

EEMSF-OCBA Operations Manual (May 2011) – Operational Toolbox – Hand over and end of mission report (template)

For more information about how to use the “Hand over and EoM report” template, please consult the OCBA operations manual:	Module VII. Project Management, Chapter 4. Project follow-up, reporting and evaluation, section 4.2 Project report.
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Mission: South Sudan (Malakal)

Mission starting date: 25st March 2022

Location (Capital / Project): Project

Post: Project pharmacy manager

End of Mission date: 18th October 2022

1. Introduction:

The aim of this document is to give an overview of the pharmacy in the Malakal project, describe the functioning and the management of Central Pharmacy and all the end-user units within the project in order to ensure the continuity of the activities as well as sharing the actual challenges and the activities already planned for the coming months.

2. Context:

The Malakal Project is offering Secondary Health Care services in 2 facilities: PoC Hospital (Mike Hotel – MH) and Malakal Town Hospital (Mike Charly – MC) and offers a decentralized care service in 11 sites through DMC – Outreach.

The base and the office is based in the Town. It is possible to go to MH every day through regular movements at the following times: 7:20/12:00/14:00. The last movement to return from MH to Town is at 17:00. It is also possible to request movements at specific times if necessary, it is important to request at least 30 minutes in advance

Mike Hotel (PoC Hospital):

- Emergency Room: MSF is only taking care of the yellow and red cases. All the green cases are supposed to be sent to IOM or IMC clinics who are offering OPD services. The reality is that this OPD services are not offered 24/7 so many patients are coming after 5pm and during the night to be consulted, triage criteria is being reinforced. For the surgical cases, they are referred to IMC hospital.
- IPD Adult ward (20 beds) + 1 isolation area for TB patients (10 beds).
- IPD Neonatology (10 beds): IMC is running a Maternity, and part of the patients in our ward are referred from there
- Mental Health (OPD): psychiatric consultation - Monday, Wednesday and Friday and counselling and psychoeducation activities.
- HIV/TB/HepB/Leprosy/Kala-Azar (KA) (OPD): consultation - Tuesday and Thursday as well as IPD, for complicated cases that need hospitalization.

- SGVB and SAC:. In MSF we offer the medical and psychological support to all the survivors and we provide ToP to those asking for it. The circuit has been improved during last months.
- Laboratory: basic laboratory available, rapid tests and basic microscopy, and blood transfusion. If other tests needed the samples are sent to MC Laboratory.
- Pharmacy: only drugs stock (DORA, DINJ, DEXT, DEXO, DINF and NFOS) to ensure the preparation of Unidose and the Daily check of the medication cupboards, emergency boxes, controlled drugs and cold chain.
- The pharmacy is open from Monday to Friday, between 08:00 and 17:00, on Saturdays the pharmacist opens the pharmacy between 08:00 and 14:00 for emergencies, but this is your personal choice. When the change of the central pharmacy to the town, I advise you to discuss with the PMR, NAM and MAM the possibility of changing the opening hours between MH and MC, with MH open on Saturdays and MC being covered by the pharma manager.

Mike Charlie (Malakal Town Hospital):

- Emergency Room: same criteria as in PoC , only yellow and red cases. All the green cases must be referred to MTH (Malakal teaching Hospital (MoH)). They are supported by IMC and they have adult ward and maternity. Some adult patients refuse to go to MTH so they can be referred to the Adult ward in PoC.
- IPD Paediatric ward (24 beds): All pathologies treated. Patients from the PoC are referred here.
- IPD Neonatology ward (4 beds)
- ITFC (4 beds): The capacity of the ward can be extended and often we have more than 4 patients. Referrals from PoC are regularly done as well.
- Mental Health (OPD): psychiatric consultation, Tuesday and Thursday, counselling, psychoeducation and pshycostimulation for IPD patients.
- HIV/TB/HepB/Leprosy/Kala-Azar (KA) (OPD): consultation, Monday, Wednesday and Friday, as well as IPD for complicated paediatric cases that need hospitalization.
- SGVB and SAC: same service offered as in PoC.
- Laboratory: well-equipped laboratory: rapid testing, microscopy, blood transfusion, GenXpert (HIV, TB, Covid19, Hep C), Sysmex, biochemistry. Apart from the samples coming from Town Hospital, samples from PoC Hospital, Ulang Project and OldFangak Project (OCP) are analysed.
- Pharmacy: only drugs stock (DORA, DINJ, DEXT, DEXO, DINF and NFOS) to ensure the preparation of Unidose and the Daily check of the medication cupboards, emergency boxes, controlled drugs and cold chain. The pharmacy is open from Monday to Saturday, between 08:00 and 17:00. The pharmacist keeps a copy of the pharmacy key with him to attend to any emergency in MC.

Apart from the 2 Hospitals we are doing DMC-Outreach activities and health promotion activities in both hospitals and in the community.

3. General Objectives

The main objective for the pharmacy manager is to manage the stock of the central pharmacy assuring availability of supplies at end user level. It is very important as well to focus on the development of the national staff under your supervision and assuring that a high level of quality in pharmacy management is maintained.

My main points of focus apart from the routine pharmacy activities included:

- Ensures the proper functioning and organization of the project central pharmacy and other peripheral units, according to MSF protocols and procedures.
- Monitors stock management across pharmacies within the project, to guarantee a good control and updated data of stock levels and general control over drugs and medical devices (reduce the extra order and expired items).
- Give support in the medicines and medical devices ordering and supply process, in order to ensure the stock follow-up for all pharmacies avoiding expiries overstocks and stock outs and ensuring its overall efficiency and effectiveness.
- Ensures the proper maintenance of the cold chain in the project according to MSF standards and in coordination with the logistics team.
- Special focus on controlled drugs management.
- Follow-up of the consumption and order placement to third parties (MOH, UNICEF)
- Close follow-up of pre-expired and expired drugs management according to local regulations and MSF standards.
- Promote the rational use of medications by ER and IPD.
- Ensures capacity building of the team.

4. Pharmacy structure in Malakal Project

As already mentioned, the structure of Malakal project is very complex and so is the pharmacy structure. The central pharmacy stock is divided in 3 locations: (a) 1 Pharmacy in the Logistic Hub, (b) 1 pharmacy in MH and (c) 1 Pharmacy in MC. The reason is to be able to deliver the hospitals in a daily basis, unidose and refilling of the cupboards and emergency boxes.

- Central Pharmacy in Humanitarian Hub (Papa): all the medical materials are stored in this pharmacy, as well as the cold chain and the EPREP. The extra storage for the voluminous/heavy products is kept there also and send to the other 2 pharmacies when requested. HIV-TB drugs are stored here as well.
In addition, we maintain some medicines to control the validity and use and stock of malaria prophylaxis: Mefloquine 250 mg, tablets; Atovaquone 250 mg/Proguanil 100 mg, tablets and Doxycycline 100 mg, tablets.
- Pharmacy in MH: only drugs are stored in this pharmacy (DORA, DINJ, DINF, DEXT, DEXO and NFOS) to ensure the daily delivery of medication to the patients. Expired drugs are also kept in a separate room inside the MH pharmacy.
- Pharmacy in MC: only drugs are stored in this pharmacy (DORA, DINJ, DINF, DEXT, DEXO and NFOS) to ensure the daily delivery of medication to the patients. Also, we have 1

fridge with cold chain stock. The pharmacy lent one shelf to NAM-DMC and two shelves to the ER to try to help organize the stock, as the ER does not have enough space.

Up to now, the pharmacies in both hospitals were open only from Monday to Friday, between 08:00 to 17:00. As we have one more staff and to avoid some of the challenges in MC, the pharmacy in town open as well on Saturdays.

For the annual plan, we requested two more storekeepers to be able to open the pharmacy of the two hospitals on Saturdays and Sundays from 8:00 am to 5:00 pm. In addition, for the annual plan, we also requested a dispensary for each ER and OPD with two employees to improve drug inventories and inventories in each unit, since today this inventory is made in a very inefficient way by the nursing team.

As well, all this structure is likely to change in 2022, the initial plan was to move the central pharmacy at the beginning of the year but still any advance has been made on the construction. The plan approved for the new central pharmacy is to have 12 containers just in front of the main building of the hospital in town. The containers are already in the correct place and the move would be in the last week of September, however we are still waiting for materials to finish the construction, the materials are scheduled to arrive in Juba in 6 weeks.

We already have the final model of the pharmacy that was approved by the PMR, but as the construction is all in containers, if you feel the need to modify something, talk to Marie Flore to verify the possibility of changes. Following the layout for you to be able to follow the change of the pharmacy and make the previous modifications that you find necessary.



Main pharmacy -
Malakal Town - v.1 - 1

5. Functioning of the medical supply

a. Supply system to the project

Our main supplier is the mission in Juba. We are following a 2+2 order system: 2 months of stock, 1-month Lead Time, 1-month Security Stock. In addition to the regular order carried out every two months, right after the total inventory, we can also request items in extra orders, these requests are based on increased consumption, beginning of treatment, need to supplement the amount of medication to end treatment, among others.

The cargo is sent from Juba by plane. Normally they try to send all the cargo at the same time with a charter. We often use the MSF plane (max. 900kgs) on Tuesdays to deliver smaller cargos, the positions sent on Tuesday are divided into items for pharmacy, logistics and food for BRAVO so if you have something very urgent and priority let everyone know so they choose to send medicines and not the other items. In some weeks there is also movement on Fridays that can be used to receive smaller positions. Lately there've been many problems with charter planes and the cargo can be delayed sometimes but usually it works fine.

We receive supplies as well from UNICEF and the MOH. Normally these articles are delivered in Juba and the mission acts as an intermediate to deliver them to Malakal. Sometimes, mostly with UNICEF, the supplies are received directly in Malakal, for UNICEF we receive in Malakal only RUTF (pumpy nut - PPN). Anyway, this stock must be differentiated from MSF stock and the reports shared on time. Also, if any stock is delivered directly in the field, validation from coordination is needed before using it.

When receiving supplies from UNICEF it is necessary to complete a quality report from the storage place. If you receive the supplies directly in Malakal you can send the report directly to UNICEF, if you receive the supplies from Juba, the report can be sent directly to the mission pharma.



Request for Local
PURCHASE - UNICEF_

We can be asked to support Ulang with supply. We may receive their cargo in Malakal and ship it by boat in the next kiss movement. Normally there's at least one kiss movement per week, usually on Wednesdays, but it depends as well on referrals and other factors so it's not very regular. Lately this is happening less as the MSF plane can land in Ulang but in the rainy season this may not be possible, and it can happen more often.

b. Supply system to the mission

The mission provides herself through an International Medical Order (IMO). These IMO is done every three months and they take into consideration the forecasted monthly consumption (FMC) of each project to supply them for enough time. The IMO takes around five/six months to arrive to the mission after its placement and the next one will be done at the beginning of November.

This system means that Juba has small margin to react when they are in rupture of anything as it takes too many time to do an extra order. But still they have solutions and they can ask for a donation/loan to other MSF OCs present in Juba or to other actors. They can rarely do a local purchase.

The new items to be introduced in the project that are not currently in the SL they must be ordered in the IMO after validation by MedCo but it's important to take into consideration that they will take a long time.

The last IMO was done in July/August, in the previous IMO we had several problems with the number of items requested. All medicines and materials were not requested and I believe that we are going to go through very complicated moments with ruptures because of this. I advise you to closely follow the medicines and materials that are not included in the IMO to avoid running out of stock. In addition to the order failure, the last IMO also had a very considerable delay in delivery, which I also advise you to follow the positions that will be sent in the coming

months. For the next IMO I advise you to request the IMO for evaluation of the team in Malakal, we did last time, so you can check that all the important items will be ordered according to your real needs and according with our annual plan.

For the next IMO we have some needs to be included:

- DINFDERI5FBF5 – DEXTROSE 5%/RINGER LACTATE, 500 ml, Flex. bag PVC free:
To use for children as maintenance fluids and it is the one that we should be using instead of mixing RL with G50%. This solution improves safety in the medication process and quality in pediatric care.
- FERROUS salt, eq. iron 45mg/5ml, syrup, 300ml, bot.: It will be necessary to increase the number of units requested. In conversation with the pediatrician, the idea is to use the medication in the hospital and when the child is discharged, send the same bottle with the child to finish the treatment at home, currently, as we do not have many units, what we do is deliver syringes filled with the syrup for mom to take home.

6. Supply system to the end-user units

We supply the Labs, HIV-TB OPDs, DMC and ERs in a monthly basis. Although, the monthly request uses a formula of Consox1,5 to avoid extraorders and they should have enough for the whole month, this rarely happens. These services keep and manage their own stock.

The IPDs do a monthly order as well but only for medical supplies. Drugs are delivered daily through the unidose and the daily check of cupboards.

We supply Logistics in both facilities, staff health, blue flower in both facilities, OR and HP upon request.

Finally, mental health OPD is delivered directly from the pharmacy upon individual prescription. When the psychiatrist visits patients in prison, usually once a week, she takes a larger amount of medication from the pharmacy and at the end of the visit returns the unused medication and the prescriptions for the medication provided.

You'll find all the soft copies related to these deliveries in the folder 2022 -> 13.PRINTS -> MONTHLY ORDERS.

a. Unidose system

The Unidose system was implemented during 2021 and currently is working fine. A nurse compiles the prescriptions for the next 24 hours in the request sheet and the medication is prepared in the pharmacy then delivered to the ward. At the end of the day, the consumption is recorded in its respective biweekly consumption sheet.

The team is trained on this and there are rarely mistakes. Our main challenges with this system came from:

- Not communicating when a medication is not available and delaying a solution for some days.
- Lack of communication when there is a change of medication during the day.
- Nurses delivering the Unidose request very late.
- Incorrect recording of the drugs supplied.

Although we have improved considerably, recording remains a challenge but overall the system works very well and the rest of the hospital appreciates.

On Fridays the Unidose is prepared for 3 days as the pharmacies are closed during the weekend. From April 2022 we will reopen the pharmacy in MC on Saturdays and the unidose will be prepared only for two days.

You have the chance of preparing unidose for more than one day anytime to close the pharmacy and work on special things, as for example the full inventory and deep clean. If any medication is changed during the time that the pharmacy is closed, or there are new admissions, these drugs are taken from the cupboard and replaced the next work day.

I've made a special focus on control drugs registering and lately we have improved a lot but still it needs a close follow-up. At the end of the two weeks of registration in the biweekly reports, they have to send them to central pharmacy for encoding in the Isystock, now they have to add this daily check along to the biweekly to double check that the recording was done ok. Although I encode on Isystock every two weeks, I check the prescriptions for controlled weekly, count the stocks and check the stock cards for these drugs, this action is performed every Saturday in MH and every Friday morning in MC.

You'll find all the soft copies related to these deliveries in the folder 2022 -> 13.PRINTS -> BIWEEKLY CONSUMPTION.

b. Daily check of the medication cupboards in the wards

As mentioned, these cupboards contain medication to treat new admissions until they enter in the Unidose and to change treatments when the pharmacy is closed. We work with a quota system and they're checked daily by the pharmacy team. The articles delivered are added daily as well to the biweekly consumption record.

Following the same system we supply as well the external drugs and syrups that are often shared by the patients in the ward and normally not delivered individually in the unidose.

I removed injectable Acyclovir from the cupboard stocks, our consumption is not that high, which generates a low AMC and a small quantity order, but for adult patients the dose can reach 9 vials x 8/8h for 7 to 10 days, in other words, a complete treatment can cost 90 ampoules. Thus, as soon as a new treatment is started, it is necessary to contact the pharmacist for science, dose calculations, patient follow-up and ordering medication for Juba when necessary. Currently, I follow these patients and when I evaluate that they can switch to oral, I already do my intervention with the MAM.

In addition to Aciclovir, I try to keep track of breakages and inventories in the cupboards to try to alleviate our demands. In this way, it is possible to withdraw and insert drugs into the cupboard as you understand your needs for inventory management and clinical management of the patient.

You'll find all the soft copies related to these deliveries in the folder 2022 -> 13.PRINTS -> DAILY CHECKS.

c. Daily check of Emergency Boxes, Controlled drugs Boxes and Cold Chain Stock

It's the same system as for the medication cupboard. All the emergency boxes present in all the services are checked in a daily basis, as well as the controlled drugs and the cold chain items.

- Emergency boxes: 1 ER MH, 1 IPD Adult MH, 1 IPD NN MH, 1 ER MC, 1 IPD Paeds MC, 1 NN-ITFC MC (6 in total, 3/hospital)
- Controlled drug boxes: 1ER MH, 1 IPD Adult MH, 1 ER MC, 1 IPD Paeds MC (4 in total, 2/hospital). The ones in IPD are to be shared in case of need with all the IPD services.
- Cold Chain drugs: Mainly vaccines and insulin. When the use of Amphotericin B (Ambisone) is necessary, the total amount used in the treatment is requested via extra-order, but the pharmacy delivers the amount used per day of application, since the dose is performed on alternate days, so it is possible to minimize errors in drug use. In addition, the pharmacist clinically monitors all patients who use Amphotericin B. Normally these checks should be done daily by the NTS but in MC is the pharmacy team who does it. The medication delivered is added daily as well to the biweekly consumption record.

For emergency boxes, these are the responsibility of the nurse supervisor to check and request the replacement from the pharmacy. The pharmacy is responsible for checking the boxes of controlled drugs. For checking the cold chain, in MC it is performed by the pharmacy and in MH it is performed by the nursing staff. In MH this control is not always very well done so once a week I check the stocks, I often find used and empty bottles, large stocks of the same drug and open bottles with no opening date. Every time I show and instruct the nursing supervisor.

The cold chain articles are supplied directly from the central pharmacy when requested. We have a special record in central pharmacy for these items and for the NFOS, we register every time we deliver any and from then it's considered stockout. This was implemented to avoid discrepancies due to poor recording and to have a clearer view of the stock available. Even if we don't encode it later in the Isystock (it's already out), they need to record in the biweekly as well when they deliver any cold chain article for us to double check later. When coding every two weeks, it is important to remember that cold chain items and nutritional items such as milk and RUTF (pumpy nut) have already been entered in the movements on Isystock.

You'll find all the soft copies related to these deliveries in the folder 2022 -> 13.PRINTS -> DAILY CHECKS and 2022 -> 13.PRINTS -> CP -> WEEKLY REQUEST OF COLD CHAIN AND THERAPEUTIC FOOD.

d. Mental Health OPD

The controlled drugs for Mental Health patients, are kept in the pharmacy. After consultation, the Psychiatrist/MD/CO will fill the prescription, green or red paper, there is no difference between colors, and the nurse/nurse aid/counsellor will come to the pharmacy to collect the medication, not the patient itself!

In a regular basis, MH consultation is on Monday, Wednesday and Friday in MH and Tuesday and Thursday in MC.

In the same line that before, I requested the team to submit all the prescriptions for the last two weeks along with the biweekly consumption record to double check before encoding. We have been working a lot on this and now it works better but still they make some mistakes.

As mentioned above, I weekly check all controlled prescriptions, movements in stock cards and count the cabinets in both hospitals to avoid stock errors. In addition, I check the patient's diagnosis and the prescribed medication to avoid prescribing errors. It is also important to check medications with special care, such as sodium valproate, which is gastro-resistant and cannot be broken. I prepared a document for the Mental Health team and the pharmacy to also monitor these characteristics related to the rational use of the drug, the document is in the folder 2022 -> 16.SUPPORT DOCUMENTS.



Control
drugs_Indications.xlsx

The psychiatrist goes to Malakal town prison more or less once a week, these days she will come to the pharmacy and we'll advance the medication she requests. Later in the day she will bring the prescriptions delivered plus the leftovers that should add just fine to what we advanced.

As well the psychiatrist is very involved in the outreach and she's treating some patients. She keeps a register and file for all of them and when she needs medication she'll do an extra order. The leftovers are kept by the NAM outreach in her stock. The extra order can also be made by NAM Outreach with the prescription drugs she needs for the next move.

For inventories we have a list made by Silena and updated by Filipa with a closed amount of medicines that we provide before the inventory. These drugs are removed from physical stock, Isystock and stock cards the day before we start counting. When the inventory process is completed, the drugs are returned to the pharmacy along with the prescriptions for the drugs used. So we proceeded with the conference of what was returned and what was prescribed. In addition, returned medicines are recorded on stock cards and are also returned to Isystock.



Control drugs.xlsx

For the next 2+2 order, it is important to check with the psychiatrist how is the consumption of medicines because this current professional has greatly increased the consumption of fluoxetine, diazepam, thiamine and promethazine and our 6-month AMC does not follow this increase. In the last 2+2 order, made at the beginning of September, these drugs had the AMC adjusted according to the patient forecast so I believe the order will cover the two months, but I advise you to follow these stocks closely and also project an increase in next 2+2 order in beginning of November.

Monthly orders

i. ER (Emergency room)

- MH:

The order is monthly and following the 1.5 formula. They request everything, drugs and medical products, and they store it in the ancient sterilisation room. It's a big room locked and with AC so very good to stock the items.

The responsible to do it is Juliana, nurse supervisor in MH, and she knows very well how to do it but lately she is not doing it ok, we have already made an inventory check by the pharmacy team in a few months and we found several errors that impacted the final order and the pharmacy stock, I recommend that this practice of evaluating orders and inventories be maintained in random months. By far the ER is the service that gathers the most of our consumption. Even if we are not running OPD services and we just treat yellow and red cases, the other OPD partners in town are not efficient and we end up treating green cases as well.

We started the sentinel service at ER MH and we are improving daily, this is a challenge for the next management of the pharmacy, to consolidate the implementation of the sentinel service and also start in MC.

Lately the consumption of masks for the whole hospital has been centralised in the ER. They are the only ward receiving masks and they are responsible to supply the triage point that delivers the masks to the staff. In MH the consumption is huge.



Monthly Request ER
MH.pdf

- MC:

The order is carried out once a month and Abraham, nurse supervisor in ER MC, is responsible for this but in MC the space to store the order from the ER is small, so the pharmacy delivers the order twice a month, in the first week and in the third week. We use the same inventory form for the preparation and delivery of items. In October, we delivered the order only once a month, as there were complaints from pharmacy staff about delivering medicines and materials without a new inventory. This process is in the adaptation phase to understand what will be more efficient for ER-MC and for the pharmacy. What we know doesn't work so far are 2 inventories

a month, because the inventory and the order are made inefficiently and are delivered late and in that time they request several extra-orders.

The amount of consultations and therefore consumption is very big. They have some stock in the ER but as they don't have enough space, some of their supplies remain in the pharmacy.

The main points here are to arrange their stock in the pharmacy and to put in place the sentinel as well.

For both hospitals, inventories are carried out very inefficiently, they count wrong medicines, fill in the fields inappropriately and the order ends up being poorly made. For each month we try different strategies to improve this situation but the problem continues to occur, this is one of my biggest challenges here because they generate a high number of monthly extra orders and the disorganization of the ERs and supervisors when following the stocks makes us very weekends and nights.



Monthly Request ER
Town.pdf

ii. IPD

All the IPD wards are only requesting in a monthly basis the medical material. For the medication we are following the unidose system and the daily check. Discharges from the wards must pick the medication from ER. They are using the 1,5 formula and each ward has their specific STD List and request form.

The stock from IPD paediatrics in town is stored in the fridges room, besides the pharmacy. The NTS for town is Mark and you should keep an eye on the inventories because he doesn't put much effort into it.

In MH the NTS is Juliana as well so she is often a bit overloaded but the IPDs work fine. Still pay attention to her inventories because it can be very good or very bad.



Monthly request
Paeds Town.pdf



Monthly request
NN-ITFC Town.pdf



Monthly Request NN
MH.pdf



Monthly Request
Adults MH.pdf

iii. LABORATORY

As mentioned, before we have one Laboratory in each facility. Both are doing the request at the beginning of the month. They have different STD List depending in the capacity of each laboratory. They are using the 1,5 formula, for some items depending in the actual demand they will adapt.

The lab supervisor is Jeremiah and he's very good, you can trust him almost always. The general consumption of the lab has increased considerably over the last months and currently we have a general shortage and ruptures of lab items in Juba, many of the important lab items were not included in the IMO that we are currently receiving, we are looking for donations from other OCs and special purchases in Nairobi so I advise you to monitor this situation closely. For laboratory items, it is very important to continue monitoring disruptions and design individual strategies according to tests and materials available in Malakal and Juba.



Lab Town.pdf



Lab POC.pdf

iv. HIV-TB

We have HIV/TB consultation in both facilities. They are requesting in a monthly basis, the 15th of each month, according to the active patients, for this order not necessarily following the 1,5 formula.

The focal point is Simon Dau and he does the orders very good. In each hospital he keeps his own stock and normally there are not many problems. Also, we take from his stock the medication prescribed in the Unidose and we don't record it in the biweekly.

Here it's important to check the expired and pre-expired items as Simon often forgets but it's getting better lately.

This order is supplied directly from the central pharmacy where we have the MSF and MOH stock physically divided. It's important to keep a register of which medication has been supplied, mainly for the quarterly report to MOH even if in Isystock it's impossible to differentiate it.

In this consultation they complement the treatments with nutritional supplies when needed. Until last month we only had PPN that was supplied monthly along with the other drugs.

Medications are ordered in two ways, via MSF in regular orders every 2 months and to the MOH. The request via MOH is done in two stages, every six months we need to send an order with the amount needed for the next 6 months, the last one was made in July, so the next one must be sent to Juba at the end of December, this order you email it to Pharma Mission and MedCo. In addition to this order, we also make requests in the quarterly reports we send to the MOH with the consumption, receipt and loss of medicines in the previous 3 months.

For the drugs used in the treatment of HIV we have several shortages, we do not receive our complete orders from the MOH and Juba also has several shortages, it is important to follow up with the MAM the drugs that are in a critical situation in the stocks. For the treatment of TB we have a good stock and the MOH always sends us large amounts of medication. For the treatment of hepatitis, I currently fear a huge rupture and we do not have any therapeutic option for treatment. All these ruptures were requested with a considerable increase predicted by the history of patients in Malakal in the last IMO, in July/2022, it is important to follow the IMO.



HIV - TB Town.pdf



HIV - TB POC.pdf

v. DMC

DMC strategy is currently working in 4 axes: Akoka, South of Kanal, Tonga and Gellachol.

The packages offered are treatment for non-complicated cases of Malaria and Diarrhoea and all the complicated cases have to be referred: 1st to the PHCC and if not able to manage the case at their level they are referred to Malakal.

The DMC office is in central pharmacy, so we are sharing a space for the DMC where they keep their stock and records.

They do the monthly order at the end of the month and everything works fine. They are also responsible for the emergency bags, they are requesting as extra order every time they use them.

Apart from the medication they give to the CHW, they have a small stock of extra medication in case they are requested to do a consultation during their visits to the field. In case they need more, they will do extra order as well. As mentioned before, they are increasing their mental health patients and for now they keep their stock as regular stock but you can adapt this circuit if you wish.



DMC Outreach.pdf

In addition to the medicines that we supply monthly to supply the 4 axes, we also supply the medicines to supply the mobile clinics, the medical bag which Rock is responsible for and the emergency bags. For these items it is necessary for NAM-DMC to prepare an extra order form so that we can proceed with the supply. The mobile clinics were organized due to the security contexts that have changed in recent months, but the use of medicines was low and currently there was no movement of items in these boxes. For the medical bag we keep some antibiotics and some medicines like salbutamol and beclomethasone, medicines that are not symptomatic and that a doctor needs to prescribe for patients.

vi. OR (Operational Research)

Since March 2021, the Operational Research has been restarted in the project. The objective of the research is to improve TB diagnosis in children through the POCUS and GenXpert test in stools and urine. MD Lazro is the responsible of this activity, supported by all medical team to enrol patients and for the follow up. He is also responsible for the ABS (Antibiotic resistance stewardship).

The initial thought was to request all the OR materials separately and to put them in a PINK UNIT in order to follow up the consumptions. The manager should be the responsible to request the materials needed, just sampling and testing and do the follow up, but it's not been working like this. In fact, all the materials they need are ordered directly to the laboratory, in some months there are some requests for masks, gloves and coupling agent, but these requests are rare.

The main issues with this are the GenExpert ULTRA cartridges and the TB Lam that we deliver to the lab in the monthly order. Currently we have enough of the ULTRA cartridges but as mentioned, few TB Lam Tests. We received in our last regular order 75 units and this was the total requested in the April IMO, this stock is enough for approximately 3 months. Everyone was informed about the situation, but it is always good to update the value we have at the pharmacy and monitor the laboratory's stock to outline new strategies in relation to the test.

vii. COVID 19:

We have a triage area for the COVID in both hospitals, if there is a suspicious case in POC, the patient will be sent to the isolation tent waiting for the PCR result. In Town the suspicious cases are sent to MH.

The COVID situation is very calm without any case for a couple of months, but at the pharmacy we keep special EPREP kits for COVID and we keep quick tests to be sent to the laboratory and to the Health Staffs.

viii. Staff Health Pharmacy

In the Base there is a cupboard with some drugs and medical materials for Staff Health. It is managed by PMR who is ordering to refill it when needed.

This locker was all overhauled at the end of September, I left a list of all the medicines and materials that are inside the locker in the Pharmacy Manager > 2022 > 35 folder. Staff Health. There is also a copy of this list on the closet door and it was sent to the PMR by email.

In addition to this closet, let's kill a common box in Tukul's closet. This box contains only symptomatic drugs and it is necessary to review the stock every two weeks, you will be amazed how ibuprofen and paracetamol are consumed quickly in this house. In common box we have in stock:

- Paracetamol 500 mg (100 units divided into small packages of 5 units);
- Ibuprofen 400 mg (100 units divided into small packs of 5 units);
- Metoclopramide 10 mg (50 units divided into small packs of 5 units);
- Oral Rehydration Salts (10 sachets);
- Levonorgestrel 1.5 mg (1 tablet);

- Condoms (100 units).

For national staff, they are consulted in our hospitals and if medication is needed is delivered from the stock in ER.



Monthly order - Staff
Health.xlsx

ix. SGVB/SAC

In each facility there is the “Blue Flower” room for the SGVB cases. In each hospital we have a cupboard with the drugs needed for this activity. The Focal Points of SGVB (MD Paediatrician and psychiatrist) are the responsible to request the drugs.

For ToP it's the same, the focal points will be the responsible to request if needed and they keep the stock with them. Normally we prepare around 5 kits and when they have few we deliver again by extra order.

To assemble the kits we follow the MSF protocols, each Kit contains:

- Mifepristone 200 mg: 1 tablet
- Misoprostol 200 mcg: 4 tablets
- Ibuprofen 400 mg: 8 tablets
- Tramadol 50 mg: 4 capsules

I also prepared a document as clinical support to the team responsible for attending these patients and dispensing these drugs. Sometimes nurses and doctors are not used to this protocol and it is not part of the specialty of these professionals.



Blue Flower.pdf



Protocol_Termination
of pregnancy.xlsx

x. MEASLES UNIT

We currently have a major measles outbreak in Malakal and the surrounding areas. We opened an isolated unit in MC for the treatment of children diagnosed with measles.

The unit is already equipped with the necessary materials for regular operation, we are waiting to receive only the oximeter to send to the unit, the device has already been ordered in a backorder on 10/04/2022. As this is a temporary unit at the end of its operation, I recommend that the devices and materials be sterilized and used in other units.

We do not have the unit in the system to encode the specific movements for these patients, so it is possible to encode in the ER MC or an IPD Pediatric.



Extra
order_Backorder_041

7. PINK UNITS

i. HIV TB Contingency plan

Drugs for the HIV/TB treatment are supposed to be delivered by MoH but they don't deliver all the drugs needed and there are often ruptures so we use the MSF stock for regular activities as well, but ideally the MSF stock was supposed to be used only as contingency plan.

ii. Mass casualty plan (MCP)

The MCP for the project has been recently updated. We have an MCP scenario in each hospital that has been updated in July/2022 and we even did a simulation in both hospitals.

The boxes at both hospitals are then located in the ER. The keys to the boxes in MH are inside the pharmacy, inside the document closet. The keys to the boxes in MC are in Tukul, in BRAVO and they are signposted. Despite the ease of finding the keys and the boxes being in accessible places, only the PMR can trigger the MCP.

The boxes are full and updated, in Excel and Isystock, without any drug expiring before the next inventory, in November/2022. The inventory has to be done every six months according to the chronogram but renewal of the stock to avoid expiries is constant. After the physical inventory, you have to encode it in the Isystock.

Some medicines are missing from the boxes such as injectable morphine, which is not present in all boxes, Ketamine which is a medicine that we do not have consumption in Malakal, among others. For medicines that we do not have consumption, it is important to insert in the regular orders for Juba (2+2 order) with the amount needed to update the MCP boxes.

iii. EPREP kit

This kit is composed of 8 modules available in Central Pharmacy. The inventory and rotation of the stock was made and updated in Excel and Isystock, last inventory was in May/2022. In the month of August we used The Dressing Module, Burn, but we still haven't replaced it because we have ruptures in our Sterile Gauzes and other materials that were not included in the last IMO, so it's important to plan the assembly of this module in the coming months.

The EPREP for the mission is still in revision, for the moment we keep these scenarios that can be used in explos, mobile clinics, MCP if stocks in the boxes are finished. The Mental Health team proposed a module with psychotropic drugs but it has not yet been approved and validated by the PMR.

When doing the inventory, this needs to be encoded as well in Isystock.

iv. PPE Contingency Plan

The PPE Contingency Plan is to be used in case of Covid-19 Outbreak. It's updated in Excel and Isystock without items expiring soon. Same procedure as for the EPREPs.

8. Current orders in process

- September 2+2 order

We did the last 2+2 order until the beginning of september. We have already received all the priorities, but we are still following the backorders. Among these, the most relevant ruptures in Juba are the laboratory items such as HIV Qual, Red vaccum tubes, slides, some materials such as sterile gauzes and medicines such as Amoxicillin 875 mg/Clavulanate 125 mg, as I mentioned we had a major failure in the April IMO and we are suffering from these absences, so I advise you to follow these ruptures closely and keep in constant contact with Juba. For all the rest we've received more or less what we ordered and we are in a quite good situation. You can always check what is pending in the backorders file.



order_September 202

On 10/04/2022 I sent a back order request with some items that were received in Juba and that help us to cover some of the breakages, I left some items marked with the location that should be shipped. We have not yet received this post in Malakal, so it is important to follow up on the dispatch of this order. I made Athor aware of the request and went through all the requested items with him.



order_Backorder_0410

You'll have to do the next 2+2 at the beginning of November, just after the inventory. Although you can use a different system if you prefer, I've divided this order into:

- 1st priority: Red
- 2nd priority: Orange
- 3rd priority: Yellow
- 4th priority: No color.

They usually try to send all the cargo at once from Juba, but sometimes due to supply constraints it's not possible and they will divide the cargo into different packing lists. Normally they share the packing list a couple of days before the expected arrival of the cargo so that you can print it and prepare yourself for reception.

On the last two orders we had considerable delivery delays, we received our first priority almost a month after we ordered the orders and we suffered as a result. Our number of patients is gradually increasing, this is because the number of people in Malakal and in POC has also increased due to unstable security contexts. Our drug consumption is very high, especially antibiotics, antimalarials and oral rehydration salts.

After reception, you have to give feedback to the mission on the actual items and expiry dates that you received. Also it's very useful to keep a record of the BOs so that you can highlight what is more needed at you level and Juba can focus on less things.

Also, after receiving the items and checking, I always send an email to the team in Malakal with the medicines and materials we receive, so everyone can update their respective teams in the hospitals and request more urgent or special items.

For this next 2+2 order we have some special demands from the team, I always try to collect as much information as the team needs and I'll leave it noted so I don't forget to insert it in the order.



2+2 NEEDS.docx

- New articles from January and April IMO

In Juba they added some new articles in the January and April IMO. These items are still in the pipeline and keep coming slowly to Malakal but you'll need to actively introduce them as normally nobody will request them because it's been very long since they were requested.

We also added new items in the July IMO, this IMO was made jointly by me, PMR, NAM, NAM-DMC, MAM and LAB-FLYING, this IMO should start arriving in Juba in December/January so it's important that you follow the orders and as well to ensure continuity and avoid that they are not used upon arrival.

- Quarterly HIV – TB order to MOH

Every three months we have to fill in the quarterly report of consumption of the MOH HIV-TB stock. This is why we have separate stocks and stocks cards among other reasons. Along with this report you fill in an order to replace the items.

It's a standardized and official template from the government that is not very updated, this report is not to easy to use but you'll get used to it. In the last report there were several questions about the number of patients and number of medicines, something important to mention is that the update of medicines is made according to the movements of the pharmacy to the HIV/TB units in each hospital, so this number does not reflect necessarily the number of medicines dispensed to patients, if this discussion comes back in the next reports it is important to devise a new strategy to collect this data.

The quantity and timing of this supply is not reliable so this is why we have MSF stock as well. The last report was sent in early October and was for the months of July to September. The report must be sent to the PMR and MAM by the 5th of each quarter.



Q3 2022 TB RR
tool.xlsx



RR tool_HIV'PMTCT
MSF Malakal_3Q_Fin

- MSF Academy

We are responsible for supplying the necessary materials for the classes and training carried out by the MSF Academy. For this, we have a document with all the necessary materials according to the study schedule until April/2023.

Once a month I check this document and prepare a donation certificate with the materials sent. I update the document and send it to those responsible for the MSF Academy with a copy to the PMR.

Prior to regular orders it is important to review this document to understand whether you will need to order specific items to cover MSF Academy orders. Another strategy I use here is to talk directly with tutors to find out exactly what they need most urgently.

The movement in Isystock is done as an output via donation to MSF Academy, all physical movements must be encoded in this way, even for masks that are ordered via extra order at sporadic times.



Medical Items
Delivered Malakal_Up

9. Stock situation

As said before, we are currently in a good situation, Juba has supplied almost all the important supplies but still we have some issues. We have problems related to some important drugs that we have a high consumption and in the last order we didn't receive any amount of the drug. Another important break is related to some materials. For lab items we have major issues with Hepatitis B tests which were not included in the last IMO and are currently out of stock. For all items that were not included in the IMO, we have to take special care and try to rationalize the use as much as possible and reinforce the indications and good practices of use to avoid major future disruptions.

In addition, the stock is organized between the 3 pharmacies, and in the central pharmacy we keep only cold chain medications and some medications for validity control or use control, exclusive medication for DMC use, such as Rectal Artesunate and medications for malaria prophylaxis, all other drugs are stored in the two pharmacies, in MC and MH.

10. Pharmacy Management:

a. Isystock:

We only have 1 Isystock in the project. The encoding was done by Pharma Manager and by Athor, pharmacist technician, one of the goals of Athor's PMS is to work with Isystock so that it knows all the features, so we have the possibility of coverage in moments of gap, such as RnR and vacations. It has improved a lot and is now able to work with the main features of Isystock, such as inputs and outputs, stock reports, backup but I recommend to keep working on this.

Every Friday we share the Isystock backup with Juba. So I recommend keeping the movements in the system up to date so that every week your backup is sent updated. If you can send the backup at lunchtime, that's better, so Arshad has time to work with the data on Friday, but if that's not possible, it's not a problem to send it in the evening.

It is important that before backing up Isystock and sharing it with Juba you pull a stock report and check if there is negative stock, if there is it is important that you correct this stock and then back it up and send it to Juba.

b. Consumption follow up in end-user units

The consumption follow-up is difficult and needs improvement, mainly concerning oral, injectable and external drugs and infusions.

Direct encoding in isystock and stock cards after delivery and verification of the request	<ol style="list-style-type: none"> 1. Laboratory (POC and Town) 2. HIV/TB (POC and Town) 3. DMC-Outreach 4. OR (Operational Research) 5. ER Town 6. IPD Paeds and NN-ITFC Town (monthly materials request) 7. ER POC 8. IPD Adults and NN POC 9. Others: Staff health, Emergency bags, Logistic request 10. SGVB and SAC <p>NB: as Logistics and SGVB they don't have their own unit to encode, we are encoding it in the ER of the corresponding structure</p>
Daily consumption from the hospitals (MH and MC) (Biweekly)	<ul style="list-style-type: none"> • Unidose • Daily check of cupboards in IPD • Daily check of emergency boxes, controlled drugs and cold chain • Mental Health prescription <p>At the end of the day, all the medication delivered in the hospital through one of the modalities mentioned above, is going to be totalized and encoded in the biweekly consumption sheet for each service.</p>

To increase this follow-up of consumption, I've requested the staff to submit along the biweekly consumption records, the respective daily checks sheets and mental health prescriptions. I then double check and the last time it was very good but still needs follow-up. Most of the problems come from forgetting or mistranslation of data, I don't believe that medication is disappearing but still there are some discrepancies during inventories.

We started the implementation of the sentinel program at ER-MH but in the last month we had several problems that made us delay this process. Athor is responsible for counting items in the ER, he has been trained by me and knows the process. In addition, we are using a table with

some target drugs that were causing problems in inventories and consumption, but it is in the adaptation phase. I suggest continuing with the program and perhaps the best way to maintain regularity is to hand over the responsibility for this task to Beronica and Akoch who are already in the hospital and often have free time for this. The choice for Athor was due to the position he occupies, being the only pharmacist.

You can check the ER prescriptions as well from time to time. The main problem is that there is a huge over prescription of almost everything, mainly antibiotics. It has been discussed many times with the MAM and PMR but the problem persists. We even prepared a document with the amount of drugs that can be prescribed to avoid problems, but doctors often do not follow the guidelines. At the end, our ERs work more as an OPD than as an ER most of the times. But always keep in mind as well that we are often the only facility fully functional on the area so sometimes exceptions are done.

In addition to the ER prescriptions, once a week, usually on weekends, I try to evaluate some single-dose prescriptions to try to optimize some treatments. In addition, as I mentioned, I follow up patients using Amphotericin B and injectable Acyclovir.

The follow-up of cold chain articles and nutritional food was very challenging in the past, with often mistakes of recording and discrepancies in the stock so, a few time ago we decided to record it when it goes out of central pharmacy. This means that when they are in the peripheral pharmacies they are counted as stockout even though they need to keep recording them in the biweekly to follow-up the consumption. This way, what you have in the Isystock should be the same than what you have in central pharmacy, not considering the hospitals. We've improved a lot with this system and the follow-up is still possible.

c. Full inventory

Full inventories are done every two months following the chronogram, the next inventory will be at the end of October. I believe that this inventory will have worse results in relation to the number of discrepancies since we had two months of many disruptions, a very high number of extra orders due to the absence of NAM in the project, many days with reduced number of employees in the pharmacy, among other situations.

The system we've been using so far is:

- A week before the inventory, I send an email informing about the process and the closing of the pharmacy for 3 days.
- On Monday I inform the team at punto info that the pharmacy will be closed between Wednesday and Friday
- On Tuesday I prepare the medicines that will be used by Mental Health in the consultations, these medicines I already encode the withdrawal in the system to avoid any discrepancy for these medicines.
- The last Tuesday of the month we prepare unidose for 3 days in both hospitals. You have then two days with the pharmacy closed.
- On Tuesday afternoon, I encode all the Byweekly consumptiom movements and check if there is any more movement to do.

- Wednesday morning we do the counting in both hospital pharmacies. Two people must count everything in one morning.
- Wednesday afternoon we begin counting in Central Pharmacy, all the team, with the exception of Beronica who has classes on Wednesday afternoons at the MSF Academy.
- Wednesday evening I encode everything and print a first draft of discrepancies.
- Thursday morning all the team finishes counting and we recount the main discrepancies.
- Thursday afternoon we finish encoding and work on the main discrepancies.
- Friday the pharmacies in hospital reopen and you work on the last discrepancies with two staffs.

Note that recounting in the pharmacies can be needed as well as there are usually a lot of discrepancies, but I believe it will be better this time.

d. Other activities

- **Cold Chain Management:**

Cold Chain Management in the project has been a big challenge. The pharmacy manager is the focal point for this as being responsible for the fridges and freezers in both pharmacies as well as for the technical support for the rest of the team.

To reinforce all the follow up of the cold chain and to ensure that each responsible is doing a good management of the cold chain, we did some trainings to all the nurses in MH, MC, Lab team and Pharmacy team.

We monitor as well weekly the LogTag readings from all the project. This is very useful to double check the fridges under our responsibility but as well to give technical advice in case there are issues in other departments. Weekly we receive temperature readings from all the fridges and passive cold chain from the two hospitals, we need to check the temperatures and send a report with our considerations.



Log tags
readings.msg

Currently what has been more problematic is the maintenance of the passive cold chain in MC, the nursing team has not taken the necessary care and we had weeks with temperatures above 20 °C. In addition to the passive cold chain, we also have the problem of maintenance and good use of the freezer in MC by the nursing team, for this reason we centralized the replacement of the freezer with icepacks and removal of the icepacks to replace the RCW boxes at the pharmacy. So the freezer must be locked at all times and the pharmacy is the only one that will have the key and control. The pharmacy will not be responsible for the exchange of icepacks in the RCW, the responsibility is only to provide the icepacks upon the request of the nursing supervision. Momoh (LTL) was responsible for locking the freezer and providing us with the key, but he was in RnR and this week he is working with the measles vaccination campaign in the

South Canal, so he hasn't organized this task yet, it's important to follow up and charge to get it done as quickly as possible.

Also, a few weeks ago the Blood Bank at the MH laboratory had some temperature problems, with temperatures below 2°C, reaching 0.6°C. Everyone is aware of the problem and currently the logistics are closely monitoring, we also send the reports and ask for the help of Eduardo, biomedical, with the situation of the equipment.

We provide the ice packs as well for the passive cold chain of the laboratory in MH. They must send the RCW25 full of hot ice packs and we send it back with frozen ones. This replacement is performed every Monday and Friday morning. This system has been working very well.

Note as well that it was validated in the annual plan 2022 to renew central pharmacy equipment as it was outdated so, at some point you'll receive new fridges and freezer.

The current cold chain setup of the project is:

- CP: 2 fridges + 1 freezer – responsible Pharmacy Manager
- IPD Adults MH: 1 fridge – responsible NAM/NTS
- Lab MH: 1 Blood Bank + 1 fridge + 1 passive cold chain for samples – responsible Lab supervisor
- IPD Paed MC: 1 passive cold chain – responsible NAM/NTS
- Lab MC: 1 Blood Bank + 1 fridge + 1 passive cold chain – responsible lab supervisor
- MC: 1 fridge (half stock pharmacy + half stock ER) + 1 small freezer + 1 big freezer (broken) – Responsible Pharmacy Manager

- **Monthly reports**

- 5th of each month UNICEF report: monthly consumption of PPN, F100 and F75 supplied by them in order to continue receiving supplies. Quarterly to do a new request if needed. We are currently receiving all supplements via 2+2 order, but if your PPN stock gets too low you can order directly from UNICEF in Malakal.



Nutrition Stock
Reporting Form_Unicef

- 5th of each month STEWARTSHIP Update: Monthly update the antibiotic consumption data by the hospitalization units, according to a standardized template, and we send it to PMR, NAM and MAM.



EN_2022_DDD
Tool_IPD - Malakal.xls

- 5th of each month Pre expire items report: We send a monthly report with the items that will expire in the next three months to promote donations and internal uses, we share with Ulang, Juba, MSF Academy and the entire team in Malakal.



Report expire
items_Donation_July.c

- Quarterly: 5th of the month. HIV-TB drugs from MOH report and order. Very important not to forget to keep receiving supplies. We'll do together for April and next will be January.



Q3 2022 TB RR
tool.xlsx



RR tool_HIV'PMTCT
MSF Malakal_3Q_Fina

- Stock Analysis: after sending the monthly report and/or after inventory, is a good moment to share the main information about the stock availability, ruptures, pre-expired items and consumption trends with the medical team.



stock
report_07092022.xlsx

- **Expired drugs**

The expired drugs are kept in the old dispensing room in the pharmacy of MH. We registered and arranged all the products that were disposed there without any document or basic hygiene standards for more than two years. Currently every box is numbered and its content is registered in a book first and then in an excel.

Local authorities forbid to send any expired item from a region to another so, at some point we'll need to destroy all that products that are accumulating. To try to avoid a big quantity of expired items every month, we send the pre-expired items to Juba before the end of the month.

So, if you find any expired drug you can just send it to MH for recording but keep in mind that MSF academy can perfectly use expired items as well, so check first their medical list.

I have currently sent a list of our expired medications to Juba. This list was requested internationally to schedule the destruction of expired items. It is important to monitor how this process is going because the expired medication room is already small for the number of items accumulated over 5 years.



Expired drugs List -
Malakal.xlsx

- **Pre-expired drugs**

Before the end of the month, we are returning to Juba all the drugs that we are not able to consume. It's important to check when is the last rotation of the month of the MSF plane (Tuesdays) and share the PL with logistics on Friday before lunch time. It's good as well to remind logistics about this as they forget sometimes.

We try to ship the items at the beginning of the month so that Juba can work with donations and exchanges of these items. Unfortunately in September, due to the security contexts that have changed a lot and the measles vaccination campaign, we didn't have time to return the medicines to Juba. Thus, a portion was donated to MSF Academy and a large part was withdrawn and placed in MH. It is important that these medicines are organized and registered and after that the updated list is shared with Juba again.

Remember to assign some days in the roster for this activity and to print an exhaustive list of all the items expiring in that month. Like this, even if you don't have in your stock, they can look for them as well in the wards. You can extract this list from the "stock availability" or medication list x validity in stock reports in Isystock.

For the validity work with the physical and theoretical stocks, you go to Athor's PMS as this is also one of his goals. Unfortunately we didn't have much time to work with Isystock's tools but he has been doing an excellent control with physical stocks, so I recommend that the skills in Isystock also continue to be worked on.

The PL has to include manufacturer and batch number as Juba needs this information to share with MOH for future destructions. Every box need to be weighed and added to the PL as well.

Remember to encode only the exits in central pharmacy but to check and collect in all the end user units (don't encode these items, but you need to add them to the PL). This process is not yet perfected as they mix the items sometimes but we are improving. Athor knows very well the system and he can supervise it at the beginning. When encoding, remember that you may have to modify previous deliveries as Isystock always considers the shortest expiry date as delivered. Finally remember to leave some stock for the last days of the month, it's preferable that a few articles expire here than running out for some days.

Lately we've received quite a few items with a short expiry date from Juba, some of them we tried to use them but we had to return others right away after reception. Check always during reception although this has been improving in the last cargos.

Finally, after the full inventory you can take from Isystock a list of the pre-expired items based on their AMC for the next 12 months, this can help you to schedule shipments to Juba even before the expiry month and will help you trying to incentivate the use of some of them and for others, you can just propose a donation with enough time before they expire.



Report expire
items_Donation_Octol

- **Rational prescription, sentinel system.**

I already mentioned the sentinel system as well and the major constraint of it being the overload of the NTS in both facilities but still, I encourage you to try it and maybe involve some staff of the pharmacy if possible as I believe it'd be another very good tool to monitor the consumption.

In addition, for some patients using target drugs, I always follow the prescriptions and the entire treatment. As I said, once a week I try to check the ER prescriptions and the inpatient prescriptions to assess how we can improve our quality of prescriptions.



Forms_Sentinel
ER.pdf

- **Trainings and capacity building.**

To me it's one of the main priorities as a manager and I encourage you to facilitate any training available for the staff. You'll receive from time to time new announcement of trainings or MSF will send facilitators to perform the trainings in Malakal. It may be annoying and interfere with regular activities but it's highly appreciated by the staff and we have the mandate to provide them.

Currently Athor, Ajour and Akoch have a protected afternoon to take the online courses at TEMBO. It is important to track the progress of the 3 courses and assist in choosing new courses to keep them developing. My advice is to keep these schedules protected even if some days are tighter. In the week of inventory the schedules are canceled so that the 3 can work in the inventory.

Beronica is not in the TEMBO courses because she is taking the nurse course at the MSF Academy, she is an excellent student, but it is important to continue monitoring her performance in the activities. For Beronica, I left Wednesday protected for MSF activities, and in the morning she does field mentoring in MH and in the afternoon she goes to classes in MC.

In addition to our team, we also assist all teams with specific training. For DMC, when teams come to Malakal for training, we always participate with the pharmacy part, we already have a power point set up that you can modify when necessary. For the next month we should receive a team for training. I always put one of our staffs with me for these trainings, they feel motivated and encouraged, in addition they speak the local language and are able to work better in the practical part of the job.

About DMC, I talked to Irene to take the pharmacy staff to the 4 axes to train the people who work with the medicines, the idea was well accepted by Irene and our staff. Irene will need to organize the movements and you will need to organize the roster for the pharmacy. Also, you will need to organize something for the staff to eat, such as cookies and fruit.

- **Stationary**

Concerning the stationary, the NAM is responsible to place an order every two months and you can include all the documents that you feel necessary for the pharmacy.

We included a couple more documents in the last stationary order to save some paper and we are waiting as well for some updated clinical guidelines for the pharmacies in both hospitals. Follow this up when the stationary arrives as they will try to take them for the hospitals and I requested them specially for the pharmacy.

The daily working documents and monthly orders you can find them all updated in the folder 2022 > PRINT. I've told the team to request on Friday everything they need for the next week so that you can have time to print it during the weekend. As mentioned all the documents are updated, but the needs change constantly so it's good to review them from time to time.

We've arranged as well all the stationary from 2021 in CP and both hospitals and the circuit to store the documents should be clear for all the team. It's very important to make sure that the photocopies from the last orders are available at the hospitals, so that they can prepare the next orders appropriately.

- **ABS program (Antibiotic Stewardship)**

This program is lead by the MAM and Dr. Lazro as focal point, it aims to monitor antibiotics rational prescription and proper use in the IPDs of both hospitals. A survey was done some time ago and the action plan is still pending. Our role in this program is to contribute with the DDD Tool. It's a standard MSF tool that we have to fill in with the data of consumption in both IPDs and the Occupancy rate of the wards, this part can be sent to NAM to fill out the nursing. The tool calculates the Defined Daily Doses that are being used in the wards. You need then to analyse the data and give feedback to the doctors mainly about trends.

The next analysis will be in January, with the data of the second semester of 2022. Consumption data need to be included monthly, after which the partial report is sent to the PMR and to Beronica, since she is responsible for attending the IPC Meeting, every third Tuesday of the month.

As I mentioned, currently the prescription of antibiotics is carried out in a completely arbitrary way, in the last few months I have been trying to work directly with Dr. Lazro so that the prescription of antibiotics has more quality. In late September, at COs trainings, Dr. Larzo worked on the topic of antibiotic therapy intensively, we hope that the result will be that in October there will be an improvement in these prescriptions.

- **MSF Academy**

The MSF academy is a teaching program for nurses and nurse aids that will be ongoing until April/2022, at least. In Malakal, there are two permanent facilitators and usually there's an expat referent as well. Concerning the pharmacy we have two points: Beronica (details below) and supply.

As I mentioned, It was shared to me a list with all the supplies needed until the end of the program along to the chronogram. This was very useful and will allow us to prepare on time the supplies. I went to all the list and highlighted the items that are not available in the mission for the referents to decide whether they can use alternatives or we should add them to the IMO, last IMO we added some items specifically for MSF Academy.

For the rest of the items that are usually available you can just place an order to Juba with enough anticipation or deliver from your stock if you have enough. You can as well give them any expired item that's in their list. I recommend to update the list regularly and share it from time to time with the referent in Malakal. Also as I mentioned I try to supply items to MSF Academy on a monthly basis and I always observe what I need to add to my 2+2 order, some equipment such as O2 concentrators I have already talked to Florence to try to use the concentrators available at the hospital.

- **Logistics**
 - a) **Deep clean**

Every three months the logistics of each hospital is responsible for doing a deep cleaning in the pharmacy. This cleaning is organized by the logistics but they need to notify us in advance because we need to pick up all the drugs from the pharmacy and organize our single-dose delivery schedule. Another way to find out about the schedule for Deep clean is to ask at IPC meetings.

When the deep clean occurs, I make a statement to the whole team and send it via email and post it on the pharmacy door so that the hospital team is aware. I organize the delivery of single doses for 2 days and I organize the packaging of the medicines the day before the afternoon and on the cleaning day we take the boxes from the pharmacy. Cleaning takes around 3 hours, once it's finished, I organize the removal of the medicines from the boxes and storage of them in their places. I always mobilize one of the two staff of the central pharmacy to help remove and store the drugs in the pharmacy.

The logistics team in MH is scheduling a deep clean for the pharmacy in MH probably next week, but they haven't confirmed the date. I asked the logistics team not to schedule a deep clean in our inventory week. In this scenario I advise you to talk to Alfred to understand if they have already set a date.

- b) **Pendent things**

Everytime you need to fix anything you can do a job request and after validation by PMR submit to logistics. They are very busy and sometimes they forget so follow-up. If you need anything that they can supply, you'll do an internal request following the same circuit.

There is a logistic department in each hospital and you can give them any biomed article for reparation. They will as well request from you some items via extra order and you'll encode them in the respective ER. Normally they only request surfanios and TB masks.

Whenever you send a Biomed article to any hospital to be introduced you need to inform the log hospital, Alfred, for him to introduce it in his record and ensure a proper maintenance.

There are two fridges pending for shipment in Juba, they are supposed to replace the two from CP as they are outdated. We asked logistics for an update on this so to follow-up but not urgent as the fridges are still working well and stable.

Regarding the freezers, we have a pending issue in MC, one of the freezers is damaged and the logistics are evaluating the possibility of exchange, it is necessary to monitor this situation since this freezer has been lacking for the maintenance of the passive cold chain in place.

At the pharmacy in MC we have three pending issues, one of them is an air conditioning that has already been requested but we have not yet had a response, in these last months we were in the rainy season and the temperature of the pharmacy remained within the appropriate range but it is important to follow this situation more than close in the dry and hot season. We also ask you to close the door and window spaces, but this has not yet been done. The electrical circuit of the pharmacy in MC is very bad and we always have problems with the lights, we have already requested that this be reviewed several times but we still have the same problem.

11. Measles Vaccine Campaign

As I mentioned, we are experiencing a measles outbreak, when this situation started we started our Malakal vaccination campaign. In addition to Malakal Town, which was our responsibility, the idea is to vaccinate the POC, which has already been carried out by another NGO, and the surroundings of Malakal Town, which would originally be the responsibility of other NGOs, but this did not happen.

In the last few weeks we have started to receive cases of measles from the Canal and given the current situation we will proceed with a vaccination campaign in the Canal next week.

Vaccines were requested from UNICEF, in addition to vaccines, we also requested materials. After the end of the campaign, it is necessary to make a report of the items used and the items that will be returned to UNICEF. In the last campaign we kept some materials and kept some doses of the measles vaccine to continue vaccinating children in hospitals. You can assess what you receive and what you want to keep in your inventory.

It is the responsibility of the pharmacy to organize and provide the teams with the necessary materials and vaccines, as the vaccination is not in Malakal, I advise you to organize the materials with safety stock. In addition, it is our responsibility together with Logisitc to take care of the cold chain and ensure that vaccines are always viable. The measles vaccine can be kept in negative temperatures (-30°C) up to 8°C, so our main concern is to keep temperatures below 8°C.

Vaccines were collected on Friday (10/14) and sent to BRAVO, 626 vials (6260 doses) were provided and are divided into two RCWs. The RCWs already have two log tags in each one and it is necessary to monitor the temperature of the boxes during the time that we keep the

vaccines stored in the boxes. I have also sent 9 vaccines carries and all available Logtags to the office.

In addition to vaccines, we are also responsible for providing Albendazole 400 mg, MUAC, 0.5 ml syringes, 5 ml syringes and safety boxes. UNICEF will provide us with syringes and safety boxes, you can pick up these items directly from the warehouse on Monday or Tuesday. About the MUAC, we have 12 units in stock which will be possible to send only 1 to each team.

It will also be necessary to prepare first aid kits a little more elaborate than what we have available. I have already asked Irene and Tasnim to prepare a list of items and quantities that will be needed.

In addition, we were having a hard time finding good profiles among nurses to be team leaders, so I offered Athor this opportunity, I believe he has a good organizational profile, maintains good communication and can help the team with possible problems on the cold chain. In addition, it is a good opportunity to broaden your leadership skills. But this means that Athor will not be available at the pharmacy on the days of vaccination, probably between Wednesday and Saturday, so it's good to review the roster for next week.



RE_ suspected cases
of Measles northern p



RE_ MVC Microplan
Draft.msg

12. Human Resources - Pharmacy

The team is composed by 3 pharmacy storekeepers and 1 pharmacy technician. This setup was approved in the annual plan 2022, even if we had requested the position of pharmacy technician to be upgraded to pharmacy supervisor. I believe it should be like that as it's quite a good team and our technician is doing a lot of supervisor tasks. We formally apply for this position in our 2023 annual plan, you can follow the requests made by the pharmacy in the annual plan.

With this team you should be able to manage routine activities but there should be enough spare time as well to other things. You can develop the control of clinical and consumption analysis in the ERs or anything, but I believe that you should always keep as a priority to develop the capacities of our national team. I truly believe it's one of the most important things that we do here.

Athor (0920005001):

He's the pharmacy technician since November 2021 but before he worked as a daily worker. He also worked with MSF some years ago, so he knows quite good how everything works.

I've been trying to give him more responsibilities in order to help him grow professionally and he's always responded greatly. He's very motivated and passionate, learns from his mistakes

and he does it very quickly. Currently he's aware of almost everything that is happening, and he can perform many tasks autonomously.

Lately we've been working in Isystock and he's been doing great, I recommend that you allow him to do the encodings as he'll gain a valuable experience.

He's really motivated to keep learning and growing in the pharmacy field. He's very reliable and you can count on him anytime.



PMS Pharma Tech
Athor_Final evaluator

Beronica (0915085042):

Beronica has been in the pharmacy storekeeper for almost a year, she's the most experienced and knows perfectly everything but she makes some mistakes sometimes. It can happen that she relaxes a little bit and she commits these mistakes out of lack of attention. You have to keep an eye on this because sometimes she needs a reminder. But out of this she's a great support, she's very respected in MH and usually anticipates quite good the problems. You can trust her as she's very honest and hard worker.

She's very ambitious as well and wants to improve all the time. She was a nurse aid before and when the MSF academy started his program she was selected to attend the first modules. Finally she's been selected to attend all the course because of her great ratings and motivation. She attend to the sessions on Wednesdays afternoon so you need to anticipate someone to cover her position. She's awarded as well a scholarship to study Nurse after the program so it's very likely that she'll leave the pharmacy, but it's a great opportunity for her and I believe you should fully support her on this. You can follow all this topic with the MSF academy referent and the NAM.

She's very experienced but she never got the opportunity to do the Welcome to MSF Training. I didn't know this when I nominated Akoch, but she should be priority for the next session.

She's as well our IPC focal point, she has to attend all the meetings and she takes it very seriously. I believe it's a good thing to delegate this on her as it gives her confidence and she does it very well.



PMS Beronica_Final
evaluation.xlsx

Ajor (0927460247):

Although Ajor joined the team officially the 1st march, he's been working with us as daily worker for a couple of months before. He's very experienced with other NGOs but he was lacking some

knowledge about MSF system. The good thing is that he knows very well the drugs and he's efficient. Since he joined us he's been performing very well and I believe he's motivated. He rejected an offer of pharmacy supervisor with another NGO in order to grow within MSF. And he's ambitious about this, he mentioned a couple of times this idea, personally I think he could do very good as well in a higher position and for sure it would be a profile to consider if the time comes.

I'd recommend as well to give him more responsibility when possible, maybe you could hand him a specific task like ABS focal point or something related to clinical/consumption in ER. You'll have a big team now and it's important to develop all the staff.



PMS Ajor Chol_Final
evaluation.xlsx

Akoch (0917644031):

Akoch joined the team the 1st march as well. He's as well very sociable and everybody in the hospital appreciates a lot his effort.

He was selected for the WtMSF training because of all the above mentioned and I believe he can be someone that grows a lot within the organisation, at least for now he has the capacities and the attitude. All this being said, he still needs to improve a lot his technical and language levels but he's still young and can do it. So, any training from the basic levels I think would be very useful for him.



PMS Akoch Kiir_Final
evaluation.xlsx

For the moment I would let him develop and master his position before giving him other responsibilities.

- **PMS:** All PMS were finalized in time, I left the documents above so you can evaluate the objectives of each one and work with the same objectives or insert new responsibilities for each one of your team.
- **Holidays:** We received an annual balance on 09/29 with updated data, for the pharmacy staff we have the following balance of annual vacation days:
 - Ajor: 14 days (preferably in December or January)
 - Akoch: 14 days
 - Athor: 24 days, will be on vacation between 11/07 to 11/21, which will reduce the employee's days balance to 14 days.
 - Beronica: 8 days (Preferred in December)

In addition, to request and release a vacation, you must follow these steps:

1. Staff filled in the leave form and signed
 2. Sent it to supervisor for his/her input.....probably number of days taken among others
 3. Department head to authorize while knowing the number of days the staff has.
 4. Admin to approve all the leaves
- **Daily Workers:** With the current setup you should not request any DW and the team should be able to cover itself autonomously, even for your holidays. But if something exceptional happened you have to just fill in the request and after validation from PMR, to submit to administration.
 - **Rosters:** I've been making the rosters a bit irregularly because of all the HR constraints that we faced but it should be done and shared with the team before the last week of the month.



2022_ Pharmacy
roster_OCTOBER.xlsx



2022_ Pharmacy
roster_OCTOBER.pdf

13. Practical Information

- Computer password: Bravo2Papa!
- Isystock Password:
 - Manager: MANAGER/MANAGER
 - Default password: TESTA/TEST
- Keys:
 - CP: There are two sets of keys. One with you and the other with Athor.
 - MH: Only one key stay on the gate in MH. Not a second spare key.
 - MC: One set with you, one with NAM Outreach and the other is kept by Athor. He delivers it every morning and take it back in the evening
- Meetings:
 - Monday: Punto info (MH/MC/BRAVO)
 - Pharmacy Meeting: We've been having a meeting all the team in CP (08.30) every month at least. Very useful to share challenges and updates. You can fix it anytime in the roster and by 10am everybody can be in his usual position so it don't affect the activities. It is important that the day of the meeting you inform everyone in the hospital and in BRAVO.
 - Tuesday of the 1st week of the month at 15h: Medical Meeting in MC. All managers, supervisors and other key staff.
 - Tuesday of the 2nd week of the month at 15h: Mortality audit. Involved staff, I believe it's not mandatory to assist unless requested.

- Tuesday of the 3rd week of the month at 15h: Medical Meeting in MH. All managers, supervisors and other key staff.
- Tuesday of the 4th week of the month at 15h: IPC meeting. All managers, supervisors and other key staff.

14. Other relevant information (not mentioned above)

- **Lessons learnt**

- HR management is very difficult here. Sometimes the job is not their main priority and it's understandable as well but we need to be firm. We need to understand that we are here to set up high standards and somethings can't be foreseen independently of the situation.
- On the same idea, I've realized that capacity building of the national team is vital here. It's the only thing that really motivates them and it's the best thing we can leave when we finish. You have a quite new team but I believe it has potential, so I encourage you to actively promote this and propose as many things as you can.
- You can always seek for support among the rest of the team. The NAM, NAM Outreach and specially the MAM have been very supportive to me and I'm sure they will answer to any doubt you may have as well. You can count as well on Athor for any pharmacy activity related issue. I'm sure he will deliver and do his best to solve it as soon as possible.

- **Challenges**

- Our challenges have been mostly related to HR, we've been in a difficult situation for several months but now it looks stable. Anyway always keep in mind that this can change anytime and you need to be prepared to react.
- Cold chain management has been a challenge in MC now. Keep always an eye on it and make sure you are prepared to react in case of emergency.
- The consumption in ER has been very high on a regular basis but we've faced periods where the other partners were closed and it was even higher. It's the ward you need to follow-up the most and a closer control would be ideal. I'm sure you'll find a proper way to do it.
- You are going to face a period of global shortage some important items. This is logic and it's not Juba's fault, we've been overconsuming for several months and we've finished all the stock in Juba. Until June it's not expected that the situation gets better so you'll need to anticipate and find other solutions in collaboration with PMR/MAM and lab supervisor.

15. Priorities for the next 3 months

- Promote expired drugs destruction;
- Move the central pharmacy to Town;
- Improve the organization of stocks in the fields in the two hospitals;

- Follow the process of improving prescriptions in the two ERs;
- Improve the validity control of medicines and medical materials;
- Improve the Sentinel system in both ERs;
- Set up a proper HIV-TB contingency Plan upon arrival;
- Follow-up Beronica's scholarship through the academy, mainly in the field mentorships;

As for the rest, I wish you all the best luck and success in your mission! Malakal is a very complex project due to context and activities we have here.

I wish you all the best! If you need to contact me don't hesitate!

My email is luisanogueire@gmail.com and my Whatsapp is +5531971505953.

Cheers!

Luisa Nogueira