

HCSM

Health Commodities and Services Management Program

MONTHLY Bulletin

July 2015

Monthly publication of USAID-Funded Health Commodities and Services Management Program implemented by Management Sciences for Health

Inside:

- » Our achievements
- » Why we remain the partner of choice
- » Promoting evidence-based budgeting
- » Our innovations
- » Our support to family planning and malaria commodities management
- » Assuring quality of medicinal products in Kenya

HCSM is a USAID project that works to improve the health of Kenyans by increasing access to and use of quality and safe essential health products and services in the areas of malaria, family planning and HIV and AIDS.



USAID
FROM THE AMERICAN PEOPLE



MSH/Health Commodities and Services Management

Our solutions remain innovative, responsive and sustainable

By Dr. John Chimumbwa, Chief of Party, HCSM Program



...we have exceedingly transformed commodities management in Kenya, thereby enhancing access to, availability, affordability and acceptability of quality medicines, products and services, as well as assisting to improve their use within the public private and faith-based sectors by providers and end users.

Dr. John Chimumbwa, Chief of Party, HCSM program

The Management Sciences for Health's (MSH) Health Commodities and Services Management (HCSM) program-funded by United States Agency for International Development has been improving the health of Kenyans since 2011 by increasing their access to and use of quality and safe essential health products and services in the areas of malaria, family planning, HIV and AIDS, TB and other public health areas.

Our innovative approaches guarantee sustainability of effective commodity management practices by building the capacity of national and county level health counterparts, providing tools,

curricula, job-aids and guidelines and leveraging on technology to expand availability and access to health commodities, related products and technologies. We also endeavor and extend our unique support to both private and quasi-public sectors to ensure a holistic and effective access to quality products to the entire Kenyan populace. Our unique niche in the systems strengthening and commodities management is centered around innovating, synthesizing, packaging and delivering best practices in the most efficient and cost-effective ways. We optimize our health impact by embedding our interventions in the public, private and FBOs, both at national and county levels. We have established strong networks at both national and county levels, enabling us to understand the country's health commodities priority needs and challenges and aspirations. We have become the trusted, go-to, honest broker and technical assistance partner, as well as the swift and sustainable first responder. Drawing from the over 40 years of MSH's national and global experience and expertise, in health commodities management, we deliver superior solutions to challenges on health commodities management and ensure value for money.

In so doing, we have exceedingly transformed commodities management in Kenya, thereby enhancing access to, availability, affordability and acceptability of quality medicines, products and services, as well as assisting to improve their use within the public private and faith-based sectors by providers and end users.

In this bulletin, we share with you some of our key achievements since 2011, including some of the innovative approaches that we have employed over time to improve health commodities management in Kenya.

Why we remain the partner of choice in health commodities management in Kenya

Perspective of Josephat Mbuva, Deputy Chief Pharmacist, Ministry of Health



MSH's programs stand out because of the way they have improved health commodities management systems: we have seen real improvements worth the investments.

Dr. Josephat Mbuva, Deputy Chief Pharmacist, MOH

To the Ministry of Health, Management Sciences of Health (MSH), through its over four decades of health commodities systems strengthening programs, is a valuable partner that has contributed immensely to health commodities management in Kenya. Having worked in the sub-sector for a while, I can attest

to this fact, especially having been a beneficiary of capacity building programs. Today, if we were to remove MSH's contribution, we shall be far much behind in health commodities management. Most, if not all, pharmacists and pharmacy technologists have been beneficiaries of capacity building initiatives of MSH and we have seen the difference in the way they manage health commodities. MSH has provided tools, materials and trainings, immensely improving health commodities management in Kenya. If you went to most health facilities today, the health commodities management infrastructure has been provided by MSH. Unlike many programs that have been implemented in Kenya, MSH's programs stand out because of the way they have improved health commodities management systems: we have seen real improvements worth the investments. MSH has demonstrated value for money in its interventions. And so, even as MSH works to wind- down the current program- Health Commodities and Services Management Program, we shall still consider you in future as a partner of choice. Thank you for working with us to ensure that the health commodities management system in Kenya is effective enough to deliver health care to enable us achieve the desired health outcomes."

Snapshot of our achievements



Since 2011, HCSM has increased availability of pharmaceutical products and services to 80 - 90%, increased commodity reporting rates in focus counties to an average of 80% - 90% and trained over 5000 health workers on commodities

By applying simple yet innovative interventions, HCSM has immensely improved management and use of health commodities in Kenya, leading to:

- Increased availability of health commodities in health facilities because facilities can now accurately forecast quantities and types of commodities required to provide uninterrupted health services
- Reduced stock-outs and expiries because of rational procurement practices, record keeping of all commodity stock transactions and monitoring of stock levels
- Improved capacity to manage health commodities by healthcare providers. Since 2011, Over 5000 health workers have been trained in commodities management, reporting and data review and are able to perform these roles
- Increased commodities reporting and use of data for decision making. Reporting rates for HIV, malaria and family planning in 15 of HCSM focus counties have improved to 80%, 85% and 90% respectively currently
- Increased use of data for decision making. Data from health commodities quantification is increasingly being used to by decision makers at county level to advocate for money for health commodities. For example in Kilifi County, the County Assembly Committee on Health chairperson presented the quantification report to justify the budget ceiling for health commodities for 2015/2016 financial year.
- There are clear guidelines and policies on commodities management including training curricula, job aids and standard operating procedures. These have been disseminated at both national and county levels for use in health commodity management
- Increased reporting of suspected adverse drug reactions (ADRs) to Pharmacy and Poisons Board from 2108 in Dec 2011 to 8309 in June 2015 showing vigilance in patient management.
- Increased reporting of suspected poor quality medicinal products (sPQMPs) from zero in December 2011 to 614 in June 2015 to promote quality of products used and enhance patient safety. 72% and 65% of the suspected ADR and PQMPs cases respectively were reported through the PV e-reporting system. Subsequent to increased ADR and PQMP reporting, several regulatory actions have also been undertaken by Pharmacy and Poisons Board to assure patient safety and product quality.
- Improved reporting of suspected ADRs and sPQMPs hence patient safety through the innovative HCSM supported pharmacovigilance electronic reporting system (PVERS). Visit <http://www.pv.pharmacyboardkenya.org/>
- Improved access to integrated clinical guidelines for HIV, Family Planning and Malaria through a web portal <http://kenyaclinicalguidelines.co.ke/> and smartphone applications on the Android and iOS platforms, promoting evidence-based practice by standardizing diagnostic and prescribing practices to improve health outcomes.

You have done well, but we still need your support

Perspective of Dr. George Midiwo, Chief Health for Officer, Siaya County



Our health commodities managers are still not able to estimate the monthly commodity needs quickly and provide information timely for use in decision making.

Dr. George Midiwo, Chief Officer for Health, Siaya County

The Health Commodities and Services Management program has been a valuable partner in fostering effective pharmaceuticals management, especially in Siaya County. Through your support, we have made great strides in health commodities management, and we are grateful for that. But we still have unmet needs that have to be addressed to improve health commodities

management in our county. We shall still need your assistance in the following areas

- Facilitate conversation between Members of County Assembly, County Department of Finance and the County Department of Health to foster common understanding on health commodities procurement, budgeting and disbursement of funds. This will lead to improved budget allocation and timely authorization of expenditure for health commodities.
- Build the capacity of County Pharmacists to enable them to timely quantify health commodities requirements for the county and the costs, including approximation of monthly commodities requirements to ensure timely availability of information for decision making.
- Facilitate the development of policy on drug storage at the county level.
- Build credible systems for use in tracking health commodities procured to prevent pilferages.
- Build capacity of health commodities managers on information technology systems that can monitor usage of health commodities.

Promoting evidence - based budgeting for health commodities in Kenya



For the first time since 2013, I have a basis to defend the amounts we are proposing for health commodities before the budget committee. This quantification report has come at a time when I really needed facts. I am sure, this coming year, our budget for health commodities will be more improved.

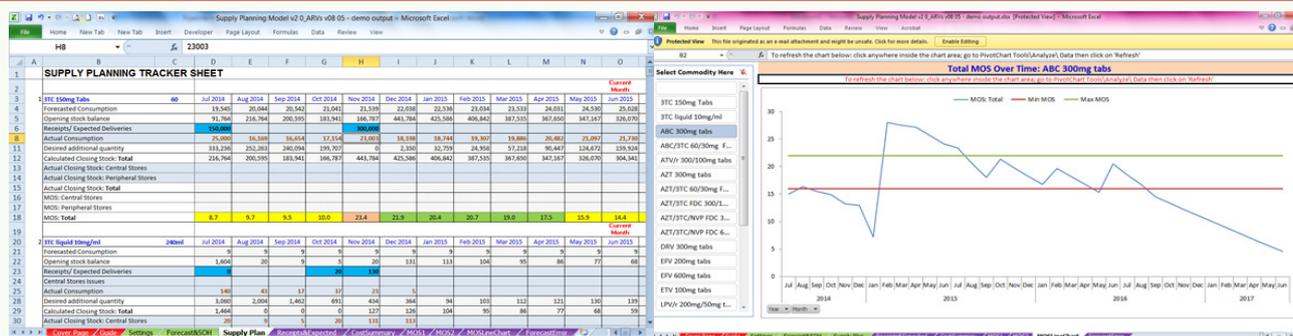
Hon. Albert Kiraga, Chairperson, Kilifi County Assembly Committee on Health Services

Through our support, Kilifi County Department for Health secured increased budget allocation for the health commodities for the county for financial year 2015/2016. The project supported the department to quantify its requirements for health

commodities and disseminate the report for the financial year July 2015-June 2016. The Department handed over this report to the County Assembly Committee for Health for presentation to the County Budget Committee to support the budgetary allocation process for health commodities for 2015/2016. The county Assembly Committee on Health is the body responsible for legislation, policy making and resource allocation for health within the county.

Since 2013, we have been supporting 13 counties to undertake quantification exercises to determine the quantities and costs of health commodities necessary to deliver health services. This support was necessitated by the limited capacity within counties to procure and manage health commodities, roles that were previously performed by the central government through the Kenya Medical Supplies Authority. The counties also lacked reliable health commodities consumption data to support evidenced-based decisions on quantities to procure and the costs to ensure adequate budget allocation for health commodities. To sustain this evidence-based budgeting process, we will continue to support our priority counties in the sharing of information between the County Departments for Health and the County Assemblies and County Departments for Finance as a measure towards ensuring adequate budgetary allocation for the procurement of health commodities.

Promoting innovative approaches to foster health commodities security



Determining the required commodity quantities was made much easier using the Pipeline Management Tracker tool considering the short time that was available for the grant-making process. The tracker provided evidence to the Global Fund (GF) team that commodity usage is tracked on monthly basis and that the HIV program was able to justify its funding requests. The GF team was happy to see the program's (NASCOP's) commitment. Susan Njogo, NASCOP

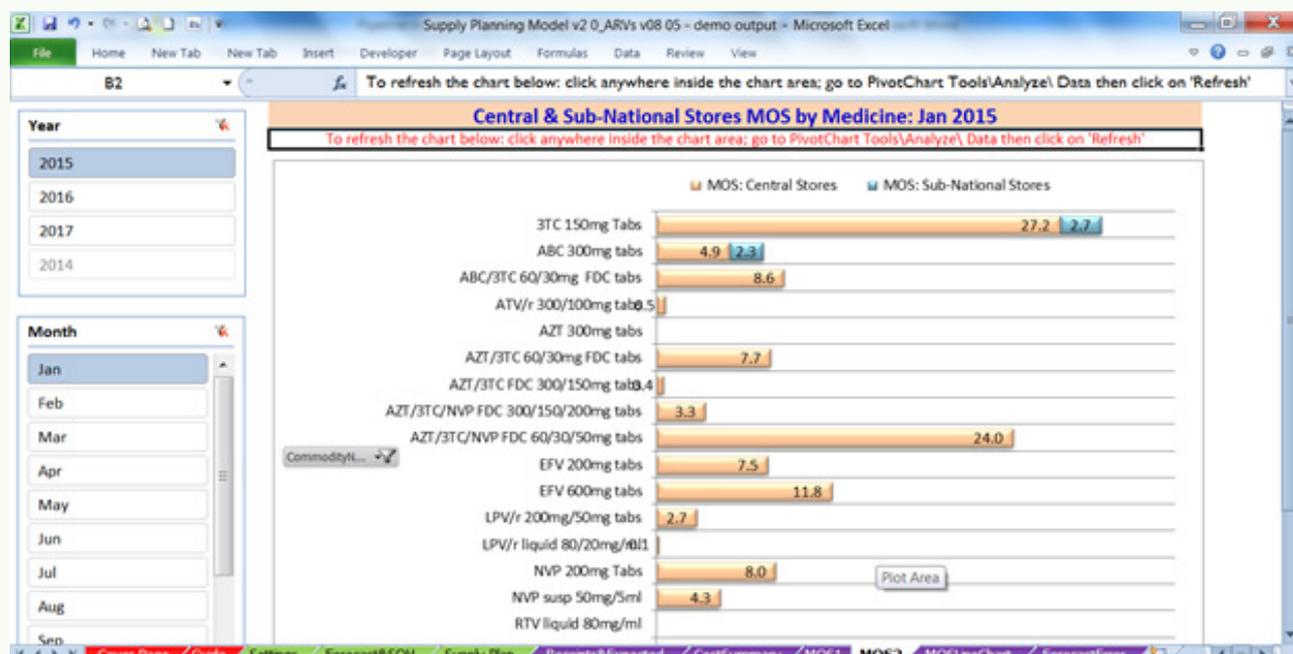
We realize that continuous tracking of pipeline parameters facilitates timely decision making, enhances quantification accuracy and contributes towards overall commodity security by minimizing health commodity stock-outs, expiries and inappropriate commodity use. On this basis, we developed a simple, yet effective MS Excel® Pipeline Management Tracker- a tool that links the annual forecasting and supply planning processes for health commodities to the routine monthly procurement planning and pipeline monitoring processes.

What are the benefits of this tool?

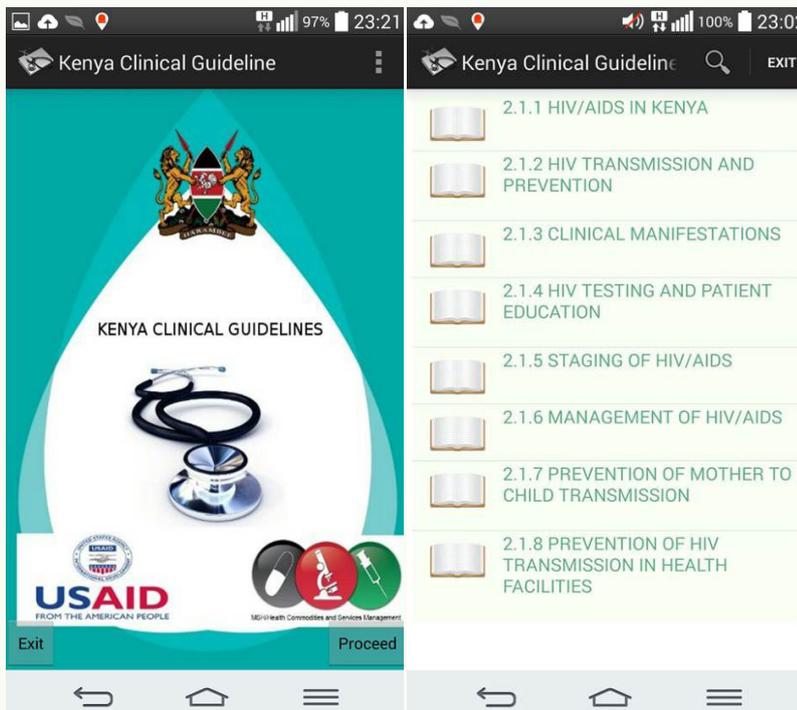
- Simple to use as it does not require advanced technical skills, making it usable by national level program managers / staff for monitoring stocks at all levels of the health commodity supply chain from health facility to national stores and stocks with suppliers.
- Simple outputs that are easy to interpret

- Facilitates adoption and use of program-specific standardized maximum and minimum stock levels that help optimize resource mobilization and utilization
- Standardizes supply chain processes across different programs / commodity categories
- Integration of different supply chain processes
- Improves pipeline visibility, and reduces supply chain risks
- Provides effective decision support based on “real time” data
- Aligns to national and funding agency/donor supply chain indicators, facilitating tracking and accountability across the supply chain
- Aligns to global best practice and terminology

You can access the tool from MSH/HCSM through email request to (dkimeu@msh.org), or can be downloaded from (www.msh.org/hcsm).



Leveraging Mobile Technology to Increase Access to Standard Treatment Guidelines in Kenya



*“Now I can access the guidelines anywhere and whenever I need them unlike previously when I had to carry a hard copy around.”
Pharmacist, Nairobi County*

The Kenya Clinical Guidelines are now available literally at the click of a button. The long standing challenge where health care workers had to spend endless hours searching for scarce copies or sharing dog-eared sometimes out-of-date copies should be in the past now. This is expected to result in higher efficiency, better care and treatment outcomes for all patients. Moreover, this should eventually enhance appropriate use of medicines thereby reducing misuse and wastage of these expensive commodities.

To achieve this, HCSM worked with the Ministry of Health’s

Kenya National Medicines and Therapeutics Committee to digitize all the three volumes of the guidelines which are now accessible via apps on the two most common mobile phone platforms- Android and iOS free of charge. Users can download and install the applications from either the Google play or Apple store by searching using the key words “Kenya Clinical Guidelines”

Initial installation requires internet connection to enable content download and for syncing with the online database. Thereafter users can access the application on the device without internet connectivity.

This innovation enhances availability of the guidelines to prescribers whenever and wherever they need them and also brings multiple other benefits. For instance this will reduce the cost of accessing the guidelines as the development was done at a fraction of the cost of printing hard

copies. The very high mobile phone penetration in the country will also ensure that there is a wider reach among health professionals and revised or updated guidelines can be accessed much faster compared to the tedious process of disseminating hard copies

The improved access to the guidelines is expected to promote evidence-based practice by standardizing diagnostic and prescribing practices to improve health outcomes. Although only the - integrated Kenya Clinical Guidelines are covered by, the application, this can be scaled-up to include disease-specific guidelines. The guidelines can also be accessed through a web portal- <http://kenyaclinicalguidelines.co.ke/>.

Improving facility level data management through innovation

In response to the emerging needs for a versatile tool at facility level to manage a broad range of patient and commodity data, HCSM has developed the Electronic Dispensing and Inventory Tracking Tool (EDITT). This is an integrated computerized health commodity inventory and patient data management tool designed to manage health commodities from receipt to issuing and dispensing, stock keeping and tracking product usage. It makes it possible to maintain patient dispensing records and issuance of commodities to clients. It is also used to provide critical decision support information on health commodities and patient/client management.

What are the benefits of the tool?

- Multi-user capability- the tool can be used on either a single

user or multi-user basis. Depending on the context of its use, it can be operationalized using either the online or offline modes.

- Ability to accommodate dispensing and issuing of all health commodities- can be used to manage all health commodities including those for HIV, Laboratory, Diabetes, Family Planning/ Reproductive Health, Malaria, Tuberculosis and the general essential medicines and medical supplies (EMMS).
- Multi-store capability- designed to manage health commodities in multiple stores within facilities. It allows one to define the number of storage areas where commodities are managed within or outside the facility.
- Different application options- can be used as an integrated

Continued on Pg 6

Improving facility level data management through innovation

Continued from Pg 5

tool for dispensing and inventory management or independently for either inventory tracking or for dispensing.

- Stable and scalable platform- is built on a stable relational database which allows for interoperability with other hospital software applications or management information systems such as EMRs. The tool is also capable of linking to the national health information system- the District Health Information System (DHIS) to allow transmission of data from health facilities using EDITT.
- Web based- though web based and runs on common browsers, it does NOT require internet access for use. It can be used in stand-alone offline computers, through the local area network (LAN) or a wide area network (WAN).
- User friendly interface- has a friendly user interface that

makes navigation across the tool easy.

- Enhanced reporting functions- tools incorporate additional commodity and patient reports to support operational and management decision-making. These include patient and commodity tracking reports and the World Health Organization Early Warning Indicators e.g. HIV Drug Resistance and stock outs. Aggregated reports from the tool can be submitted to higher levels in the healthcare system to inform decision making.
- Security and controls- access to the tool is through a username and password and the administrators can determine access privileges to different users based on their roles

For more details about this tool, contact Joseph Warero through Jwarero@msh.org

HCSM supports national family planning program to determine family planning commodity requirements

This County FP commodity allocation report has come at the right time, just before the start of the next budgeting cycle. Counties have been asking how much to allocate for FP commodities in their budgets. We now have something to share with them so as to make provisions for FP in their next budgets. Dr. Jonah Maina, Commodity Manager, RMHSU.

Despite significant progress made in family planning (FP) commodities management, the country still faces challenges in the family planning program, especially in FP commodities security following devolution of health services that transferred the management of FP commodities from national to county level. This change significantly disrupted previously established supply systems for FP commodities and had a negative impact on commodity availability and delivery of FP services. Many counties lack adequate skills in quantification hence unable to determine commodity requirements hence insufficient budgetary allocation at the county level. The USAID- funded HCSM project has been supporting the Reproductive Health and Maternal Health Services Unit (RHMSU) to convene FP commodity quantification annually to estimate the quantities and costs of FP commodities required and when they products should be acquired to ensure uninterrupted supply for the program.

In June 2015, HCSM, together with other partners supported RHMSU to convene the national FP commodities quantification workshop to determine requirements for FY 2015/2016 and 2016/2017 both for the national and County levels. HCSM provided both technical and financial support for workshop that estimated both the National requirements as well as break down by County. The other partners present were PIMA; Clinton Health Access Initiative (CHAI); JHPIEGO; Population Services Kenya (PSK) and Kenya Medical Supplies Agency (KEMSA). The

estimated FP commodity requirements and funding gap is as summarised in the figure below:

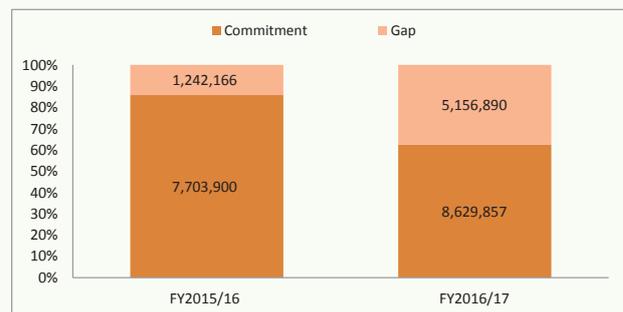


Figure 1: FP commodities funding status for FY 2015/2016 and 2016/2017

To generate County FP commodity requirements for 2016, three considerations were made - county target population (including the sub-set for sexually active Women of Reproductive Age) county Contraceptive Prevalence Rate (current and projected) and the County method mix. Dr. Jonah, the FP commodity manager, has already disseminated the county FP commodity requirements for 2016 to all the county pharmacists, which can then be used to inform advocacy for county budgetary allocation for FP commodities

Of note during this year's quantification was the use of FP commodity data from DHIS2 to assess client method preferences, commodity consumption rates and trends and downstream commodity stock on hand. The data from DHIS2 was instrumental in review and validation of quantification assumptions and helped to enhance the accuracy of the forecast and supply plans.

It is envisaged that through determination of county FP requirements, counties will be well informed and make budgetary allocation at the county level.

HCSM supports the Ministry of Health to hold Family Planning Commodities Security Meeting



As a step towards increasing budgetary allocation for FP commodities, we shall meet parliamentary committee on health to discuss FP commodities budgetary requirements. Dr. Jonah Maina, RMHSU.

HCSM supported the Ministry of Health's, Reproductive and Maternal Health Services Unit (RMHSU), to hold a high level family planning (FP) commodities security meeting to update partners on FP commodities situation in the country and current funding commitments, as well as disseminate the quantification report on FP commodities requirements for financial year 2015/2016 and 2016/2017 that was done with support of HCSM alongside other partners including Clinton Health Access Initiative (CHAI), JHPIEGO, Kenya Medical Supplies Authority (KEMSA), JHPIEGO, Measure Evaluation (PIMA), and Population Services - Kenya. The meeting also accorded FP partners an opportunity to deliberate on how to improve FP commodities security in Kenya.

The meeting, which was chaired by Dr. Bartilol Kigen- Head of RMHSU, on behalf of Dr. Nicholas Muraguri - Director of Medical Services, highlighted the funding commitments and gaps for the financial year (FY) 2015/2016 and 2016/2017 (2015/2016- requirement- USD 8,946,016 [excluding condoms], commitment- USD 7,703,900, gap- USD 1,242,166; 2016/2017- requirements – USD 13,786,747 [excluding condoms], commitment- USD 8,629,857, gap- USD 5,156,890). Out of the commitments, the Government of Kenya contribution is USD 1,851,432 for FY 2015/2016 and USD 5,156,890 for FY 2016/2017, an improvement from the previous years where government did not contribute to FP commodities. United States Agency for International Development (USAID) and United Kingdom Department for International Development (DFID) committed bridge the funding gap for FY 2015/2016. Partners will however

explore ways to bridge the funding gap for FY 2016/2017. Dr. Jonah Maina- Commodity Manager, RMHSU, highlighted progress made in improving FP commodities management at both national and county level, noting that reporting rates have remained high at above 80%, while the quality of data has improved significantly- providing a good basis for evidence-based decision making. HCSM, alongside other partners, has been building the capacity of both RMHSU and the county teams on reporting of FP commodities and improving of data quality. This support has contributed significantly to the improvements in data that is now being seen.

During the meeting, partners discussed ways to ensure that counties budget for FP services and commodities, with some proposing that a discussion be held between the national government and county governments to determine how best to use the finances to be allocated by counties for FP commodities and services management. Additionally, partners discussed ways to ensure increased resource mobilization and budgetary allocation for FP commodities and services. Dr. Maina informed partners that a meeting would be held with the Parliamentary committee on health to discuss FP commodities budgetary requirements to ensure increased allocation for FP commodities.

The meeting was attended by representatives from Ministry of Health RMHSU, USAID, DFID, CHAI, JHPIEGO, MSH/HCSM and KEMSA

Partners set the next meeting for FP commodities security for October 29, 2015.

Using data for decision making in management of malaria commodities



As a result of HCSM's work, malaria commodity reporting through DHIS2 has been maintained above 80% in the 13 priority counties against the national reporting rate that has averaged at below 70%

Since 2011, HCSM has been supporting the National Malaria Control Program (NMCP) to ensure malaria commodity security in the country. A key infrastructure that NMCP has used to report on the use of malaria commodities is the DHIS2. HCSM has been providing technical assistance to NMCP to increase and maintain high reporting rates through DHIS2 and importantly, to use the data for decision making at both the national and county levels.

To maintain reporting rates for malaria commodities above 80% in HCSM priority counties, the project has been building the capacity of county governments to take up the management of malaria commodities in line with the devolution of healthcare management from the national to county governments. As a result of HCSM's work, malaria commodity reporting through DHIS2 has been maintained above 80% in the 13 priority counties against the national reporting rate that has averaged at below 70% (see figure below).

HCSM has gone a step further to promote the use of data reported in DHIS2 for decision making by supporting the 13 priority counties to establish commodity security Technical Working Groups (TWGs). Further, the project has support-

ed these TWGs to meet on a quarterly basis to review data in DHIS2 and make decisions around the supply planning of malaria commodities. To date, the TWGs have taken leadership of commodity management not only for malaria commodities but across all program commodities. Importantly, the TWGs are now meeting on a regular basis without any impetus from HCSM.

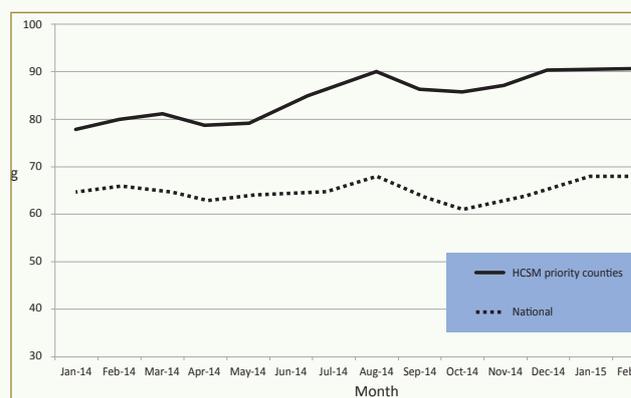


Figure 2: Comparison of Reporting Rates for Malaria Commodities between the HCSM priority counties and national average

Assuring Quality of Medicinal Products in Kenya



Through our support to the Ministry of Health (MOH) and Pharmacy and Poisons Board (PPB) to implement an integrated country-owned pharmacovigilance (PV) system, there is an emerging trend of reducing incidence of poor quality medicinal products circulating in the Kenyan market. PV is a system responsible for monitoring and reporting suspected poor quality medicinal products and adverse drug reactions in Kenya to PPB.

This has also led to progressive increase in the percentage of samples of medicines undergoing laboratory testing from 69.2% in 2009 to 98.8%. PPB has also been able to undertake several evidence-based regulatory decisions including withdrawal of medicines; closure of a pharmaceutical company; recall of medicines such as paracetamol tablets and anti-tuberculosis medicines; and rescheduling of some antibiotics to hospital use only.

Post-Marketing Surveillance has led to a reduction in number of substandard and counterfeit medicines circulating in the system. Manufacturers, importers and distributors of medicines are now more careful. PPB Official

HCSM updates

HCSM holds stakeholders consultative meeting for its last work plan

On July 15, 2015, HCSM held a stakeholders meeting to inform its fifth and last work plan. The meeting brought together representatives from Ministry of Health- national and county levels, faith-based sub-sector and other USAID implementing partners. Participants identified activities to be included in the work plan, but noted the limited time remaining for implementation against many unmet needs in commodities management. Some of the pressing needs identified by stakeholders included:

- Need to address commodities storage challenges at the county level
- Need to facilitate discussion and information sharing between the County Department of Health, County Department of Finance and Members of the County Assembly to ensure adequate budget allocation and timely issuance of Authority to Incur Expenditure for health commodities
- Need to build the capacity of health commodities managers on quantification
- Need to build systems to deal with health commodities pilferage
- Need to address challenges associated with laboratory commodities

This work plan will cover the period October 2015 to March 2016.

HCSM holds County Pharmacists Forum

In June 2015, HCSM, in partnership Pharmaceutical Services Unit (PSU) of the Ministry of Health, Malaria Control Unit (MCU), Reproductive Health/Family Planning program and the National AIDS and STI Control Program (NASCO), hosted the County Pharmacists forum to disseminate several priority guidelines developed by PSU with HCSM support, including:

- Guidelines and training materials for quantification for health commodities
- Guidelines and training materials to guide County Health Management Teams (CHMTs) in planning for and conducting supportive supervision for health commodities management.
- Guidelines and training materials on the management of Essential Medicines and Medical Supplies
- Guidelines on Pharmacy Information Systems (PIS) standards

These guidelines are already being used at county level in management of health commodities.

Additionally, the forum reviewed progress with supply chain related issues such as availability, reporting rates among others affecting the HIV, Malaria and Reproductive Health programs at county and facility levels.

Pictorial...



Capacity to manage medicine - Uasin Gishu Health Commodities Champions



MTC orientation - Segu Mission Hospital



Monitoring commodity room temperature



Health commodities manager at work



A participant makes a presentation during partners meeting



Medicines Therapeutic Committee workplanning - Segu Mission Hospital



Mombasa County Data Review Meeting



Supportive supervision - review of the requirements at Ukwala Health Center



Improved commodities management at Ukwala Health Center



Capacity to manage medicine - Uasin Gishu Health Commodities Champions



Kilifi MCA makes a point during the quantification dissemination meeting



Sifuyo Health Center- Facility nurse displays store in March 2015



Dr. Mbuva makes a point during the County Pharmacists Forum



Participant making presentation during the County Pharmacists Forum



USAID
FROM THE AMERICAN PEOPLE



MSH/Health Commodities and Services Management

Health Commodities and Services Management Program

Management Sciences for Health

ACK Garden House, 6th Floor, Wing B

1st Avenue, Ngong Road, Off Bishops Road

Telephone: 254-20-2714839, Fax: 254-20-2736881

Website: www.msh.org/hcsm

Contributors:

Ruth Omondi, Victor Sumbi, Paul Malalu, John Chimumbwa, Joseph Mukoko, Ndinda Kusu,
Charles Ouma, David Loki, Judy Mwangi, Cecilia Muiva, Josea Rono.

Layout and Design:

John Chepkong'a

This document is made possible by the generous support of the American people through the U.S. Agency for International Development (USAID), under the terms of associate award cooperative agreement number AID-623-LA-11-00008. The contents are the responsibility of Management Science for Health and do not necessarily reflect the views of USAID or the United States Government.