

RPM Plus Support to Namibia in Strengthening Commodity Management Procedures of Central and Regional Medical Stores and Treatment Health Facilities for HIV-related Pharmaceuticals. Namibia: May 08th – 19th, 2006: Trip Report

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About RPM Plus

The Rational Pharmaceutical Management Plus (RPM Plus) Program, funded by the U.S. Agency for International Development (cooperative agreement HRN-A-00-00-00016-00), works in more than 20 developing countries to provide technical assistance to strengthen drug and health commodity management systems. The program offers technical guidance and assists in strategy development and program implementation both in improving the availability of health commodities—pharmaceuticals, vaccines, supplies, and basic medical equipment—of assured quality for maternal and child health, HIV/AIDS, infectious diseases, and family planning and in promoting the appropriate use of health commodities in the public and private sectors.

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Acronyms

AIDS	Acquired Immune-Deficiency Syndrome
ART	Antiretroviral Therapy
ARV	Antiretroviral
CMS	Central Medical Stores
HIV	Human Immune-Deficiency Virus
IHO	Intermediate Hospital Oshakati
MoHSS	Ministry of Health and Social Services
MRMD	Multi-Regional Medical Depot
MSH	Management Sciences for Health
RMS	Regional Medical Stores
RPM	Rational Pharmaceutical Management Plus
SOP	Standard Operating Procedures
USAID	United States Agency for International Development
WH	Warehouse

Background

Management Sciences for Health (MSH)/Rational Pharmaceutical Management Plus (RPM Plus) Project has received funds under the USG Emergency Plan for AIDS relief through USAID Namibia to provide technical assistance and support to strengthen the pharmaceutical management system of the Ministry of Health and Social Services (MoHSS) of Namibia in support of the scale up and expansion of the HIV/AIDS program. RPM Plus, since 2003, has been undertaking a number of activities and providing technical assistance to the MoHSS in working towards the achievement of this goal.

Key to RPM Plus objectives is the strengthening of commodity management procedures of the Central Medical Stores, Regional Medical Stores and Treatment Health Facilities for HIV-related pharmaceuticals. This is to be accomplished through the review, modification and implementation of improved procedures, systems and infrastructure.

The capacity of the MoHSS Central and Regional Medical Stores (RMS) needs continuous enhancement to ensure that medicines and other commodities required to implement the nationwide HIV/AIDS program are available and accessible in a dependable manner. Rapid expansion of HIV/AIDS services throughout the country continues to create new strains on medical stores and treatment facilities. Modification, upgrade and implementation of new systems and procedures for Inventory Control, Storekeeping and Management Information Systems at Central and Regional Medical Stores and Treatment Health Facilities are imperative. In FY06, ongoing support will be provided for the implementation of the enhancements introduced in previous years to ensure continued strengthening of the pharmaceuticals and commodity management systems of CMS, RMS and treatment facilities for HIV/AIDS-related pharmaceuticals. This will be achieved through continued support to ensure that the newly installed computerized inventory control management systems and new workflow patterns at the Regional Medical Stores and treatment health facilities function as planned.

The 4-Os Regions (North West)

Oshakati Multi-Regional Medical Depot (MRMD) is located in the Oshakati municipality in the Oshana region. Its primary role is to stock and supply pharmaceuticals and related items to hospitals and health facilities¹ in the Ohangwena, Omusati, Oshana and Oshikoto regions. It gets its supplies from the Central Medical Store, Windhoek. Intermediate Hospital Oshakati (IHO), which is an intermediate-referral hospital, is also located in the Oshakati Municipality in the Oshana region. It is a 750 bed capacity hospital with staff and facilities that are more advanced compared to most district hospitals in the neighboring regions. It is a referral hospital for five regions which are: Kunene, Ohangwena, Omusati, Oshana and Oshikoto. Administratively, both the Multi-Regional Medical Depot and the Intermediate Hospital Oshakati report to the Oshana Regional Director. In terms of the budget, the two institutions fall under different regional budget votes.

¹ Health Centers and clinics

MRMD is directly supplying six district hospitals, twelve Health Centres and fifty six clinics in the Oshakati, Okahao, Outapi, Tsandi, Oshikuku and Onandjokwe districts. Of the six hospitals, three conduct the ordering supplies for their satellite health facilities. They are the Engela hospital (14 clinics), Eenhana hospital (6 clinics) and Okongo hospital (2 clinics). Two mission hospitals are currently ordering directly from CMS, however, this is a temporary measure. It is expected that at a later date the hospitals (Onandjokwe & St. Martin Oshikuku) will resume ordering from MRMD. It follows that at any time the MRMD has to keep stock enough to cater for 6 hospitals, 12 Health Centres and 78 clinics. The morbidity patterns in the four regions served by MRMD and IHO share similarities in regards to diseases such as HIV/AIDS, Tuberculosis, Malaria, and Respiratory Tract Infections occupying the upper slots. All hospitals in the MRMD's catchment area are having ART activities going on and some health centres have started with HIV screening and counseling services. Provision of Nevirapine for PMTCT is also planned for health centres conducting ANC services.

Kavongo & Caprivi Regions (North East)

Approximately 30% of supplies are delivered by the Rundu RMS, while the remaining 70% is collected by health facilities. Since the RMS has only one 10 ton truck for distribution and some approach roads leading to health facilities are poor, most drugs are collected from Rundu Regional Medical Store. The RMS uses two delivery routes for distribution. The furthest user unit served by the RMS is located 250 kms from Rundu and the turnaround time for serving this point is one day. Supply cycles have been set for individual facilities. Hospitals are expected to place orders once every three weeks and other facilities such as clinics and health centers are expected to place orders once a week. The Rundu Regional Medical Store is expected to have supplies ready for dispatch within seven days of receiving an order from a user unit. At the time of delivery, the order book and a delivery note are expected to be forwarded with supplies to user units. Hospitals are invoiced once in three months. In the case of the Lutheran Hospital and the two Catholic Hospitals, checks are forwarded to RMS against supplies.

The Rundu Regional Medical Store has only one 10-ton truck for distribution as well as picking up supplies from Windhoek when required. This truck is over 10 years old and is available only about 50% of the time due to down time for maintenance and repair. The Pharmacist in charge indicated that at least one 20-ton truck was urgently required for distribution and another 4x4 pickup truck for distribution and supervisory visits.

Purpose of the Visit:

Oliver Hazemba of MSH/RPM Plus-Zambia, traveled to Namibia to team with Joseph Ngidari of MSH/RPM Plus – Namibia, and Girma Tadesse the Network Administrator CMS, and undertake field visit to support Oshakati Regional Medical Stores (being renamed Multi-Regional Medical Depot) and the Oshakati Intermediate Hospital, from 15th – 19th May 2006. Joseph Ngidari and Girma Tadesse also made a similar visit to Rundu Medical Stores, Rundu Intermediate Hospital and Nankudu District Hospital, from 08th – 12th May 2006.

The two field missions were made in order to strengthen these health institutions' pharmaceutical and commodity management systems and procedures with emphasis on HIV/AIDS-related pharmaceuticals.

Scope of Work:

- Review the Business flow process at the Oshakati and Rundu Regional Medical Stores; post the establishment of the SYSPROTM Inventory Control System.
- Based on the above, develop appropriate recommendations for the development of Standard Operating Procedures (SOPs) for the Regional Medical Stores.
- Review the adequacy and effectiveness of the electronic ordering system initiated at Oshakati and Rundu to place orders with the Central Medical Stores (CMS)
- Assess the feasibility of establishing an electronic ordering system at Oshakati Intermediate Hospital, Rundu Intermediate Hospital and high-volume ART patients Treatment Health facilities.
- Assist the Oshakati and Rundu Medical Stores to commence batch tracking of ARVs and Schedule 7 security medicines
- In and out briefing of USAID (as required)

Activities

Oliver Hazemba, Joseph Ngidari and Girma Tadesse visited the Oshakati MRMD and Oshakati Intermediate Hospital on May 15, 2006. Follow up visits and discussions were held on May 16-19, 2006 at both facilities. Joseph Ngidari and Girma Tadesse visited Rundu RMS, Rundu Intermediate Hospital and Nankudu District Hospital during the week of May 08th-12th, 2006.



Picture 1: Msafiri Kweba: Chief Pharmacist

The team had general discussions on the operations of Oshakati MRMD with Mr. Msafiri Kweba, Chief Pharmacist, and at the Oshakati Intermediate Hospitals with Ms. Rauna Shitaleni, Pharmacist in Charge. This acted as a preamble for systems analysis for automating pharmacy and stores processes.

a) Review the Business flow process at the Oshakati and Rundu Regional Medical Stores; post the establishment of the SYSPROTM Inventory Control System.

The management and staff at the Depot acknowledged the extensive operational improvements since the implementation, installation and training of SYSPRO inventory control system at the two regional medical stores. SYSPRO system has greatly simplified inventory management and control of medicines and non-pharmaceuticals. However, monitoring and provision of technical support on proposed procedures and activities to ensure improved performance on best practices, is still needed. On receipt, goods records are entered into SYSPRO system using an invoice document. SYSPRO at the medical stores is also used for supply management to produce picking lists and shipping of stocks. However, the tool is still being supported by manual stock management system. Stock control cards are being used to record movement of stocks in the warehouses; however, these should be phased out and replaced with live SYSPRO data. In addition, snapshot observations noticed significant operational oversights and gaps that need to be bridged.

i. Receiving:

The receiving of supplies takes place at the receiving bay where the trucks pack. Delivering truck drivers, the police and work-hand men and women were found off loading the goods. Drivers are not allowed to engage in offloading operations. In Oshakati, no technical staff was there at all times to supervise the off loading of the stocks from the CMS truck. After offloading, hand-men transferred stocks directly to the warehouses and the isles. While in Rundu, stock spent 3-5 days at the receiving bay for commodity and documentary checks before eventually being moved to respective warehouses.

In Oshakati, the warehouse staff were then observed going through the invoices and accepting receipt of the goods. Neither the CMS driver nor senior technical staffs were requested to verify the receipts. However, the receipt of ARVs, Schedule 7 and Security supplies were checked in collaboration with the CMS driver using an invoice and ARV delivery slip records

The documents received to support the delivery include: 1) dispatch book showing the number of boxes delivered which the receiving clerk uses to acknowledge receipt, 2) delivery note, 3) ARV delivery picking list, and 4) Invoice:

Transfer of goods: Oshakati Regional Medical Stores received items were not stored at the receiving bay but transferred directly to the respective warehouses and the isles. Warehouse staff checked the items in their warehouses and in the isles before transferring the goods into the respective warehouses. Although this was justifiable by lack of receiving bay space, double handling and human resources issues, this is obviously not the best practice of warehousing management. Goods received must always be at receiving and quarantine bays for all primary and secondary checks and authentication before being put away.



Picture 2: Work-hand transferring stock

ii. Warehousing

Environmental issues:

The RMS FLOORS: The Oshakati and Rundu Medical Stores warehouse floors are in a very bad state requiring urgent attention. The concrete surface is wearing out producing fine dust powder that could be harmful to the medicines, staff and IT equipment. This is further aggravated by the heavy handling equipment. Anecdotal information points to ill health of some staff in the RMS, who are thinking that tuberculosis, could be contracted through the dusty floors of the RMS. To control the situation, the staff sprinkle water to dampen the surface once in a week or when necessary. The dust is not swept out at all. While this may be a desirable temporal initiative, it could increase humidity which is not suitable for storage of pharmaceutical products during hot sunny days. Standard storage guidelines state that, “store in a cool dry place”. MoHSS is aware of the problem and is said to be making plans to resolve it. The stores floors are not at all suitable for storage of medicines and work environment for the workers. Steps should be taken to repair

the flow with immediate effect. In the meantime, alternative measures should be developed to clean the floors and reduce dust, for example, using industrial polishing equipment to coat the floor or painting the floors could serve as an interim measure, and perhaps suspend use of heavy equipment, i.e. forklifts, etc.

Temperature Control: All pharmaceuticals warehouses at the medical stores have adequate air-conditioners to control the temperature. Built in thermometers have been installed to monitor the temperature. However, no temperature charts were found as a record on the performance of the conditioners in the warehouses and the cold room. Management indicated that built in automated systems have been installed to provide retrospective data on the performance of the refrigerators. Notwithstanding, temperature issues and control for non-pharmaceuticals storage spaces is not adequate. The stocks were found well protected from sunlight and water as there was no direct sunlight ray and water observed to reach the stocks.

Pets and pests: Pets and pests control could be improved. Birds were observed flying in and out of the warehouse.

Inventory management:

Stock control cards were found to be filled appropriately in Rundu. In Oshakati, incompletely filled and documented stock cards observations were noted by the team, which confirmed earlier observations of the Office of the Auditor General report of 2005. Warehouse staff monitors the movement of stocks in their respective assigned warehouses. Management monitors the consistence in manual records and comparison findings with the automated SYSPRO records. Each warehouse staff is responsible for the stocks, picking, storage, assembly and dispatch in the warehouse they have been assigned to.



Figure 1: Flow of Goods at Oshakati Multi-Regional Medical Depot

iii. Ordering from health institutions:

On reception of an order, the records clerk records the order in a register and issues a proof of issue note to which an original order is attached. At this stage, the warehouse pharmacist reviews the orders for appropriateness (NB: not all orders are reviewed by the pharmacist/pharmacist's assistant, primarily due to the volume of orders vis-à-vis the number of pharmacists/PAs).

Documents are sent to the data typist who enters the information into SYSPRO™ to produce picking slips. Warehouse clerks/PAs in charge of specific warehouses collect the picking slips from the record clerk and take them for filling of the orders. On completion, a copy of the completed picking slip is sent back to the record clerk for record keeping.

The warehouse clerks pick the goods, pack, assemble and transfer the stock to the dispatch bay pending delivery. However, ARVs, Narcotic medicines (schedule 7) and security items remain kept in the respective warehouses until on the actual day of delivery. Additionally, guidance is required in the picking of items in the warehouses, assembly and dispatch as standard operating procedures for the staff.

Oshakati and Rundu have no dedicated personnel for assembly and dispatch. Warehouse staff are responsible for transfer of orders to the dispatch bay and loading into the delivery van or truck of clients.

iv. Dispatch:

On a typical day for Oshakati clients' delivery, the pharmacist informs the drivers to prepare for delivery according to the delivery schedule. The drivers take their vehicles to the dispatch bay where the warehouse clerks load the ordered consignments. Police staff stationed at the depot provide support to count and ensure that only consigned boxes are loaded onto the truck.

Rundu has no dedicated vehicle for delivery of medicines to her environs. This is a logistical concern which has been raised in several forums and is hampering efficient and effective distribution services to the population of these regions. Particular attention is required to be placed at the dispatch bay to take responsibility of packing, dispatch and delivery (shipping) of items to the sites.

v. Expired Items:

Discussions were held on disposal policy of expired items at Oshakati MRMD. There seems to be no strict compliance to the ministry's policy on disposal of expired, obsolete medicines and supplies. Once the items expire, the warehouse clerk transfers the batch to WH 6 for expired items. The items remain in the store until after the annual stock taking. Expired items are transported to the rubbish dump where they are burnt with the assistance of the police. In the mean time, the items do not get deleted from inventory control in SYSPRO™.

Rundu Medical Stores is following the National Guidelines on the Disposal of Expired Medicines as outlined in Circular No. 17 of 1997 from the Office of the Permanent Secretary.

When items (Schedule 0-4) expire in any warehouse, the clerk in charge draws up the list of all such items and the list is then handed over to the Pharmacist in charge. The items are then removed from the inventory control in SYSPRO by the Pharmacist in charge. The list is then handed back to the Warehouse Clerk who then removes the items from the shelves and transfers them to the Expired Stock warehouse. Schedule 5-7 medicines, once they have been deducted from inventory, are removed from the shelves but stored within the scheduled medicines warehouse until they are inspected by the Medicines Control Officer and then disposed off by incineration or other means in his presence.

The Schedule 0-4 medicines in the expired stock warehouse are disposed of under the supervision of the Pharmacist. There have, however, been a lot of delays in disposing of the items because the Rundu Hospital Incinerator which is used to incinerate the items has frequent breakdowns. The incinerator is very old and its performance is compromised.

Rundu is however currently not happy with the mode of removal of stock from inventory. Even though there is inventory record for expired stock is in SYSPRO, the system is unable to determine the Ledger code for the receiving warehouse because the G/L Interface Record is not on file. It has therefore been impossible to do a Stock transfer from the active warehouses to the expired stock warehouse. Instead Stock adjustment is done to remove expired stock from inventory. It is hoped that the System administrator, Girma, will be able to sort out this problem as soon as possible

b) Review the adequacy and effectiveness of the electronic ordering system initiated at Oshakati and Rundu to place orders with the Central Medical Stores (CMS)

RMSs send their orders to CMS either by fax by courier. The process was found to be time consuming and may need strategic review on ordering process modification countrywide which will require new resources.

sent by email to CMS, who confirmed receipt. [Exhibit A]

Girma taught the responsible pharmacists in the two stores how to convert an order developed in SYSPRO™ into an electronic format that can be e-mailed to CMS and uploaded into CMS's SYSPRO™ without the need for computer re-entry.



Picture 3: Network Administrator Girma Tadesse and Pharmacist Farida Goronga of Oshakati RMS.

Within minutes of sending the file, the Distribution Pharmacist at CMS acknowledged receipt of the order. Girma retrieved the order at CMS on his return and processed it through the system without one having to re-enter the order data. Thus Rundu RMS and Oshakati MRMD can now use an electronic ordering system from CMS. The email connectivity of the two stores has to be operational and reliable for continuity.

c) Develop appropriate recommendations for the development of Standard Operating Procedures (SOPs) for the Regional Medical Stores.

From observations made in a), it is urgently recommended that SOPs should be developed for all the stages in warehousing management. Management recognizes the need of the SOPs. First attempt to introduce SOPs for Oshakati was made in 1998 which were partially operationalized at the time. There are no records for any SOPs having been developed or attempted at the Rundu Regional Medical Stores. Oshakati revisited the strategy in 2004 which is reported in the Oshana Pharmaceutical Services Annual Report 2005-2006 and the Oshana Pharmaceutical Services Plan for Operations for 2006-2007.

The 1998 draft SOPs should be urgently reviewed and updated to the modernized Oshakati MRMD operations at all stages including receiving, inventory control, stores management, house keeping, assembly, dispatch and delivery. The potential for losses at the receiving bay are enormous and management should quickly assign a person to receive, check and inspect all goods received at the depot. This is of course is very much linked to the availability of qualified staff, and also, needs to consider the logistics at the receiving bay in view of space constraints. The officer should be responsible to advise what, when and which of each of the consignment is to be received or rejected into the depot and to be transferred to the appropriate warehouses.

There are important reasons and factors why operational procedures are needed and be implemented with urgency. SOPs are required in the warehouse to control environmental factors and operations activities. SOPs are required for good house-keeping and maintenance of the warehouse. SOPs are needed for inventory control management using SYSPRO inventory system as well as for the manual tools and materials, i.e. for instance, completing of stock control cards, picking slips, etc. SOPs would be required to take corrective measures of the discrepancies, e.g. as reported by the Office of the Auditor General of 2005; the report findings cite incomplete stock control cards, consistence and untimely issue delivery invoices and supportive supervision.

Security

Gaps in total security of the warehouse were also cited as weaknesses that needed to be addressed. SOPs could help to guide staff on how to carry out their routine activities in a verifiable manner. SOPs should also include management of items in danger of expiry and disposal of obsolete and expired items. The security status of medical stores is documented².

² Ngidari, Joseph. *Strengthening Security Systems at the Central and Regional Medical Stores of the Ministry of Health and Social Services, Republic of Namibia*. July 2005. Submitted to the Namibia Ministry of Health and Social Services and the U.S. Agency for International Development by the Rational Pharmaceutical Management Plus Program. Arlington, VA: Management Sciences for Health.

Human Resources

However, such SOPs need to take cognizant of the human resources current and prevailing challenges at the two stores. Annex 1 shows a list of staff establishment and position filled at the medical stores. Most positions are either vacant or the available staff are technically challenged. It is very clear that the two regional medical stores are critically understaffed both in numbers, staff competence and motivation. Management should quickly look into human resources issues with urgency. However, management at the store should learn to do with whatever is available at the time and use the existing staff to its best. Any development of such SOPs should be based within the existing constraints and burdens of the store. The initial draft SOPs should be developed on the site with the contribution of the staff involved, the ministry and development partners. Auxiliary services key to the smooth operations ought to be taken into consideration when staffing, i.e. transportation, finance, pharmaceutical budgets and links to regional activities, invoicing, administration, etcetera.

d) Assist the Oshakati and Rundu Medical Stores to commence batch tracking of ARVs and Schedule 7 security medicines

The team assisted both the Rundu and Oshakati Regional Medical Stores pharmacists in charge of the ARVs warehouses to collect batch specific information on ARVs and Schedule 7 pharmaceuticals in stock. An expeditious stock count process was conducted and information collected on names, lot/batch numbers and expiry dates of the inventory. Girma trained the two pharmacists on how to enter data in the SYSPRO inventory system to facilitate batch tracking and traceability. The pharmacists then successfully carried out the exercise and the team can confidently conclude that the Rundu and Oshakati RMSs can successfully track ARVs and Schedule 7 medicines on SYSPRO as issued to treatment health facilities. (Exhibit B). With appropriate staffing levels, this practice is desirable for other “sensitive” medicines such as antibiotics, TB, Malaria, etc.

e) Assess the feasibility of establishing an electronic ordering system at Intermediate Hospital Oshakati, Intermediate Hospital Rundu and high-volume ART patients Treatment Health facilities

A discussion was held on the general operations of the pharmacy departments in the hospitals visited on the provision of pharmaceutical services, particularly on ordering, stores management, and dispensing services. The pharmacist-in-charge cited a number of activities that the department carries out. The department narrated weakness and areas of support the pharmacy department requires from MSH/RPM Plus technical assistance. The department provides both in-patient and out-patient services for adults and pediatrics. ART is provided as a specialist service.

Keeping a stable inventory, avoiding expiry of medicines, quantification and placing of orders in a timely manner remains a great challenge for the institutions, especially Intermediate Hospital Oshakati. Typically, it takes at least a full 8-hour day, to assess and calculate the hospital's requirement, quantify and place an order for the institution. Perusing through every single stock card, determining the quantity to order, and with no established min/max stock figures, proves a nightmare in managing the pharmacy and the store. Hence, the pharmacist-in-charge's earnest request for technical support to automate inventory management of supplies. Various RPM Plus and previous auditors' reports³ have shown excess levels of efforts on the part of pharmacy staff ability to conduct supply chain and inventory control processes and strongly recommended automation. Communication between CMS and health facilities was cited as not being encouraged to the desired level, i.e. knowledge of stock on hand at CMS before orders placement hence reducing number of interim/intermittent orders.

Certainly, the aforementioned electronic ordering of supplies would greatly reduce the cumbersome process of rewriting the requirement manually and sending these to CMS where the entry process will not be repetitive, clearly removing another task of authenticating deliveries. Costly incidences were reported where errors in entry of items and figures were made resulting into over and/or under ordering in the past, leading to excesses and expiry of items, pilferages, breakages, shrinkages, untraceable stock movements, etc, as a result of such mistakes.

On further discussions with the hospitals and regional directorate, there was a need to determine where the electronic order would be prepared at the regional level before transmission to CMS. Three Alternative solutions were proposed:

- 1) Oshakati and Rundu Hospitals, (and probably all hospitals and regions) prepare electronic orders and send the orders to Rundu and Oshakati RMSs. Oshakati and Rundu RMS would then take ownership of the order, key into SYSPRO and fill the pipeline. The RMS will then incorporate such orders into its routine ordering system. However direct delivery will be made to the hospital(s) from CMS. The constraint identified here was an additional data entry clerical staff stationed to the respective RMS to handle/receive all treatment health facilities ordering through the RMS. [Exhibit C]. In this perspective, there will be consideration of the issue of entering receipts goods/data into SYSPROTM, and correlation of receipts with orders/invoices from CMS.
- 2) The SYSPROTM Inventory Control System and the servers at the two RMSs have capacity to handle high volume treatment health facilities within their regions. It was established from Impact Africa in RSA that it is possible to create up to a maximum 25 companies free-of-charge within the current annual licenses provisions. These hospitals could thence be created as separate companies within SYSPRO systems in respective RMSs. Desktop screens can then be installed at the site pharmacy/stores from where pharmacists will directly enter their order and electronically relay same to CMS. The RMSs will manage and monitor these extra companies created in their serves for the hospitals as they refill routine pipelines.

³ Aboagye-Nyame, Francis. Akhlaghi, Laila. Dias, Vimal. 2004. *Assessment of the Public Sector Pharmaceutical Supply System of Namibia, November 2003*. Submitted to the U.S. Agency for International Development by the Rational Pharmaceutical Management Plus Program. Arlington, VA: Management Sciences for Health.

3) The third option is to capacitate the health treatment facilities pharmacies/stores with a convertible file formats onto SYSPRO, on which hospital staff key in their respective orders at site and relay these directly to CMS, by-passing the local RMSs for routine refills.

The team preferred the first approach as it reduces pressure from the hospitals' pharmacy and delegates bulk ordering responsibilities to the regional medical stores that have more logistics resources and capacity. Options 2 and 3 are potentially big projects needing a comprehensive approach. The regional stores could additionally be capacitated and mandated for the bulk ordering administration activity only, without necessarily interfering with the current modus operandi status quo. The strategy would provide a shorter lead time, less inventories and allow more time to the hospital pharmacy staff to concentrate on immediate patient care activities. The option also reduces pressure on the regional medical storage space through source direct delivery to the sites. The later two options may require more resources, i.e. in time to implement and increased supervision.

High volume health institutions within the environs of Rundu are Rundu Intermediate, Nankudu District Hospital, Andara Hospital, Nyangana Hospital and Katima Mulilo Hospital. Rundu RMS and Rundu State Hospital compare very closely in their annual pharmaceutical budgets. [Exhibit D]. Oshakati environs include Oshakati Intermediate, Onadjokwe, Oshikuku, Opuwo. CMS would also handle other high burdened institutions within its environs.

Other Activities

The team paid courteous calls on the Regional Directors for the two regions where the two regional medical stores are located, namely Dr. N.T. Hamata - Oshana Region and Ms. Elizabeth Muremi - Kavango Region, whose regions host the Oshakati and Rundu RMSs respectively. The team briefed these two executives on the purpose of the mission, scope of work and explained the objectives of the trip and what was achieved as of that time. These Directors supported the team's interventions supporting the CMS, Rundu RMS and Oshakati MRMD. Dr. Hamata specifically appealed to the team to ensure a sustainability and exit plan to the support the interventions rendered by RPM Plus.

The team also visited the ART clinics within the Rundu and Oshakati Intermediate Hospitals and had discussions with the pharmacy staff on ART pharmaceutical services and the functionality of the ARV dispensing tool. Girma cleaned up the tool and provided advice to staff on the use of the tool, particularly on tracing defaulting patients. The ART clinics personnel were encouraged to share information from the tool with other members of the health care team, particularly on ARVs periodic stock status, ARV drug combination, patient scale up, demographic figures and other information that may enhance provision and service level of ART at the hospitals.

Oshakati Intermediate Hospital

Oshakati Intermediate Hospital with about 750 bed capacity and receiving around 5-600 patients per day, hadeight (8) pharmacists in place at the time of the field visit from sources, 1-GRN, 1-

MSH sponsored, 1-CDC sponsored and 5-Cuban Volunteers. 4 pharmacists' assistants are also stationed in Oshakati. The ART clinic has a pharmacist and one pharmacist's assistant at all the time. The staff more often gets overwhelmed with work and has to seek assistance from colleagues from other hospital departments. The Oshakati Intermediate pharmacy is divided into outpatient, inpatient and repacking areas and also manages the stores. Other support staff and work hands number 13, making a total workforce for the pharmacy at 25.

MSH/RPM Plus has planned this year (COP06) to strengthen and improve the workflow processes of the pharmacy and stores of the hospital. This will include systems options analysis for automating the pharmacy and stores processes of Oshakati Intermediate Hospital. Following gaps were identified by the pharmacist-in-charge during the field visit requiring interventions;

- 1 extra pharmacist to handle drug information line, prescribers and nurses, and also update doctors and other health professionals on the latest developments.
- 2 computers. This has to be taken into consult during systems options analysis.
- Labour saving equipments at the stores to supplement human resources constraints
- Filling in of empty/senior posts taking lengthy due to ministerial processes
- Pre-packing machines (2 will be adequate and should be of simple technology)
- Labeling software and translatable into vernacular local dialects
- Automate the manual store
- Improve air conditioning facilities within the storage arrears
- Other gaps which may be identified during the systems options analysis

Constraints

Any system is as good as the personnel operating that system. Both RMS do not have enough skilled support staff (pharmacists' assistants, clerks, work hands) for the operations, and the few staff in place is not adequately trained to handle all aspects of warehouse management. This may lead to underutilization for the new systems being introduced and stumble sustainability. This is further compounded by low morale among some staff due to RMSs poor floors and hazardous dust.

Collaborators and Partners

- | | |
|--------------------------|---|
| 1. Dr. Naftal T. HAMATA | Regional Director – Oshana Region |
| 2. Ms. Elizabeth MUREMI | Regional Director – Kavango Region |
| 3. Mr. Msafiri F. KWEBA | Chief Pharmacist–Pharmaceutical Services, Oshana Region |
| 4. Ms. Mary M. KATONGO | Pharmacist (in-charge) – Rundu |
| 5. Ms. Farida H. GORONGA | Pharmacist; Oshakati RMS |
| 6. Ms. Rauna SHITALENI | Pharmacist; Oshakati Intermediate Hospital |
| 7. Mr. Greatjoy MAZUBUKO | ART Clinic Pharmacist; Oshakati Intermediate |
| 8. Ms. Patricia KOMU | Pharmacist; Rundu Intermediate Hospital |

Next Steps

Immediate Follow Up Activities

RPM Plus support

- Monitor the consistence and continuity in the utilization of the SYSPRO electronic ordering systems with CMS
- Monitor and support to the implementation of batch tracking of other vital medicines in addition to ARVs and other commodities
- Develop SOPs to support and guide the business operations of the Oshakati MRMD and Rundu RMS, with the support of MSH/RPM Plus.
- Review the possibility of providing automated the inventory control management system at Oshakati Intermediate Hospital.
- Support the Oshakati Intermediate Hospital to use electronic ordering system either to Oshakati MRMD or directly to CMS, including other treatment health facilities, as determined by patients load, CMS issues volume, or other agreed criteria.
- Support the hospitals to analyze the ARV dispensing tool information and share the information with the healthcare team members at the hospital and HQs
- Removal of Expired stock from the warehouse for expired stock in SYSPRO. Rundu RMS reported that the System is unable to determine the Ledger code for the receiving warehouse because the G/L Interface Record is not on file. It has therefore been impossible to do a Stock transfer from the active warehouses to the expired stock warehouse. Instead Stock adjustment is done to remove expired stock from inventory.

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MOHSW support

- Assist to renovate the warehouse floors
- Recruit and retain staff to effectively manage the two regional warehouses

References:

1. Office of the Auditor-General (2005) Inspection Audit in Oshana Region
2. Pharmaceutical Services Plan of operations for 2005-2006
3. Oshakati MS Store Annual report 2005-2006
4. SOPs –Management guidelines for Oshakati Medical Stores

Annex 1

List of Staff & MoHSS Posts establishment at the Regional Medical Stores

Oshakati RMS

1. Chief Pharmacist: Msafiri F. Kweba
2. Principal Pharmacist: [vacant]
3. Senior Pharmacist: [vacant]
4. Pharmacist: Farida H. Goronga
5. Senior Pharmacist's Assistant: [vacant]
6. Pharmacist's Assistant: Monica Shaalukeni [staff member borrowed from Oshakati health centre's establishment]
7. Staff additional to establishment : Kasian Shikongo
8. Chief Clerk: [vacant]
9. Clerks (2): Joseph Ashipala; Severus N. Kantewa
10. Record Clerk (2): Roswita S. Shilunga; Augustinus P. Amutenya
11. Data Typist: Maija S.N. Shingenge
12. Health Assistant (2): Oscar Shilongo; Anna Daniel Iithete
13. Senior Workhand (2): Simon Gabriel; Kaulikufwa Auala
14. Work hands (6): Isaak Nicodemus; Fillemon Hamulondo; Frans Negumbo; Taimi Shaanika; Festus Auala; Paulus Hamutenya
15. Drivers (3): Edward Nghihupula; Faustus Nangombe; [vacant].

Rundu RMS

1. Pharmacist-in-Charge: Mary Katongo (Donor employed)
2. Chief Pharmacist (vacant)
3. Principal Pharmacist (vacant)
4. Senior Pharmacist (vacant)
5. Pharmacist Assistant [1]: Mechtilde Kawana
6. Warehouse Clerks [2]: Loius Jermanus and Ezra Muronga
7. Health Assistant [1]: Laaimo Muhako
8. Data Typist [1]: Christine Neves
9. Record Clerk [1]: Meritha Kankono
10. Workhands [3]: Asser Muruti, Ben Hausiku and Elina Ndulo
11. Driver [1]: Alloys Haikera

Exhibits

Exhibit A – Electronic order format from RMSs to CMS

Exhibit B – Pickling slip of ARVs showing batch/lot numbers and expiry dates

Exhibit C – Purchase order for Treatment Health Facilities as handled by the respective RMS

Exhibit D – Annual Budgets plans for Rundu State Hospital and Rundu Regional Medical Stores