



REPUBLIC OF KENYA

MINISTRY OF HEALTH

Family Planning Commodity Quantification and Supply Planning Review FY2013/14-2014/15

Summary Report

February 2014



MSH/Health Commodities and Services Management

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About MSH/HCSM

The MSH/HCSM Program strives to build capacity within Kenya to effectively manage all aspects of health commodity management systems, pharmaceutical and laboratory services. MSH/HCSM focuses on improving governance in the pharmaceutical and laboratory sector, strengthening pharmaceutical management systems and financing mechanisms, containing antimicrobial resistance, and enhancing access to and appropriate use of medicines and related supplies.

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Acronyms

| | |
|----------|---|
| AMC | Average Monthly Consumption |
| AOP | Annual Operational Plan |
| CCSS | Contraceptive Commodity Security Strategy |
| CoCs | Combined Oral Contraceptives |
| CPR | Contraceptive Prevalence Rate |
| CYP | Couple-Years Of Protection |
| DMPA | Depot Medroxyprogesterone Acetate |
| DoP | Department Of Pharmacy |
| DRH | Division Of Reproductive Health |
| ECP | Emergency Contraceptive Pills |
| F&Q | Forecasting And Quantification |
| FHOK | Family Health Options Kenya |
| FP | Family Planning |
| FY | Financial Year |
| HIS | Health Information Systems |
| HIV | Human Immunodeficiency Virus |
| IUCD | Intrauterine Contraceptive Device |
| KDHS | Kenya Demographic And Health Survey |
| KEMSA | Kenya Medical Supplies Authority |
| KEPH | Kenya Essential Package For Health |
| KfW | Kreditanstalt Für Wiederaufbau |
| KNBS | Kenya National Bureau Of Statistics |
| KSP | KEMSA Support Program |
| KURHI | Kenya Urban Reproductive Health Initiative |
| LAM | Lactational Amenorrhea Method |
| LAPM | Long Acting And Permanent Methods |
| LMU | Logistics Management Unit |
| MDGs | Millennium Development Goals |
| MoH | Ministry of Health |
| MSH/HCSM | Management Sciences For Health/Health Commodities and Services Management (Program) |
| MSK | Marie Stopes Kenya |
| NASCOP | National Aids & Sexually Transmitted Infections Control Program |
| OJT | On The Job Training |
| POP | Progestin Only Pills |
| PSI | Population Services International |
| RH | Reproductive Health |
| RHCS | Reproductive Health Commodity Security |
| SCMS | Supply Chain Management Systems |
| SDM | Standard Days Method |

| | |
|-------|--|
| SORF | (KEMSA's) Standard Order and Reporting Form |
| SOPs | Standard Operating Procedures |
| TFR | Total Fertility Rate |
| TOWA | Total War Against HIV & AIDS (Project) |
| UNFPA | United Nations Population Fund |
| USAID | United States Agency for International Development |
| USD | United States Dollar |
| WB | The World Bank |
| WHO | World Health Organization |
| WRA | Women Of Reproductive Age |

DRAFT

Introduction

The Reproductive and Maternal Health Services Unit (RMHSU) works to promote the reproductive health of all Kenyans by responding comprehensively and effectively to their needs for information and reproductive health services. The RMHSU has several programs, namely Safe Motherhood and Child Survival, Adolescent/Youth Sexual & Reproductive Health, STI/HIV&AIDS, Gender & Reproductive Rights, Infertility, Reproductive Tract cancers, Reproductive health needs of elderly persons and Family Planning.

The main objectives of the Family Planning (FP) program are to co-ordinate FP activities, develop FP policy guidelines, conduct facilitative supervision and research and manage FP commodities' distribution and logistics. These objectives are carried out in collaboration with various partners.

The FP program is also charged with the responsibility of ensuring contraceptive commodity security in Kenya. This involves forecasting of Contraceptive commodity needs, quantification of commodity requirements, monitoring and coordinating procurement, and monitoring the storage and distribution of these FP commodities.

As part of its mandate in ensuring FP commodity security, RMHSU carried out a quantification review workshop from 18th to 19th February 2014.

Objectives

The objective of the quantification workshop was to review the FP commodity requirements and quantities to be procured for FY2013/14 to FY2014/15 for national level. Based on the generated requirements, current in-country stocks and planned/pending shipments from the government and development partners, a national supply plan would be prepared to guide procurement in the period under consideration.

Assumptions for the Forecasting and Supply Planning

These were as agreed on in June 2013, except for changes in supply lead times (see annex 1)

Data

The following key data was collected for the quantification exercise

- Stock on Hand (SOH) at Central Level (KEMSA);
- Shipments of supplies and medicines ordered to date, but not yet received (UNFPA, KEMSA, USAID, DFID, KfW);
- Stock on Hand (SOH) at peripheral level, based on the December 2013 FP commodity workbook from KEMSA

Prices

Prices were drawn from KEMSA latest procurement prices. Central Bank of Kenya mean exchange rate of 1USD = Kshs 85.3878 was used in determining the cost of commodities requirements for the period under review.

Table 1: Prices of Products for estimation of costs

| Product | Unit Size | Unit Price (USD) |
|---------------------|-----------|------------------|
| DMPA | Vials | 0.955 |
| POPs | Cycles | 0.34 |
| COCs | Cycles | 0.21 |
| Male Condoms | Pieces | 0.029 |
| Implants - Jadelle | Sets | 8.85 |
| Implants - Implanon | Sets | 9.85 |
| IUCD | Sets | 0.54 |
| Female Condoms | Pieces | 0.72 |
| Cycle Beads | Sets | 2.256 |
| Emergency Pills | Doses | 0.25 |

Source: KEMSA, as at 31st May 2013

Stock on Hand at KEMSA

Table 2: KEMSA stock on hand as at 18th February 2014.

| Product | Unit Size | Available Quantity |
|---------------------|-----------|--------------------|
| DMPA | Vials | 13,831,400 |
| POPs | Cycles | 0 |
| COCs | Cycles | 1,758,102 |
| Male Condoms | Pieces | 53,400,400 |
| Implants – Jadelle | Sets | 29,390 |
| Implants – Implanon | Set | 353,271 |
| Female Condoms | Pieces | 0 |
| IUCD (Copper T) | Pieces | 0 |
| Emergency Pills | Doses | 0 |
| Cycle beads | Pieces | 57,136 |

Shipments

Table 3: Donor procurements 2013/14

| Commodity | Quantity | Shipment Plan | | | | Status |
|-------------------------|------------|---------------|------------|--------------|--------|--|
| | | No. | Quantity | EDA | Agency | |
| DMPA | 8,420,000 | 1 | 3,000,000 | Sept-13 | KfW | DELIVERED- Oct 2013 |
| | | 2 | 3,000,000 | Dec-13 | | DELIVERED- Nov 13 |
| | | 3 | 2,420,000 | March- 14 | | - |
| Jadelle | 55,600 | 2 | 55,600 | Jun-13 | USAID | DELIVERED- June 2013 |
| | 144,900 | 1 | 45,000 | Jun-13 | KfW | DELIVERED- June 2013 |
| | | 2 | 45,000 | Sept-13 | | DELIVERED- Sept 2013 |
| | | 3 | 54,900 | Dec-13 | | 45,000 DELIVERED – Jan 2014 |
| Implanon | 159,016 | 1 | 45,000 | Jun-13 | KfW | DELIVERED- June 2013 |
| | | 2 | 45,000 | Sept-13 | | DELIVERED- Oct 2013 |
| | | 3 | 69,016 | Dec-13 | | DELIVERED- Jan 2014 |
| | 90,000 | 1 | 90,000 | July-13 | DFID | DELIVERED TO PS/KENYA |
| | 123,842 | 1 | 123,842 | July-13 | UNFPA | DELIVERED- Nov 2013 |
| COCs | 5,341,680 | 1 | 2,645,280 | July-13 | USAID | DELAYED |
| | | 2 | 2,696,400 | June-13 | | DELIVERED- July 2013 |
| Male Condoms | 31,680,000 | 1 | 31,680,000 | June-13 | WB | DELIVERED |
| | 52,000,000 | 1 | 26,000,000 | June-13 | DFID | DELIVERED TO PS/KENYA – Jan 2014 |
| | | 2 | 26,000,000 | Sept-13 | | DELIVERED TO PS/KENYA – Jan 2014 |

Quantification results and supply plan for FY2013/14 - 2014/15

See annex 2

Revised supply plan

Table 4: Revised supply plan FY 2013/14 and 2014/15

| Product | Unit Price | Funding Source | 2013/2014 | | ETA |
|---------------------|------------|----------------|------------|-------------|-----------------|
| | | | Base Units | Cost (US\$) | |
| DMPA | 0.955 | KfW | 3,975,822 | 3,796,910 | June- Sept 2014 |
| | | UNFPA | 2,000,000 | 1,910,000 | June 2014 |
| POPs | 0.340 | UNFPA | 652,419 | 221,822 | April 2014 |
| COCs | 0.210 | USAID | 1,248,792 | 262,246 | June 2014 |
| EC Pills | 0.250 | UNFPA | 24,991 | 8,748 | April 2014 |
| Implants – Jadelle | 8.885 | | 0 | 0 | - |
| Implants – Implanon | 9.885 | USAID | 190,000 | 1,878,150 | March 2014 |
| | | DFID | 280,000 | 2,767,800 | June 2014 |
| | | KfW | 100,000 | 988,500 | March 2014 |
| | | UNFPA | 72,057 | 712,283 | June 2014 |
| IUCDs | 0.540 | USAID | 34,927 | 18,861 | June 2014 |
| Cycle Beads | 2.500 | | 0 | 0 | - |

| Product | Unit Price | Funding Source | 2014/2015 | | ETA |
|---------------------|------------|----------------|------------|-------------|----------------|
| | | | Base Units | Cost (US\$) | |
| DMPA | 0.955 | USAID | 1,500,000 | 1,432,500 | December 2014 |
| | | TBD | 2,796,980 | 2,671,116 | |
| POPs | 0.340 | TBD | 1,267,230 | 430,858 | September 2014 |
| COCs | 0.210 | TBD | 1,361,108 | 285,833 | April 2015 |
| EC Pills | 0.250 | TBD | 43,738 | 10,913 | August 2014 |
| Implants – Jadelle | 8.885 | TBD | 256,000 | 2,265,600 | September 2014 |
| Implants – Implanon | 9.885 | | 0 | 0 | - |
| IUCDs | 0.54 | USAID | 35,140 | 18,976 | December 2014 |
| Cycle Beads | 2.50 | | 0 | 0 | - |

RECOMMENDATIONS

The team made a number of recommendations to improve FP commodity security:

- (1) Monthly monitoring of supply plan to ensure uninterrupted supply pipeline
- (2) Focus on accessing regular accurate and complete downstream data to help in national planning
- (3) Mobilization of resources for all shipments that are planned but unfunded in the current supply plan
- (4) Joint resource mobilization for procurement of condoms by both NASCOP and RMHSU with NASCOP as the lead
- (5) Adherence to the agreed timelines for committed funds and procurements
- (6) Regular updates from the procuring agencies to ensure uninterrupted supply.
- (7) Stakeholders' forum to be planned to discuss distribution and reporting in view of devolution.

ANNEXES

Annex I: Assumptions for Forecasting

Period of Forecasting

The agreed forecasting period ranged from July 2013 to June 2015 and the forecast was to include Family Planning commodity requirements for the entire country (from both public and non-public sectors). Reality Check, which is a population (Morbidity) based forecasting tool was used to derive quantities. Two other sources of data were used to validate the forecasts and these included service statistics from DHIS-2 and FP commodity consumption from monthly CDRR reports.

The population covered in the forecast was sexually active women of reproductive age (WRA) constituting approximately 71.5% (KDHS 2008/9). Population figures were derived from projections using Reality Check.

| Population sub-set | 2012 | 2013 | 2014 | 2015 |
|---|------------|------------|------------|------------|
| Total women of reproductive age | 10,296,814 | 10,563,220 | 10,842,923 | 11,136,137 |
| Sexually active women of reproductive age (71.5%) | 7,362,222 | 7,552,702 | 7,752,690 | 7,962,338 |

The quantification included all family planning commodities as per the public sector method mix; Combined Oral contraceptives (COCs), Progestin only Pills (POPs), Depot Medroxyprogesterone Acetate Injection (DMPA), 2-rod Implants (Jadelle), 1-rod Implants (Implanon), Intra-Uterine contraceptive device (IUCD), Emergency Contraceptive Pills (EC), Male Condoms, Female Condoms and Cycle Beads.

Percentage Use and Product Mix

Table 5: Percentage use for each product method

| Data element | Method Mix 2012 | Method Mix 2015 | |
|--------------------------|-----------------|-----------------|-------------|
| | % of Total | % of Total | CPR |
| Pills POPs | 16.36 | 16.36 | 9.63 |
| Pills COCs | | | |
| FP Injections | 50.24 | 50.24 | 29.59 |
| IUCD insertion | 5.02 | 5.02 | 2.96 |
| Implants insertion | 18.20 | 18.20 | 10.72 |
| Sterilization BTL | 1.32 | 1.32 | 0.78 |
| Sterilization Vasectomy | 0.08 | 0.08 | 0.05 |
| Client receiving condoms | 8.5 | 8.5 | 5.01 |
| Female Condoms | 0.29 | 0.29 | 0.17 |
| Totals | 100 | 100 | 58.9 |

The goal of RMHSU is to realize CPR of 58.9% for sexually active women of reproductive age for modern methods by 2015.

Method mix for 2012 was derived from the DHIS-2 2012 service statistics reports on FP uptake and usage by various methods. It was assumed that there would be increased uptake of the LAPMs, particularly the implants, but review of this will be done on a semi-annual basis.

Table 6: Percentage use of individual products among category

| | | | | | |
|-------|------|-----|----------|----------|-----|
| Pills | POP | 30% | Implants | Jadelle | 50% |
| | COCs | 70% | | Implanon | 50% |

Among the individual products, pills will be split between POPs and COCs in the ratio 30:70 respectively. Implants will have equal split between Jadelle and Implanon.

EC pills requirements were calculated using adjusted consumption data for the period January-March 2013.

Cycle beads requirements were retained as determined in January 2012 quantification review since quantities determined then were not procured and no new data was available for consideration.

The public sector contributes the bulk of FP supplies to both public and non-public service providers. The non-public sector supplies contribution is mainly through PSI. The share of supplies contribution per method/product is summarized in table 3 below.

Table 7: Product Mix Public and Non-Public

| Product | Public Sector | Non-Public |
|----------------|---------------|------------|
| DMPA | 85 | 15 |
| POPs | 100 | 0 |
| COCs | 60 | 40 |
| Male Condoms | 85 | 15 |
| Jadelle | 95 | 5 |
| Implanon | 100 | 0 |
| IUCD | 75 | 25 |
| Female Condoms | 100 | 0 |

Logistics parameters

The supply plan was generated using PipeLine® software. The following inventory management parameters for the program were set for the supply planning activity:

- Minimum central stock level of 16 months of supply
- Maximum central stock level of 22 months of supply
- Desired central stock level of 22 months
- Desired interval between orders of 6 months

Table 8: Estimated supply lead times

| Supplier | Plan to Order (Months) | Order to Ship (Months) | Ship to Receive | Total |
|-----------------------|-------------------------------|-------------------------------|------------------------|--------------|
| Government of Kenya | 6 | 4 | 3 | 13 |
| USAID Deliver Project | 2 | 4 | 7* | 13 |
| DFID | 2 | 4 | 7* | 13 |
| KfW | 6 | 4 | 3 | 13 |
| UNFPA | 2 | 4 | 7* | 13 |

*2 months for receipt; 3 months for clearance (quality and KRA) and 2 months RDL.

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Annex 2: Quantification results and supply plan

Quantification Results

Table 9: Annual national requirements

| Product | Unit Price | July 2013 - June 2014 | | July 2014 - June 2015 | | TOTAL |
|---------------------------|------------|-----------------------|-------------------|-----------------------|-------------------|-------------------|
| | | Base Units | Cost (US\$) | Base Units | Cost (US\$) | Cost (US\$) |
| DMPA | 0.955 | 8,863,432 | 8,464,578 | 9,424,656 | 9,000,547 | 17,465,125 |
| POP | 0.310 | 3,273,435 | 1,014,765 | 3,450,533 | 1,069,665 | 2,084,430 |
| COC | 0.210 | 7,638,016 | 1,603,983 | 8,051,243 | 1,690,761 | 3,294,744 |
| EC Pills | 0.250 | 74,983 | 18,746 | 74,983 | 18,746 | 37,492 |
| Jadelle | 10.542 | 205,907 | 2,170,670 | 245,254 | 2,585,467 | 4,756,137 |
| Implanon | 8.885 | 205,907 | 1,829,483 | 245,254 | 2,179,081 | 4,008,564 |
| Male Condoms (Lubricated) | 0.029 | 43,726,121 | 1,268,057 | 47,836,134 | 1,387,248 | 2,655,305 |
| Female Condom | 0.720 | 1,439,842 | 1,036,686 | 1,632,056 | 1,175,081 | 2,211,767 |
| Iud (Copper) | 0.540 | 76,045 | 41,065 | 83,973 | 45,345 | 86,410 |
| Cycle Beads | 2.500 | 3,060 | 7,650 | 3,072 | 7,680 | 15,330 |
| TOTAL Cost (US\$) | | | 17,455,683 | | 19,159,620 | 36,615,303 |

Supply plan and gap analysis

The expected cost of supply plan (excluding condoms) for the FY2013/14 is USD 23,902,901 and for the FY2014/15 is USD 6,681,446.

Excluding condoms, the commodities already committed against the supply plan are worth USD 12,881,479 in FY 2013/14. Therefore the funding gaps are **USD 11,021,422** for 2013/14 and **USD 6,681,446** for 2014/15.

Table 10: FP commodities supply plan for FY2013/14 and FY2014/15 (Maximum level – 22 months; minimum level- 16 months)

| Product | Unit Price | 2013/14 | | | | | | 2014/15 | | | | | |
|--------------------------|------------|------------|-------------------|------------|-------------------|------------|-------------------|------------|------------------|------------|-------------|------------|------------------|
| | | TOTAL | | COMMITTED | | GAP | | TOTAL | | COMMITTED | | GAP | |
| | | Base Units | Cost (US\$) | Base Units | Cost (US\$) | Base Units | Cost (US\$) | Base Units | Cost (US\$) | Base Units | Cost (US\$) | Base Units | Cost (US\$) |
| DMPA | 0.955 | 12,395,822 | 11,838,010 | 8,420,000 | 8,041,100 | 3,975,822 | 3,796,910 | 4,296,980 | 4,103,616 | | - | 4,296,980 | 4,103,616 |
| POPs | 0.340 | 1,443,133 | 490,665 | | - | 1,443,133 | 490,665 | 475,745 | 161,753 | | - | 475,745 | 161,753 |
| COCs | 0.210 | 1,248,792 | 262,246 | | - | 1,248,792 | 262,246 | - | - | | - | - | - |
| EC Pills | 0.250 | 96,508 | 24,079 | | - | 96,508 | 24,079 | 43,738 | 10,913 | | - | 43,738 | 10,913 |
| Implants – Jadelle | 10.542 | 549,073 | 5,788,328 | 144,900 | 1,527,536 | 404,173 | 4,260,792 | 119,938 | 1,264,386 | | - | 119,938 | 1,264,386 |
| Implants – Implanon | 8.885 | 616,850 | 5,480,712 | 372,858 | 3,312,843 | 243,992 | 2,167,869 | 126,258 | 1,121,802 | | - | 126,258 | 1,121,802 |
| IUCDs | 0.540 | 34,927 | 18,861 | - | - | 34,927 | 18,861 | 35,140 | 18,976 | | - | 35,140 | 18,976 |
| Cycle Beads | 2.256 | - | - | | - | - | - | - | - | | - | - | - |
| TOTAL Cost (US\$) | | | 23,902,901 | | 12,881,479 | | 11,021,422 | | 6,681,446 | | 0 | | 6,681,446 |

A national condom supply plan with quantities, costs and dates will be generated after the NASCOP F&Q in July 2013.

APPENDIX

Appendix I: Workshop Timetable

DAY 1: Tuesday 18th February 2014

| TIME | ACTIVITY/SESSION | FACILITATOR |
|------------------------|---|----------------------------|
| 8.30 – 9:00am | Registration | Rapporteur (MSH HCSM) |
| 9:00 – 9:10am | Introduction, official opening remarks and Objectives of the meeting | Head RMHSU |
| 9:10 – 9:40am | Program status update | RMHSU |
| 9:40 – 10:00am | Central level stocks, distribution trends and ongoing procurements | KEMSA |
| 10.00 – 10:30am | TEA BREAK | |
| 10:30am - 11.15am | Updates from Partners and Stakeholders Planned procurements and procurement /Delivery status | USAID, UNFPA, KfW, DFID |
| 11.15am - 11.45am | Updates from Partners and Stakeholders (Current stocks, Consumption/usage trends, Planned procurements) | PSI, MSK, FHOK, Tupange |
| 11:45 – 1:00pm | Review of quantification assumptions | RMHSU |
| 1:00 – 2:00 pm | LUNCH | |
| 2:00 – 2:30pm | Review of F&Q results | RMHSU |
| 2:30 – 4:30pm | Review of supply plan | RMHSU |
| 4:30 – 5:00pm | Wrap-up and plan for Day 2 | RMHSU |

DAY 2: Wednesday 19th February 2014

| TIME | ACTIVITY/SESSION | FACILITATOR |
|-------------------------|-------------------------|-------------|
| 9:00 - 9:30am | Recap of day 1 sessions | RMHSU |
| 9.30 – 10:00am | Update of supply plan | All |
| 10:00 – 10:30 AM | TEA BREAK | |
| 10:30am – 1:00pm | Update of supply plan | All |
| 1:00 – 2:00 PM | LUNCH | |
| 2:00 – 4:30pm | Procurement Planning | All |
| 4:30 – 5:00pm | Way forward and closure | Head RMHSU |