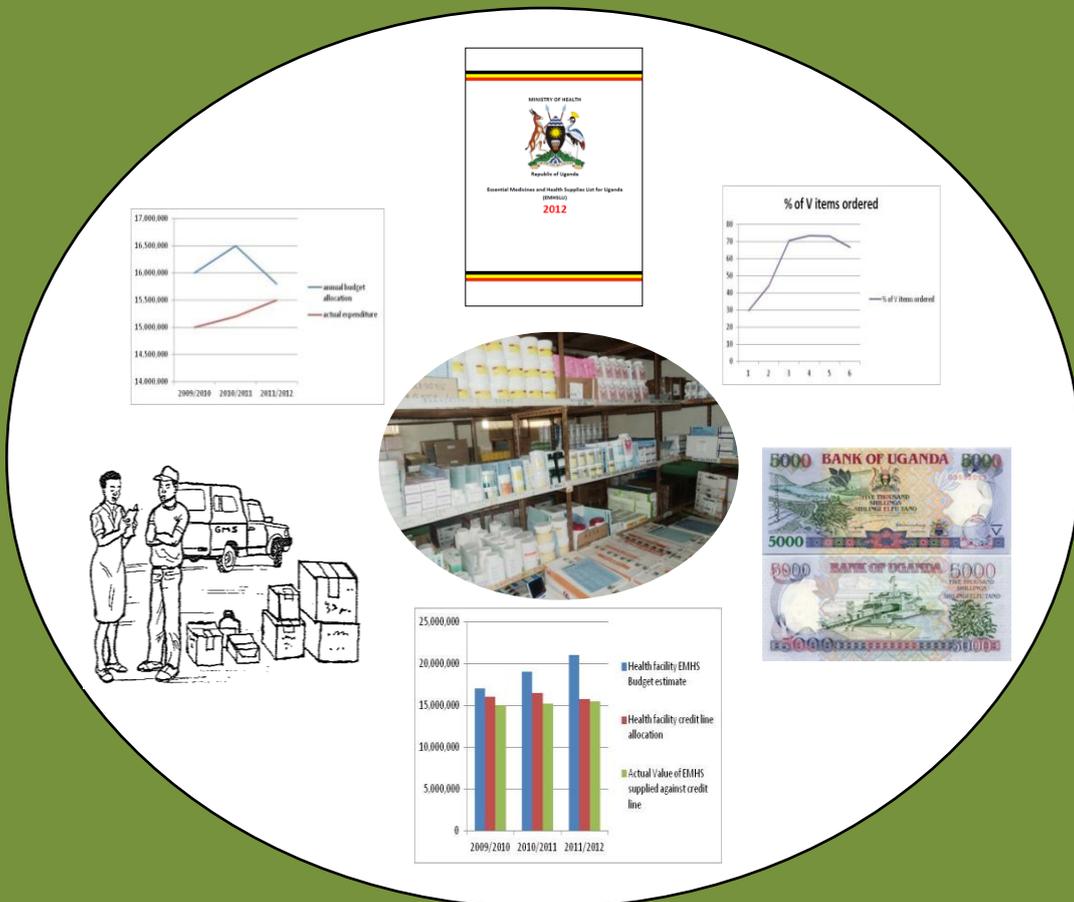




REPUBLIC OF UGANDA

PHARMACEUTICAL FINANCIAL MANAGEMENT MANUAL



Produced by the Division of Pharmacy Services
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PREFACE

This Pharmaceutical Financial Management Manual was developed by the Pharmacy Division at the Ministry of Health in collaboration with the Securing Ugandans' Right to Essential Medicines (SURE) Program. Its main purpose is to provide health workers — pharmaceutical managers in particular— with a reference guide to the management of budgets and expenditures earmarked for essential medicines and health supplies (EMHS), including laboratory supplies.

EMHS make up the second largest item of recurrent expenditure in the health sector after wages and the health workers involved must therefore have the right skills, knowledge, attitude and practice to manage these resources efficiently. Pharmaceutical financial management is an extremely important managerial activity as it concerns the planning, budgeting and management of resources for health commodities. The ultimate objective of a pharmaceutical financial management system is to facilitate the effective and efficient utilisation of the available financial resources.

Financial resources for the procurement of medicines and health supplies needed in the country are limited. Appropriate planning and management cannot therefore be overemphasised. Health workers have to understand and manage budgets in order to enhance efficient and effective resource utilisation. When funds are limited, the commodities to be procured must be prioritised. This is why the manual outlines how to use the VEN classification system when prioritising and placing orders. Moreover, the manual takes the concept of medicines management, as described in the Essential Medicines and Health Supplies Management Manual, a step further by highlighting the financial implications of the decisions to be made as we plan for and manage EMHS.

The manual provides a description of the basic principles of financial management to be applied to the management of budgets earmarked for EMHS and laboratory commodities. If properly followed, it will promote efficient planning, prioritisation, ordering and budget management for all EMHS. Health workers at all levels of care but in particular at the levels ordering EMHS in the public sector and private not-for-profit organisations are strongly encouraged to use the pharmaceutical financial management system described in this manual.

We believe that if procedures outlined in this manual are properly applied by all health workers and managers involved in medicines and health supplies management, the management of EMHS will vastly improve, and greatly contribute towards the ultimate goal of increasing the Ugandan population's access to health commodities.

.....
Dr Jane Ruth Aceng, Director General, Health Services

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Martin Oteba

.....
Assistant Commissioner Health Services, Ministry of Health

ACRONYMS AND ABBREVIATIONS

AMC	Average Monthly Consumption
ARVs	Antiretrovirals
CAO	Chief Administrative Officer
CDC	Centres for Diseases Control
CHAI	Clinton Health Access Initiative
CPHL	Central Public Health Laboratories
DANIDA	Danish International Development Agency
DHO	District Health Officer
EMA	Essential Medicines Account
EMHS	Essential Medicines and Health Supplies
GOU	Government of Uganda
GFATM	Global Fund for Tuberculosis, AIDS and Malaria
HC	Health Care
HMIS	Health Management Information System
HSD	Health Sub-District
IFMS	Integrated Financial Management System
JMS	Joint Medical Stores
MAUL	Medical Access Uganda Limited
MC	Monthly Consumption - Quantity issued for the month
MMS	Medicines Management Supervisors
MOFPED	Ministry of Finance, Planning and Economic Development
MOH	Ministry of Health
MTC	Medicines and Therapeutic Committees
NDA	National Drug Authority
NMS	National Medical Store
OPD	Out Patient Department
ORS	Oral Dehydration Salts
PEPFAR	President's Emergency Plan for AIDS Relief
PFM	Pharmaceutical Financial Management
PHC	Primary Health Care
PMI	Presidential Malaria Initiative
PNFP	Private Not- For- Profit
PPDA	Public Procurement and Disposal of Public Assets Act
SCMS	Supply Chain Management System
STG	Standard Treatment Guidelines
SURE	Securing Ugandans' Right to Essential Medicines Program
TB	Tuberculosis
USAID	United States Agency for International Development
VEN	Vital, Essential and Necessary

PART 1: INTRODUCTION

WHAT IS THE PFM MANUAL ABOUT?

This manual outlines procedures and management practices related to the planning, budgeting and utilization of public funds earmarked for the purchase of essential medicines, health supplies and laboratory commodities. It supplements the Medicines and Health Supplies Management Manual by adding a financial dimension to management practice.

Through out this manual, the term essential medicines and health supplies (EMHS) is used to refer to all the three major categories of health commodities, namely pharmaceutical, medical, and laboratory supplies.

While EMHS play a critical role in the quality and provision of healthcare services, funds available to health facilities for EMHS are limited. The Ministry of Health recommends the use of the Pharmaceutical Financial Management (PFM) Manual to effectively manage these resources and ensure the availability of essential medicines at all levels.

The manual is not intended to add to or to replace the statutory requirements of the Public Finance and Accountability Act 2003, the Local Government Finance and Accounting Regulations 2007 and other standing National Treasury instructions.

OBJECTIVES OF THE PFM MANUAL

The specific objectives of this manual are:

- ✓ To strengthen financial planning, financial tracking and expenditure management and ensure that resources are allocated to vital EMHS, prioritised according to the needs of patients at the individual health facilities.
- ✓ To ensure that health workers apply harmonised financial management procedures and techniques in relation to EMHS budgets and expenditure.

WHO SHOULD USE THE PFM MANUAL?

This manual is for staff responsible for managing pharmaceuticals and health care commodities including laboratory commodities at mainly public sector health facilities but it can also be used by Private not for profit facilities (PNFP). The staffs include pharmacists, pharmacy technicians, laboratory staff responsible for managing laboratory supplies and other cadres within the pharmacy who may not have had any formal training in management, finance and accounting. It is also intended for administrative and accounting staff, such as medical storekeepers, hospital administrators and procurement officers, who are involved in monitoring budgets, and in processing and approving orders and invoices. District and health facility managers will find the PFM manual particularly useful in connection with monitoring resource utilisation and the budget performance of individual facilities, as well as for reallocating EMHS among health facilities within their jurisdiction in accordance with

local demands.

GETTING STARTED

Develop a routine

It is important to develop a routine. Much of the information you need is already available from one source or another. Parts 2 and 3 of the manual explain how to use this information to plan and monitor the credit line budgets.

Briefly, the keys to success are:

- ✓ Knowing what the facility needs for a year
- ✓ Knowing the annual EMHS credit line budget and the budget per cycle
- ✓ Knowing how much the supplies cost
- ✓ Making budget projections based on the annual procurement plan
- ✓ Using the stock management system (see the “Medicines and Health Supplies Management Manual”)
- ✓ Costing before ordering and adjusting requirements to fit within the available allocation
- ✓ Improving the utilisation of the credit line budget by applying the VEN system when ordering
- ✓ Maintaining a commitment register and budget monitoring sheet
- ✓ Regularly updating the commitment register and budget monitoring sheet
- ✓ Regularly reconciling health facility records and NMS/JMS records of account balances.
- ✓ Reviewing the budget and expenditures monthly

You do not need to wait for the beginning of the financial year to start keeping records. You can find out from the National Medical Stores how much has been spent on your credit line i.e. vote 116 or laboratory credit line so far in the current financial year. Even if you cannot find out how much has already been ordered or spent, start recording and reconcile the value of orders placed and the actual value of goods received as you go along. You will catch up eventually.

What is needed to implement the PFM system?



You will need:

- ✓ An NMS/JMS/MAUL price list, the online stores catalogue, the order form and if

available the most recent invoice

- ✓ An up-to-date stock book showing a monthly summary of store transactions for individual items
- ✓ The Essential Medicines and Health Supplies List for Uganda, and the Uganda Clinical Guidelines
- ✓ A simple calculator or a computer, if available
- ✓ A commitment register each for the EMHS and laboratory credit lines to record the cost of everything ordered including an order date and order reference number and invoice details
- ✓ A budget monitoring sheet to summarise the health facility credit line allocation, laboratory allocation and expenditures to date
- ✓ Primary records of the actual value of orders placed/value of goods received and the running credit line balance
- ✓ Files in which to keep financial correspondence (monthly/bimonthly orders, copies of invoices discrepancy notes, internal vouchers/orders)
- ✓ Other stationeries such as pencils and eraser, red and black (or blue) pens

You will also need a safe place (for example a drawer or cupboard with a lock) to keep these things in.

BACKGROUND AND EMHS FINANCING

This chapter provides the context within which EMHS budgets operate in the health sector. It provides a broad overview of key developments in the sector that impact on medicines and health supplies management, notably the recentralisation of EMHS budgets under Vote 116, the laboratory credit line and the kit system for HC IIIs and HC IIs. It outlines the sources of funds available for the procurement of medicines, health supplies and laboratory commodities. The evolving roles of the district health officers and heads of health sub-districts in regard to coordinating HC IV, HC III and HC II budgets are outlined.

It is important to note that the term budget will refer to actual needs projected by the facility, while to Ministry of Finance, Planning and Economic Development (MOFPED) the budget will refer to actual funds allocated to the facility.

A budget is the amount of money a health facility is expected to receive and spend on specific planned items during a given financial year (1st July to 30th June). The credit line represents a virtual allocation/financial limit of the value of commodities a health facility can order cumulatively in a financial year or in a given delivery cycle.

For harmonization purposes, the terms “budget” and “allocation” will be used interchangeably through out the manual to mean allocation as per budget line either the vote 116 or lab-vote.

EMHS FINANCING IN PUBLIC HEALTH FACILITIES

Essential medicines and health supplies (EMHS) are the second largest item of recurrent primary health care expenditure after wages, contributing to over 40%¹ of GOU recurrent expenditure. However, the total EMHS expenditure might be even higher if including inflows from the Global Health Initiatives and in kind donations (like contraceptives) that are not captured in Government of Uganda (GOU) expenditure.

In most cases, EMHS and laboratory and credit line budgets are not managed effectively. Little attention is paid by staff to the costs of supplies, and expenditure is not monitored, especially because transactions do not involve physical payments. This absence of financial awareness contributes to underutilisation of available credit (allocations).

Previously primary health care (PHC) expenditure on medicines involved physical payment to the NMS, Joint Medical Stores (JMS) and private sector providers. As such, the accountants, hospital administrators and health facility managers were actively involved in capturing and tracking these expenditures. With the centralisation of the management of funds for medicines and supplies (Vote 116), there is no involvement of administrative staff in the monitoring of the budget because there is no physical payment of funds by the facility. Today health workers involved in the management of EMHS and laboratory commodities will have to play an increased financial management role. The budgetary and accounting complexities of managing reallocations and the borrowing of commodities across health facilities within a district are now the responsibility of district health officers and heads of health subdistricts eventhough their role in determining individual health facility allocations is limited. Currently credit line budget allocations are managed by the NMS.

Communication between health workers, the local government and between accounting and hospital administration staff should be strongly encouraged as each have expertise within their respective fields. Such close collaboration will benefit the financial management process.

Effective management of the EMHS and laboratory credit line budgets will ensure that health facilities (hospitals and HC IVs) draw on available allocations systematically throughout the financial year, place orders in a timely manner, reconcile the value of goods received against orders placed, and monitor unutilised allocation or Vote balances with the NMS. Management of the allocations from the 'bottom-up' must be improved, and this is the objective of this manual.

Limited funds must be utilised effectively and managed more efficiently so that the EMHS needed for the provision of health care will be available at the right time, in the right quantity and at the right place.

The key output indicators are:

- The health facility has not missed any delivery cycle due to the late placement of orders (hospitals, HC IV, and HC III that place orders for laboratory supplies)
- The value of the order placed for each cycle is as close as possible to the maximum

¹ Annual Health Sector Performance Report 2009/2010

available for that cycle

- The credit line has been fully drawn down (fully utilised) by the end of each financial year.

To achieve this, financial management must be in place and there has to be continuous effective communication and collaboration between MOH, NMS, DHO, and in-charges of HSD, and health facilities as well as pharmacy in-charges within individual health facilities. Every stakeholder must take greater responsibility for ensuring the availability of EMHS.

Previous Funding Mechanisms

Before Financial Year (FY) 2009/2010, EMHS funding was decentralised into primary health care (PHC) recurrent non-wage grant (70%) under the Fiscal Decentralisation Strategy and the essential medicines credit line account (30%) which was accessed through NMS.

According to the guidelines, local governments were permitted to reallocate up to 10% of the conditional non-wage recurrent grants to any other underfunded area in the health sector. General hospitals were required to utilise a minimum of 40% of the PHC recurrent non-wage grant on EMHS while the requirement for lower level units was 50%.

The overbearing principle was that health facilities were required to spend all PHC funds earmarked for the procurement of EMHS at the NMS or JMS. The two institutions charged the facilities a sales price inclusive of product cost and a mark-up to cover their operating costs. In the event that supplies were not available at both NMS and JMS, health units were allowed to procure supplies from the private sector in accordance with the Public Procurement and Disposal of Public Assets Act (PPDA) 2003. All expenditures on EMHS were approved by the chief administrative officer (CAO) in the case of local governments, or by the accounting officer in the case of self-accounting entities including the referral hospitals. As required by GOU standing orders, the transactions were captured and tracked in the integrated financial management system (IFMS).

The essential medicines account (EMA) credit line operated as a basket funding mechanism jointly funded by GOU, under Programme 9 of the MOH budget Vote 014, and DANIDA. Funds were deposited into a specific ring fenced EMA operated by the MOH. 20% the funding was earmarked for PNFP facilities to be accessed through JMS, while 80% was for GOU facilities to be accessed through NMS.

MOH/MOFPED allocated resources to regional and general referral hospitals as well as to lower level health facilities down to health sub-district level. The health sub-districts were responsible for the final reallocation to health facilities using the ratio 3:2:1.

Based on the prices that were agreed upon for the cycle, a local purchase order for the cycle was then issued by the MOH and NMS/JMS would then upload the respective health facility credit. Public and PNFP health facilities could access EMHS from the NMS or JMS up to the limit of the uploaded credit. The MOH would pay the NMS and JMS upon proof of delivery of EMHS to health facilities.. The range of items available through the credit line was periodically reviewed.

Government of Uganda Budget Vote 116

From the beginning of the financial year 2009/2010, the GOU shifted the financing system

for EMHS away from the decentralised PHC to a new single vote (Vote 116) for NMS. Each health facility at all levels of care: national referral, regional referral, general hospitals, and HC IV, HC III and HC II levels is allocated a fixed credit line system that the facility draw from to finance ordered EMHS for one financial year (1st July to 30th June). For level II and III the vote 116 funding was used centrally for predetermined orders in the form of kits, higher levels were expected to make orders against their allocation. Similarly, the laboratory credit line is also allocated annually with a specific budget for each health facility.

Health facilities are notified of their annual credit line allocations/budgets and hospitals and HC IVs are required to place orders bimonthly with the NMS utilising their allocations across the financial year.

There are four key stages involved in operating Vote 116:

- Bank of Uganda (BOU) ensures the Vote 116 account dependent on the NMS providing MOFPED with acceptable accountability for past releases, a work plan and a request for a release for the subsequent quarter.
- Funds are allocated to all individual GOU health facilities through the NMS. The NMS is responsible for distributing the EMHS to the various lower level facilities according to these allocations.
- The NMS maintains its internal procedures for supplier payment, but sends payment requests to MOFPED for review, approval and authorisation using a batch system.
- Suppliers are paid directly from funds held in the BOU Vote 116 account when this has been authorised by MOFPED.

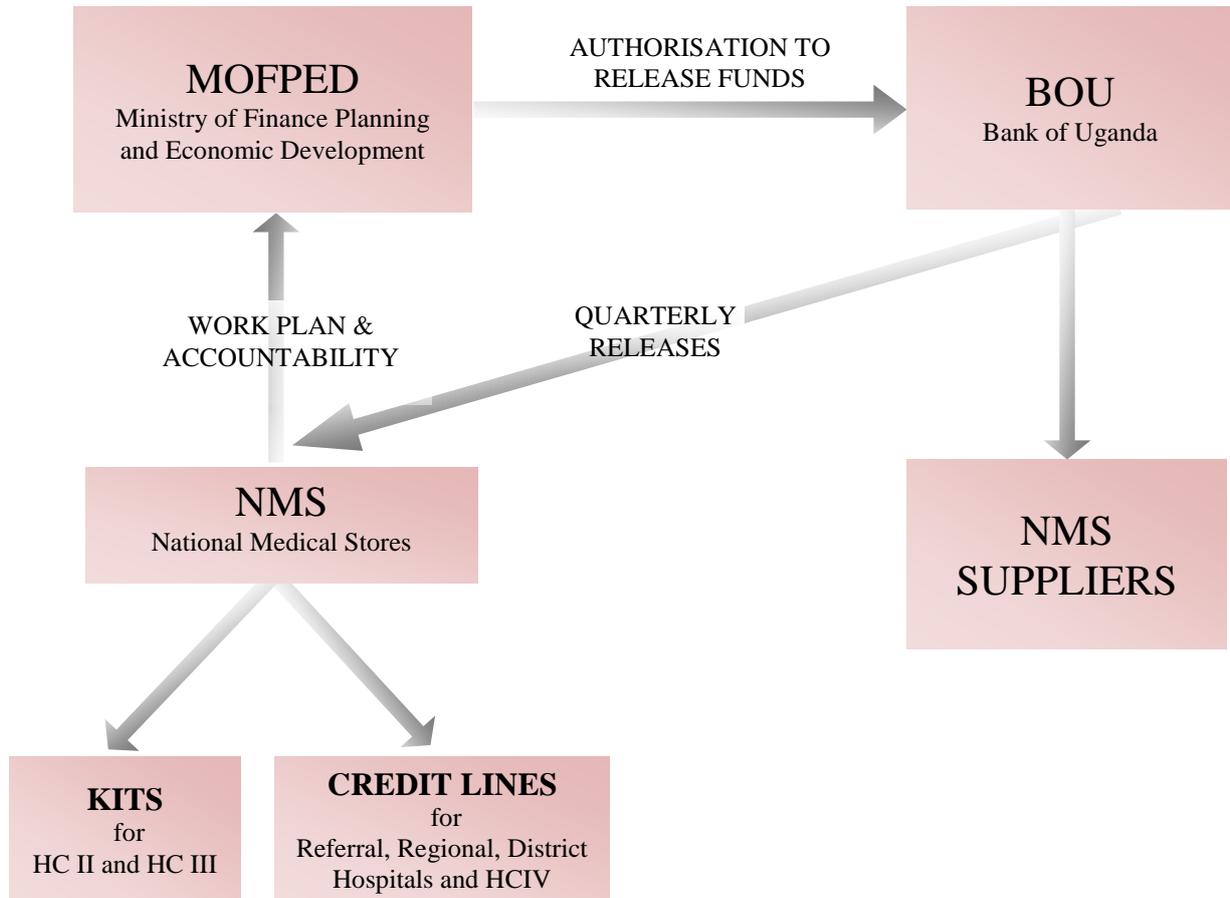
MOFPED pays the NMS service provider fees on a quarterly basis once the NMS has submitted invoices for services rendered and proof of procurement .

Additionally, the NMS has adopted last mile delivery to individual health facilities and a fixed kit system for HC IIIs and HC IIs. The kit content is periodically reviewed. JMS is also expected to introduce to the door delivery to its clients including the PNFP facilities.

As a result of this:

- ✓ Health facilities are now responsible for monitoring and tracking their credit line balances and ensure optimal utilisation of their allocation Orders have to be generated on the basis of the identified need but within a maximum financial limit for each delivery cycle. The process of orders being approved by heads of HSD and DHOs is changing and health workers responsible for managing EMHS and budgets at facility level have to acquire basic financial management skills.
- ✓ The process of receiving EMHS and verifying invoices, delivery notes and running balances on credit lines has shifted to health facility level.
- ✓ Health facilities are required to prepare annual procurement plans to enable the NMS to plan and conduct bulk procurement in advance. However, there is a move to replace facility procurement plans with national plans generated by the now established quantification procurement planning unit.

Figure 1: VOTE 116 Flow of Funds



The different funding modalities and budgetlines

Medicines and supplies reach the health facilities through different funding modalities.

The Government of Uganda (GOU) budget

- I. Vote 116 administered by the NMS is currently the main source of funding for EMHS for public health facilities.
- II. Vote 014 for vaccines, reproductive health commodities and emergencies.

Global Health Initiatives

These funds come principally from the Global Fund to finance AIDS, Malaria and TB commodities; additional funding for ARVs and malaria commodities is provided largely by the President's Emergency Plan for AIDS Relief (PEPFAR) and the Presidential Malaria Initiative (PMI) with substantial funding coming through USAID for reproductive health commodities.

Donations

A number of organisations and Implementing partners used to procure and deliver medicines and supplies in kind. However, these donations have been minimised to ensure a more coordinated and managed effort and procurement is now centralised with procurement , storage and distribution done by NMS, JMS, MAUL according to criteria agreed upon by both the MOH and the donor.

The laboratory credit line

The laboratory credit line is presently available for hospitals, general hospitals, HC IVs, HC IIIs and HC IIs. Financing of laboratory commodities in Uganda is currently through the Presidents Emergency Fund for Aids Relief (PEPFAR) channeled through the United States Agency of International Development (USAID) and the Centers of Disease Control and Prevention (CDC), Global Fund for Tuberculosis, AIDS and Malaria (GFATM), United Nations , AIDS Healthcare Foundation and Clinton Health Access Initiative (CHAI). Various procurement channels are used to procure lab commodities and they include Supply Chain Management System (SCMS), NMS, Voluntary Pooled Procurement, Medical Access Uganda Limited (MAUL), Uganda Cares, UNICEF and CHAI. Lab commodities from these procurement entities are channeled through NMS and JMS/MAUL who store and distribute them to two main supply channels: GOU respectively PNFP health facilities. The funding and supply chain for lab commodities is under review and it is expected to be rationalized and harmonized with the medicines supply chain. Under this rationalization process, funds will be allocated to each health facility based on a credit line which ensures that funds are allocated equitably and based on the health facility's client and testing platforms. It is important that a facility, whether public or PNFP, is able to track and manage its allocation for medicines as well as laboratory commodities, to ensure full and optimal utilization.

Private not for Profit Facilities (PNFP) and Private Wings

PNFP facilities continue to receive conditional non-wage recurrent PHC grants for EMHS through the districts the facilities also utilise part of the self generated funds from patient payments procure medicines, mainly from JMS or any other private supplier. This manual has not focussed on how PNFP or private wings shall manage their finances where different from public health facilities and especially how to manage cost recovery or user

fees.

WHY IS TRAINING IN CREDIT LINE BUDGET MANAGEMENT IMPORTANT?

There are several reasons why personnel managing health facilities in Uganda should be trained in managing the EMHS budget and implementing good PFM systems:

- ✓ Financial resources available to health facilities are limited and need to be well managed.
- ✓ Health facility in-charges and store/pharmacy staff need to know how much money is available for EMHS and laboratory supplies when preparing orders.
- ✓ It is important that the EMHS credit line allocation, and the laboratory credit line allocations, are fully utilised.
- ✓ Available funds should not be committed almost entirely to medicines while other vital health supplies are overlooked.
- ✓ Facility staff may not know how their budget allocations are best spent and therefore may be unable to make financial decisions related to the EMHS budget.

How is the Health Facility budget decided?

The MOH in collaboration with NMS decide on the health facility budget. For lower level health facilities, who are supplied kits, all facilities at the same level have the same budget and receive the same kit. Higher level facility budgets are allocated based on a formula 3:2:1 but are also in principle based on district population statistics and patient load at the individual health facilities.

Health facility in-charges may be inclined to say that their problems would be solved if they just had more money to work with. Having more money at their disposal is certainly better than having too little. However, more money may not always result in greater impact, if the money is not well managed or distributed based on needs. The fact is, the facilities that know how their money for EMHS is being spent tend to be the most effective. Equitable Resources Allocation for EMHS

The term equitable is derived from the noun equity which refers to justness and fairness. Equitable resource allocation for EMHS in a credit line budget system would necessitate that facilities with greater needs should receive proportionately more resources. The level of need for financing of EMHS by a health facility is determined by :

1. The level of care within the referral system
2. Patient load and services offered
3. Disease burden
4. Urban, peri urban or rural setting
5. Access by the catchment population to alternative health care facilities

The introduction of the kit push system for HC II and HC III ensure allocation where health

facilities at the same level of care are allocated the same financial resources for EMHS. However this approach has its limitations because it only take consideration to level of care but does not take into account:

- Differences in catchment populations
- Differences in actual patient attendance
- Differences in morbidity patterns and disease burden.
- The fact that some health facilities offer services that compare to those at a higher care level.

The process of developing region specific pre-packed kits and regularly updating and amending the kit content attempts to better address equity but many challenges remain. By allocating health facilities a budget within which they can decide what to order and the composition of EMHS that meets their needs, inequity is reduced. This is the situation at HC IV where all facilities at this level receive the same credit line budget allocation but are not restricted to a kit and can adjust their order composition. The other challenges relating to the distribution of resources to facilities at the same level of care but with different level of need is still not addressed.

The current system allocates more resources to general hospitals and referral hospitals according to the level of care, which addresses equitable resource allocation and also to an extent allocates different amounts to these higher level facilities according to their patient load and geographical location.



KEY POINTS

- ✓ The change in the way health facilities procure EMHS and the termination of EMHS primary health care grants have given health facilities greater responsibility for planning and managing their EMHS credit line budgets.
- ✓ Careful prioritisation of what needs to be ordered and good stock management procedures are key to ensuring the availability of medicines.



PART 2: ORDERING ESSENTIAL MEDICINES, HEALTH SUPPLIES AND LABORATORY COMMODITIES

THE MINISTRY OF HEALTH EMHS PROCUREMENT POLICY

GOU health facilities must order all (100%) of their EMHS needs through the NMS using credit line funds. The NMS stocks a full range of quality medicines and health supplies. These are purchased in bulk, large volumes through contracts which comply with the PPDA & NDA/NDP Acts and through competitive bidding procedures, thereby providing an overall saving to the public health system.

The NMS processes orders and makes deliveries every two months to referral and general hospitals and HC IVs. Pre-packed kits are delivered every two months to HC IIIs and HC IIs. Hospitals, HC IVs and a number of HC IIIs make their orders for laboratory chemicals and consumables every two months using laboratory credit line.

Presently PNFP facilities pick up their orders when convenient but it is planned that orders in line with JMS playing a more significant role in supplying PNFP with EMHS especially ARV, TB and malaria medicines will also introduce bimonthly schedules and to the door distribution.

Health facilities place orders based on their needs calculated on the basis of average monthly consumption and within the maximum value of one cycle for each delivery. In the event that there is an under delivery, and thus under spending in one cycle, the residual value can be carried forward to the next delivery. Health facilities have to plan and spread their EMHS orders and expenditures evenly throughout the year and ensure that they fully utilise their allocation.

However, as allocation presently is based on level of care with less consideration to actual needs, only few facilities will have an allocation that allow them to order what they need to top up their supplies as per stock management principles, some facilities will have a quite high financial allocation that can cover more than their needs while other facilities have all too little in their budgetline to order EMHS based on their consumption and their needs.

DECIDING WHEN TO ORDER; THE NMS ORDER AND DELIVERY CYCLES

The NMS order deadlines dictate when a health facility is to order EMHS. The schedule for EMHS orders and for replenishing the health facility virtual account at the NMS is set in such a way that each health facility has to place an order and receive supplies every two months.

To ensure that they meet the NMS deadlines, health facilities must start preparing their orders at least two weeks in advance (Figure 2). To order supplies from the NMS, facilities have to

complete order form HMIS 018.

Presently all HC IV EMHS orders have to be approved by the DHO. Orders made by hospitals have to be approved by the medical superintendant who, in turn, must send a copy of the approved order to the relevant DHO for the record. Currently public HC IIs and HC IIIs do not order EMHS as they receive pre-packed Essential Medicines Kits from the NMS. The approval practice might be revised when online ordering is introduced.

Figure 2: NMS delivery schedule



Sales & Marketing Department Direct Lines
 Toll Free: 0800 200015 (MTN)
 Toll Free: 0800 12221 (Uganda telecom)
 Tel: 0414 320089
 Fax: 0414 321323
 Email: sales@nms.go.ug

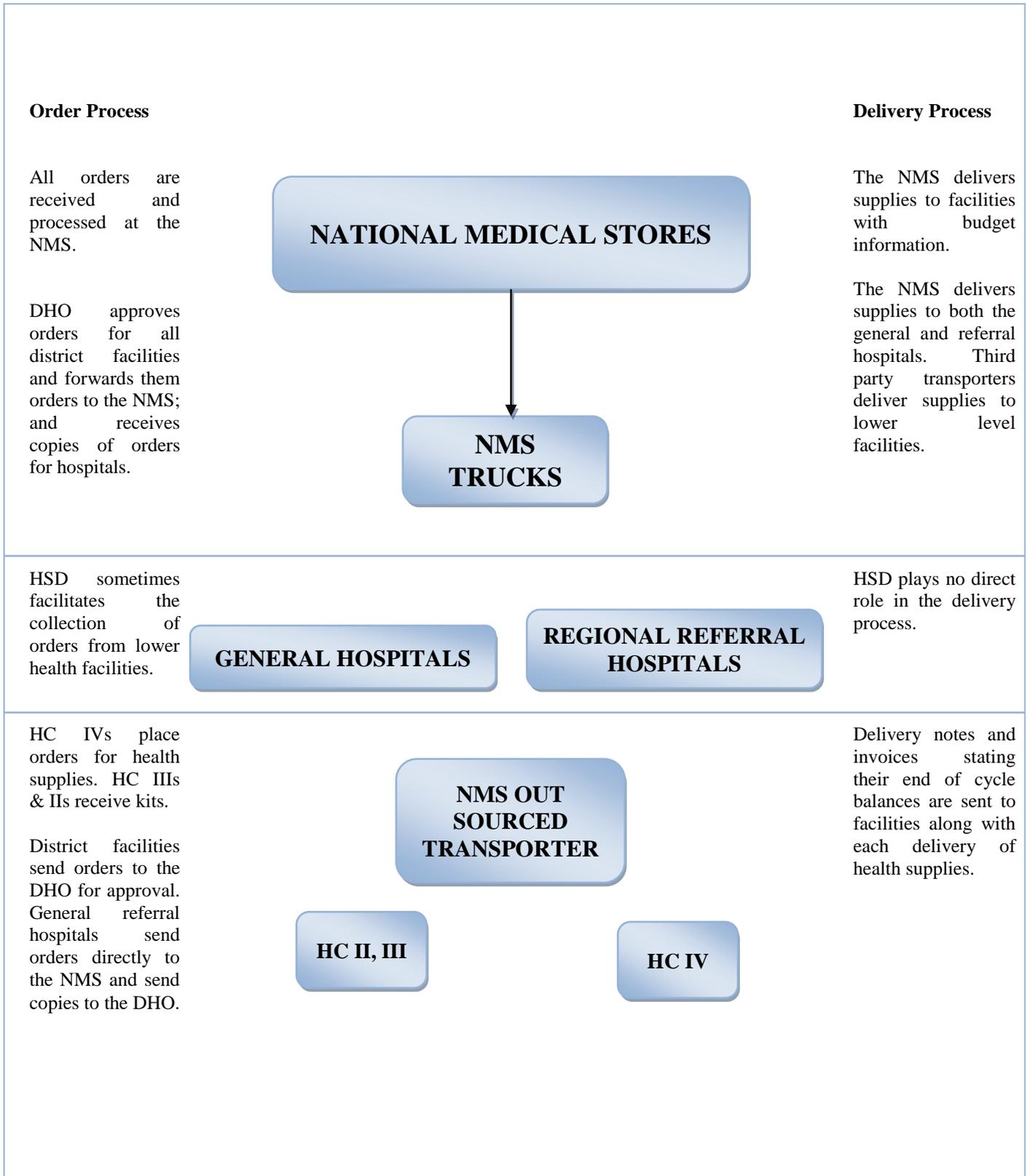
FY 2011/12 NATIONAL MEDICAL STORES DELIVERY SCHEDULE

ZONE	DISTRICTS	CYCLE	ORDER DEADLINE	DELIVERY ENDS
ZONE 1	Abim, Amolatar, Amudat, Amuria, Budaka, Bududa, Bugiri, Buikwe, Bukedea, Bukwo, Bulambuli, Busia, Butaleja, Buvuma, Buyende, Iganga, Jinja, Kaabong, Kaberamaido, Kaliro, Kamuli, Kapchorwa, Katwakwi, Kayunga, Kibuku, Kotido, Kumi, Kween, Luuka, Manafwa, Mayuge, Mbale, Moroto, Mukono, Nakapiripirit, Namutumba, Napak, Ngora, Pallisa, Sironko, Soroti, Serere, Tororo	CYCLE 1	13-Jun-11	26-Jul-11
		CYCLE 2	16-Aug-11	20-Sep-11
		CYCLE 3	11-Oct-11	15-Nov-11
		CYCLE 4	05-Dec-11	18-Jan-12
		CYCLE 5	09-Feb-12	16-Mar-12
		CYCLE 6	06-Apr-12	16-May-12
ZONE 2	Buhweju, Bukomansimbi, Bushenyi, Butambala, Gomba, Ibanda, Isingiro, Kabale, Kabula, Kalungu, Kanungu, Kanungu, Kiruhura, Kisoro, Lwengo, Masaka, Mbarara, Mitooma, Mpigi, Ntungamo, Rakai, Rubirizi, Rukugiri, Sembabule, Sheema	CYCLE 1	29-Jun-11	09-Aug-11
		CYCLE 2	01-Sep-11	04-Oct-11
		CYCLE 3	27-Oct-11	29-Nov-11
		CYCLE 4	27-Dec-11	02-Feb-12
		CYCLE 5	27-Feb-12	30-Mar-12
		CYCLE 6	26-Apr-12	30-May-12
ZONE 3	Bullisa, Bundibugyo, Hoima, Kabarole, Kamwenge, Kasese, Kibaale, Kiboga, Kiryandongo, Kyankwanzi, Kyenjojo, Kyegegwa, Masindi, Mityana, Mubende, Ntoroko	CYCLE 1	21-Jun-11	19-Aug-11
		CYCLE 2	15-Sep-11	14-Oct-11
		CYCLE 3	10-Nov-11	09-Dec-11
		CYCLE 4	13-Jan-12	14-Feb-12
		CYCLE 5	13-Mar-12	11-Apr-12
		CYCLE 6	11-May-12	11-Jun-12
ZONE 4	Adjumani, Agago, Alebtong, Amuru, Apac, Arua, Dokolo, Gulu, Kitgum, Koboko, Kole, Lamwo, Lira, Luweero, Maracha, Moyo, Nakasongola, Nebbi, Nwoya, Otuke, Oyam, Pader, Yumbe, Zombo	CYCLE 1	02-Aug-11	31-Aug-11
		CYCLE 2	27-Sep-11	26-Oct-11
		CYCLE 3	22-Nov-11	29-Dec-11
		CYCLE 4	25-Jan-12	24-Feb-12
		CYCLE 5	23-Mar-12	25-Apr-12
		CYCLE 6	23-May-12	21-Jun-12
ZONE 5	Kampala, Kalangala, Nakaseke, Wakiso	CYCLE 1	12-Aug-11	02-Sep-11
		CYCLE 2	07-Oct-11	28-Oct-11
		CYCLE 3	02-Dec-11	02-Jan-12
		CYCLE 4	07-Feb-12	28-Feb-12
		CYCLE 5	04-Apr-12	27-Apr-12
		CYCLE 6	04-Jun-12	25-Jun-12

NOTES

- Facilities should place orders for the next cycle before the "Order Deadline" date indicated
- Facilities should **always** submit **all** order types (EMHS, ARV, PMTCT, LAB & FLUCONAZOLE) at the **same time** to ensure that **all orders get delivered at the same time**. Adherence to this requirement shall reduce/eliminate the need for emergency orders.
- NMS shall not process orders during its bi-annual stock take. Stock take dates are 1st- 8th July 2011 and 19th- 23rd December

Figure 3: Ordering and delivery process for health supplies



DETERMINING THE TOTAL VALUE TO ORDER

Every ordering cycle (2 months) each order based health facility has to calculate, in monetary terms, the maximum value of EMHS that it can order. The average value the facility can order per cycle is calculated at the beginning of each financial year by adding any balance carried forward from the previous year to the annual credit line allocation for the current financial year and dividing this amount by the number of ordering cycles per year.

STEP 1



STEP 2



STEP 3

For subsequent orders throughout the financial year, the health facility has to take into account the total value of EMHS not received on previous orders before placing the next order. This is done in order to ensure that the facility does not maintain any unutilized balances by the end of the year, especially where available funding is less than the routine demand for EMHS.



In summary the health facility has to take the following points into consideration before proceeding to prepare an order.

- What is the health facility annual credit line budget?
- How many delivery cycles does the facility have per year?
- What is the budget allocation for each cycle?
- How does the facility manage carried forward balances across each delivery cycle?

Part 3 of the manual (Keeping track of your Budget and Expenditure) describes the tools

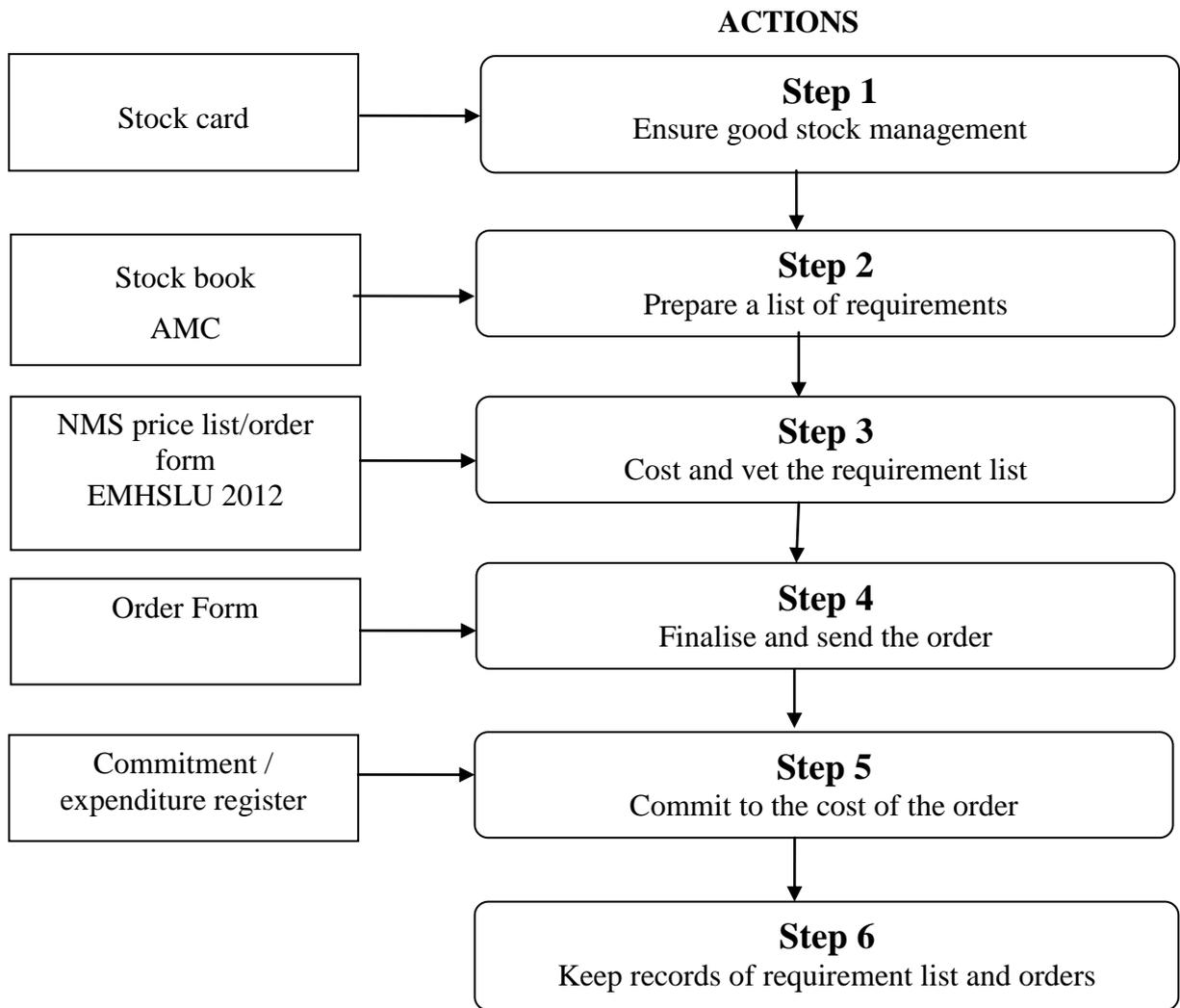
available for the facility to manage this important financial activity on a routine basis. This is especially so because the figure stated as “Remaining Budget” on the National Medical Stores Invoice only reflects the actual cumulative credit line balance uploaded quarterly on to the health facility credit line account by NMS less the value of any EMHS delivered to the facility. It does not reflect the actual credit line balance available for the facility to order EMHS

STEPS TO TAKE WHEN PREPARING AN ORDER

This section outlines the six steps needed to prepare a vetted order (See figure 4). The procedure for ordering EMHS is described in the “Management of Medicines and Health Supplies Manual”. Before ordering supplies, it is important to know which items you need, the quantity you need, how much the order is going to cost, what you can afford to order, and whether there is enough money in your budget to cover the order. Good stock management and the careful implementation of this budgeting process are fundamental to good financial management.



Figure 4: Steps to take prepare an order and ensure good financial management



STEP 1: ENSURE GOOD STOCK MANAGEMENT

Good stock and stores management is a prerequisite for making appropriate orders. This is well described in the "Management of Medicines and Health Supplies Manual". You need to maintain up-to-date stock cards (or lab log books) and a stock book and calculate the average monthly consumption (AMC) so that you can accurately determine the maximum stock and the quantities to order.

STEP 2: PREPARE A LIST OF REQUIREMENTS

First list your requirements and write the quantities you need based on the maximum stock level (5 months). The list of requirements or unvetted orderlist can easily be derived from the stock book if you have performed a physical count. Your requirement list forms the basis for costing and vetting to fit the order within the available budget.

Selection of items to order

When the stock balance of an item shown on the stock control card or stock book is less than

the maximum stock level, include the item in the order list. However, you must first make sure that the information about the stock on hand is up-to-date by doing a physical count. The maximum stock level is the quantity which is normally used in 5 months (see the Management of Medicines and Health Supplies Manual). For lab commodities, a long shelf life is 5 months, a short shelf life is 3 months and some reagent or tests needs to be ordered every month. How to calculate the quantity to order

Use the following formula for each item:

$$\text{The quantity to order} = \text{maximum stock} - \text{current stock}$$

For essential medicines, sundries and laboratory supplies the maximum stock level is 5 months stock. Note that the maximum stock levels for other items are less than five months, for example for test kits and ARVs the level is four months.

How to calculate the average monthly consumption (AMC)

MC (when no stock-out)

Quantity issued for the month = MC

Example from the stock book: (January) =15

MC (with adjustment for stock-out days)

$$\frac{\text{Quantity issued}}{\text{Number of days item was available}} \times 30 = MC$$

Example from the stock book: (June)

$$\frac{19}{(30 - 4)} \times 30 = 22$$

AMC calculation

$$\frac{\text{Sum of last 3 month MC}}{3} = AMC$$

Example from the stock book (April, May and June)

$$\frac{20 + 16 + 22}{3} = \frac{58}{3} = 19.33 \approx 19$$

Fill in the MC every month in the stock book, and when you are ready to order, calculate the AMC based on the last 3 months as illustrated above. So, if you were to order in June, your AMC would be 19.

Example of a stock book:

Item description (name, formulation, strength): <i>Cotrimoxazole tabs 480mg</i>								Pack size: <i>Tins of 1000's</i>		Item code No: <i>220185</i>	
Date	Previous Physical Count	Quantity received	Quantity issued	Days out of stock	Losses & adjustments	Balance on hand	Adjusted AMC	Maximum stock quantities (= AMC*5)	Quantity to order (=Maximum stock quantities. Balance on hand)	Remarks	initials
<i>30/01/10</i>	<i>76</i>	<i>Nil</i>	<i>15</i>	<i>0</i>		<i>61</i>	<i>15</i>				<i>TR</i>
<i>28/02/10</i>	<i>61</i>	<i>Nil</i>	<i>18</i>	<i>0</i>		<i>38</i>	<i>18(17)</i>	<i>85</i>	<i>47</i>		<i>TR</i>
<i>30/03/10</i>	<i>38</i>	<i>40</i>	<i>13</i>	<i>8</i>	<i>+1</i>	<i>66</i>	<i>18</i>			<i>Lost&found</i>	<i>TR</i>
<i>30/04/10</i>	<i>66</i>	<i>Nil</i>	<i>12</i>	<i>12</i>		<i>54</i>	<i>20(19)</i>	<i>95</i>	<i>41</i>		<i>TR</i>
<i>30/05/10</i>	<i>54</i>	<i>Nil</i>	<i>16</i>	<i>0</i>		<i>38</i>	<i>16</i>				<i>TR</i>
<i>30/06/10</i>	<i>38</i>	<i>45</i>	<i>19</i>	<i>4</i>		<i>64</i>	<i>22(19)</i>	<i>95</i>	<i>31</i>		<i>TR</i>
<i>30/07/10</i>	<i>64</i>	<i>Nil</i>	<i>17</i>	<i>0</i>		<i>47</i>	<i>17</i>				<i>TR</i>
<i>30/08/10</i>	<i>47</i>	<i>Nil</i>	<i>20</i>	<i>0</i>	<i>-2</i>	<i>27</i>	<i>20(20)</i>	<i>100</i>	<i>73</i>	<i>damaged</i>	<i>TR</i>

Calculation of AMC for laboratory supplies is done in a similar manner:

Over the most recent three month period (October, November & December 2010), 1700 HIV Determine tests were used. During that three month (90 day) period, HIV Determine tests were out of stock for a total of 18 days.

Adjusted AMC = $(1700 / 72) \times 30 = 708.3$ i.e. Adjusted AMC = 708 Determine tests

How to calculate the maximum and minimum stock levels

Maximum stock level = AMC × 5 (months)

Minimum stock level = AMC × 2 (months)

Preparing a list of your requirements had you no budget constraints

For each item in your store that is below maximum stock level you will need to include it in a requirement list. This is not a HMIS form but a form you generate yourself on a sheet of paper.

Each item below maximum stock should be entered on the list and the quantity you need calculated based on AMC and the amount needed to reach maximum stock level is entered.

An example of the requirement list is given below.



Table 1: Sample requirement list of Items to be ordered by a HC IV

Item	VEN	Qty needed	Unit pack	Unit cost	Total cost
Darrows solution half strength 500ml infusion vial	V	2	24	26,200	
Hydrocortisone injection	V	4	50	29,200	
Lidocaine HCL 2% injection	V	13	1	900	
Mannitol 10% 100ml infusion	E	3	1	3,200	
Penicillin Procaine 3MU + Benzyl 1MU ampoule	V	4	10	4,300	
Sodium (Ringers) lactate comp. infusion	E	2	24	22,500	
Acetyl salicylic acid	E	24	1000	3,450	
Albendazole 400mg tablet	E	3	500	30,850	
Allopurinol 100mg tablets	E	1	100	4,500	
Amitriptylline 25 mg tablet	V	4	1000	9,250	
Amoxicillin 250 mg capsule	V	10	1000	28,200	
Charcoal Activated 250 mg tablet	E	2	100	4,000	
Cotrimoxazole syrup 200+40 mg/ 5ml 100ml bottle	E	50	1	750	
Cannula I.V with inj. port & stopper 20G, 0.9mm	V	1	100	32,950	
Gloves, examination, latex, medium non-sterile	V	1	50	9,550	
Etonogestrel contraceptive implant 68mg (IMPLANON) with applicator	E	15			

Always note the number of units in a pack of the items you are ordering. For example, if you need 50 bottles of Darrows half strength, fill in 2 in the “quantity needed” column as the unit pack is a box of 24 bottles. Two boxes will give you 48 bottles.

Based on the requirement list you can now cost what you plan to procure and evaluate if it is within the credit line budget limit for the bimonthly cycle.

STEP 3: COST AND VET THE REQUIREMENT LIST

Know the item prices and estimate the total cost of the Health facility order

To work out how much an order will cost, you need up-to-date price information. Prices change periodically and the NMS indicates the price in the NMS catalogue/price list and presently also in the orderform. If prices are not on your orderform, the best way to keep up-to-date with price information is to record all the prices from the latest invoice in your stock book. Currently the stock book does not have a provision for keeping a record of the unit price but you can use pencil so that it is easy to change and update. It is important to keep a record of up-to-date prices, not only for costing orders but also for estimating the annual budget requirement. If the health facility has a computer with a basic Excel package you can also keep track on the prices using the computer and you can generate the requirement list on

the computer. It will make it easier to fit the requirements to your budget.



KEY POINT

- ✓ Keep an up to date pricelist if up to date prices are not available on the orderform. Record the price of each item in the stock book using a pencil. Update the price information in the stock book using the price list (online catalogue/price list) or the prices listed in the latest invoice or order forms from the NMS.

Estimate the cost

In order to calculate the cost of each item in the order, multiply the unit cost of the item by the number of units you are ordering. Add up these costs to get the total cost of the whole order.

After you have determined the quantity of each item you intend to order, write its price in the "unit cost" column. To find the most up-to-date price, check the NMS catalogue, the NMS online price list or the previous invoice.

Use a calculator to multiply the unit cost by the quantity that you are ordering, round off the figure to the nearest whole number and note it down in the column marked "total cost". It is quicker to do this after you have finished filling in all your orders than doing it as you go along. Presently do not include a value for ARVs, ACTs, reproductive health commodities, condoms and other third party (donated) items. The cost of these items will not be deducted from the health facility credit line balance.

Now add up your total costs.



Table 2: Sample Costed requirement list of Items to be ordered by a HC IV

Item	VEN	Qty needed	Unit pack	Unit cost	Total cost
Darrows solution half strength 500ml infusion vial	V	2	24	26,200	52,400
Hydrocortisone injection	V	4	50	29,200	116,800
Lidocaine HCL 2% injection	V	13	1	900	11,700
Mannitol 10% 100ml infusion	E	3	1	3,200	9,600
Penicillin Procaine 3MU + Benzyl 1MU ampoule	V	4	10	4,300	17,200
Sodium (Ringers) lactate comp infusion	E	2	24	22,500	45,000
Acetyl salicylic acid	E	24	1000	3,450	82,800
Albendazole 400mg tablet	E	3	500	30,850	92,550
Allopurinol 100mg tablets	E	1	100	4,500	4,500
Amitriptylline 25 mg tablet	V	4	1000	9,250	37,000
Amoxicillin 250 mg capsule	V	10	1000	28,200	282,000
Ampicillin/Cloxacillin 250 mg/250 mg capsule	E	5	100	5,300	26,500
Cetirizine 10 mg tablet	N	3	100	2,350	7,050
Charcoal Activated 250 mg tablet	E	2	100	4,000	8,000
Cotrimoxazole syrup 200+40 mg/ 5ml 100ml bottle	E	50	1	750	37,500
Cannula I.V with inj. port & stopper 20G, 0.9mm	V	1	100	32,950	32,950
Gloves examination latex , medium non-sterile	V	1	50	9,550	9,550
Etonogestrel contraceptive implant 68mg (IMPLANON) with applicator	E	15	1		
TOTAL					873,100

When using the electronic/Excel spreadsheet NMS order form, enter the quantities of each item you wish to order and the total cost per line, and the order total will be computed automatically.

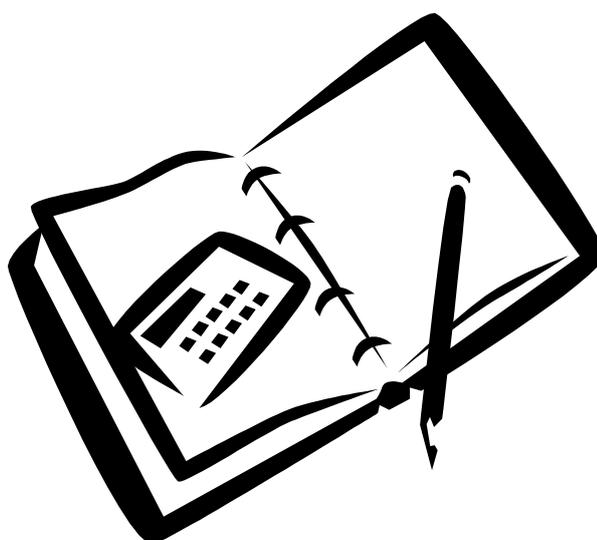


Figure 5: Sample NMS Electronic Order Form 2012

GENERAL HOSPITAL NAME						
DISTRICT						
ORDER DATE						
ORDER TOTAL (USH) EMHS						70,600,650
ORDER TOTAL (USH) NON-COMMUNICABLE DISEASE ITEMS						0
CODE	DESCRIPTION	UNIT	PRICE	AVG QTY	ORDER QTY	TOTAL
VITAL ITEMS [TO BE <u>ORDERED BY EXCEPTION</u> AS PER INSTRUCTIONS BELOW]:						
1. LEAVE 'ORDER QTY' COLUMN BLANK WHEN 'AVG QTY' IS SUFFICIENT						
2. ONLY INSERT FIGURES IN 'ORDER QTY' COLUMN WHEN CHANGES TO 'AVG QTY' ARE TO BE MADE						
3. WHEN MAKING CHANGES, INSERT A ZERO (0) IF ITEM IS NOT TO BE ORDERED, OR INCREASE/DECREASE QUANTITY IN 'ORDER QTY' COLUMN						
ADMINISTRATION SETS						
308310	AD SYRINGES 10ML+ NEEDLE DISP. DETACHED	100	17,050	30		511,500
308302	AD SYRINGES 2ML+ NEEDLE DISP. DETACHED	100	9,350	100		935,000
308305	AD SYRINGES 5ML+ NEEDLE DISP. DETACHED	100	10,100	100		1,010,000
302010	BAG URINE DISPOSABLE 2L, WITH OUTLET	1	450	150		67,500
302156	BLOOD TRANSFER BAG 300ML	1	2,400	20		48,000
302620	CANNULA I.V, WITH INJ. PORT & STOPPER 20G, 0.9MM	100	31,050	20		621,000
302622	CANNULA I.V, WITH INJ. PORT & STOPPER 22G, 0.7MM	100	31,000	25		775,000
302623	CANNULA I.V, WITH INJ. PORT & STOPPER 24G, 1.9MM	100	33,150	20		663,000
302618	CANNULA IV , WITH INJ. PORT & STOPPER 18G, 1.2MM	100	31,600	20		632,000
302095	GLOVES SURGEON 7 1/2 STERILE PAIRS	50	31,750	200		6,350,000
302100	GLOVES SURGEON SIZE 8 STERILE PAIRS	50	26,450	50		1,322,500
302069	GYNAECOLOGICAL GLOVES S-7 1/2,LATEX 1 PAIR	1	2,000	50		100,000
404425	NEEDLE LUMBAR PUNCTURE,25G X 90MM	1	1,500	150		225,000
302155	SET BLOOD TRANSFUSION, Y-SITE 10DROPS/ML	1	700	200		140,000
302146	SET INFUSION ADULT, 15-20 DROPS/ML, + NEEDLE 21G	1	300	3,000		900,000
302151	SET INFUSION PAEDIATRIC, BURETTE 100ML	1	1,700	400		680,000
BANDAGES & DRESSINGS						
301090	BANDAGE COTTON W.O.W. HYDROPHILIC, 75MM X 4M	1	400	250		100,000
301195	COTTON WOOL B.P. 500G	1	7,550	150		1,132,500
301105	GAUZE W.O.W HYDROPHILIC 90CM X 50M	1	18,350	75		1,376,250
301175	PLASTER ADHESIVE ZINC OXIDE, 75MM X 5M	1	2,200	300		660,000
301033	PLASTER OF PARIS (POP) 6 INCH ROLL	1	1,350	200		270,000
301031	PLASTER OF PARIS (POP) 8 INCH ROLL	1	1,700	160		272,000

The VEN classification

Each item on the Essential Medicines and Health Supplies List has been classified as either V for vital, E for essential or N for necessary. V or vital items have first priority and are items that are life saving. If these items are not available it could mean irreparable damage or the death of a patient. E or essential items have second priority; if these items are not available it causes pain or great discomfort to the patient. N or necessary items are needed and are therefore on the order form; however they have third priority.

Due to the limited funds available difficult decisions have to be made about which medicines and health supplies to purchase for use in the facility. In many cases the facility budget will not be large enough to buy all the essential medicines needed to meet the requirements. In such a situation the VEN classification serves as a guide for the health facility staff when they

have to adjust quantities to suit the budget. The health facility managers should always ensure that all vital items are included in their order before adding the essential and necessary items, funds permitting. The VEN principle applies to all health commodities, including sundries, laboratory chemicals and consumables.

How to do the vetting

The total cost you have just calculated when filling in the order form is now compared with the budget available for the delivery cycle. If the total cost is higher than your budget, you will need to reduce the cost by revising your requirement list. The revision should be based on the VEN classification. A first step in the vetting process, as illustrated in the figure below, is to remove some or all N items and redo the costing. If the total cost is still above your budget, you will need to remove or reduce the quantities classified as E items. If there is still not enough money, you will have to reduce an even greater quantity of the E items. You must only reduce the quantity of V items as the last resort to make the total cost fit within the budget. When the cost of the list of requirements is within your budget for the cycle you can fill in order form HMIS 018. In the above example let us imagine that our available credit line balance is 570,000 UGX. The list is now reduced to the one shown in Table 3 below.

Figure 6: Flow chart for preparing orders

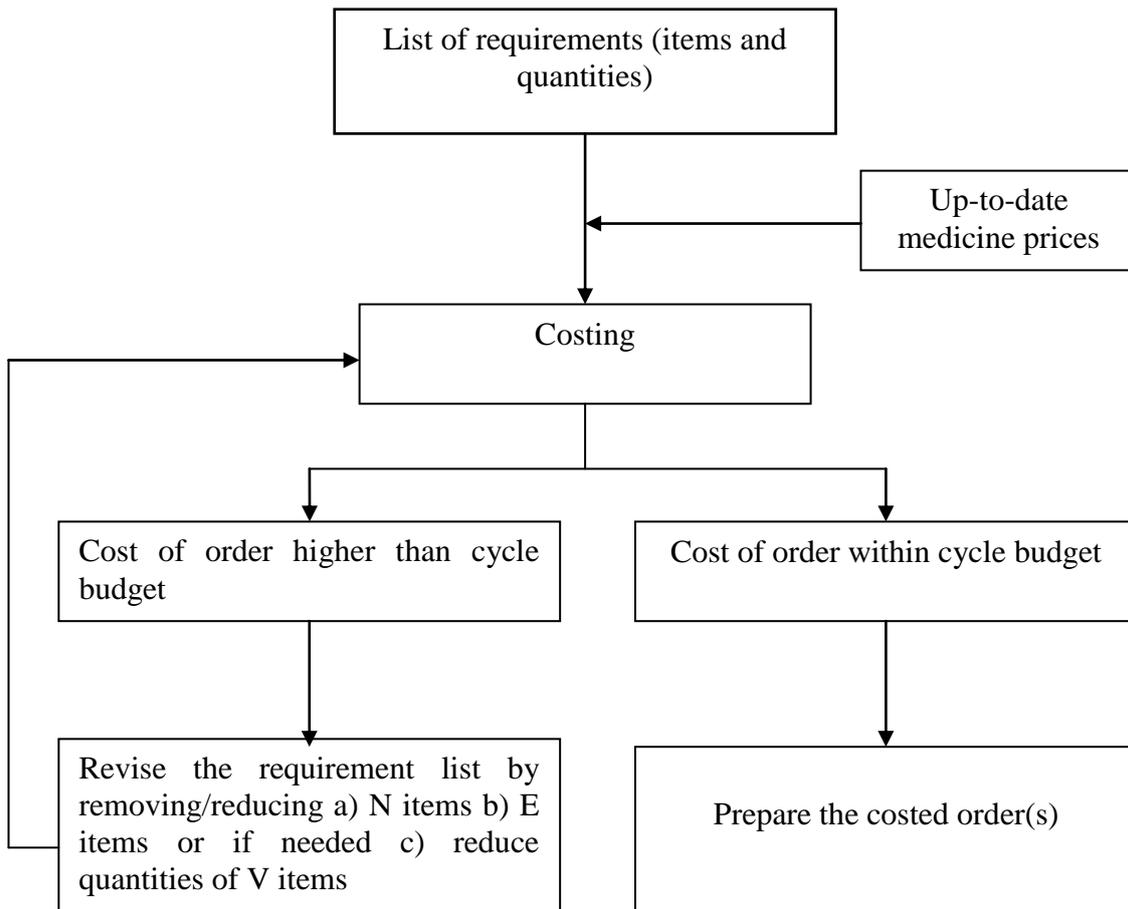


Table 3: Sample VETTED requirement list of Items to be ordered by a HC IV

Item	VEN	Qty eeded	Unit pack	Unit cost	Total cost
Darrow solution half strength 500ml infusion vial	V	2	24	26,200	52,400
Hydrocortisone Injection	V	4	50	29,200	116,800
Lidocaine HCL 2% injection	V	13	1	900	11,700
Penicillin procaine 2MU + Benzyl 1MU ampoule	V	4	10	4,300	17,200
Amitriptylline 25mg tablet	V	4	1,000	9,250	37,000
Amoxicillin 250 mg capsule	V	10	1,000	28,200	282,000
Charcoal Activated 250 mg tablet	E	2	100	4,000	8,000
Cannula I.V with Inj port & stopper 20G, 0.9mm	V	1	100	32,950	32,950
Gloves examination Latex, medium non-sterile	V	1	50	9,550	9,550
Etonogestrel contraceptive implant 68mg (IMPLANON) with applicator	E	15	1		
TOTAL					567,600

Who should do the costing and vetting

All facilities ordering EMHS (not facilities only receiving kits) should cost and vet their requirement list; this should be the responsibility of the health facility in-charge. Pharmacy staff should work closely with prescribers, personnel in charge of stores and procurement staff during the VETTING process. This is a team effort that should take into account the requirements of all departments.

If you have access to a computer, using an Excel spreadsheet makes the vetting process easy to carry out. However, you can do it manually although this will take you more time.

Keep a copy in your files of the requirement list that you made before vetting it and the vetted list that ends up being your order. It is good to see how you arrived at your order. You can also note down your considerations or decision points and keep in the file.

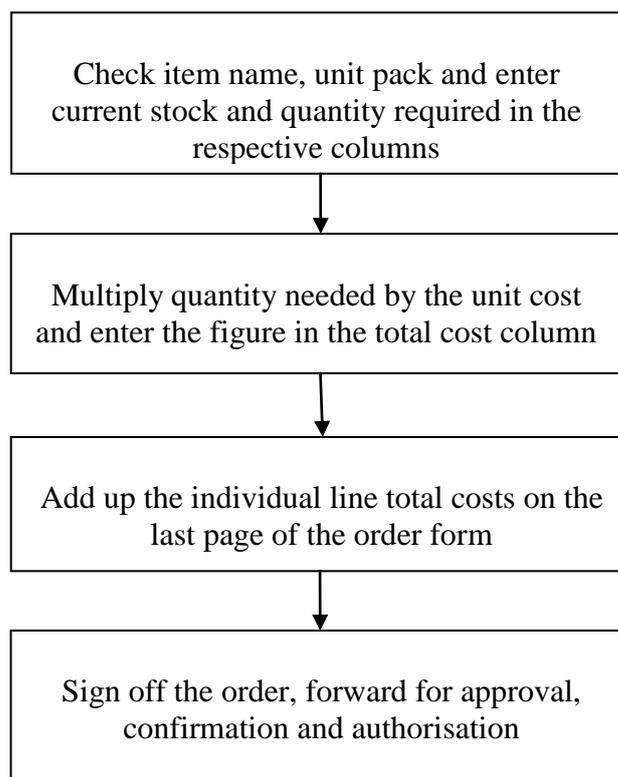
STEP 4: FINALISE AND SIGN OFF THE ORDER**Finalising and sending orders**

When you have completed the vetting process, enter the final quantities and total value in the NMS order form (HMIS 018). The ordering officer (pharmacist, pharmacy or store in-charge) must then sign the order and submit it to the facility in-charge to approve by signing, stamping and dating the order.

When you use the NMS order form (HMIS 018), the order must be filled in in triplicate. The form has a provision for indicating the current stock, quantity needed and total cost. The unit of issue and unit prices for each item are pretyped on the form.

Fill in the quantity required and multiply this by the unit cost for each item to obtain the total cost per line item. See a sample of a completed order form in Figure 4 and 7.

Figure 7: Steps in filling in the orderform



Do this for every item that you order. Fill in the order forms for ARVs, anti-malarials and reproductive health supplies separately. Contraceptives, condoms, vaccines and other donations are supplied free of charge and the values of these items should not be deducted from the credit line balance.

Costed orders have to be authorized by the DHO and the HSD in-charge for HCIVs. District, general hospitals and regional referral hospitals submit their orders directly to the NMS and send a copy of their order forms to the DHO for record purposes only. The DHO must check:

- that the order is correctly filled in and contains only drugs approved for the level of care
- whether excess stock in one facility could be redistributed to another
- that the order has been correctly costed and that there is enough money in the facility's credit line budget for the cycle.

Orders are then submitted to the NMS or the regional NMS offices by fax/e-mail, by post or by hand. Note that even electronic orders must be approved by the DHO and HSD in-charge. They might be able to do this by signing the forms electronically using digital signatures or by pasting a signature in the provided space and forwarding the form to the relevant level. It is important that you obtain an acknowledgement of the receipt of your order.

Figure 8: HMIS 018 ORDER FORM

ESSENTIAL MEDICINES & HEALTH SUPPLIES ORDER FORM (HCIV & ABOVE)							
FACILITY NAME:	PALLISA HOSPITAL	ORDER DATE:	26/01/2011	ORDER NO:	E 2513		
CODE	DESCRIPTION	PACK SIZE	UNIT COST (US\$)	CURRENT STOCK (UNITS)	AMC (UNITS)	ORDER QTY (UNITS)	ORDER COST (US\$)
215890	VITAMIN K1(PHYTOMENADIONE) 10MG/ML INJ IM	1	3,050				
216510	WATER FOR INJECTION 10ML	100	6000				
TABLETS/CAPSULES/ORAL PREPARATIONS							
220011	ACETAZOLAMIDE 250 MG TABLET	1000	88,500				
220010	ACETYLSALICYLIC ACID 300 MG	1000	4,800	21	12	20	76000
220008	ACETYLSALICYLIC ACID 75MG SR OR TABLET (CARDIOASPIRIN)	100	3,450				
220016	ACICLOVIR 200MG TABLET	100	2,500				
220018	ALBENDAZOLE 400MG TABLET	500	30,850	06	04	05	154250
220024	ALLOPURINOL 100MG TABLETS	100	4,500				
220030	AMITRIPTYLINE 25MG TABLET	1000	9,250				
220522	AMLODIPINE 5MG TABLETS	100	3,550				
205004	AMOXICILLIN 125MG/5ML SYRUP	1	900	30	80	100	90000
220034	AMOXICILLIN 250MG CAPSULE	1000	28,200	03	20	20	564000
220039	AMPICILLIN/CLOXACILLIN 250MG/250MG CAPSULES	100	5,300	14	08	20	106000
220050	ATENOLOL 100 MG TABLET	1000	20,000				
220051	ATENOLOL 50MG TABLET	100	3,300				
220528	ATORVASTATINE 10MG TABLETS	10	2,900				
220060	BENDROFLUAZIDE 5MG TABLET	1000	18,300				
220065	BENZHEXOL 2MG TABLET	500	15,750				
220066	BENZHEXOL 5MG TABLET	100	4,400				
220571	BISACODYL 5MG TABLETS	100	12,450				
220211	CAFFEIN CITRATE 10MG TABLETS	1	0				
220212	CALCIUM CARBONATE (ORAL)	1	0				
151142	CALCIUM LACTATE 300MG TABLETS	1000	5,100				
220530	CAPTOPRIL 25 MG TABLETS	100	3,450				
220100	CARBAMAZEPINE 200MG TABLET	1000	32,400	00	04	05	162000
220657	CARBIMAZOLE 5MG TABLETS	100	8,750				
220519	CARVEDILOL 6.25MG TABLET	30	7,550				
220002	CEFUROXIME TABLETS 500MG	100	60,300				
220656	CETIRIZINE TABLET 10MG	100	2,350				
220021	CEPHALEXIN CAPSULE 250MG	100	7,000				
220012	CHARCOAL ACTIVATED 250MG TABLET	100	4,000	00	01	05	20000
220120	CHLORAMPHENICOL 250 MG CAPSULE	1000	28,150	02	40	10	281500
220140	CHLOROQUINE 150MG BASE TABLET	1000	19,500	06	04	10	195000
220145	CHLORPHENAMINE MALEATE 4MG TABLET	1000	900				
220155	CHLORPROMAZINE 100MG TABLET	1000	13,850				
220162	CIPROFLOXACIN 500MG TABLET	100	4,500	00	20	40	180000
220025	CLINDAMYCIN HCL CAPSULES 150 MG	100	88,300				
220187	CLOXACILLIN 250MG CAPSULES	100	3,500				
223007	CODEINE PHOSPHATE 30MG TABLETS	100	16,950				
220185	COTRIMOXAZOLE 480MG TABLET	1000	15,200	50	80	40	608000
205096	CO-TRIMOXAZOLE SYRUP 200MG+40MG/5ML 100ML BOTTLE	1	750	00	60	100	75000
220022	DEXAMETHASONE 0.5MG TABLETS	1000	4,000	00	04	05	20000
220435	DIAZEPAM 5 MG TABLET	1000	3,000	00	02	01	3000
220207	DICLOFENAC SODIUM 50MG ENTERIC COATED TABLET	100	550				
220210	DIETHYLCARBAMAZINE TABLETS	1000	8,300				
220220	DIGOXIN 250MCG (0.25MG) TABLETS	1000	16,500				
220498	DONEZEPIL TABLETS 10MG	100	9,000				
220222	DOXYCYCLINE CAPSULES	100	2,900				
205082	ENEMAX SOLUTION	1	3,500				
220235	ERYTHROMYCIN STEARATE 250MG TABLET	1000	58,000	00	10	10	580000
205005	FERRO B SYRUP	1	1,000				
220255	FERROUS SULPHATE 150 MG+FOLIC ACID 0.5 MG	1000	7,600				
220266	FOLIC ACID 5MG TABLET	1000	1,550				
220270	FUROSEMIDE 40MG TABLET	1000	5,050				
220276	GLIBENCLAMIDE TABLETS BP 5MG TABLET	100	1,050				
220518	GLYCERINE TRINITRATE (SUBLINGUAL) TABLETS	100	4,300				
220289	GRISEOFULVIN 500MG TABLET	100	11,700				

Original to NMS; Duplicate - MS/DHO; Triplicate; Stores/HCIV

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MEDICAL SUPERVISOR
PALLISA HOSPITAL

Figure 9: General Laboratory Report and Order Form

Name of Health unit: <u>Walukuba</u> HC IV Date: <u>12/june /2013</u>										Funding Source (Tick)	
HSD: <u>Jinja East</u> District: <u>Jinja</u>										Credit Line <input type="checkbox"/>	
Requisition made By: <u>Dhakaba lab incharge</u>										PHC <input type="checkbox"/>	
										Others <input type="checkbox"/>	
										Specify: _____	
Authorized By: <u>Namuganza Janifer facility incharge</u>											
			A	B	C	D	E	G	H	I	
Code No.	Item Description	Basic Unit	Opening Balance	Total Qty Received	AMC	Losses/ Adjustment (-/+)	Total Closing Balance A+B-C (+/-D)	Qty To Order (C x 3) -E	Unit Cost (UGX)	Total Cost (G x H)	Issues/ Request Remarks
Vital Prepared reagents											
151 800US	2%TURKS SOLUTION	500ml	2000	2000	4000	+1000	1000	5	3600	18,000	
151 801US	0.04 Ammonia Solution	500ml							5724		
151 814US	20% Crystal Violet	500ml							16,200		
General TEST KITS											
151 815US	Anti Serum A	10ml							2,358		
151 816US	Anti Serum B	10ml							2,358		
151 822US	RPR Antigen Kit	100 Tests							10,134		
151 823US	Urine Test Strips 3Parameter	50 Strips							5,850		
VITAL FULL SUPPLY TUBERCULOSIS REAGENTS											

Presently there is a special orderform and report form for laboratory supplied but in the future these might be merged into one orderform as electronic ordering becomes more widespread and the norm.

STEP 5: COMMIT THE COST OF THE ORDER

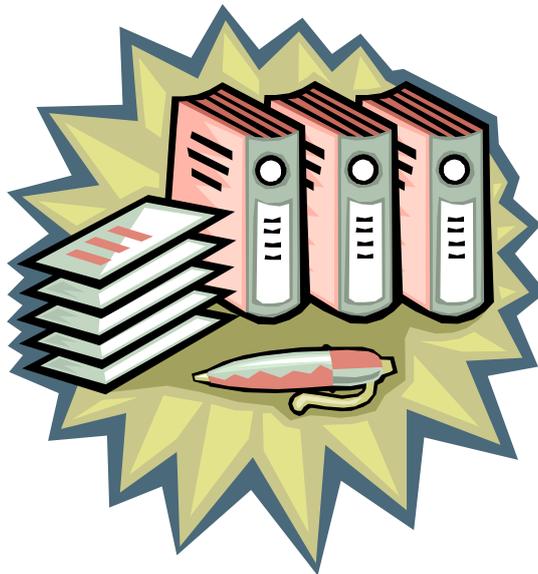
Enter the details of the order in the commitment register including the order date, order number and the cost of the order.

STEP 6: KEEP RECORDS OF YOUR ORDERS

File the paperwork involved in ordering goods and supplies so that you can refer back to them in case there are any problems. The records will also provide important information to help with budget planning and reporting (see later).

Keep separate files for different types of documents. Organize the papers by date so that the most recent ones are at the top of the file.

Record	Notes
Requirement list (order calculation form)	Keep your order calculation forms as documentation of your costing and vetting process. File them in a separate ring binder.
National Medical Stores order form HMIS 018	If you use a manual orderform, do not remove the last copy (green). It must remain in the book. Keep all your old books together in one place.
Commitment register	Maintain a register for each financial year. A separate register should be maintained for the different credit lines



PART 3: KEEPING TRACK OF YOUR ALLOCATION AND EXPENDITURE

THE COMMITMENT REGISTER

The commitment register enables you to keep track of how much of the health facility credit line budget has already been spent or committed, and how much remains (the balance). “Committed” means that an order has been placed for something that will have to be deducted from the total available credit held at the NMS at some point in time when it is delivered.

The commitment register has been introduced because credit line expenditure on EMHS was not being captured at the district level through the IFMS. This new system enables HSD heads as well as individual health facilities to keep track of their credit line expenditures and balances. It also enables them to reconcile their account with the NMS, an exercise which they should carry out periodically to ensure that the line item for essential medicines and health supplies is efficiently managed. The DHO does maintain copies of the commitment registers but reviews them periodically during visits to the facilities.

The principle is simple. Every time an order is entered, the estimated amount to be deducted from the credit line is recorded. This amount is then deducted from the amount that remained in the budget to give the new balance. It is important to cancel or make adjustments to commitments should the order not be delivered for that cycle or if the NMS makes only a partial delivery.

The records are useful for the future planning and monitoring of the credit line budget. They also help the facility maximise the utilisation of the credit line allocation for each cycle.

PREPARING THE COMMITMENT REGISTER FOR HEALTH FACILITIES

Prepare your commitment register at the beginning of the financial year (1st July).



Hint: As you read this chapter, follow the examples shown

Setting up the commitment register

Complete the details at the top of the register. These include the health facility’s name and number, the financial year, the vote name and number, and your annual credit line allocation (in the example given this is UGX 360,000,000 for essential medicines and UGX 60,000,000 for lab supplies).

Divide this by the number of ordering and delivery cycles per year to compute the allocation

per cycle. In the example below, Pallisa hospital has 6 cycles a year and the allocation per cycle is UGX 60,000,000 for essential medicines and UGX 10,000,000 for lab supplies.

Recording your opening balance

Enter the annual credit line budget allocation in the column headed “uncommitted balance” and again in the “balance” column under “actual expenditure” as shown in the example (Tables 4a. and 4b.) below.

If you are starting a commitment register for the first time, ask your accounts office for your annual credit line allocation or check with the NMS. If you have already placed orders which were not recorded in the commitment register at the time, you will have to wait until the invoice comes in to record all the details, as explained later in the manual.



Table 4. Setting up the Commitment Register for Essential Medicines

Budget: EMHS Credit Line CRL Facility name: Pallisa No:						Vote no. 116 Financial 2010/11		Budget allocation: UGX 360,000,000 Balance brought forward: UGX 0 Total credit line budget: UGX 360,000,000 Year: Allocation per cycle: UGX 60,000,000			
Date	Order no.	Supplier	Estimated cost in UGX	Adjustment	Uncommitted balance in UGX	Invoice			Actual expenditure		Adjustments & notes
						Order No.	No.	Date	Actual in UGX	Balance	
					360,000,000					360,000,000	
01/08/10	001	NMS	58,000,000		302,000,000						

Table 5. Setting up the Commitment Register for Laboratory Supplies

Budget: Lab Credit Line CDC			Vote no. NA			Budget allocation: UGX 60,000,000					
Facility name: Pallisa			Financial			Balance brought forward: UGX 0					
No:			2010/11			Total credit line budget: 60,000,000					
						Year: Allocation per cycle: UGX10,000,000.					
Date	Order No.	Supplier	Estimated Cost In UGX	Adjustment	Uncommitted balance in UGX	Invoice			Actual expenditure		Adjustments and notes
						Order No.	No.	Date	Actual In UGX	Balance	
					60,000,000					60,000,000	
01/08/10	001	NATIONAL STORES	8,000,000		52,000,000						



RECORDING COMMITMENTS

Every time you place an order, you must record it in the commitment register and update the uncommitted balance.

For each order, record the date, the order number/s and the name of the supplier, i.e. the NMS. In the “estimated cost” column, write the estimated cost of the order, calculated as explained in Part 2 of the manual.

Estimating the balance

Adjust the balance of the remaining uncommitted funds. Subtract the estimated cost of your order from the previous “uncommitted balance” to show the new balance. In the example below (Table 6), the “uncommitted balance” is UGX 39,000,000 as a result of commitments made up to the end of August 2010. This is then the balance to be brought forward to October.

Table 6 shows the commitment entered for the order costed on 1st October 2010.

Again you have to adjust the balance of the remaining uncommitted funds. Subtract the estimated cost of your order from the previous uncommitted balance to show the new balance. In Table 6, the order (order 002/10/11) placed with the NMS for UGX 7,500,000 has been subtracted from the previous balance of UGX 39,000,000, leaving UGX 31,500,000.

Every time you place an order, you must subtract the cost of the order from the previous uncommitted balance.

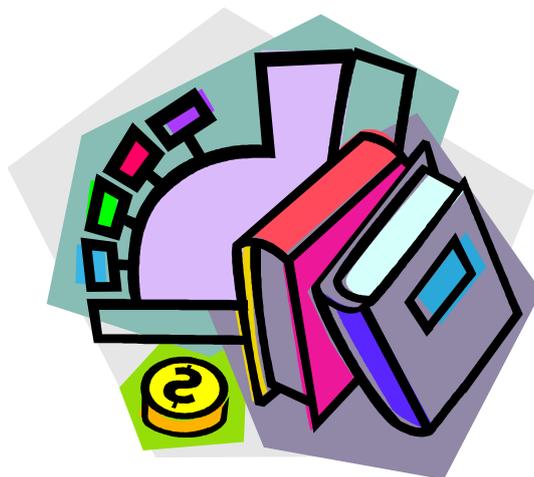


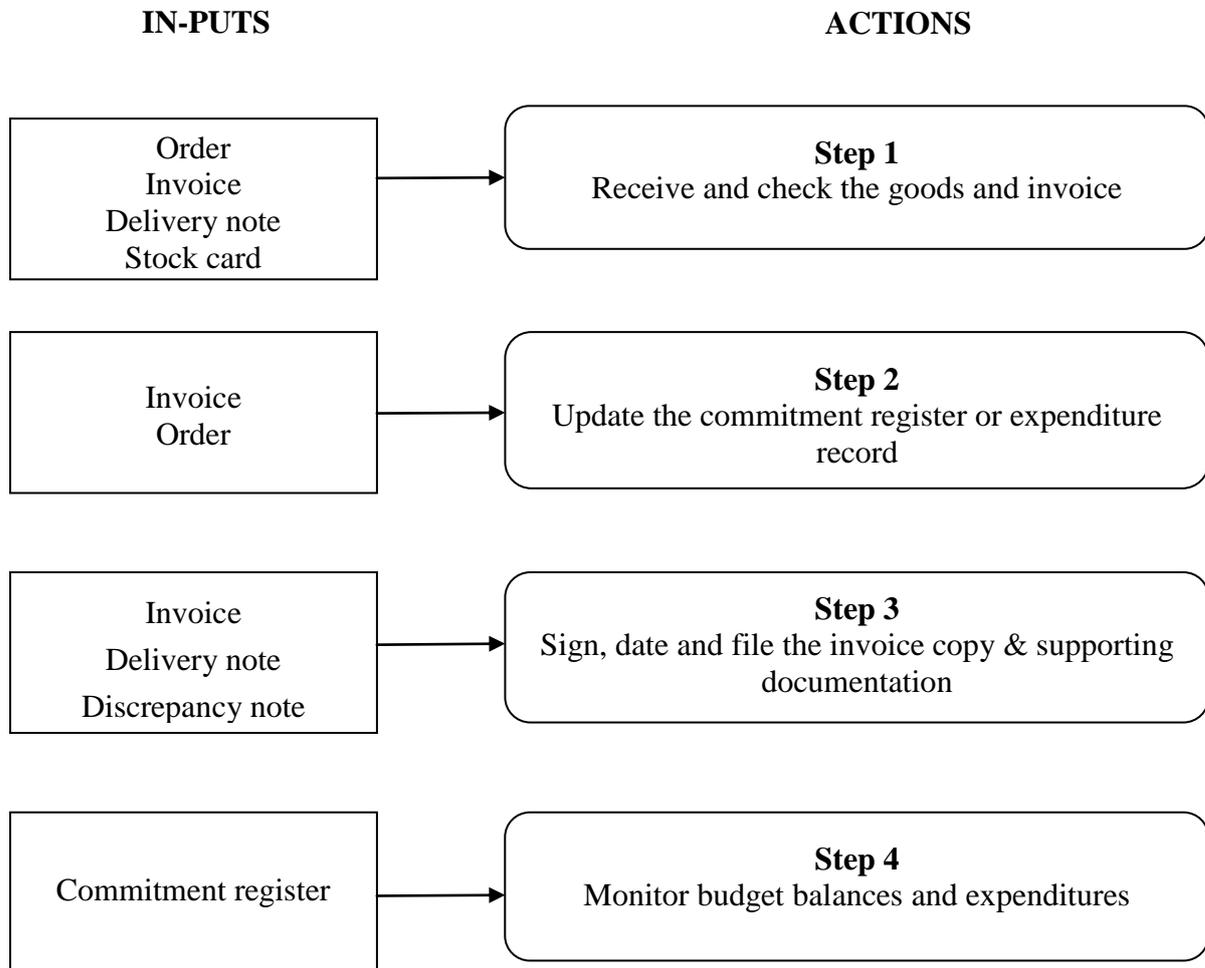
Table 6: Recording commitments

Budget: EMHS Credit Line CRL						Vote no.116			Budget allocation: UGX 46,000,000		
Facility name: Koja HC IV						Financial			Balance brought forward: UGX 0		
No:						2010/11			Year: Allocation per cycle: UGX 7,600,000.		
Date	Order no.	Supplier	Estimated cost in UGX	Adjustment	Uncommitted balance in UGX	Invoice			Actual expenditure		Adjustments and notes
						Order No.	No.	Date	Actual in UGX	Balance	
					46,000,000					46,000,000	
01/08/10	001/10/11	NMS	7,000,000		39,000,000						
01/10/10	002/10/11	NMS	7,500,000		31,500,000						

TRACKING YOUR BUDGET

The following section outlines the 4 steps you have to take to track your budget.

Figure 10: To keep track of your allocation, follow these steps



STEP 1: RECEIVE AND CHECK THE GOODS AND INVOICE

The procedure for receiving and checking goods is described in the Medicines and Health Supplies Management Manual. As shown in the sample delivery note in Figure 11 each delivery must be witnessed and acknowledged by more than one person.

It is important to remember that goods must be checked to ensure that they are of the right quantity and quality, and that they have been delivered to the right facility.

Checking your delivery

A delivery note, a packing list, invoices (copy and original) and a discrepancy note are enclosed with the goods when an order is delivered.

Steps to follow:

- ✓ Prepare space and palettes to store the supplies.
- ✓ First check the documents delivered with the items to ascertain the source and destination of the consignment.
- ✓ Identify the order that relates to the delivery from the copies of orders or requisitions in your file. Compare the order details in the delivery note and the order details in the numbers.
- ✓ Check the quantity supplied, unit size, unit price and the calculation of total value of each item. There are often errors in this calculation: you can save the health facility money by checking these figures. Any errors detected should be noted on the delivery note immediately.
- ✓ Inspect the quantity and quality of the items. The quantity is inspected by comparing the physical quantities with the stock order form, suppliers invoice and delivery note.
- ✓ Check if the boxes are well sealed and there is no sign of being tampered with, then the delivery can be signed off. If a box looks as if it has been opened, check the entire contents of the order with the person delivering the goods.
- ✓ Pay special attention to expiry dates and reject items with short expiry dates particularly if it is unlikely that they will be consumed before they expire.
- ✓ The delivery note should then be signed by the person checking and by the persons delivering the consignment.
- ✓ Indicate on the delivery note if a discrepancy is observed e.g. - if there is a difference between what they have received, and what the delivery note that came with the items says, or if items have been found missing/broken, a copy of which should be returned to the suppliers.
- ✓ In case facilities notice discrepancies with the deliveries after the trucks have left a discrepancy form should be filled and the person in charge of procurement alerted so that s/he can follow up with NMS or JMS.
- ✓ If items not ordered for are supplied, the items may not be accepted and should be sent back with the driver.
- ✓ Retain a copy of the delivery form and invoice and put them in their specific files.
- ✓ Always check the packaging materials properly before discarding them. There may be small items hidden in there.

Checking delivered supplies for quality

Check for the items delivered for signs of damage or deterioration:

- a) Items that require cold storage should be checked first. If they are not packed in cold packs, return those items to the supplier.

- b) Check the color of laboratory reagents and test kits. If they are discolored, they have deteriorated. Do NOT accept them.
- c) Check for broken containers. Check for leaks. Carefully remove broken containers. If there is a leak, remove any supplies damaged from the leak.
- d) Check for unsealed or unlabelled items. Someone may have tampered with unsealed items. It is dangerous to use unlabelled items. Do NOT accept them.
- e) Open sealed containers only if you suspect deterioration. Once opened, check the quality..



KEY POINTS

- ✓ Check the delivery against your invoice – ensure that the items and quantities on the invoice are on the delivery note.
- ✓ Make a note of items that appear on the invoice but have not been delivered, cross check and confirm that these items do not appear on the delivery note.
- ✓ If an item you ordered is not supplied, it must be ordered again in your next order. The order from the previous cycle will no longer be valid.
- ✓ A discrepancy note is only written when an item appears on the invoice but has not been physically delivered.



Figure 11: NMS delivery note

VERIFIED BY AUDITOR

Witnessed by
Chairman
Health Unit
Management
Committee

Witnessed by
District
officer's
representative

**STAMPED BY
MEDICAL
SUPRINTENDANT.**



NMS MEDICAL LOGISTICS
Passionate about your Life

4-12 Nsamizi Road P.O. Box 16 Entebbe, Uganda.
Tel: 0414-320089/320542/320566; Toll Free: 111 (Uganda Telecom Mobile) 080012221 (MTN) 0800200015 Fax: 0414-321323/321469
Email: nms.go.ug, http://www.nms.go.ug

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VAT Reg. No. 23268-I
Bank : Starbic Bank of Uganda
Account No: 0140020378101

DELIVERY NOTE

Deliver to:
PALLISA HOSPITAL
HOSPITAL
PALLISA HOSPITAL
PALLISA
ZONE 1
Client No. PAL305ED
Client NMS

Order No. 0062814
Journey No. 110309-003
Shipment Date 10/03/11
Printed By: BKOGERE
Program CRL
No. of cartons 140.00

Code	Description	Qty Ordered	UOM	Expiration	Qty Sent	Lot
✓ 205004	AMOXICILLIN 125MG/5ML SYRUP	100	1	30/10/12	100	6010
✓ 207011	LIQUID SOAP DETERGENT FOR	12	1	30/12/14	12	
✓ 211300	KETAMINE 500MG/10ML INJECTION	50	5	30/05/13	50	XS001
✓ 211305	LIDOCAINE HCL 2% INJECTION 20ML	50	1	30/04/13	50	LA13E02
✓ 215035	PENICILLIN, BENZATHINE BENZYL	20	10	30/06/12	20	907037
✓ 215045	PENICILLIN, BENZYL 1MU/600MG INJ	1000	10	30/04/13	1000	1005037
✓ 215435	QUININE DI-HCL 600MG/2ML INJ	30	100	30/08/13	30	100801
✓ 215440	PENICILLIN, PROCAINE 3MU+	100	10	30/12/12	100	1001036
✓ 216024	GLUCOSE (DEXTROSE) 5% INFUSION	50	1	30/09/13	50	A107949
✓ 216025	GLUCOSE (DEXTROSE) 5% INFUSION	50	24	30/09/12	50	030732
✓ 216030	GLUCOSE 50% INJECTION 100ML	10	1	30/11/12	10	10V02
✓ 216040	SODIUM (RINGERS) LACTATE	50	24	30/07/12	50	040612
✓ 216088	SODIUM CHLORIDE/NORMAL SALINE	25	24	30/11/12	25	020842

The above goods have been distributed to you. Please acknowledge receipt.

APPROVED BY: BKOGERE
Section: Transport and Logistics
Date: 10/03/11
Driver: NJ - WALUSIMBI JAMADAH
Tum man: KW - Komakech William

Client Section
Received By: Mary J An
Title: Store Asst
Signature: [Signature]
Vehicle Reg: [Registration]

**MEDICAL SUPERINTENDENT
PALLISA HOSPITAL**

**NATIONAL MEDICAL STORES
DISPATCH SECTION
P.O. BOX 16 ENTebbe
10 MAR 2011**

Checking your invoice

Under the new system, the NMS will directly invoice the facility that ordered the supplies and will pack the invoice along with the goods/cartons to be delivered. Facilities at all levels will receive two invoices - an original and a copy from the NMS. A copy will also be forwarded directly to the DHO.

When you receive this invoice for the goods that have been delivered, you will be able to update your commitment registers. The figure stated on the invoice is the amount which will be deducted from your credit line balance.

Did you get what you are being charged for?

The first step is to check that you have actually received the supplies which you are being charged for. Check the invoice against the delivered goods. If you have received the goods as stated on the invoice (i.e. correct formulation, pack size, unit pack and quantities) you can certify the invoice, and continue as explained below. If there are any discrepancies you must follow this up with the NMS through the DHO and make the necessary adjustments to the credit line balance or have a replacement delivered.

Is the final invoice value very different from the order value (committed estimate)?

In many cases the cost on the invoice will be different from the original cost that you committed in the register. There are several possible reasons for this:

- You may have made a mistake in your arithmetic.
- The NMS may have made a mistake in adding up the costs.
- The NMS may not have delivered everything that you ordered, in which case the final cost will be less than what you originally estimated,(some items might have been out of stock).
- The price of an item may have increased.
- The NMS may have been able to provide the item at a cheaper price.
- The NMS may have sent you a different unit pack from what you ordered.
- You may have received someone else's order – a lost order.

The main reason for a difference in NMS invoices at this stage will be price changes and unfilled orders.

NMS invoices indicate the up-to-date unit costs and the final cost of the order. You must use them to update your expenditure record as shown in the following pages. Update the unit costs for NMS supplies in your stock book as mentioned earlier. Use a pencil and as there is no specific place to put the latest unit cost just write it on the top of the page. File a copy of the NMS invoice and forward the original to the accounts/administration department.

Figure 12: Sample NMS Invoice



NMS
MEDICAL LOGISTICS
Passionate about your Life

Plot 4-12 Nsamizi Road P.O. Box 16 Entebbe, Uganda.
Tel: 0414-320089/320542/320566: Toll Free (UTL & Uganda Telecom Mobile) 080012221 (MTN) 0800200015 Fax: 0414-321323/321469
Email: nms.go.ug, http://www.nms.go.ug

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VAT Reg No. 23268-I Bank Stanbic Bank of Uganda Account No. 0140020378101 Delivery PAL205ED FALLISA HOSPITAL HOSPITAL FALLISA HOSPITAL FALLISA SCENE 1	Processed by: BKOGERE Date: 10/03/11 Time: 15:30:44 0062814 Invoice No. Your Reference CRL Despatch note No. 0000102306 Invoice Date 10/03/11 Despatch Date 10/03/11 Program CRL Remaining Budget 16578734.73
--	---

delivered 18, 268, 502 by 16,578,734

Invoice

No	Product	Product Description	Qty	Unit Price	Total Value
59	151096	ANTI SERUM D 10ML	20	9,900.00	198,000.00
01	205004	AMOXICILLIN 125MG/5ML SYRUP 100ML	100	1,192.80	119,280.00
02	207011	LIQUID SOAP DETERGENT FOR HOSPITAL	12	24,735.70	296,828.40
03	211300	KETAMINE 500MG/10ML INJECTION IV/IM	50	5,692.00	284,600.00
04	211305	LIDOCAINE HCL 2% INJECTION 20ML VIAL	50	789.66	39,483.00
05	215035	PENICILLIN, BENZATHINE BENZYL	20	3,515.00	70,300.00
06	215045	PENICILLIN. BENZYL 3MU/600MG INJ	1000	1,135.38	1,135,380.00
07	215435	QUININE DI-HCL 600MG/2ML INJ	30	35,220.00	1,056,600.00
08	215440	PENICILLIN, PROCAINE 3MU+ BENZYL	100	3,971.00	397,100.00
09	216024	GLUCOSE (DEXTROSE) 5% INFUSION 250ML	50	969.54	48,477.00
10	216025	GLUCOSE (DEXTROSE) 5% INFUSION 500ML	50	16,140.82	807,041.00
11	216030	GLUCOSE 50% INJECTION 100ML	10	1,367.30	13,673.00
12	216040	SODIUM (RINGERS) LACTATE	50	12,608.35	630,417.50
13	216080	SODIUM CHLORIDE/NORMAL SALINE 0.9%	25	19,410.00	485,250.00
14	220012	CHARCOAL ACTIVATED 250MG TABLET	5	2,983.33	14,916.65
15	220018	ALBENDAZOLE 400MG TABLET	5	27,733.31	138,666.55
16	220034	AMOXICILLIN 250MG CAPSULE	20	26,277.34	525,546.80
17	220039	AMPICILLIN/CLOXACILLIN 250MG/250MG	20	4,918.71	98,374.20
18	220100	CARBAMAZEPINE 200MG TABLET	5	26,676.97	133,384.85

Uploaded
BALANCE
ON
CREDIT LINE
16,578,734

STEP 2: UPDATE THE EXPENDITURE RECORD

Updating the commitment register

The final cost of the order (as stated on the invoice) must now be recorded in the commitment register as the “actual expenditure” and the balance of unspent funds must be updated. Since the final invoice value will probably be different from the original order (commitment), the “uncommitted balance” must also be revised, otherwise it will not provide a true picture of what you have left to spend.

If the order costs more than the original estimate, there will be less left in the budget than you thought. If the order costs less than the original estimate the balance will be higher. Either way it is important that the uncommitted balance is now altered to take the differences into account.

Recording the final cost (i.e. the actual expenditure)

If you are satisfied that the supplies have been delivered and the invoice can be filed, find the original commitment in the register.

Record the invoice number in the indicated column along with the date, and fill in the “amount” column under “actual expenditure”. This time, fill in the exact amount: do not round it off. In Table 7, the invoice for NMS order numbers 001/10/11 arrives on 1/08/10 and the invoice number is 0062814. The final cost of this order is UGX 6,980,055



You can enter these records as soon as you receive the delivery with the final costs and then fill in the invoice details.

Calculating the actual expenditure balance

Deduct the amount you have to pay from the “balance” column under “actual expenditure”. In Table 7 below, UGX 6,980,055 has been deducted from UGX 46, 000,000 leaving a balance of UGX 39,019,945

Updating the Uncommitted Balance

You now have to alter the “uncommitted balance” to reflect the difference between the value that will actually be deducted from your credit line balance for the order and what you originally committed.

Subtract the final cost on the invoice from the figure you originally committed (order value). **If the final cost (invoice value) is lower** than the amount you originally committed, this figure will be a positive number (it will have a plus sign in front of it). This means there is more money left in your budget than you had originally thought. This is what happened in the case of NMS order 001/10/11 in the example - originally UGX 7, 500,000 was committed, but the final cost on the invoice was less than this (UGX 6,980,055). The difference is +UGX 519,945.

Record the difference against the original order entry, in the right hand column marked “adjustments and notes”. To adjust the balance, you must also record it below the last register entry—fill in the date when the invoice was received and the original order number, write

“adjustment” to show that it is not a new commitment, and indicate the adjustment to be made. This is done to make arithmetic easier (remember the uncommitted balance is only an estimate). In Table 7 below UGX 519,945 has been added to the uncommitted balance to bring it up to UGX 39,019,945 from UGX 38,500,000.

Invoices rarely have evenly round figures, such as UGX 500,000 but instead typically have odd numbers such as UGX 519,945. However for simplicity and illustration purposes the example has "nice" figures listed in the invoice.

If the cost (invoice value) is higher than the amount you originally committed, this figure will be negative (i.e. will have a minus sign in front of it) and you have **less** money left than you thought. This is what has happened in the case of invoice no. 0062815 which was for UGX 8,500,000 compared with the original estimate of UGX 8,100,000. The difference of UGX 400,000 has been deducted from the uncommitted balance of UGX 30,919,945 to leave UGX 30,519,945. These adjustments should be made in the adjustments column.

This may be very confusing to start with. Just remember, always subtract the final cost from the original estimate and do whatever the sign says.

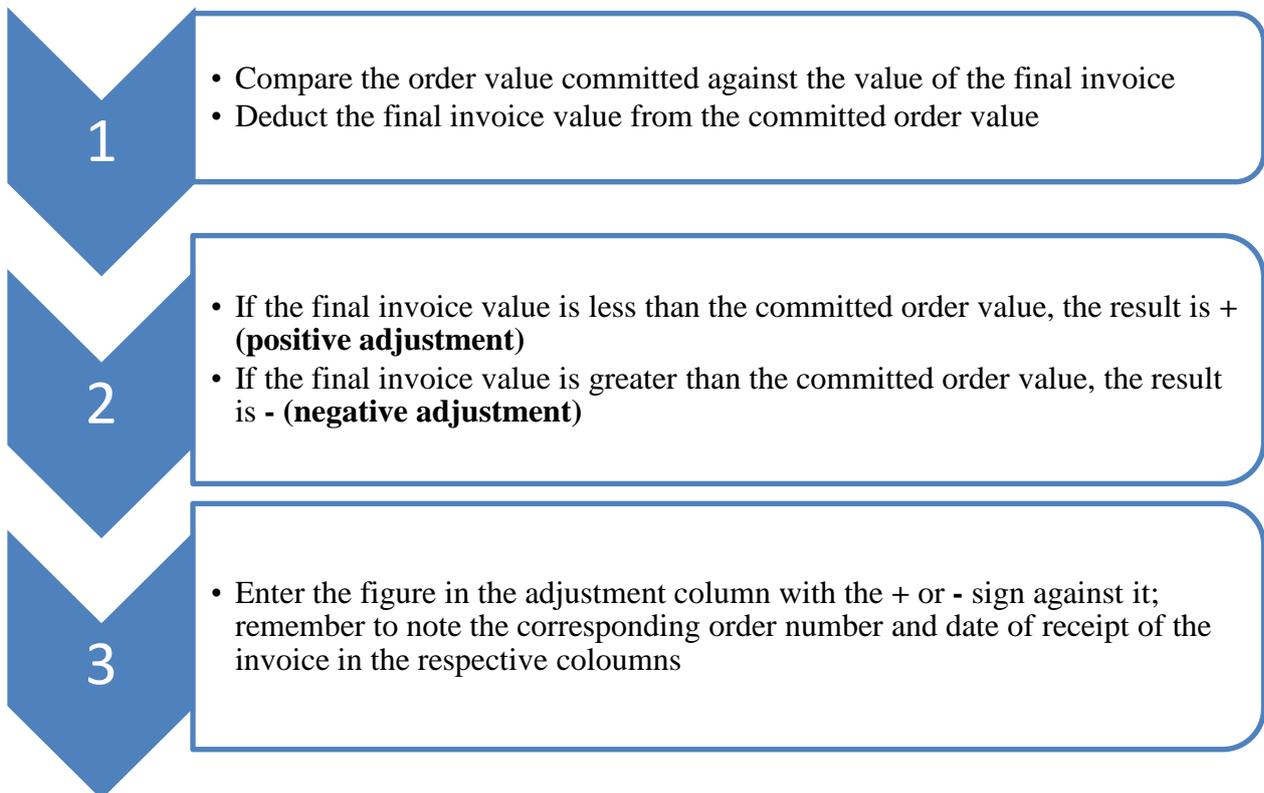


Table 7: Commitment Register

Budget: EMHS Credit Line CRL		Vote no.116		Budget allocation: UGX 46,000,000							
Facility: Pallisa		Financial		Balance brought forward: UGX 0							
No:		2010/11		Total credit line budget: 46,000,000							
				Year: Allocation per cycle: UGX 7,670,000							
Date	Order no.	Supplier	Estimated cost in UGX	Adjustment	Uncommitted balance in UGX	Invoice			Actual expenditure		Adjustments and notes
						Order No.	No.	Date	Actual in UGX	Balance	
					46,000,000					46,000,000	
01/08/10	001/10/11	NMS	7,500,000		38,500,000		0062814	20/08/10	6,980,055	39,019,945	+519,945
Adj. 20/08/10	001/10/11	Adj.		+519,945	39,019,945						
01/10/10	002/10/11	NMS	8,100,000		30,919,945		0062815	20/10/10	8,500,000	30,519,945	-400,000
Adj. 20/10/10	002/10/11	Adj.		-400,000	30,519,945						

STEP 3: SIGN, DATE AND FILE THE INVOICE

Processing the invoice

Keep a copy of the invoice in the stores or pharmacy, and pass on the original certified invoice to the administrative/accounts staff so that they can update their own records.

The NMS processes your health facility EMHS invoices and deliveries under separate programmes.

1. CRL: EMHS Credit Line Vote 116
2. CRH: GOU ACT/ARV Credit Line Vote 116
3. CDC: Centers for Disease Control Laboratory Supplies credit line
4. TPT: Third party supplies

When you receive the invoices, sort them according to the programme to which they relate, because your PFM system tracks the budgets and expenditures for each credit line separately i.e. the EMHS credit line Vote 116 and the laboratory supplies credit line separately. You can record the value of priced ACTs and ARVs received separately as they are not drawn against a creditline but it is important to have a complete picture of the total funding received by the facility from GOU for all EMHS.

In the event that you encounter a situation where the total invoice value of EMHS delivered by the NMS includes the cost of ARVs and ACTs, remember that these line items are at zero cost on the NMS order form (018) and are not included in the total cost of the order you submitted to the NMS for processing. In the unlikely event that the health facility receives an invoice which has not been separated by the respective programs and it includes the value of of ARV's and ACT's follow the steps outlined below to calculate your actual EMHS credit line expenditure.

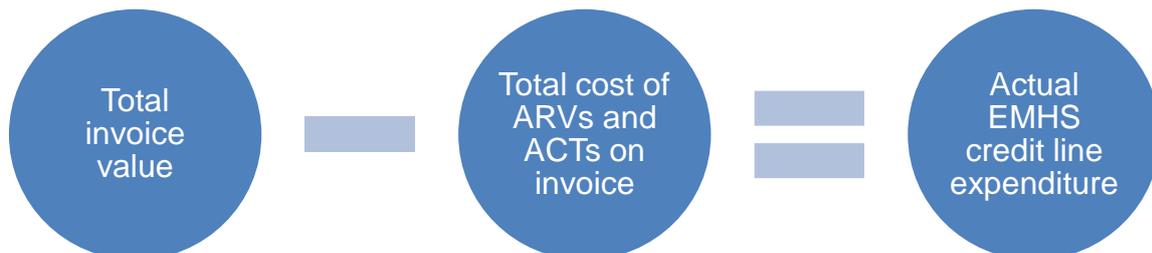


The cost of ARVs, ACTs and contraceptives is not part of, neither is it deducted from, your EMHS credit line budget allocation.

WHAT DO YOU DO NEXT?

The final cost of the order for EMHS less the value of ARV's and ACT's (as stated on the invoice) must now be recorded in the commitment register as the "actual expenditure" and the balance of unspent funds updated.

Calculate your actual EMHS expenditure



Add the total cost of the line items for ARVs to the total cost of the line items for ACTs.

Deduct this total from the total invoice value for that delivery. This gives you the actual EMHS credit line expenditure for that cycle.

The figure you obtain from the calculation of actual EMHS credit line expenditure is the cost of this invoice. This is the amount to be deducted from the health facility credit line budget for the cycle. Use this figure and continue from Step 2 of the manual, (updating the expenditure record).

Continue the process of monitoring budget and expenditure in Step 4 below. Update the budget monitoring sheet using the actual EMHS expenditure after reconciling the “remaining budget” on the NMS invoice with your uncommitted balance.

Reconciling credit line budget balances

The NMS maintains a record of the credit line expenditures and running balances for each health facility. The credit line balance at the end of each cycle is reflected on the NMS invoice that accompanies each delivery. This amount is indicated as *remaining budget* on the top right hand side of the invoice. *Remember that this “remaining budget” only reflects the total amount the NMS has uploaded to your account less the value of EMHS supplied to date. The health facility credit line account is uploaded quarterly by NMS as the MOFPED releases funds to Vote 116. The figure does not reflect the actual unutilised health facility credit line budget!*

It is important that the records kept at the health facility are “reconciled” with those reflected on the NMS invoice at the end of each delivery cycle. This means that you must check your *actual balance* in your commitment register against the *remaining budget* stated on the invoice. In the event that there is a discrepancy this should be immediately communicated to the DHO or the medical superintendant who will bring it to the attention of the NMS. The reconciliation will involve NMS providing you with an account statement showing the annual credit line allocation, the amount uploaded to the health facility account to date and the value of EMHS supplied to date with the corresponding invoice dates and amounts.

The National Medical stores issues on request an account statement for each health facility (figure 13) that provides a narrative of all financial transaction that have been posted to that specific credit line account.

Figure 13: NMS Account statement

Dest Code	Facility Name	Level	HSD	District	Account	Date	Transaction Reference	Transaction Narrative	Amount
		HC IV			CRL	1-Jul-11	Balance B/F	BUDGET UPLOAD	1,067,473.00
		HC IV			CRL	1-Jul-11	FY2011/12 Q1 BUDGET	BUDGET UPLOAD	7,346,673.00
		HC IV			CRL	15-Aug-11	1186852	SALES INVOICE	5,600,000.00
		HC IV			CRL	15-Aug-11	1186893	SALES INVOICE	740,000.00

As part of the financial management process the health facility should on a quarterly basis conduct a reconciliation between its internal EMHS financial records and the NMS statement of account. This involves the following steps:

1. Check each transaction for accuracy: amount, date and reference. This applies to invoices received.
2. Ensure that all invoices appearing on the statement were actual received and that they are posted in the commitment register and budget-monitoring sheet.
3. Compare the budget upload with the corresponding allocation to date in the budget monitoring sheet.
4. In the last quarter compare the total budget upload against the total credit line budget for the financial year that is recorded on the commitment register and budget monitoring sheet.

Reconcile the account statement with the commitment register to confirm that NMS does not have an erroneous entry made in its accounting system or that another health unit's order has not been posted to your account.

Internal reconciliation

If the calculated actual balance reflected in the commitment register and the uncommitted balance are significantly different from each other, work together to find out why. Possible reasons for differences include:

- ✓ Someone may have forgotten to commit an order or made an error in computing the actual balance.
- ✓ A previous invoice may have been omitted from the commitment register.
- ✓ An adjustment entry may have been omitted.

STEP 4: MONITOR BUDGET AND EXPENDITURE

The budget allocation monitoring sheet

The "budget monitoring sheet" allows you to see, at a glance, how your expenditure compares with your credit line allocation throughout the financial year. It shows how much has been spent over the year to date and the balance remaining on the credit line at the end of each cycle. The difference between the allocation to date and the expenditure to date at the end of a cycle is the amount the health facility can order over and above the average allocation per cycle. (See Table 8.)

Allocation-to-date

The allocation-to-date for a particular cycle is the total of the cycle allocations up to and including that cycle (cumulative allocation). This allocation per cycle is usually one sixth of the annual allocation.

The allocation-to-date for the last delivery cycle of the financial year will be the total annual allocation. You can complete this column as soon as the NMS communicates the annual allocation for your health facility at the beginning of the financial year.

Actual expenditure per cycle

For each cycle, enter the total value of actual orders placed and received in that cycle as presented in the invoice (Table 8, third column (a)).

Total expenditure per date

In the fourth column (b), record the total expenditure to date. Add the value of the invoice for the cycle that has just been delivered to the previous figure for total expenditure (cumulative expenditure).

Uncommitted balance

Record the uncommitted balance in the fifth column. You fill in this column by taking the total budget allocation and deducting the total expenditure to date (b). In Table 8, the total allocation is UGX 48,000,000. Taking cycle 4 as an example, the uncommitted balance at the end of the cycle is UGX 18,064,114 (UGX 48,000,000 – UGX 29,935,886).

The uncommitted balance of UGX 2,736,245 at the end of cycle six indicates that the health facility did not fully utilise the available credit for the year. The reason for this could be either that the facility did not order efficiently or that the NMS did not deliver all the items that had been ordered. It could also be the result of a combination of both factors.

To find out why the available credit was under-utilised, an analysis has to be made of NMS order performance in relation to the orders placed by the facility. This process is described in detail in Part 5 of the manual.

Unspent allocation from previous cycle

For each cycle, enter the unspent allocation from the previous cycle (Table 8, sixth column). This amount is the amount of money that did not get utilized the last time an order was made. Deduct the total expenditure to date (b) from the allocation per cycle to get the unspent allocation from the previous cycle.

Available allocation for next cycle order

The seventh column of the budget monitoring sheet is labeled 'Available allocation for next cycle order' and signifies the maximum amount one can use to order items for the next cycle. To get this amount add the allocation per cycle to the unspent allocation from the previous cycle. For example in cycle 4 of Table 8, UGX 8,000,000 + UGX 2,064,114 = UGX 10,064,114 which is the available allocation for the next cycle order.

Table 8: Budget monitoring sheet for EMHS

Facility name: Kojja HC IV Facility Code: xxx Vote: 116, EMHS CREDIT LINE CRL			FINANCIAL YEAR: 2010/2011 Budget allocation: UGX 48,000,000 Balance brought forward: UGX 0 Total credit line budget: UGX 48,000,000 Allocation per cycle: UGX 8,000,000			
CYCLE	Allocation-to-date	Actual expenditure per cycle (a)	Total expenditure to date (b)	Uncommitted balance: (total credit line budget – b)	Unspent allocation from previous cycle	Available allocation for next cycle order
1	8,000,000	6,980,055	6,980,055	41,019,945	1,019,945	9,019,945
2	16,000,000	8,500,216	15,480,271	32,519,729	519,729	8,519,729
3	24,000,000	7,943,611	23,423,882	24,576,118	576,118	8,576,118
4	32,000,000	6,512,004	29,935,886	18,064,114	2,064,114	10,064,114
5	40,000,000	8,117,496	38,053,382	9,946,618	1,946,618	9,946,618
6	48,000,000	7,210,373	45,263,755	2,736,245	2,736,245	10,736,245

TRACKING FUNDED HEALTH COMMODITIES

AIDS, Malaria, TB and reproductive health commodities are funded by global health initiatives namely the President’s Emergency Plan for AIDS Relief (PEPFAR), the Presidential Malaria Initiative (PMI) and USAID. Funds for the aforementioned health commodities are separate from the EMHS credit line and the laboratory credit line. Therefore, these funds are not to be tracked or monitored in the tools discussed in this manual such as the Budget Monitoring Sheet or Commitment Register. However, it is important to track the quantities and values funded health commodities for the following reasons:

- To understand the worth of funded health commodities the facility is receiving and
- For long-term planning and strategy development of global health aid agencies (i.e. sustainability of funding programs, identify funding needs and gaps)

When shipments of AIDS, Malaria, TB and reproductive health commodities are received by your facility, you should collect any available data on the quantities and values of such health commodities as well as organize and file collected data.

To maintain a record of the value of ACTs and ARVs delivered to your facility use the following simple format:

Example 1: Health facility ARV and ACT priced supplies

HEALTH FACILITY NAME:

FACILITY CODE:

FINANCIAL YEAR: 2011/2012

Invoice number	Invoice date	Cycle	Value of ARVs supplied	Value of ACTs Supplied
		1		
		2		
		3		
		4		
		5		
		6		
		TOTAL		



PART 4: MAKING BUDGET ESTIMATES AND ANNUAL PROCUREMENT PLANS

The PPDA ACT 2003 requires all government entities to prepare annual procurement plans before the beginning of each financial year. With some exceptions, spending on routine EMHS is fairly consistent throughout the year. Using stock and expenditure records, you can estimate the amount to be spent each cycle and extrapolate this to calculate the annual requirement. An adjustment can be made to accommodate any increase in projected demand. It is important that all the departments ordering essential medicines and health supplies understand this in order to plan their orders. The format of the procurement plan is provided in later sections of the PFM Manual.

The NMS aggregates the procurement plans from all health facilities countrywide to generate consolidated bulk procurement plans and delivery schedules.

MAKING BUDGET ESTIMATES AND ANNUAL PROCUREMENT PLANS

This section tells you how to arrive at the annual EMHS budget estimate for your health facility and describes the process of developing annual procurement plans for the health facility.

Why procurement plans?

Procurement planning for EMHS at health facility level is part of the national planning cycle whereby plans from health facilities are consolidated into the national procurement plan. The MOH and National Medical Stores use the estimates to guide the procurement process for the year. The procurement plan includes:

- Generic item description, dosage form, strength, unit pack size of each item.
- Estimated quantity required for the coming 12 months
- Estimated unit cost per item
- Total estimated cost per line item
- Total estimated cost for the annual requirement

Who should be involved?

This is the responsibility of hospitals and HC IVs. Different departments contribute to the procurement process by providing the necessary data and expert input. The prescribers and user departments collect information on morbidity and prescriptions, the storekeeper provides the consumption and stock out data, and the pharmacy staff provides the drug lists and medicines quantification expertise. A good procurement plan is the result of teamwork.

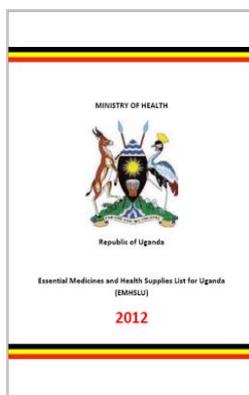
The process

The procurement planning process involves selection, quantification, costing and aligning requirements to the available budget.

Selection

The newly updated Essential Medicines and Health Supplies List of Uganda 2012 (EMHSLU) will guide the facility on what is considered vital, essential and necessary and level of care.

. The EMHSLU 2012 for the first time also includes laboratory supplies



YOUR BUDGET ALLOCATION

The NMS will inform you of the budget that has been allocated for the facility EMHS credit line at the beginning of the financial year. If this is less than your estimated requirements, discuss this with your DHO. You will find it easier to argue for additional funding if you have used one of the methods described in this section to estimate your needs.

If you still do not have enough in the budget to meet your estimated needs, think of what savings and adjustments can be made. This is where the VEN classification is useful. If your budget is insufficient to cover all your requirements, first priority **MUST** be given to ordering V items. This means that you will have to do without some of the E and N items that you had originally budgeted for. .

FROM QUANTIFICATION TO BUDGET ESTIMATES

There are three methods of estimating your annual EMHS budgetary requirement. The first is the **consumption or issue method**. This means you use your stock card, lab log books or stock book together with price lists to work out the value of drugs and supplies you used in the last year. You will need to adjust your estimates to allow for times when a particular item was out of stock, for anticipated changes in drug usage, and for inflation. This is the most accurate method but it is time-consuming unless your information is computerised.

Any facility can use this method because the only information needed is what can be found in the records in their stock management system and a price list.

The second method is the **expenditure method**. You start with the amount of money spent on medicines and other medical supplies in the previous year, and adjust this for expected changes in drug usage and inflation. It is probably the best method to use when estimating the budget for the whole district, rather than just one facility. This method is simpler but it is difficult to adjust for stock-outs, and can only be used where there are good records of past expenditure. Unless you have been keeping accurate records of how much you have spent, you will not be able to use this method the first time you do a budget estimate.

The information regarding your procurement from the NMS is available at the NMS and pharmacy staff can arrange to obtain it. Once you have kept expenditure records for a year, you should be able to use the expenditure method.

The third method is the **morbidity-based method**. Here you use morbidity data to find out the number of patients suffering from a specific disease. Based on the standard treatment guidelines/testing guidelines (STG), and assuming that all your patients are treated in accordance with the STG, you can calculate the quantities of the medicines needed for the year - the consumption. Then, as with the consumption method, you can estimate the budget

by multiplying the quantity by the unit prices for each item. This method is not feasible for calculating your total medicines budget but it can be used to calculate the funding requirements for a specific disease, for example TB, or when introducing a new treatment such as ARV second line treatment. The method is not very accurate and has many limitations, especially the validity of the morbidity data and adherence to STG in prescribing. These variables and assumptions have to be factored into the computation as well as possible when using the morbidity method.

Budget estimation and quantification of laboratory commodities will be conducted using the morbidity based tool. This tool relates the number of people predicted to be tested during the quantification period and then applies the National testing guidelines aligned with type of equipment and tests done at each site to analyze the quantity of each product required for each particular testing area by using coherent assumption.

APPLYING THE CONSUMPTION METHOD

This is the most accurate way of assessing your annual budget needs and is the recommended approach to preparing the itemized EMHS procurement plan. It takes time, but because it is based on actual usage at your facility, and makes you focus on your patients' needs, it will give you the best idea of the resources you will need.

The five steps involved are described in detail in the following pages. They are based on consumption figures from the stock book.



Hint: As you read this chapter, follow the examples

STEP 1: FINDING OUT WHAT YOU USED

Use your stock cards and stock book to find out what you used or issued in the previous year (Table 9). For each item, add up the entries for the last 12 months in the “quantity used” column. Exclude the units issued to other facilities and not returned (check your stock card). Make a note of the total at the bottom of the page for each item. This example shows you how to do this for aspirin.

Table 9: Stock book

Item Description (name, formulation, strength): Aspirin 300mg tablets							Pack size: tin of 1000 tablets		Code No:	
DATE	PREVIOUS PHYSICAL COUNT	QUANTITY RECEIVED	QUANTITY USED	DAYS OUT OF STOCK	LOSSES & ADJUSTMENTS	BALANCE ON HAND	Adjusted AMC	MAX STOCK	QUANTITY TO BE ORDERED	SIGN
June 07	50	48	21	0	nil	77	21	105	28	LQ
July 07	77	nil	21	0	nil	56	21	105	49	LQ
Aug 07	56	nil	20	0	nil	36	21	105	69	LQ
Sept 07	36	30	18	0	nil	48	20	100	52	LQ
Oct 07	48	30	23	0	nil	55	21	105	50	LQ
Nov 07	55	32	22	0	nil	65	21	105	40	LQ
Dec 07	65	nil	19	0	nil	46	21	105	59	LQ
Jan 08	46	nil	20	0	nil	26	21	105	79	LQ
Feb 08	26	nil	9	0	nil	17	20	100	83	LQ
March 08	17	nil	nil	0	nil	17	18	90	73	LQ
April 08	17	63	20	0	nil	60	18	90	30	LQ
May 08	60	60	21	0	nil	99	18	90	nil	LQ
June 08	99	nil	19	0	nil	80	18	90	10	LQ
July 07	-June 08		212							

Enter the total used in one year in the column headed “quantity used” on the “budget estimation form”. Also write down the number of months this item was out-of-stock.



Do not forget to include items for which you do not keep stock cards, such as oxygen, blood, or an item which you did not order last year but will need next year. Go through the NMS catalogue.

Example 2: Budget estimation form

Code	Description	UnitStep 1.....		Step 2Step3.....		
			Qty used	No. months O/S	Adjusted quantity	Price in UGX	Total in UGX	VEN
220034	Amoxicillin 250mg caps	1000	212	2	254			V
220065	Benhexol 2mg tabs	500	15	nil	15			E
220571	Bisacodyl 5mg tabs	100	5	nil	5			N
220100	Carbamazepine 200mg tabs	1000	55	2	66			V
	Etc.							

STEP 2: ADJUSTING THE QUANTITY

Think about whether there are likely to be any differences between what you used last year and what you will need next year. This is a question of using your judgment and your knowledge of the area and of your patients. Here are some examples of the sort of adjustments you might need to make:

You might have been out of stock of an item at some time during the year (see the record for carbamazepine 200mg above which was out of stock for 2 months, meaning it was available for only 10 months). Add up the consumption for the time when the item was available, divide it by the number of months it was available, and multiply by 12.

Example from stock book above: $\frac{55 \times 12}{10} = 66$

The health facility may have redistributed items to other facilities - these should not be counted in the hospital estimate, as they should be included in the estimate of health facility that received the supplies.

There might be some items whose use has been changing because of changes in the morbidity pattern in your area (check this with your OPD returns). Look at the difference in consumption between last year and the previous year to give you an idea of how much to adjust upwards or downwards.

Someone might have changed their prescribing habits to use more or less of a particular drug, or perhaps the standard treatment guidelines have changed.

STEP 3: FILL IN THE PRICES

Fill in the unit price for each item, as shown in Table 10 below. Use up-to-date price catalogues or the most recent invoice to obtain the price.

To calculate the total cost multiply the adjusted quantity by the price and enter this amount in the “total cost” column, just as you do when costing your orders/ orders.



Hint: Make sure that the units in your stock book and the units in the price list and budget estimation form are the same.

Repeat this process for all the items that are to be covered by your budget, leaving out ARVs, ACTs, TB drugs, vaccines and reproductive health commodities for the moment.

If there are any items which you used in very small quantities, you can make a guess of the cost at these.

Table 10: Budget Estimation Form

	Step 1....		Step 2	Step3.....		
Code	Description	Unit	Qty used	No. months O/S	Adjusted qty	Price in UGX	Total in UGX	VEN
220034	Amoxicillin 250mg caps	1000	212	2	254	33,850	8,597,900	V
220065	Benhexol 2mg tabs	500	15	nil	15	18,700	280,500	E
220571	Bisacodyl 5mg tabs	100	5	nil	5	2,650	13,250	N
220100	Carbamazepine 200mg tabs	1000	55	2	60	31,050	1,863,000	V
						Etc.		
	Sub					(step 4)	10,754,650	

STEP 4: ADDING UP THE TOTALS

Add up all the figures in the total cost column to give you the total value of drugs and other medical supplies you expect to consume next year.



Hint: Make a sub-total at the end of every section (e.g. oral preparations, parenterals, sundries, etc.). Then, if you make any mistakes in totalling the estimate, they will be easier to find.

Add the sub-totals for each section to get the total as shown in Example 3 on the next page.

STEP 5: ADJUST THE QUANTITIES TO FIT WITHIN THE ANNUAL EMHS BUDGET

Your DHO or the NMS will provide you with details of the credit line budget allocation for EMHS for your facility for one year. If it turns out that you have over-budgetted, you must now make adjustment in quantities to ensure that the total cost is within the allocated budget. The first step is to make sure that you include all the items that are vital for your level of care in sufficient quantities for the twelve month period. You can then adjust the essential and necessary items according to the priorities of your health facility.

APPLYING THE EXPENDITURE METHOD

This method is an alternative way of calculating how much money you need. However, it cannot serve as a procurement plan because the individual quantities of each line item and product descriptions are not included. You can only use it if you have good records of how much was spent on drugs and other medical supplies in the previous year.

Even if there is a record of expenditure, you will need to decide if these records are accurate enough. You will need to consider:

- Whether expenditure was lower than it should have been because many items were unavailable.
- Whether there were any items you ordered but did not use yourself (or vice versa), for example, because they were redistributed.
- The value of any drugs which you ordered but did not use because they had expired.

You may be able to make adjustments for problems like these. For example, if you know some items were unavailable, you can cost these from your stock management system as you would do using the consumption method. You may know which items were transferred to or from another facility and be able to cost these in the same way.

Again, you will then need to adjust this figure for the increase in prices due to inflation. How much you need to add will depend on how old your expenditure figures are, and on the current rate of inflation.

The expenditure method is quicker than the consumption method but it is not as accurate and, for the reasons given above, it may understate your expenditure.

Example 3: Expenditure method

To estimate the health facility budget for F/Y 2011/2012	UGX
Actual expenditure on drugs last year (2010/2011)	35,000,000
Adjustment for items not available during last year (+5,000,000)	5,000,000
Adjustment for items issued to other health facilities during past year (2010/2011) (-1,000,000)	(1,000,000)
Adjustment for items received from other health facilities during past year (2010/2011) (+2,000,000)	2,000,000
TOTAL	41,000,000
Add inflation at the current rate, 10%	4,100,000
Total budget estimate 2011/2012	<u>45,100,000</u>



KEY POINTS

- ✓ To make a procurement plan you will need to know how much of each item your facility uses in a year and what each item costs.
- ✓ Adjust this figure for stock outs, changed treatment guidelines, increased utilisation etc. and allow for inflation.
- ✓ Use unit costs from the most up-to-date catalogue, invoice, and order form.
- ✓ If your allocated budget is not adequate for you to order all the items you listed, you must vet your requirements and purchase V EMHS first.

PART 5: MAKING USE OF PHARMACEUTICAL FINANCIAL INFORMATION

IMPORTANT CALCULATIONS

% Actual budget fulfilment

$$= \frac{\text{actual value of EMHS received in current FY}}{\text{health facility EMHS budget estimate for the FY}} \%$$

% Allocation utilisation

$$= \frac{\text{actual value of EMHS received in current FY}}{\text{credit line allocation for the FY}} \%$$

EMHS expenditure per capita

$$= \frac{\text{total facility EMHS credit line budget expenditure for FY}}{\text{facility catchment population}}$$

EMHS expenditure per patient

$$= \frac{\text{total facility EMHS credit line budget expenditure for FY}}{\text{total patient attendance (OPD + inpatient)}}$$

% Order or Supply performance

$$= \frac{\text{supply value}}{\text{order value}} \%$$

% Expenditure on V items

$$= \frac{\text{value of V items included in the order}}{\text{total order value}} \%$$

UTILISATION OF PFM DATA

Now that you have acquired the knowledge and skills to manage budgets and expenditures on EMHS, the question is what you can do with the data you collect to assist in the management, planning and decision-making process.

The routine information provided by your pharmaceutical financial management system ensures that:

- ✓ Orders generated are within the maximum permissible value for each delivery cycle
- ✓ Uncommitted balances are routinely reconciled with the NMS balance on the credit line included on the invoice with each delivery

- ✓ Credit line budgets are fully utilised each year
- ✓ You can analyse the data collected to establish patterns and trends in the annual EMHS allocations and actual expenditure.

% Actual budget fulfilment

$$= \frac{\text{actual value of EMHS received in current FY}}{\text{health facility EMHS budget estimate for the FY}} \%$$

Example

The estimated health facility EMHS budget requirement for your health facility for the financial year 2010/2011 was UGX 50,000,000. The credit line for your health facility for the financial year 2010/2011 was UGX 46,000,000. The actual expenditures (value of EMHS under the credit line received by the facility in that financial year) was UGX 40,000,000. From the health facility records the actual value of EMHS orders placed with NMS was 42,000,000.

$$= \frac{UGX\ 40,000,000}{UGX\ 50,000,000} \% = 80\%$$

At the end of the financial year the health facility managers can compare the actual value of the EMHS received to their original projected requirement. In this case the facility received only 80% of its projected EMHS requirement for the financial year. % Allocation utilisation

$$= \frac{40,000,000}{46,000,000} = 87\%$$

At the end of the financial year the health facility utilised 87% of their creditline allocation. This could be explained by their needs being less than their allocation or that they did not receive the amounts that was ordered.

Order or Supply performance

$$= \frac{\text{Total value of supplies received}}{\text{Total value of orders placed by the health facility in the financial year}} \%$$

$$\text{Order or Supply performance} = \frac{UGX\ 40,000,000}{UGX\ 42,000,000} \% = 95\%$$

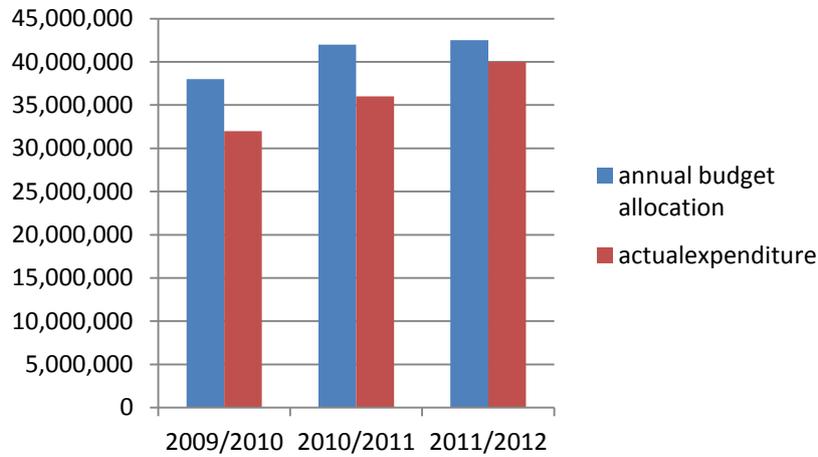
This information will assist you in guiding the facility head and DHO in your budget planning meetings. When preparing annual procurement plans you can use this information to project what you might actually receive in the coming year as opposed to the credit line communicated to you.

Potential areas for internal improvement that require management attention can be identified especially if the health facility is ordering less than the available funding yet there are stock outs of vital commodities.

It also functions as powerful tool in supply chain management to set performance benchmarks for delivery performance and alerts management where poor service delivery at the health facility is a result of inefficient supply.

How much money was allocated to your facility for the year and how much did you actually get and how much did you order for?

Figure 14: Comparison of allocated budgets or allocation and actual expenditure

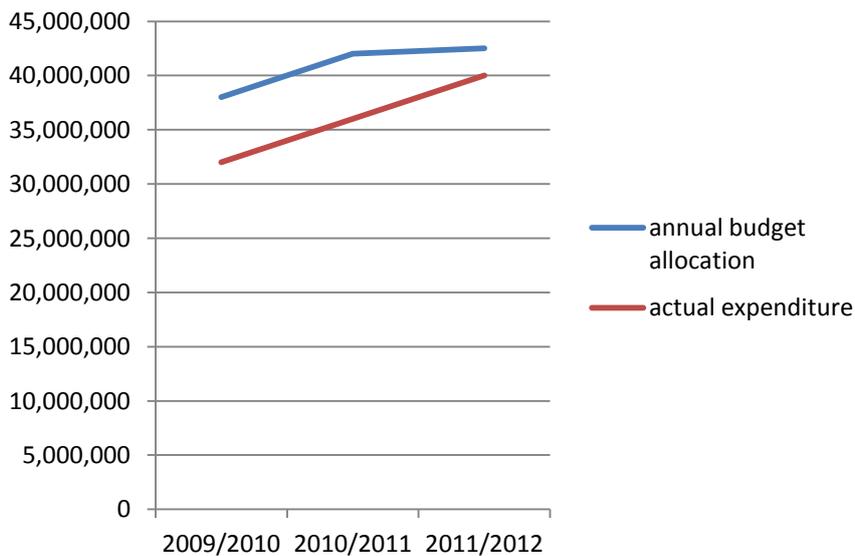


Change in allocation and EMHS expenditure

The analysis can provide a snapshot of the change in monetary and percentage terms of the allocated budget from one year to the next and changes in actual expenditure on EMHS over time

	2009/2010	2010/2011	2011/2012
Annual budget allocation	38,000,000	42,000,000	42,500,000
Actual expenditure	32,000,000	36,000,000	40,000,000

Figure 15: Trends in budget allocation and actual EMHS expenditure



Average EMHS expenditure per patient and expenditure per capita (based on catchment population)

Using the data collected by the PFM system , you can calculate how much money you have for EMHS per patient. This figure can then be used as evidence in discussions with management about the challenges facing the health facility as a result of population growth or an increase in the number of visits by patients to the facility. Such evidence is particularly useful if population growth or the increase in use of the health facility is greater than the facility’s approved annual credit line budgetary increment.

It also allows you to plan and monitor the reallocation of supplies within the district according to the patient load at each facility.

EMHS expenditure per capita

$$EMHS \text{ expenditure per capita} = \frac{\text{Total annual facility EMHS expenditure}}{\text{Facility catchment population}}$$

Example

The EMHS expenditure for your facility for the financial year 2010/2011 was UGX 40,000,000. According to the MOH Health Facility Inventory, the catchment population for this facility is 20,000 people. The EMHS expenditure per capita was therefore:

$$EMHS \text{ expenditure per capita} = \frac{UGX 40,000,000}{20,000} = UGX2,000$$

Average EMHS expenditure per patient (OPD and in patient attendance)

$$EMHS \text{ expenditure per patient} = \frac{\text{Total annual facility EMHS expenditure}}{\text{Total patient attendance}}$$

Example

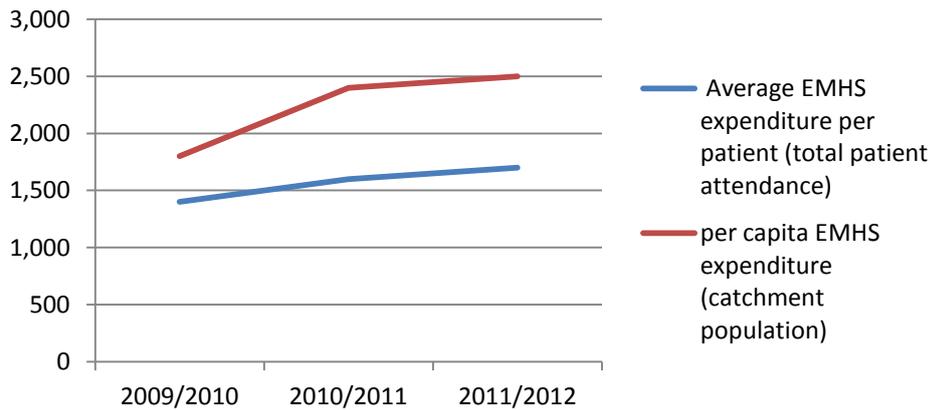
The EMHS expenditure for your facility for the financial year 2010/2011 was UGX 40,000,000. According to the OPD and inpatient attendance registers, the total number of patients who visited the facility in the financial year was 30,000. The average EMHS expenditure per capita was

$$EMHS \text{ expenditure per patient} = \frac{UGX 40,000,000}{30,000} = UGX 1333$$

NB: THE ASSUMPTION IS THAT ALL THE EMHS SUPPLIED IN THE YEAR WAS CONSUMED OR THE STARTING BALLANCE AT BEGINNING OF THE YEAR IS THE SAME AS AT THE END OF THE YEAR SAY 4 MONTH EMHS IN STOCK

The the average and per capita expenditure on EMHS can be plotted graphically to illustrate trends over time.

Figure 16: Trends in average EMHS expenditure per patient/ expenditure per capita



% Expenditure on V items

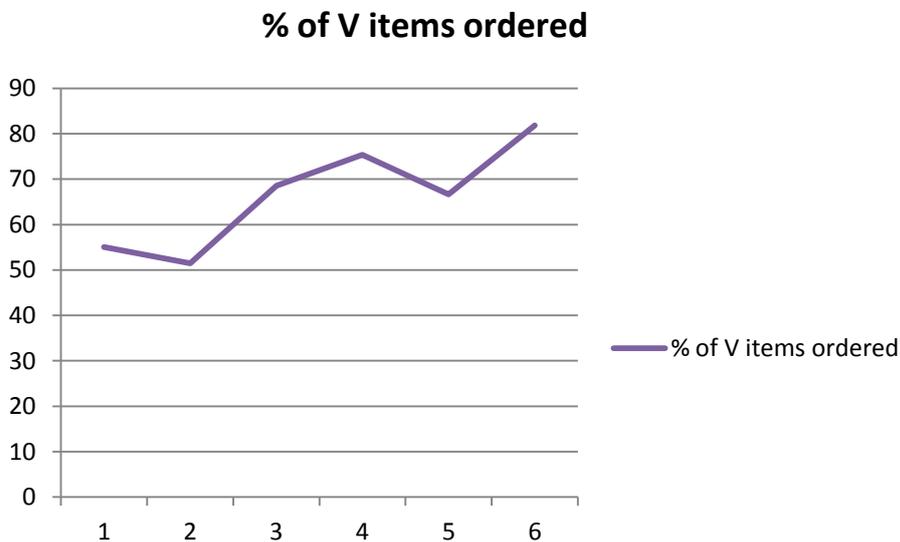
You can track how the health facility’s implementation of the VEN principle in the ordering process has applied to make best use of limited funding. . To do this you have to monitor the composition of each order and measure the percentage of V items in each order according to its value.

% of V items ordered and delivered out of the total order /delivered value

$$= \frac{\text{Total value of V items in the order}}{\text{Total value of order}} \%$$

Cycle	Value of V items	Total order value	% of V items ordered
1	3,800,000	6,900,000	55
2	3,500,000	6,800,000	51
3	4,800,000	7,000,000	69
4	4,900,000	6,500,000	75
5	4,400,000	6,600,000	67
6	4,500,000	5,500,000	82

Figure 17: Percentage of V Items



SAMPLE REPORT

THE DHO: LIRA DISTRICT

DATE: JULY 25TH 2011

Signature: Dr Ndlovu

EMHS VOTE 116 CREDIT LINE PERFORMANCE 2010/2011

The facility budget estimate for the financial year 2010/2011 was UGH 50,000,000. The health facility credit line allocation for the year was UGX 46,000,000, representing a budgetary deficit (financing gap) of 8 %. This deficit is clearly reflected in the stock out of EMHS experienced through the year.

The actual value of EMHS received by the facility was only UGX 40,000,000 which reflected a allocation utilisation of 87%. Based on the facility usage and average monthly consumption data, the budget estimate for 2010/2011 was increased by 11% from financial year 2009/2010

Compared to 2009/2010, where the total patient attendance was 12,000, attendance rose to 15,000 in 2010/2011. The average expenditure on EMHS per patient fell from UGX 3,126 to UGX 2667 despite the slight increase in the credit line allocation and the actual value of supplies received.

The NMS supply /order performance for the period ranged from 74% to 115%, averaging 95%. Our detailed nil line and line adjustment analysis showed that the instances of significantly low performance were the result of high value V items not having been delivered. The cycles with high delivery performance were characterised by the inclusion of greater quantities than had been ordered but also items that were not on order, presenting the risk of expiry.

The pharmacy staff have adopted the vetting principle and prioritised V items, as demonstrated by the percentage of V items ordered increasing from 30% to 73% in the course of the year. The drop in the last cycle was due to the facility having to replenish very low stocks of some E items whose average monthly consumption had increased significantly.

HINTS ON PREPARING AND MONITORING BUDGETS

Much of the material in this module will seem difficult and complicated when you are dealing with a budget for the first time. However, it will be straightforward when you get used to it. Remember:



Work through the examples in the text so that you are completely familiar with how the commitment register and the budget monitoring sheet work.



Get into a routine. Make your orders once every two months and cost them. Deal with delivery notes and invoices as soon as you receive them, making the necessary adjustments in your commitment register. Set aside time at the end of the month for calculating the monthly totals in your commitment register and transferring these to your budget monitoring sheet; and for preparing your financial report.



Keep an up-to-date price list by entering new price information in your stock book whenever you receive a delivery note or invoice.



Keep your paperwork neatly in a safe place.



Make sure all staff involved in managing EMHS at the facility are familiar with how the system operates. Once you are familiar with the materials in the text, take at least one other member of staff through it. Make sure that everyone understands that you will not be able to order EMHS in excess of the money available in your credit line budget.



Discuss problems with the DHO as soon as they arise.

ANNEXES

ANNEX 1: DEFINITION OF TERMS USED IN THIS MODULE

Accountable	Responsible
Allocation	Money designated for a particular purpose
Budget	The amount of money a health facility is expected to be allocated and to spend on specific planned items during a given financial year
Capital expenditure	Expenditure incurred to acquire or upgrade physical assets or non-consumable assets
Commitment	Money which has already been set aside for a particular purpose
Credit line	A virtual financial allocation in a budget calculated as the value of commodities a health facility can order cumulatively in a financial year or in a given delivery cycle
Data	A collection of facts (information) that has been translated into a form that is more convenient to process
Financial year	The period of time for which budgets are allocated and accounts are kept. In Uganda, the financial year runs from 1 st July to 30 th of June.
Nil line	An undelivered item on an order placed for EMHS
Line adjustment	An increase or decrease in the quantity of a line item delivered compared to the original order
Line item	A specific item of expenditure in the budget against which spending is recorded, e.g. vehicle hire, medical supplies and services
Projection	Forecast of what would happen if trends continued
Recurrent expenditure	Expenditure on goods and services that does not result in the acquisition or creation of fixed assets - tends to recur regularly each financial year
Uncommitted balance	The amount of money left in the budget, which has neither been spent nor committed for spending
Quantification	A calculation to determine the quantities of an item required in a given period (e.g.12 months)
Vote	A budgetary allocation of financial resources allocated to a designated institution
Vote function	A set of services or outputs which a spending institution is responsible for delivering, using treasury funds

ANNEX 2: CALCULATING MAXIMUM AND MINIMUM STOCK LEVELS FOR LABORATORY COMMODITIES

Tools Used in Managing Laboratory Commodities

The table below is a list of each type of tool for use in the management of the laboratory commodities, its purpose, and its related activity. Copies of these forms can be found in the Job aids for completing the forms they can also be found in this Manual. The roles and responsibilities of key personnel in the system are highlighted in the job Aids'

Table 11: Tools use in managing Laboratory supplies

Form Name	Purpose	Activity
Stock card	<ul style="list-style-type: none"> ✓ To account for the quantity of laboratory commodities in a storeroom, including transactions such as issuing, receiving, noting losses/adjustments and physical count ✓ Record quantity issued to the bench or used 	<ul style="list-style-type: none"> ✓ Receiving ✓ Issuing ✓ Physical inventory count ✓ Calculating Stock on Hand
Stock book	<ul style="list-style-type: none"> ✓ To keep records of all the consumable items in your store. ✓ It is a summary of stock cards. 	<ul style="list-style-type: none"> ✓ Physical inventory count ✓ Calculating Stock on Hand
Daily Activity Registers/Worksheets	<ul style="list-style-type: none"> ✓ To record and track the number of tests conducted 	<ul style="list-style-type: none"> ✓ Recording Testing Numbers
Laboratory Logistics Monthly Reporting ;Form	<ul style="list-style-type: none"> ✓ To report stock on hand and consumption data ✓ To calculate requisition quantities of each laboratory commodity for the laboratory or facility. 	<ul style="list-style-type: none"> ✓ Calculating requisition quantities. ✓ Reporting logistics data.
Requisition Form	<ul style="list-style-type: none"> ✓ Packing and distributing laboratory commodities ✓ To request laboratory commodities 	<ul style="list-style-type: none"> ✓ Requisitioning /Ordering
Commodity Return Form / Discrepancy	<ul style="list-style-type: none"> ✓ To return laboratory commodities that are damaged, are close to expiry, have expired and been wrongfully issued by the MOH Store 	<ul style="list-style-type: none"> ✓ Returning laboratory commodities

Form Name	Purpose	Activity
Feedback report	✓ Provide feedback to the laboratories and facilities on Laboratory Logistics Monthly Reporting Form	✓ Provide feedback

Feedback Reports

Data reported to the Logistics M&E is aggregated, processed and analyzed to produce feedback reports that are used by program and commodity managers to monitor the performance of the logistics system. These same reports can be used by supervisors to identify problems and take corrective actions.

The Laboratory Inventory Control System

The purpose of an inventory control system is to inform personnel when and how much of a commodity to order and to maintain an appropriate stock level to meet the needs of patients. A well designed and well operated inventory control system helps prevent shortages, oversupply, and expiry of products

In the laboratory commodity logistics system a forced ordering maximum/ minimum inventory control system is used. This means that every health facility that provides laboratory testing services and receives reagents and other laboratory supplies through the national laboratory logistics system is required to report at the end of every two months and will receive order quantities of supplies to bring all stocks back up to the maximum level. To help facilities maintain adequate stocks, the *maximum months of stock* and an *emergency order point* have been established.

The maximum months of stock is the maximum number of months of stock of a product a facility should have in stock at any one time. If a facility has more than the maximum number of months of stock of a product, it is overstocked and risks having stocks expire before they can be used.

The emergency order point is the number of months of stock of a product at which the risk of stocking out is likely, and an emergency order should be placed immediately.

The maximum months of stock and emergency order point for the different levels of the Laboratory Commodity Logistics System are shown in the following table:

- The review period is the time interval at which stock levels are examined and a determination is made whether or not a re-supply decision needs to take place.
- Lead time is referred to as the time interval between when new stock is ordered and when it is received and available for use.
- Buffer Stock is the safety, cushion, or reserve stock kept on hand to protect against stock outs caused by delayed deliveries or unpredictable increase in demand.

The table below details the key parameters of the MOH inventory control system at all levels of the logistics system.

Table 12: Key parameters of the MOH inventory control system

Level	Review Period	Lead time	Buffer Stock	Minimum	Maximum	Emergency Order Point
Long shelf life	6 months	4 months (variable based on type of product)	4 months	4 months	8 months	2 months
Short shelf life						
Facility Testing Sites (Lab Reagents-Long life)	2 months	Approx. 1 month (to be decided)	1 month	2 months	5 months	1 month
Facility Testing Sites (Lab Reagents-Short life)	2 months	1 month	1 month	2 months	3 months	2 weeks
Facility Testing Sites (HIV Test kits)	2 months	2 months	4 months	3 months	6 months	1 month

ANNEX 3: EXERCISES IN COSTING & ORDERING

These exercises take you systematically through all the stages of requirement planning, vetting, costing and committing orders, setting up and updating the commitment register, updating the credit line budget balance using the budget monitoring sheet and annual budgeting. They give you practice in calculating the maximum value to order per cycle, determining the quantity to order, costing a list of requirements, vetting the requirements list and preparing the commitment register for the new financial year.

There are also some questions in the exercise. Write your answers in the space provided (indicated by the sign ) and check them with answers given in annex 4-Answers to excises in costing and ordering

Exercise I: Calculating the maximum value to order for each cycle

1(a). It is the beginning of financial year 2012/2013 (July 1st). *There are no* unutilized balances from the previous financial year carried forward. The NMS has informed you that your credit line budget allocation for the year is: UGX 42,000,000 for HC Ivs and UGX 600,000,000 for general hospitals

(Figures in these examples do not include the cost of ACTs ARVs, TB drugs and contraceptives.)

What are the number of ordering/delivery cycles per year for your health facility

(HC IV)

 (General hospital)

Calculate the allocated average order value for each cycle

(HC IV)

(General hospital)

1(b). You work at an HC IV. The annual credit line budget for your facility was UGX 42,000,000 The value of the order (01/012) you placed with the NMS for the first cycle of deliveries for the financial year was UGX 6,500,000. The final invoice value for the goods delivered against this order was UGX 6,100,000. The last NMS invoice indicates that your running credit line balance is UGX 35,900,000. Calculate the maximum order value for the next delivery cycle.

Hint: How much can you order?



You work in a general hospital. The health facility annual credit line budget for the year is 600,000,000. The value of the order (01/12) you placed with NMS for the first cycle of deliveries for the financial year was UGX 95,000,000. The final invoice value for the goods delivered against this order was UGX 82,000,000. The last NMS invoice indicates that your running credit line balance is UGX 518,000,000. Calculate the maximum order value for the next delivery cycle. Hint: How much can you order?



Exercise 2: Calculating the quantity to order

Quantity to order = Maximum stock level – Stock on hand (hint)

In the “Quantity to be ordered” column, enter the calculated quantity to be ordered for each of the selected items.

Example 4: Calculating quantity to order

Item	Unit	Balance on hand	AMC	Min	Max	Quantity to order
Paracetamol 500 mg	1000	3	3			
Amoxicillin 250 mg	1000	1	4			
Doxycycline 100 mg	1000	1	2			
Cotrimoxazole tabs	1000	2	5			
Artemether/Lumefantrine 20/120, 24 tabs	1 pack	100	300			

Exercise 3: Costing requirements

3 (a). Calculate the total cost of your requirement list by filling in the “total cost” column in Example 6 on the next page.

It is the beginning of the financial year. You have finished preparing the quantities to order and have filled in your requirement list. You now have to cost the requirement before proceeding with the vetting process.

3 (b). Using the price list in Example 4, enter the price of each item in the “unit pack price” column. In actual practice you will use the up-dated prices written in your stock book/cards, the latest NMS invoice or NMS order form.

Calculate the total cost of each item you have ordered and enter this figure in the next column marked “total cost” in Example 6.

Example 5: The Price List

Item	Unit pack	Unit cost	Item	Unit pack	Unit cost
Darrows solution half strength 500ml infusion vial	24	26,200	Amoxicillin 250 mg capsule	1000	28,200
Hydrocortisone injection	50	29,200	Ampicillin/Cloxacillin 250 mg/250 mg capsule	100	5,300
Lidocaine HCL 2% injection	1	900	Cetirizine 10 mg tablet	100	2,350
Mannitol 10% 100ml infusion	1	3,200	Charcoal Activated 250 mg tablet	100	4,000
Penicillin Procaine 3MU + Benzyl 1MU ampoule	10	4,300	Cotrimoxazole syrup 200+40 mg/ 5ml 100ml bottle	1	750
Sodium (Ringers) Lactate comp. Infusion	24	22,500	Cannula I.V with inj port & stopper 20G, 0.9mm	100	32,950
Acetyl Salicylic acid	1000	3,450	Gloves examination Latex , medium non-sterile	50	9,550
Albendazole 400mg tablet	500	30,850	Etonorgestrel contraceptive implant 68mg (IMPLANON) with applicator	1	
Allopurinol 100mg tablets	100	4,500			
Amitriptylline 25 mg tablet	1000	9,250			

Example 6: The Requirements List

Item	VEN	Qty needed	Unit pack	Unit cost	Total cost
Darrows solution half strength 500ml infusion vial	V	2	24		
Hydrocortisone injection	V	4	50		
Lidocaine HCL 2% injection	V	13	1		
Mannitol 10% 100ml infusion	E	3	1		
Penicillin Procaine 3MU + Benzyl 1MU ampoule	V	4	10		
Sodium (Ringers) Lactate comp infusion	E	2	24		
Acetyl Salicylic acid	E	24	1000		
Albendazole 400mg tablet	E	3	500		
Allopurinol 100mg tablets	E	1	100		
Amitriptylline 25 mg tablet	V	4	1000		
Amoxicillin 250 mg capsule	V	10	1000		
Ampicillin/Cloxacillin 250 mg/250 mg capsule	E	5	100		
Cetirizine 10 mg tablet	N	3	100		
Charcoal Activated 250 mg tablet	E	2	100		
Cotrimoxazole syrup 200+40 mg/ 5ml 100ml bottle	E	50	1		
Cannula I.V with inj port & stopper 20G, 0.9mm	V	1	100		
Gloves examination Latex , medium non-sterile	V	1	50		
Etonorgestrel contraceptive implant 68mg (IMPLANON) with applicator	E	15	1		
TOTAL					

Exercise 4: Vetting

Using the total you have calculated in Example 6, vet the costed requirement list using the VEN principle. In this exercise the maximum amount you can order for this cycle (order ceiling) is UGX 580,000.

Exercise 5: Fill in the items and quantities you can order with a maximum budget of UGX 580,000 based on the list of requirements in Example 6.

Example 7: The Vetted Requirements List

Item	VEN	Qty	Unit price	Unit cost	Total cost
TOTAL					

Exercise 6: Setting up a commitment register

It is 5 months into the new financial year and you are required to set up a commitment register for a health centre IV. You have the following information:

- ✓ Health centre name: Mpumude HC IV
- ✓ Budget line: NMS EMHS CRL
- ✓ Vote 116
- ✓ Annual credit line budget allocation UGX 42,000,000

The facility has placed 2 orders since the beginning of the financial year:

- ✓ Order 001/12/13 on 5th July 2012 at a total cost of UGX 6,700,000
- ✓ Order 002/12/13 on 7th September 2012 at a total cost of UGX 7,100,000

The facility has received three deliveries from the NMS in the same period with the following invoice details:

- ✓ Invoice 0062900 amount UGX 1,500,000, delivered on 25th July 2012 (emergency delivery)
- ✓ Invoice 0062814 amount UGX 6,100,000, delivered on 8th August 2012

- ✓ Invoice 0062950 amount UGX 6,800,000, delivered on 20th October 2012

Prepare your commitment register. NB spare copies of the commitment register are included in the manual for you to practise the exercises.

- ✎ Fill in the details at the top: the name of the vote, the vote number and the name of the facility. Fill in the amount you have been allocated and calculate the allocation per cycle.
- ✎ Fill in the annual allocation in the “uncommitted balance” column and in the “balance” column under actual expenditure.
- ✎ Record the value of each order placed with the NMS.
- ✎ Calculate the uncommitted balance after each order and record it in the relevant row.
- ✎ Record the value of each invoice received from the NMS.
- ✎ Calculate and record the actual expenditure and the actual balance.

Example 8: Updating the commitment register and making adjustments

Budget:						Vote no.		Budget allocation: UGX				
Facility name:						Financial Year:		Balance brought forward:				
Facility No:								Total credit line budget;				
								Allocation per cycle:				
Date	Order no.	Supplier	Estimated cost in UGX	Adjustment	Uncommitted balance in UGX	Invoice			Actual expenditure		Adjustments and notes	
						Order no	No.	Date	Actual in UGX	Balance		

Exercise 7: Committing

The head of the HSD has requested you to set up a commitment register for a health centre IV that has already placed 5 orders with the NMS in the present financial year. One order has not been delivered. You have the following information from the facility accounting records:

- ✓ Health centre name: Mpumude HC IV
- ✓ Budget line: NMS EMHS CRL
- ✓ Vote 116
- ✓ Annual credit line budget allocation UGX 42,000,000

The facility has placed 5 orders since the beginning of the financial year:

- ✓ Order 001/12/13 on 5th July 201X at a total cost of UGX 6,800,000
- ✓ Order 002/12/13 on 7th September 201X at a total cost of UGX 7,100,000
- ✓ Order 003/12/13 on 7th November 201X at a total cost of UGX ,6,500,000
- ✓ Order 004/12/13 on 7th January 201X at a total cost of UGX 6,900,000
- ✓ Order 005/12/13 on 7th March 201X at a total cost of UGX 6,600,000

The facility has received four deliveries from the NMS in the same period with the following invoice details:

- ✓ Invoice 0062814 amounting to UGX 6,100,000, delivered on 8th August 201X
- ✓ Invoice 0062915 amounting to UGX 6,900,000, delivered on 20th October 201X
- ✓ Invoice 0062936 amounting to UGX 7,100,000, delivered on 20th December 201X
- ✓ Invoice 0062989 amounting to UGX 6,900,000, delivered on 20th February 201X

Prepare your commitment register: NB spare copies of the commitment register are included in the manual for you to practise the exercises.

- ✎ Fill in the details at the top; the name of the vote, the vote number and name of the facility. Fill in the amount you have been allocated and calculate the allocation per cycle.
- ✎ Fill in the annual allocation in the “uncommitted balance” column and in the “balance” column under actual expenditure.
- ✎ Record the value of each order placed with NMS.
- ✎ Calculate the uncommitted balance after each order and record it in the relevant row.
- ✎ Record the value of each invoice received from the NMS.
- ✎ Calculate and record the actual expenditure and the actual balance.

Exercise 8: Updating the commitment register and making adjustments

This is an exercise in making positive and negative adjustments. Use the information in exercise 7 and fill in the relevant details. Please note that spare copies of the commitment register are also included in the manual for you to practise the exercises.

- ✎ Enter the details of each order and invoice in the relevant column and row using the information from Exercise 7. This time make the relevant adjustments as invoices are received. Record each entry chronologically (enter each order, invoice and adjustment according to the date of occurrence).

Using the information from Exercise 7 make positive (+) and negative (–) adjustments to the uncommitted balance:

- ✎ Deduct the NMS invoice value of goods delivered from the corresponding order value.
- ✎ If the invoice value is less than the order value, you will have a + figure (positive adjustment).
- ✎ If the invoice value is greater than the order value, you will have a – figure (negative adjustment).
- ✎ Enter the figure you have computed in the column labeled “adjustment and reason” (last column of the register) with its sign (positive or negative) in the same row as the corresponding invoice.

In order to update the uncommitted balance follow the steps below:

- ✎ In the “date” column (first column of the register) enter the date of receipt of the invoice corresponding to the adjustment and clearly note it as an adjustment.
- ✎ In the “order number” column enter the order number corresponding to the adjustment for ease of tracking.
- ✎ In the “supplier” column indicate that it is an adjustment to ensure that it is not confused with an order.
- ✎ Enter the adjustment figure in the column labeled “adjustment” with its sign (+/-)

DO WHAT THE SIGN SAYS

- ✎ Depending on the sign of the adjusting figure, add or subtract the figure from the previous uncommitted balance to get the updated uncommitted balance.

RECORD AND MAKE ADJUSTMENTS AS SOON AS THE NMS INVOICE IS RECEIVED AT THE HEALTH FACILITY!

Exercise 9: Updating the budget-monitoring sheet

The health centre/hospital finance and administration department has provided you with the following information.

- Facility name: Mpumude
- HCIV
- Facility code:
- Financial year: 2012/2013
- Budget line EMHS CRL
- Vote 116
- Total credit line allocation: 42,000,000

This is an exercise in updating the budget monitoring sheet. Use the Budget Monitoring sheet in the annex and enter the details in the fields provided.

- ✎ Enter the name of the facility, its code, vote and budget line details.
- ✎ Enter the financial year, allocation for the year, balance brought forward and total credit line budget.
- ✎ Calculate the allocation per cycle.
- ✎ Enter the order/delivery cycle number in the column labeled “cycle”.
- ✎ Calculate and fill in the “allocation” column for the year to date by adding the total allocation from the previous cycles to the allocation for the current cycle. (Hint: Cumulative total)
- ✎ Enter the value of each NMS invoice delivered per cycle in the “actual expenditure” column.
- ✎ Calculate and fill in the “total expenditure to date” column by adding the current invoice value for the cycle to the total value of all invoices supplied prior to that cycle. (Hint: Cumulative total)
- ✎ At the end of each cycle, calculate the uncommitted credit line budget balance by deducting the total expenditure to date from the total annual allocation.

Example 10: Budgeting and procurement planning

Code	Item description	Unit	Step 1		Step 2	Step 3		VEN
			Qty used	No. Of months O/S	Adjusted qty	Unit price	Total price	
	Darrows solution half strength 500ml infusion vial	24	15	2				V
	Hydrocortisone Injection	50	10	-				V
	Lidocaine HCL 2% injection	1	50	1				V
	Mannitol 10% 100ml infusion	1	25	4				E
	Penicillin Procaine 3MU + Benzyl 1MU ampoule	10	100	1				V
	Sodium (Ringers) Lactate comp infusion	24	20	3				E
	Acetyl Salicylic acid	1000	50	-				E
	Albendazole 400mg tablet	500	20	1				E
	Allopurinol 100mg tablets	100	10	4				E
	Amitriptylline 25 mg tablet	1000	10	4				V
	Amoxicillin 250 mg capsule	1000	50	2				V
	Ampicillin/Cloxacillin 250 mg/250 mg capsule	100	20	1				E
	Cetirizine 10 mg tablet	100	100	2				N
						Grand total		

ANNEX 4: ANSWERS TO EXERCISES IN COSTING & ORDERING

Exercise 1

To calculate the total number of ordering/delivery cycles per year, divide the 12 months in a year by the number of months between each NMS delivery cycle.

- ✓ 6 HC IV
- ✓ 6 General Hospitals

To calculate the average order value for each cycle, divide the total annual credit line allocation by the number of delivery cycles.

- ✓ UGX 7,000,000 HC IVs
- ✓ UGX 100,000,000 general hospitals

Exercise 2

To calculate the order value for the subsequent delivery cycle, add the value of the average order per cycle to the cumulative value of under-delivered invoices from previous cycles.

- ✓ UGX 7,900,000 HC IVs
- ✓ UGX 118,000,000 general hospitals

Exercise 3

To determine the quantity to order, compare the balance/stock on hand (SOH), which is written on the stock card or in the stock book, with the maximum stock level of the particular item. If the stock on hand is more than the maximum stock level, then you do not need to order. If SOH is less than the maximum quantity, then you need to order the difference.

Quantity to order = maximum stock level - stock on hand

Item	Unit	Balance on hand	AMC	Min (AMC x 2)	Max (AMC x 5)	Quantity to order (Max - SOH)
Paracetamol 500 mg	1000	3	3	6	15	12
Amoxicillin 250 mg	1000	1	4	8	20	19
Doxycycline 100 mg	1000	1	2	4	10	9
Cotrimoxazole tabs	1000	2	5	10	25	23
Artemether/Lumefantrine 20/120, 24 tabs	1 pack	100	300	600	1,500	1,400

3 (a): Costed requirement list

Item	VEN	Qty needed	Unit pack	Unit cost	Total cost
Darrows solution half strength 500ml infusion vial	V	2	24	26,200	52,400
Hydrocortisone Injection	V	4	50	29,200	116,800
Lidocaine HCL 2% injection	V	13	1	900	11,700
Mannitol 10% 100ml infusion	E	3	1	3,200	9,600
Penicillin Procaine 3MU + Benzyl 1MU ampoule	V	4	10	4,300	17,200
Sodium (Ringers) Lactate comp infusion	E	2	24	22,500	45,000
Acetyl Salicylic acid	E	24	1,000	3,450	82,800
Albendazole 400mg tablet	E	3	500	30,850	92,550
Allopurinol 100mg tablets	E	1	100	4,500	4,500
Amitriptylline 25 mg tablet	V	4	1,000	9,250	37,000
Amoxicillin 250 mg capsule	V	10	1000	28,200	282,000
Ampicillin/Cloxacillin 250 mg/250 mg capsule	E	5	100	5,300	26,500
Cetirizine 10 mg tablet	N	3	100	2,350	7,050
Charcoal Activated 250 mg tablet	E	2	100	4,000	8,000
Cotrimoxazole syrup 200+40 mg/ 5ml 100ml bottle	E	50	1	750	37,500
Cannula I.V with Inj port & stopper 20G, 0.9mm	V	1	100	32,950	32,950
Gloves examination Latex , medium non-sterile	V	1	50	9,550	9,550
Etonorgestrel contraceptive implant 68mg (IMPLANON) with applicator	E	15	1		
TOTAL					873,100

3(b): Vetted requirement list

Item	VEN	Qty	Unit price	Unit cost	Total cost
Darrow solution half strength 500ml infusion vial	V	2	24	26,200	52,400
Hydrocortisone Injection	V	4	50	29,200	116,800
Lidocaine HCL 2% injection	V	13	1	900	11,700
Penicillin procaine 2MU + Benzyl 1MU ampoule	V	4	10	4,300	17,200
Amitriptylline 25mg tablet	V	4	1,000	9,250	37,000
Amoxicillin 250 mg capsule	V	10	1,000	28,200	282,000
Charcoal Activated 250 mg tablet	E	2	100	4,000	8,000
Cannula I.V with Inj port & stopper 20G, 0.9mm	V	1	100	32,950	32,950
Gloves examination Latex, medium non-sterile	V	1	50	9,550	9,550
Etonogestrel contraceptive implant 68mg (IMPLANON) with applicator	E	15	1		
TOTAL					567,600

Exercise 6: Setting up a commitment register

Budget: NMS EMHS CRL	Vote no. 116	Budget allocation: UGX 42,000,000 Brought forward balance: 0 Total credit line budget:
Facility name: MPUMUDE HC IV No: XXX	Financial 2012/2013	Year: Allocation per cycle: UGX 7,000,000

Date	Order no.	Supplier	Estimated cost in UGX	Adjustment	Uncommitted balance in UGX	Invoice			Actual expenditure		Adjustments and notes
						Order No.	No.	Date	Actual In UGX	Balance	
					42,000,000					42,000,000	
05/07/12	001/12/13	NMS	6,700,000		35,300,000		0062900	25/07/12	1,500,000	40,500,000	
07/09/12	002/12/13	NMS	7,100,000		28,200,000		0062814	08/08/12	6,100,000	34,400,000	
							0062950	20/10/12	6,800,000	27,600,000	

Exercise 7: Committing orders

Budget: NMS EMHS Credit Line CRL	Vote no. 116	Budget allocation: UGX 42,000,000 Brought forward balance: 0 Total credit line budget: 42,000,0000
Facility name: MPUMUDE HC IV No: XXX	Financial 2012/2013	Year: Allocation per cycle: UGX 7,000,0000

Date	Order no.	Supplier	Estimated cost in UGX	Adjustment	Uncommitted balance in UGX	Invoice			Actual expenditure		Adjustments and notes
						Order No.	No.	Date	Actual In UGX	Balance	
					42,000,000					42,000,000	
05/07/1X	001/12/13	NMS	6,800,000		35,200,000		0062814	08/08/1X	6,100,000	35,900,000	
07/09/1X	002/12/13	NMS	7,100,000		28,100,000		0062915	20/10/1X	6,900,000	29,000,000	
07/11/1X	003/12/13	NMS	6,500,000		21,600,000		0062936	20/12/1X	7,100,000	21,900,000	
07/01/1X	004/12/13	NMS	6,900,000		14,700,000		0062989	20/02/1X	6,900,000	15,000,000	
07/03/1X	005/12/13	NMS	6,600,000		8,100,000						

Exercise 8: Updating the commitment register and making adjustments

Budget: NMS EMHS CRL						Vote no. 116			Budget allocation: UGX 42,000,000		
Facility name: MPUMUDE HC IV						Financial			Year:		
No: XXX						2012/2013			Allocation per cycle: UGX 7,000,000		
Date	Order no.	Supplier	Estimated cost in UGX	Adjustment	Uncommitted balance in UGX	Invoice			Actual expenditure		Adjustments and notes
						Order No.	No.	Date	Actual In UGX	Balance	
					42,000,000					42,000,000	
05/07/1X	001/12/13	NMS	6,800,000		35,200,000	001/12/13	0062814	08/08/1X	6,100,000	35,900,000	+ 700,000
08.08/1X ADJ	001/12/13	ADJ		+700,000	35,900,000	002/12/13	0062915	20/10/1X	6,900,000	29,000,000	+200,000
07/09/1X	002/12/13	NMS	7,100,000		28,800,000	003/12/13	0062936	20/12/1X	7,100,000	21,900,000	-600,00
20/10/1X	002/12/13	ADJ		+200,000	29,000,000	004/12/13	0062989	20/02/1X	6,900,000	15,000,0001	nil
07/11/1X	003/12/13	NMS	6,500,000		22,500,000						
20/12/1X	003/12/13	ADJ		-600,000	21,900,000						
07/01/1X	004/12/13	NMS	6,900,000		15,000,000						
07/03/1X	005/12/13	NMS	6,600,000		8,400,000						

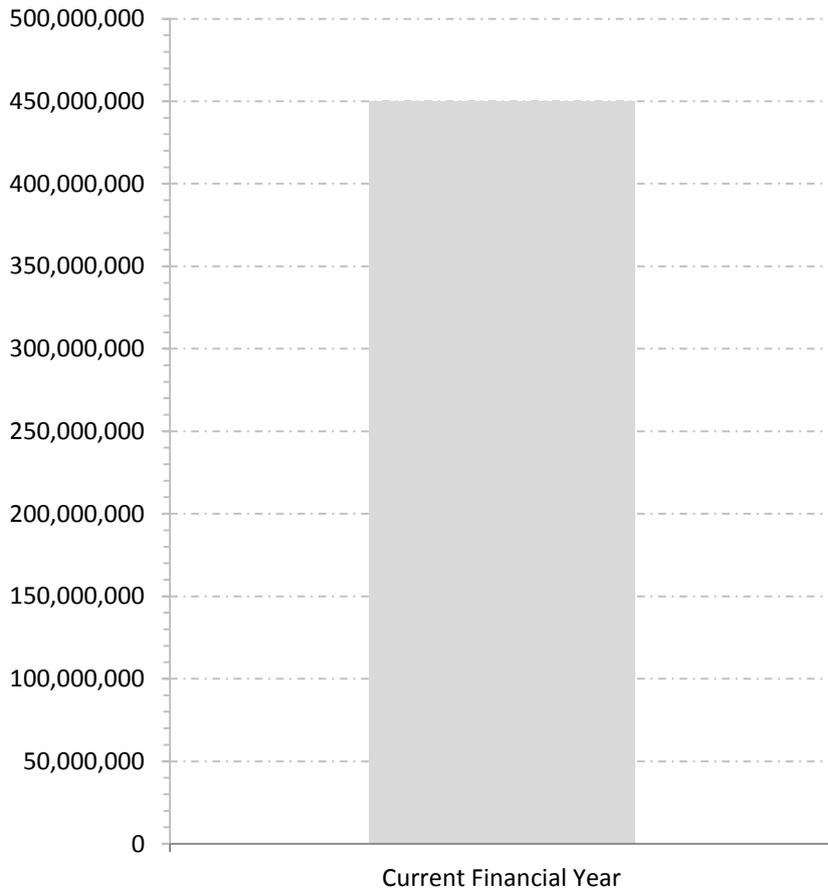
Exercise 9: Updated budget monitoring sheet

Facility name: Mpumude HC IV Facility code: xxx Vote: 116, NMS EMHS CRL			FINANCIAL YEAR: 2012/2013 Budget allocation: UGX 42,000,000 Balance brought forward: UGX 0 Total credit line budget: UGX 42,000,000 Allocation per cycle: UGX 7,000,000			
CYCLE	Allocation to date	Actual expenditure per cycle (a)	Total expenditure to date (b)	Uncommitted balance: (total credit line budget -b)	Unspent allocation from previous cycle	Available allocation for next cycle order
1	7,000,000	6,900,000	6,900,000	35,100,000	100,000	7,100,000
2	14,000,000	7,100,000	14,000,000	28,000,000	0	7,000,000
3	21,000,000	6,100,000	20,100,000	21,900,000	900,000	7,900,000
4	28,000,000	5,400,000	25,500,000	16,500,000	2,500,000	9,500,000
5	35,000,000	6,200,000	31,700,000	10,300,000	3,300,000	10,300,000
6	42,000,000					

Exercise 10: Budgeting and procurement planning

Code	Item description	Unit	Step 1		Step 2	Step 3		
			Qty used	No. Of months O/S	Adjusted qty	Unit price	Total price	VEN
	Darrows solution half strength 500ml infusion vial	24	15	2	18	26,200	471,600	V
	Hydrocortisone Injection	50	10	-	10	29,200	292,000	V
	Lidocaine HCL 2% injection	1	50	1	55	900	49,500	V
	Mannitol 10% 100ml infusion	1	25	4	38	3,200	121,600	E
	Penicillin Procaine 3MU + Benzyl 1MU ampoule	10	100	1	110	4,300	473,000	V
	Sodium (Ringers) Lactate comp infusion	24	20	3	27	22,500	607,500	E
	Acetyl Salicylic acid	1000	50	-	50	3,450	172,500	E
	Albendazole 400mg tablet	500	20	1	22	30,850	678,000	E
	Allopurinol 100mg tablets	100	10	4	15	4,500	67,500	E
	Amitriptylline 25 mg tablet	1000	10	4	15	9,250	138,750	V
	Amoxicillin 250 mg capsule	1000	50	2	60	28,200	1,692,000	V
	Ampicillin/Cloxacillin 250 mg/250 mg capsule	100	20	1	22	5,300	116,600	E
	Cetirizine 10 mg tablet	100	100	2	120	2,350	28,2000	N
						Grand total	5,162,250	

ANNEX 5: BUDGET UTILISATION GRAPH



The budget utilization graph is designed to help you track your allocated budget spent per cycle. Each cycle, shade in the amount of actual expenditure used for EMHS. In the shaded box, write the cycle number. Draw a thick line across the box that signifies the amount your facility has been allocated per year (for example, 41,000,000 UGX total credit line per year). See example below.

SAMPLE

