantity Per Toolkit	Observation
18	IV Infusion Tubing	IV administration tubing (connects bottle or bag of fluid with canula in patient's vein). Want at least one injection port through which to give drugs	2	
19	IV Catheter	IV catheter - 18Gx1.75" (1.3x45mm) with port&wings, sterile, disposable	5	
20	IV Catheter	IV catheter - 22Gx1" (09x25mm) with port&wings, sterile, disposable	5	
21	IV Catheter	IV catheter - 16Gx1" (09x25mm) with port&wings, sterile, disposable	2	
22	Tape	Tape (To Secure IV Catheters and ET Tubes)	1 Roll	
23	Pump, Aspirating, Surgical	Pump, aspirating, surgical, portable, foot-operated, capacity up to 600mm Hg	1	
24	Endotracheal Tube	Endotracheal tube, CH 6, 50cm, disposable, sterile	1	
25	Endotracheal Tube	Endotracheal tube, CH 7, 50cm, disposable, sterile	1	
26	Endotracheal Tube	Endotracheal tube, CH 8, 50cm, disposable, sterile	1	
27	Oxygen Cylinder	Oxygen cylinder - 10 litre, with regulator	1	Regulator and tank shown separately
28	Disposable Exam Glove	Disposable Exam Gloves - Medium Size	1 Box	
29	Alcohol Swabs	Alcohol Swabs - Individually packed	10	
30	Gauze	4X4inch (or 10x10cm) in packages of 2	5	
31	Syringe 2 cc	Syringe 2 cc	5	
32	Syringe 10 cc	Syringe 10 cc	5	
33	Needle 23 Gauge	Needle 23 Gauge	5	
34	Needle 21 Gauge	Needle 21 Gauge	5	
35	Pulse oximeter	Battery operated, fingertip pulse oximeter	1	
36	Emergency Protocols	Laminated protocols for basic resuscitation of anaphylaxis	1	

CLOSING REMARKS BY KIM EVA DICKSON FROM WHO

WHO-UNAIDS is fully supportive of the recommendations presented by the two working groups at this meeting and will include them into the MOVE MC document being finalized. WHO will contact countries, especially those that are moving ahead with these programs, and will continue discussing how to best proceed. WHO can also discuss potential funding options for MC commodities and kits through SCMS with UNITAIDS, an organization that uses airline taxes to pay for HIV/AIDS programs.

Through Emmanuel Njeuhmeli, David Stanton and Nomi Fuchs-Montgomery, the PEPFAR MC TWG thanked all meeting attendees for their participation and determination to reach consensus on the commodities list, to refine the kit options details, and to provide clear options for procurement and supply chain management. The next step will be to discuss with SCMS and other funding agencies, such as the Clinton Foundation, to finalize cost analysis, negotiation, and forecast demand. Another step may be to develop a basic list of other items that facilities may need.

Emmanuel Njeuhmeli was designated as the contact person who will be in touch with SCMS, WHO-UNAIDS, PEPFAR, other donors, and the national MOHs to finalize options and allocate resources. Emmanuel Njeuhmeli encouraged all meeting participants to remain in contact with one another and continue the collaborative exchange on MC.

AGENDA OF THE MEETING

May 19, 2009	
8:00-8:15	Breakfast
8:15-8:30	Welcome Speech Nomi Fuchs-Montgomery (OGAC) Objectives of the Meeting and Presentation of the Agenda David Stanton (USAID)
8:30-9:00	Countries Support and Implementation/WHO-UNAIDS Materials/Website Kim Eva Dickson (WHO)
9:00-10:00	PEPFAR Partners Presentation PSI (Steve Gesuale) 15 mn Jhpiego (Kelly Curran & Jabbin Mulwanda) 15 mn USAID HPI (Ken Morrison) 15 mn EngenderHealth (Paul Perchal & Mark Barone) 15 mn
10:00-10:15	Tea Break
10:15-11:00	PEPFAR Partners Presentations FHI (Kwaku Yeboah) 15 mn JHU CCP (Stella Babalola) 15 mn C-CHANGE (Rose Mary Romano & David Hughes) 15 mn
11:00-11:15	Costing and Impact of MC for HIV Prevention John Stover (USAID HPI), Emmanuel Njeuhmeli (USAID),
11:15-12:00	Update on MC Service Delivery Nomi Fuchs-Montgomery (OGAC), Naomi Bock (CDC)
12:00-1:00	Working Lunch PEPFAR MC TWG with Bertran Auvert
1:00-3:00	PEPAFR MC TWG Panel Discussion Introduction of the MC TWG Nomi Fuchs-Montgomery (OGAC) 10 mn Panel Discussion on Key Topics Jason Reed (CDC) 15 mn Questions and Answers 1h30mn
3:00-3:15	Wrap Up/Next Steps Emmanuel Njeuhmeli (USAID)
3:15-3:30	Tea Break
3:30-4:00	Discussion on Coordination Between MC TWG and WHO-UNAIDS
4:00-4:15	Meeting PEPFAR MC TWG with Jhpiego
4:15-4:30	Meeting PEPFAR MC TWG with PSI
4:30-5:00	Meeting PEPFAR MC TWG on MC devices: Woody Blevins & Mark Filstein
5:00-5:15	PEPFAR TWG MC Meeting
5:30-6:30	Welcome Reception for All Participants (Aria Trattoria, Ronald Reagan Building)

May 20, 2009

8:00-8:15	Breakfast
8:15-8:20	Objectives of the Meeting and Presentation of the Agenda Emmanuel Njeuhmeli (USAID) 5 mn
8:20-8:40	Issues Related to Male Circumcision Procurement and Supply Chain Management SCMS (Sameer Sakallah)
8:40-9:45	Funders' Perspectives on MC Kits and Commodities Kim Shaffer (The Bill & Melinda Gates Foundation) 15 mn Jessica Fast & Joanna Rosenblum (The Clinton Foundation) 15 mn Emmanuel Njeuhmeli (USAID) 15 mn
9:45-10:00	Break
10:00-11:30	Clinical and Programs Perspectives and Experiences on MC Kits and Commodities Steve Gesuale (PSI) 15 mn Edgar Necochea & Jabbin Mulwanda (Jhpiego) 15 mn Stephen Watya (Rakai Health Science Program) 15 mn Bertran Auvert & Dino Rech (Orange Farm) 20 mn Kenya MC Consortium (Michael Stalker) 15 mn Jim Kahn (UCSF) 15 mn
11:30-12:30	Group Works Kim Shaffer (The Bill & Melinda Gates Foundation) Group 1: List of Commodities, Refining Kits and Modules Options Jason Reed (CDC) Group 2: Procurement and Supply Chain Management Issues David Stanton (USAID)
12:30-1:30	Working Lunch Break
1:30-2:30	Presentation of Group Work Kim Shaffer (The Bill & Melinda Gates Foundation) Group 1: List of Commodities, Refining Kits and Modules Options TBD by the Group Group 2: Procurement and Supply Chain Management Issues TBD by the Group
2:30-2:45	Break
2:45-3:30	Final Discussion and Recommendations Nomi Fuchs-Montgomery (OGAC)
3:30-4:00	Final speech Kim Eva Dickson (WHO) Emmanuel Njeuhmeli (USAID), Nomi Fuchs-Montgomery (OGAC)
4:00-5:30	Meeting PEPFAR, The Bill & Melinda Gates Foundation, WHO-UNAIDS, The Clinton Foundation

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