

GOVERNMENT OF MALAWI, MINISTRY OF HEALTH, DIRECTORATE OF
HEALTH TECHNICAL SUPPORT SERVICES (PHARMACEUTICALS)



Strengthening SC Planning & Coordination, SC Data Management and SC Performance monitoring capacity at HTSS/P

Inception Report

Mr. Khuwi Albert
Deputy Director, HTSS/Pharmaceuticals

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This is the draft inception report for a technical assistance project implemented by HTSS/P with funding from USG and GoM. This is a privileged document of HTSS/Pharmaceuticals Directorate and the opinions expressed here are not necessarily the opinions of USAID.

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ABBREVIATIONS (to be done)	
ACT	Artemisinin Combination Therapy/Therapies
ART	Antiretroviral Therapy
EDL	Essential Drug List
GFATM	Global Fund to Fight HIV/AIDS, TB & Malaria
HIV	Human Immunodeficiency Virus
LMIS	Logistics Management Information Systems
M&E	Monitoring & Evaluation
NMCP	National Malaria Control Program
PSM	Procurement and Supply-chain Management
SCM	Supply Chain Management
TA	Technical Assistance
TB	Tuberculosis
TOR	Terms of Reference
USAID	United States Agency for International Development
PMG	Project Management Group
JSI	John Snow International
CMS	Central Medical Stores

1.0 **ACKNOWLEDGEMENTS**

(to be done)

2.0 BACKGROUND AND PROJECT RATIONALE

The Government of Malawi seeks to increase availability of essential medicines particularly targeting the delivery of the minimum essential healthcare package. Ineffective planning and coordination of medicine supply systems is a constraint to achieving this goal. The lack of accurate, complete and timely logistics data and/or its low levels of utilization at all levels have lead to non-optimal supply-chain coordination, planning and management decisions. The extent of these problems varies from district to district and from one technical program to another.

Through HTSS/Pharmaceuticals, GoM in collaboration with its partners intends to strengthen health commodity supply-chain planning, coordination and management decisions at all levels in order to increase medicine availability, optimize public pharmaceutical resource utilization, and minimize stock outs and wastage.

Moving forward, GoM with technical assistance from USAID through JSI/DELIVER is formulating a project to strengthen supply-chain data management and supply-chain performance monitoring to gain the benefits of timely access to high quality data and inform improvements in medicine supply chain planning and coordination at all levels. Moreover, the Pharmaceutical Sector Strategic Plan 2009-2013 prioritizes the establishment of sustainable systems in data management and a supply-chain performance monitoring as well.

With improved supply-chain data management and performance monitoring capabilities, there will be more opportunities to reshape core supply-chain functions, improve decision-making, inform evidence-based policy changes and enhance capacity to plan and coordinate the universe of health supply-chains that currently operate in Malawi.

In part therefore, this project aims to strengthen HTSS oversight roles and to contribute to the achievement of its supply-chain management strategic plan. The project identifies short to medium term priority areas of improvement in medicine supply-chain management particularly to the extent such areas affect supply-chain data collection, transfer and utilization. The implementation of this project shall be managed by HTSS/Pharmaceutical in collaboration with USAID and key partners, CMS-T, DHOs and prioritized technical program heads in Malawi.

3.0 PROJECT SUMMARY

3.1 Purpose of the Inception Report

This is the inception report of the HTSS/Pharmaceuticals Project to strengthen supply-chain data management and supply-chain performance monitoring. The project is implemented by Ministry of Health, HTSS/Pharmaceuticals with technical assistance from USAID through JSI/DELIVER and in collaboration with priority technical programs and key stakeholders in the pharmaceutical sector.

The main purpose of this Inception Report is to set out a clear way forward for the USAID technical assistance task using a project work form. The report specifies activities and actions, timing and outputs of specific tasks of the project. The report presents an implementation approach and work plan and input schedules. It is intended to create a common understanding of what the project is intended to achieve and to form a basis for future evaluation of progress and effectiveness of strategies employed.

During this phase, the Project Team has taken inventory of the operating supply-chain systems & practices with emphasis on SC performance monitoring systems and Logistics Management Information systems (LMIS) to establish how it is organized, resourced, and utilized, its capabilities, challenges, coping strategies as well as register the aspirations and plans to improve system performance. The Project Team reviewed several documents and reports and established findings relevant to the scope of this project detailed in later sections of this report.

In part, this report serves to define HTSS/P strategic direction on medicine and health supplies supply-chain management over the period May 2013 to September 2014.

3.2 Project Description:

This project focuses on building HTSS/P institutional capacity for planning, coordinating and monitoring medicines supply-chain management in the country. In the long-term, this should increase availability of medicines in public health facilities and contribute to the HSSP goal of improving/saving lives.

The project supports HTSS/P itself and it is designed to involve a wide range of partners in medicines management within and outside Ministry of Health. The project covers the central level players and all 28 districts and its initial phase is scheduled to conclude on 30th September 2014.

3.3 Project Purpose

The purpose of this project is to strengthen leadership, systems, capacity and skills in supply-chain coordination, planning and management at HTSS/P using improved logistics information systems.

3.4 Project Goal & Objectives

The goal of technical assistance and the project is to build capacity in logistics data management and supply-chain performance monitoring and evaluation.

The specific objectives of the project are:

- Establish cost-effective supply-chain performance monitoring capacity
- Improve supply-chain data collection, organization, processing and utilization capacity
- Use logistics information to strengthen supply-chain planning and coordination capacity and to strengthen collaboration of HTSS with its partners and technical programs.
- Monitor supply-chain reforms and inform the required policy changes

The significance of this project lies in its potential and the opportunities it creates for systems strengthening targeting areas in public sector medicines management that have not been addressed adequately by existing players.

3.5 Project Implementation Approach

The purpose of the inception phase was to develop the project implementation approach and work plan. The implementation approach detailed here ensures that the objective of the project will be achieved by working in collaboration with and providing technical support and advisory services to Ministry of Health, districts and key stakeholders. The approach has involved the assessment of the national supply chains, identifying opportunities for improvement and developing appropriate recommendations and proposing actions to build capacity to strengthen supply-chain data management and supply-chain performance monitoring systems to inform improved SCM oversight by HTSS.

The technical assistance team recognizes that some of the tasks prescribed will require an immediate response while others will be achieved in the medium term during the project life. Our approach therefore provides for a **two-track strategy** to ensure delivery of all project tasks in a logical manner. The project team will respond to the immediate logistics management and coordination support needs whilst we set up procedures and initiate capacity building activities that will yield the intended long-term benefits to HTSS and clients at health facilities.

The project team recognizes that some work has been or is being done and we intend to build on it particularly the ongoing e-LMIS development efforts supported by JSI, GFATM efforts to harmonize storage and distribution of HIV and Malaria commodities, DFID/CK support to CMS to strengthen procurement management, JSI support to strengthen supervision of logistics management at SDPs, ITECH support to strengthen supply-chain management for HIV program commodities, various donor-supported technical assistance efforts to support reforms at CMS-T, etc to mention but a few. Our approach has provided for an inception phase in which we have assessed, among other things, the work previously completed and the status of implementation in order that emphasis is placed where gaps still exist and further support is needed in areas that are within scope of this project and relate to the objectives set here.

3.6 Priority areas of improvement and recommendations

Based on the national situation analysis, below is a list of strategic areas of interventions and recommended actions in line with the project objectives. These interventions apply to all MoH program areas which use medicines and/or health supplies.

1. Strengthen national stock status reporting for key program commodities.
2. Strengthen health commodity demand forecasting and joint supply-planning.
3. Develop and implement a supply-chain performance monitoring framework.
4. Strengthen national supply-chain data collection, data quality, analysis and utilization in medicine supply decisions
5. Strengthen accountability systems and use of consumption tracking records for priority items and those prone to wastage and unexplained losses.
6. Strengthen district level medicine management support systems.
7. Strengthen HTSS/P collaboration with CMST, technical programs and partners ensuring information sharing and optimal planning, harmonization and coordination of commodity supply-chains
8. Support a medicine stores condition assessment covering all public health facilities (*not yet detailed in this report*)

While many areas of supply-chain management currently require support, this project has targeted these areas because of their overbearing effect on quality of data, how data is generated, shared or utilized and the overall impact on medicine availability at service delivery points.

These activities are detailed in section 7.0 of the report and don't target a particular program.

4.0 PROJECT ESTABLISHMENT

4.1 Start-up

The project commenced on 2nd April, 2013 with the arrival of the Supply-Chain Monitoring & Evaluation Advisor (SCMEA) and the Supply-Chain Data Management Advisor (SCDMA) in the country. Introductory meetings with USAID, JSI and the Directors of HTSS and Deputy Director HTSS/Pharmaceuticals as well as staff of HTSS/Pharmaceutical were held in the period 2nd to 5th April, 2013 to brief the technical assistance team and agree on a plan for inception activities (Annex-1). Due to budgetary constraints and availability of key persons, it was not possible to hold a stakeholders' meeting to present the technical assistance team, to explain the project purpose, vision, and objective, rational, role of partners and implementation strategy as was originally intended.

That said, the technical assistance team has attended a number of stakeholders meetings and held discussions and interviews with key persons and teams across different technical programs of Ministry of Health, selected district staff and partners (see Annex-2 for list of persons interviewed). The SWAp Review Meeting, the orientation meeting for logistics supervisors and mentors, the Family Planning Commodity Security TWG meeting, select district and facility level meetings, PHC kits meeting at CMS-T, etc were rich ground for information to guide the project work planning priorities.

The learning process shall continue and changes to the implementation plan shall be accommodated as needed within limits of time and resources at the team's disposal.

4.2 Project Management Proposal

The team proposes the appointment of a Project Management Group (PMG) consisting of the Director HTSS, Deputy Director HTSS/Pharmaceuticals, CMS-T Operations management and RH/HIV/TB/Malaria/IMCI Program Management representation. Alternatively, the DMS-TWG may constitute itself into a PMG from time to time to offer guidance to the project team which consists of the Deputy Director HTSS/P supported by the SCMEA, SCDMA and the HTSS logistics officers positioned in various programs of the Ministry of Health.

The responsibility for convening the PMG or TWG meeting lies with the Deputy Director HTSS/Pharmaceuticals in consultation and/or upon request by members of the Project team. At district level, the project team shall coordinate its activities through the DHO supported by the District Pharmacy Technician, relevant MoH program district coordinators and district based partners.

The role of the Project Management Group is to ensure that:

- The project is implemented in accordance with the project plan subject to the changes that may be made and approved from time to time.
- The project proceeds in a timely and efficient manner;

- The project team is adequately guided during the design and implementation of the technical solutions.
- That project results will be accepted by management of partner institutions and technical programs of Ministry of Health.
- That the Project Team can access resources and information needed to effectively carry out its duties.

The Project Team is structured in the way that **Mr. David Bagonza** (SCMA) shall lead supply-data management strengthening while **Mr. Austine Omiunu** shall take lead on pharmaceutical strategic planning and establishment of performance monitoring systems. The technical support towards building capacity of counterparts is shared accordingly. These individuals will be stationed at the HTSS/Pharmaceuticals office over the projected period ending 30th September 2014. Additional experts may be requested by HTSS for short term unique assignments if resources allow.

4.3 Assumptions to Project Implementation

In order for the project to succeed, it is assumed that;

- Ministry of Health shall allocate or mobilize resources in time to cover cost of implementing this project given that USAID is paying for only the cost of the SCMEA & SCDMA.
- Collaboration and co-operation among stakeholders at all levels and information sharing by the project team throughout the project period.
- Pilot projects will be successfully implemented in time (and where sufficient experience with tools exists such pilots may be waived upon notification of the counterpart).
- There shall be continued political, financial and managerial support to ensure project stability.
- Project team members and partner focal persons shall commit to the agreed amount of time to support implementation of project activities generated and that this requirement shall be included in the staff performance monitoring.
- Information shall be accurate and shared freely in a timely manner through the appropriate management structures.

4.4 Review and Clarification of Terms of Reference

5.0 A NEEDS REVIEW FOR STRENGTHENING MEDICINE MANAGEMENT

The overall goal of the country situation assessment was to identify opportunities for improvement in supply-chain management with particular emphasis on supply-chain coordination and logistics data management and their impact on availability of medicines.

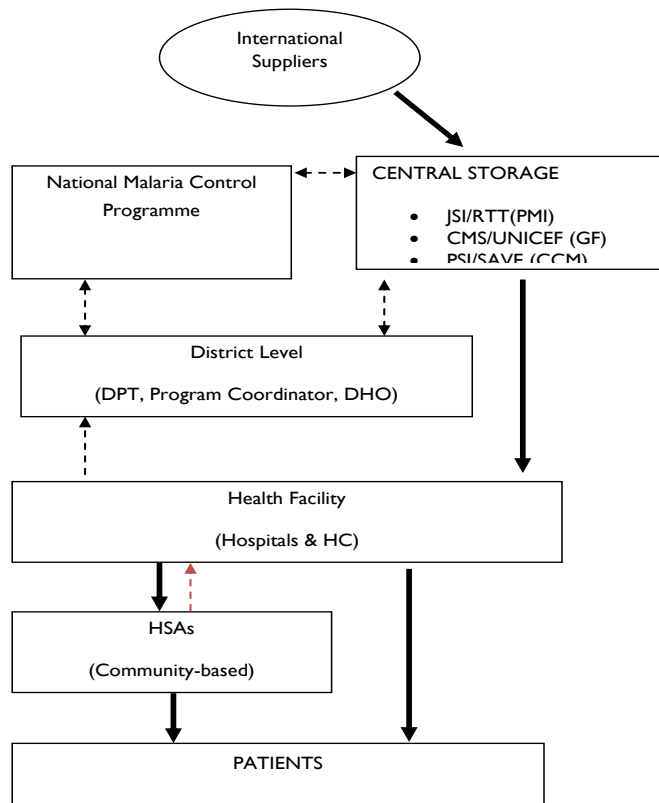
The technical assistance team interviewed stakeholders and several resource persons responsible for different functions of pharmaceutical supply-chain management in Malawi. The team visited central storage facilities, selected district (Mzimba South, Mzimba North, Ntchisi, Blantyre and Chiradzo) stores and selected service delivery points. In addition, the team examined existing distribution networks, LMIS, various policy and strategy documents and technical reports on work previously done.

The results of the assessment formed the basis of the project implementation plan ensuring that project work will be relevant because it targets and seeks to address current problems which have a bearing on the overall performance of the LMIS and the supply-chain systems it serves.

This assessment was of limited scope because there is a lot of assessments and reports written in the last few years with consistent findings. It is important to note that the findings on medicine supply management from this rapid assessment correlate, for example, with the reports reviewed, comments presented at recent SWAP review meeting of stakeholders, CMS-T/PHC kit project meeting, as well as problems presented at the recent Reproductive Health commodity security meeting. This inception report is guided, among others, by the aspirations of the several stakeholders that attended these meetings and others that were interviewed separately.

Nonetheless it is possible that due to time and logistical constraints, the team may have missed some vital information in relation to medicine supply management particularly at lower levels. There will be opportunities to review and update the implementation as and when these vital and/or new issues become apparent and we have determined what actions can be supported within limits of resources available.

5.1 Review of Malaria Program Commodity Supply-chain and information flow



Features & key issues:

- A two tier distribution and inventory management system.
 - Resupply decisions made at SDP based on past consumption, reviewed and consolidated at district in the LMIS reports using SC Manager.
 - Aggregated demand and stock position consolidated at national level using SC Manager.
 - Individual facility orders further refined by NMCP logistics team and compiled into a national distribution list every month. Low reporting rates a challenge.
- Scale up of CCM through partners has created new parallel supply chains (PSI, Save the Children, etc).
 - Parallel SC handles only ACT & RDTs. Others program commodities such as Quinine injection; SP tablets, etc are supplied through the essential medicines kit.
 - Preparation of the monthly national distribution list remains a challenge and is subject to multiple reconciliations because procedures for tracking and handling of CCM program commodities at the Health centers are not harmonized. Some health centers do not record consumption through HSAs on stock cards and a few centers have not pooled CCM ACTs on a single stock card. The effect of this anomaly is not yet fully apparent.
 - Health facilities usually switch to available pack sizes to meet demand for ACTs. Again, this distorts demand forecast for the different pack sizes. This can only be resolved by minimizing interruptions particularly for LA 6x4 and LA 1x6 are minimized.
 - Use of the dispensing records remains weak because it is a new practice to most facilities. Facilities are challenged to use an increasing range of reporting tools due to workload and

capacity but it is best practice to maintain dispensing records for key items particularly those prone to pilferage.

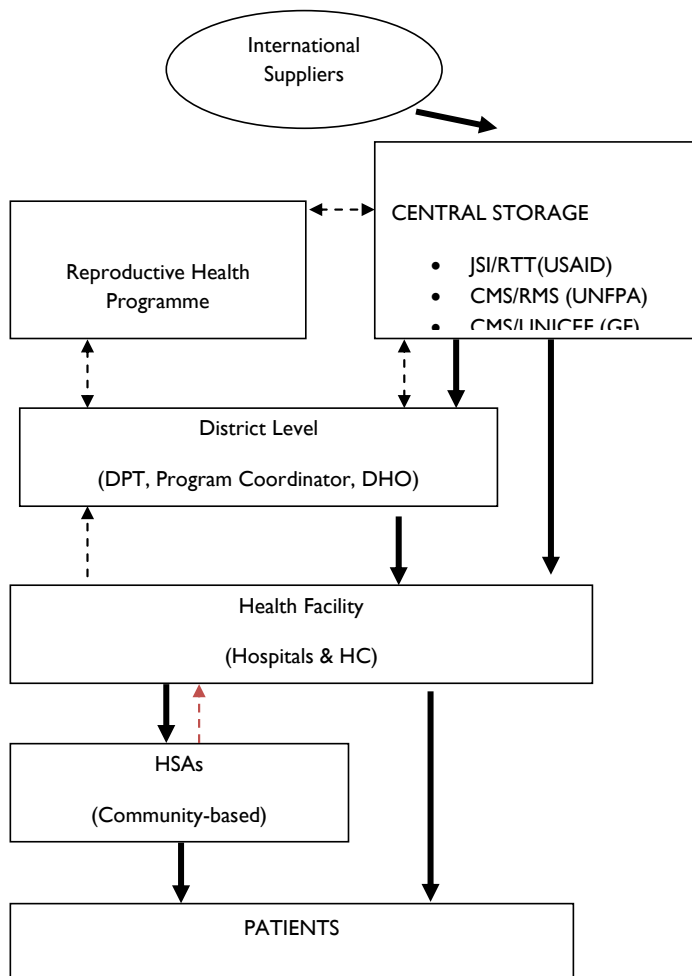
- There is strict monitoring of the parallel supply-chain service provider at all stages. As a result, coupled with a short tier system, malaria program operates an intense but effective supply-chain. It has recorded the lowest stock out rates of fewer than 5%.
- NMCP commended for utilizing LMIS data in re-supply decisions. The program takes simple steps such as calling DPTs and district program coordinators and DHOs to ensure reports are available to inform the monthly distribution list.

Areas of Improvement for malaria program commodity management

- 1. Clarify policy and support facilities to eliminate multiple stock cards for ACTs particularly in districts receiving supplies from CCM partners.*
- 2. Health facilities to record quantities issued to specific HSAs on stock cards to facilitate tracking of utilization at the Health center and the various health it serves.*

Section 3.4 above identifies key areas of improvement applicable to all technical program areas at Ministry of Health.

5.2 Review of Reproductive Health Commodity Supply-chain & information flow



Features & key issues:

- A mix of a two and a three tier distribution and inventory management systems (central, district and facility levels)
- Resupply decisions largely unclear and not optimally coordinated between CMS and the PSC. Re-supply quantities are coordinated by one individual who must call all district coordinators to get true picture of stock situation at district and facility.
- No Logistics Coordinator at RH.
- While logistics reports are consolidated at district, the parallel supply-chain provider has limited information on what and when/if CMS delivers to health facilities.
- Aggregated demand and stock position done at national level using SC Manager.
- Confusion largely caused by CMS' inability to deliver uneconomic orders to health facilities, the mix of push and pull re-supply systems at SDPs and inadequate information sharing among players.
- The two main parallel distribution systems are designed to operate monthly delivery cycles but in effect CMS delivers supplies to districts without reliable mechanisms for timely delivery to SDP.
- GFATM has procured Depo to be distributed to ART sites through yet another CMS/UNICEF/SDV parallel supply-chain. It is not known if health facilities will pull from this source or if this new source for RH products will push to SDPs.
- These multiple and uncoordinated supply-chains at Reproductive Health are a serious cause for concern and will need to be harmonized as a matter of urgency. While some reports have suggested high stock out rates of reproductive health commodities, all the facilities

visited during the assessment had adequate and sometimes excess supplies. Past reports and minutes going several months back have listed the same problems associated with inadequate coordination of procurement and supply-chain planning.

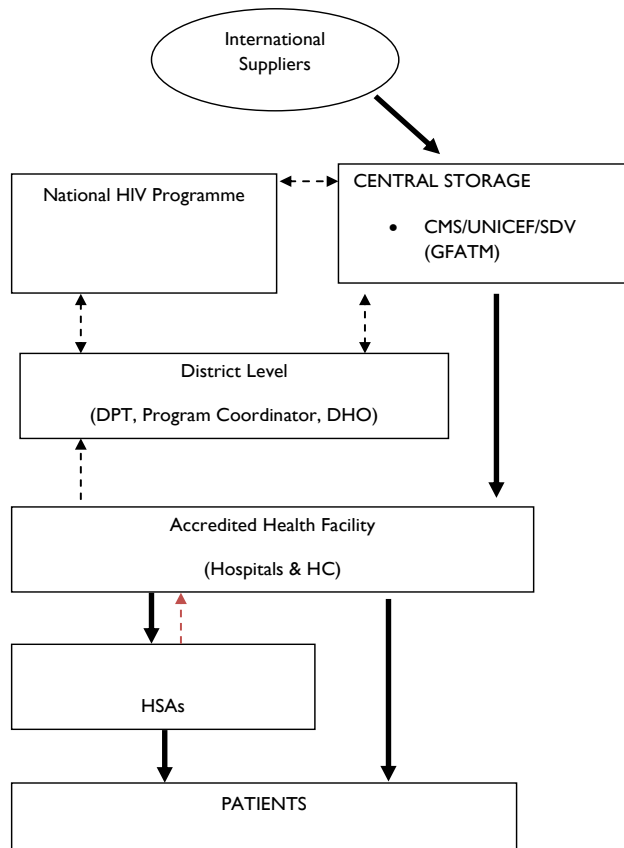
- While there is strict monitoring of the parallel supply-chain service providers at all stages, there are no similar benchmarks for monitoring CMS performance.
- RH is commended for utilizing LMIS data but then this information has to under lots of manual reconciliation to determine the actual needs at the health facility. The program takes simple steps such as calling DPTs and district program coordinators and DHOs to ensure reports are available to inform the monthly distribution list. As a result of the confusion in how to order for RH commodities, the preparation of the monthly national distribution list remains a challenge and is subject to multiple error prone reconciliations because procedures for tracking what each supply-chain is delivering to the health center are not optimal.
- Products from different pipelines are pooled on one stock card at the SDP, this is commendable but then it is not clear how health centers track commodities supplied to the HAS.

Areas of Improvement for RH program commodity management

- 1. Harmonize and coordinate supply-chain decisions under the three supply-chains for RH commodities and strengthen communication and information sharing.*

Section 3.4 above identifies key areas of improvement applicable to all technical program areas at Ministry of Health.

5.3 Review of HIV Program Commodity Supply-chain and information flow



Features & key issues

- Much in common with the NMCP supply-chain management. A robust two tier distribution and inventory management system (central and SDP only)
- Resupply decisions made at the center based on patient statistics. This is largely due to relatively good quality M&E data which provides reliable patient numbers per regimen per facility.
- SDPs continue to report LMIS which is consolidated at the district. The main drawback is low LMIS reporting rates and unreliable inventory and stock utilization data.
- Aggregated demand and stock position done at national level using SC Manager.
- Quarterly supervisions are done to collect

LMIS data, particularly Physical counts before a national distribution list is prepared and shared with districts and CMS. The quarterly distribution cycle is associated with heavy workload associated with large volume of goods distributed followed a period of very low activity for the ARV warehouse team.

- The existence of a single delivery system for HIV commodities eliminates the problems associated with poor coordination of multiple distribution systems.
- There is strict monitoring of the parallel supply-chain service provider at all stages. As a result, coupled with a short tier system, and less frequent delivery cycles, HIV program operates an effective supply-chain. The program is recording decreasing incidents of stock out rates at its accredited facilities but emergency orders remain high especially when changes to treatment regimens are made.
- The program is supported by a large team of logistics staff including a Supply-Chain Technical Advisor procured through ITECH.

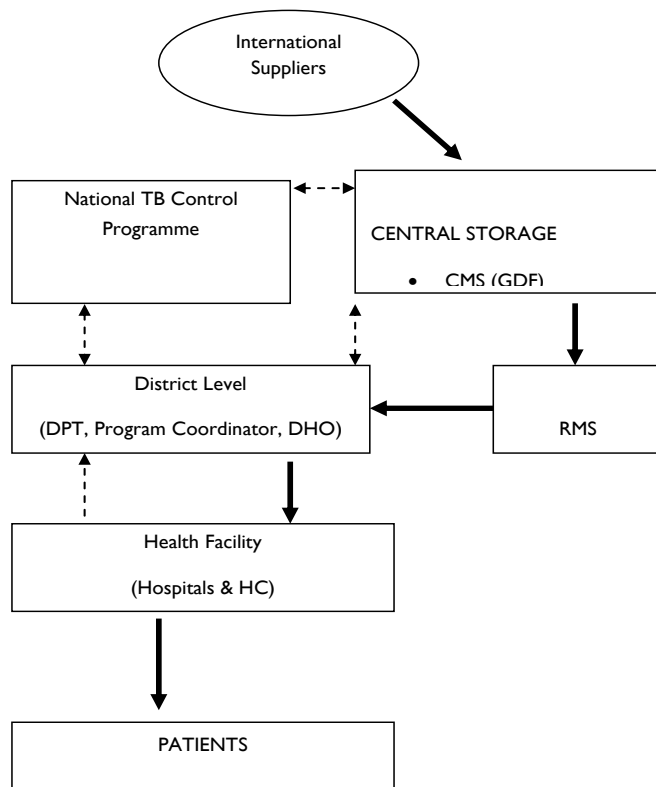
- The program takes simple steps such as calling DPTs and district program coordinators and DHOs to ensure reports are available to inform and track redistribution decisions. A toll free line is available for facilities and district staff to report supply-chain problems. In these instances, LMIS data may be used to confirm status of stock at selected facilities.
- There is an ongoing plan to consolidate supply-chains for HIV and Malaria program commodities by January 2014 but this timeline does not appear feasible given the amount of time, the depth of care and inevitable procedural checks required to procure this type of service and the amount of time a new contractor would require to establish and test the required warehousing and transportation capacity in Malawi.
- Health facility stock cards do not record quantities of HIV test kits issued to specific HSAs making it difficult to track utilization at community level

Areas of Improvement for malaria program commodity management

- 1. Monitor the transition towards an integrated HIV/Malaria commodity supply-chain for GF supported commodities.*

Section 3.4 above identifies key areas of improvement applicable to all technical program areas at Ministry of Health.

5.4 Review of TB Program Commodity Supply-chain and information flow



Features & key issues

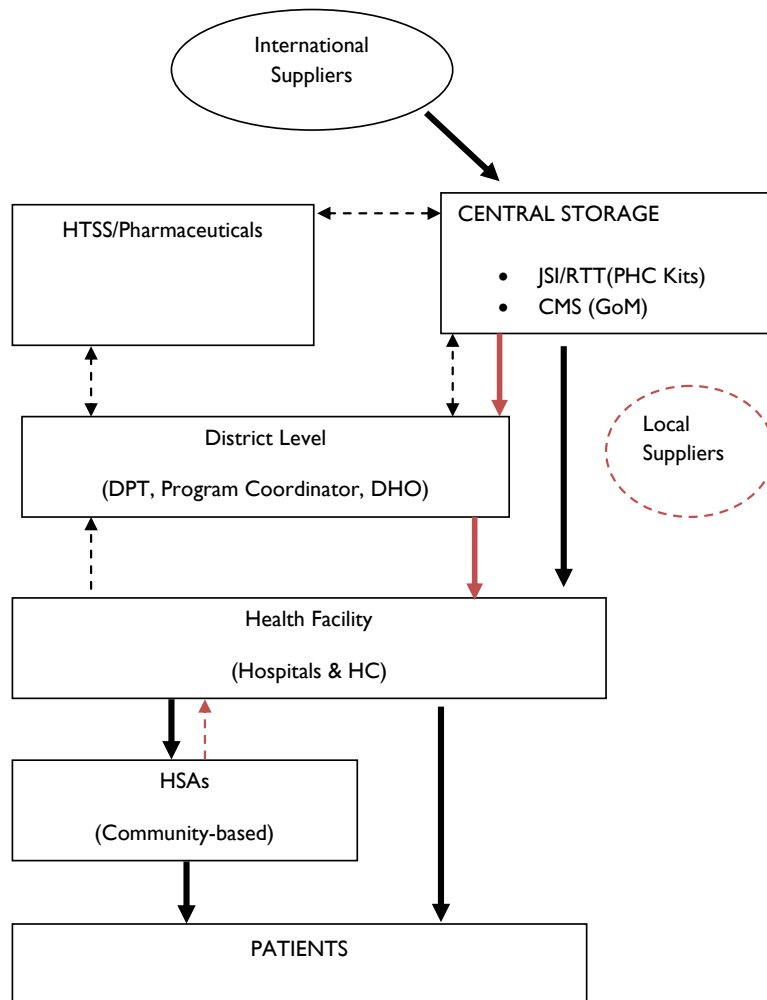
- A four tier distribution and inventory management system (central, regional, district and SDP only)
 - Resupply decisions made at the center to RMS based on the proportion of TB patients in the regions. All resupply decisions for TB medicines are made at the district (which pulls from RMS and pushes to SDPs based on referred number of patients)
 - No LMIS data is collected for TB medicines.
 - Quarterly supervisions are done to but these have little consideration for LMIS data except for physical counts.
- There is no clear system for monitoring of the CMS supply-chain. The program has little visibility on program items in the system due to the multiple layers of distribution. At present the program is only helped by the fact that TB patients are largely managed at district hospitals and a few health facilities (about 198). The system cannot optimally support a wider network of facilities beyond the district given the unreliability of delivery systems beyond the district.
 - The existence of a single delivery system for HIV commodities eliminates the problems associated with poor coordination of multiple distribution systems.
 - There is an ongoing plan to consolidate supply-chains for HIV and Malaria program commodities by January 2014. The TB program should consider the efficiency gains and the ability to shorten the in-country pipeline and to commence monitoring of stock status at SDPs.
 - Until now, CMS-T does not charge for handling of TB medicines.

Areas of Improvement for malaria program commodity management

- I. Strengthen the use of logistics data in resupply decisions, in part, by including TB commodities on the integrated LMIS form.*

Section 3.4 above identifies key areas of improvement applicable to all technical program areas at Ministry of Health.

5.5 Review of CMS-T and essential medicines supply-chains



Features & Key issues essential commodity and information flow

- Essential medicines largely distributed through a PHC kit system operated by JSI (to end July 2013). The kit is procured and distributed using donor funds. Limited range of essential medicine items available through CMS.
- Districts have no resources for effective support of distribution to SDPs.
- JSI delivers to SDP while CMS delivers to district level, no economic order quantities to health centers through CMS.
- The kit system is credited for improving medicines availability and quality.

Uncertainty on how CMS and GoM shall maintain this level of service when PHC kit project closes in September 2013.

- Reforms at CMS-T are ongoing to create the necessary capacity and expertise to procure, store and distribute essential medicines. These reforms have not progressed as fast as originally intended and the benchmarks for the required capacity have not been fully met or tested. The recruitment of key persons is still ongoing.
- Ministry of Health and partners have developed and signed to a strategy for integration of supply-chains for commodities supplied to public health facilities. The strategy is largely a road map for CMS-T on what needs to be in place if the integration goal were to be met. The strategy paper does not prescribe actions CMS requires to undertake and it is not clear what kind of technical and financial support CMS-T will require to develop the necessary capacity and move towards meeting the targets in the integration road map. Presently, there

is no high level tasks force with sufficient authority to accelerate CMST reforms, mobilize resources and make progress towards targeted capacity in procurement, storage and distribution of medicines.

- Based on available level of funding through SWAP, Ministry of Health is yet to decide whether or not to continue with kit distribution and the content of such a kit is not yet determined. There is consensus among stakeholders that some form of kit system should be sustained for Health centers in view of limited capacity to order and the need to maintain a system that responds to facility needs fast enough.
- A growing debtor's position has hurt the CMS financial health and depleted its capacity to sustain service delivery in the past. The situation has not improved even after the transition to autonomous CMS-T. Districts continue to accumulate debt with CMS-T a situation that is likely to recreate the conditions that failed the institution in the past. 50%..
- District purchases outside of CMS-T are associated with supplies of low quality and usually at higher prices. There are no sufficient structures or capacity at the district to ensure product quality and create sufficient economies of scale to attract fair prices. District purchases do not sufficiently prioritize vital supplies and medicine budgets are reported to be diverted to other activities. The HSSP notes the lack of a documented role of the central level procurements undertaken by the districts. These procurements are characterized by emergencies and no district has prepared a procurement plan for medicines. It is unlikely that the country is getting value for money in these procurements. As such, Ministry of Health in consultation with the local governments ought to review guidelines for expenditure of the medicines budget.
- There is no forecast of essential medicine and supplies requirements for 2012/13 and beyond. As such, it is not clear how essential medicine needs beyond Jan 2014 shall be covered.
- CMS-T is not only assuming the responsibility for kit storage and distribution but for "kitting" the items. Kitting operations are labor intensive I nature, time-consuming and require careful planning of picking and bulk locations in line with internal systems for item movements. A fair degree of technology is required to support picking, packing and dispatch operations. The capacity of CMS-T to deliver an efficient kitting operation is not known.
- CMS-T is currently not utilizing LMIS data which is freely available through the LMIS unit at HTSS. The data needed to make good –resupply decisions is available at HTSS.
- GFATM supports procurement of 20% national needs for drugs used to treat opportunistic infections. These grants close in June 2014.

Recommendations:

Strengthen HTSS coordination with CMST and optimize the PHC kit post September 2013

Activities:

1. Monthly coordination meetings with HTSS/P
2. Review medicine budgets and allocation criteria: hospitals & health centers and strengthen VEN implementation
3. Establish MoH Kit committee, advocate for procurement of pre-packed PHC kits to allow space for efficient distribution operations.
4. Collaborate with DHOs, CMST to develop adjusted Kit and a supply plan
5. Design biannual kit studies to inform periodic review of kit content
6. Prepare a forecast of essential medicine and health supplies needs and propose a supply plan within limits of resources available for 2013/14 and 2014/2015. In view of the end of the kit project and the expiry of GFAT grants in June 2014, use forecast to identify supply gaps for essential medicines and advocate for increased resource allocation to procure vital commodities.
7. Strengthen LMIS data sharing with CMS-T to improve supply-chain decisions and inform ongoing policy changes.

Section 3.4 above identifies key areas of improvement applicable to all technical program areas at Ministry of Health.

5.6 Summary of Key findings

Coordination

- Many program-specific vertical supply chains, multiple players, not optimally coordinated, resources across programs not shared
- Performance monitoring and supervision of parallel supply chains and not CMST. No routine performance reporting, no regular coordination of TWG meeting, meeting actions not followed
- HTSS/P not sufficiently resourced and capacitated or structured to offer effective SCM coordination

Demand forecast & supply planning

- National forecasts for essential medicines while coordinated, they are not used to guide procurement decisions
- Capacity to project medicine needs is low at all levels,
- Quality consumption data for accurate quantification not available, resupply decisions based patient statistics for some programs

- No joint procurement planning among RH donors, need for improved coordination and consolidation of needs

Storage & Inventory Control practices

At health facility level, there is progress towards improved storage practices, further support needed to improve

- inventory management (knowing what and how much to order)
- record keeping including proper use of dispensing records and RIV
- stores infrastructure as this may be a major hindrance to apply good practices, to undertake a national stores condition assessment
- clarify role and authority of HF charge in LMIS reporting and stores management; reports from HF not reviewed or signed off by HF in-charge
- routine monitoring and supervision by the district level

Central level storage (see CMST & essential medicines section)

- Slow reforms and risk of stock outs when PHC project expires
- Delays in stock status and pipeline information sharing;
- RDF model misconceived, “government buying from itself”, little value in districts managing drug budgets, no economies and no quality assurance, district debts shall bankrupt CMST.
- VEN implementation poor: redundant stocks, expiries, non-V purchases in large volumes (sutures, POP, etc)
- Some key warehouse functions not automated such as location management, FEFO, etc

Data collection, analysis and utilization

- Low reporting rates and data accuracy challenges, affects logistics management decisions
- access to transport for collect/deliver reports is a major problem
- LMIS form doesn't prioritize Vital items, items not well organized, not adequate for central hospitals
- Data utilization very low, if any. Weakest HMIS component.
- Opportunity for automation/web-based/e-LMIS
- CHAM facility reporting most challenging, reports cover only items supplied by GoM
- Reports prepared by unqualified staff and not signed off by facility in-charge or used by the district.

Distribution

- No funds to support distribution of some donated (DFID) commodities
- Good oversight and clear performance standards for outsourced distribution

- Routine distribution planning and/or coordination among/between programs

Human Resource, capacity building and service delivery

- Low numbers of qualified pharmacists and PTs in government, 76% vacancy rate, thin structure at district and at center
- Output of pharmacy carders very low <30 PTs and <20 Pharmacists, government cannot attract
- Capacity and skill level low for level of responsibility of pharmaceutical staff in majority of cases
- Other persons trained to manage and dispense medicines, unqualified persons dispensing or managing records, reporting
- Inadequate tools: dispensing trays, Medicine envelopes, computers for data entry, etc.
- Supervision, appraisals need improvement

6.0 INTERVENTIONS FOR STRENGTHENING MEDICINE MANAGEMENT

6.1 Strengthen Supply-chain data collection, analysis and utilization

As with all other forms of management information, the LMIS is an important input for efficient performance of various managerial functions at different levels of the country's health commodity supply-chains. The information system facilitates planning, controlling and decision making which includes setting performance standards, measuring performance against those standards, and correcting deviations. Therefore improvement of the LMIS is likely to lead to improvement of results in all supply-chain functions.

Important to note that parallel to this project effort, an assessment of the LMIS was conducted in February 2013 by an e-LMIS team from JSI/DELIVER to examine the overall system design; the processes of LMIS data collection, recording, reporting, and use; the software solutions that are used to manage the data; and the underlying resources needed to sustain the LMIS. The report will be presented to MOH in May 2013 and it proposes short and long-term recommendations to improve the LMIS processes and technology solutions in Malawi. To that end, our project shall only contribute to the final report and development of the plan to strengthen LMIS. HTSS/Pharmaceuticals shall determine, in consultation with the e-LMIS team, what recommendations need to be implemented under this project.

The February 2013 LMIS report suggests, among other things, that the system design and processes as documented are largely sound and remain valid, and that recent trainings for health workers and supervisors have achieved some gains. However, compliance with written procedures is weak, and the list of commodities to be reported by lower level health facilities for resupply is too long and not prioritized. This is consistent with our own independent observations from the field. Program data needs relate to SDP commodity utilization rates, closing balances and adjustments to stock and shelf life for the full range of commodities used to deliver treatment and care services. The existing LMIS is designed to collect this data and the tools exist (although not present at some SDP) and procedures have been defined to support this system. As indicated above, the system is not well administered or supervised and data is not utilized. The challenge is greatest with CHAM facilities.

In respect to the LMIS, the scope of this project team relates to setting parameters and improving the management support systems for supply-chain data intake using existing tools and making it readily available and usable to decision makers who shall be capacitated to analyze and produce and share supply chain performance reports. The e-LMIS project shall take lead on implementing any approved system modifications particularly to the extent it relates to reprogramming of current tools or introduction of new ones.

Recommendations

Support Data management and reporting improvements

Activities:

1. Develop and implement an integrated data management strategy allowing for use of multiple data bases (CMED, supervision data, LMIS, etc)
2. Data quality review
3. Prepare district report and national report
4. SC manager user training
5. Print/disseminate LMIS forms
6. LMIS report authentication by in-charge and/or DHOs office
7. Discussion of the district report by DPT with DHO and at DHMT
8. Facilitate communication between district/health facility with LMIS unit
9. Map and coordinate with district based partners to support LMIS reporting
10. Clean LMIS data set per reporting cycle and share with CMS-T and technical programs

6.2 Support HTSS/P collaboration with programs and key partners

The project team has identified priority areas to strengthen vertical program commodity supply-chains and opportunities for streamlining supply-chain activities and move towards integration, where feasible. Under this technical assistance, HTSS/P project team will design interventions to improve supply system efficiency and information systems to provide timely feedback for programs to make evidence-based decisions. HTSS/P aspires to strengthen its linkage to and collaboration with technical programs. Given the differences in the spectrum of supply-chain problems, it is possible that some technical programs will be prioritized when it comes to particular interventions. Note that while some of the key interventions do not directly target vertical programs, those interventions positively impact on the overall management of program commodities at different levels.

CMST is mandated to procure, warehouse and distribute all essential medicines and health supplies to public sector health facilities in Malawi. Ongoing reforms are geared towards gaining capacity to efficiently perform these functions. The Ministry of Health in collaboration with partners has signed on a supply-chain integration strategy. Given its central role, HTSS aspires to strengthen its collaboration with CMST to improve supply system efficiency and performance monitoring information systems.

Recommendations

Strengthen HTSS coordination with partners and MoH technical programs

Activities

1. Monthly coordination meetings CMST
2. Coordinate DMS TWG meeting: discuss reports, monitor implementation of actions
3. Facilitate monthly technical program logistics meetings
4. Prepare HTSS briefing notes and management papers to MoH Senior Management
5. Coordinate annual meeting of medicine SC stakeholders
6. Support and contribute data for distribution planning for key technical programs

7. *Joint supervision planning of medicines management at SDPs and district level*

6.3 Strengthen Stock status reporting, Demand forecasting & Joint Supply-Planning

The goal of this intervention is to establish and quantify the national and facility commodity requirements for the short and long-term; establish priority program procurement plans/budget and achieve best practices in the management of the forecasting function.

The objective is that within the project period, HTSS/P has strengthened itself and technical programs in the application of best practices in forecasting and quantification of pharmaceutical needs; strengthen the stakeholder coordination mechanisms in the management of the forecasting function at national level and at service delivery points and minimized shortages and wastages that arise out of inappropriate needs assessment

Forecasting, quantification, and supply planning performance have enormous impact on the entire pharmaceutical system's ability to fulfill medicine and health supplies needs. The HTSS/P team will provide technical support to all technical programs and implementing partners to harmonize, standardize, document, and prepare demand forecasts, estimate funding requirements, identify and track funding sources, and develop procurement and delivery plans. The HTSS/P team will create a quantification calendar to make sure that country needs are determined in time to feed into the GoM and partner budgeting processes. In particular, the HTSS/P will help DPTs to quantify and track district medicine needs and prepare periodic stock status reports to the district health management team.

HTSS/P will help strengthen the methodology for determining country requirements as logistics data quality improves. At the onset, HTSS/P will work with technical programs, partners and CMST to develop a calendar of forecast and quantification tasks for the year and this will be updated regularly.

Under this technical assistance, HTSS/P will monitor stock status on a bimonthly basis for key donor-supported commodities of unique public health importance such as ARVs, ACTs(malaria medicines), anti-TB drugs, laboratory reagents, and contraceptives. The reports will be discussed with key stakeholder including CMST and technical programs before being presented at technical working groups meetings. The project team will ensure that the stock status reports are prepared on time and necessary actions are taken to improve the supply chain.

Activities

1. *Advanced quantification methodologies course (STTA)*
2. *Quantification calendar*
3. *Review quantification guidelines and data collection tools*
4. *Review forecast reports and status of procurement plans and establish mechanisms for coordination*
5. *Prepare Quantification reports and review financing gaps*
6. *Discuss with technical program and partners, brief for MoH SMT*

6.4 Support District level medicines & data management systems

Given the level of responsibility transferred by the decentralization policy to the district, the existing pharmaceutical planning and management structures at the district are weak and cannot provide the required support to the district. For example, according to the PSP only 92 of 378 positions for pharmacy technicians are filled in the public sector giving a vacancy rate of 76%. The responsibility for medicine management and monitoring pharmaceutical service delivery in the district falls under the office of the District Pharmacy Technician, a full time staff of the district hospital. Under the circumstances, the DPT is sufficiently engaged with day-to-day operations of the district hospital leaving him with almost no time to correctly plan and manage medicine monitoring responsibilities at health centers. Moreover, few DHOs have demonstrated effective management of the DPT role or prioritized medicine management issues in the district.

With a view to strengthen the district medicine planning and management apparatus and provide effective and continuous supervisory support to SDPs, HTSS/P proposes a full time position of a district-based Medicine Management Supervisor under the administrative control of the DHO.

What would be the roles of the DMMS?

- Assessment of health facility medicine management performance: inventory, stores and reporting
- Solve medicines management problems and build HF staff capacity through on-the-job training and mentoring in stock and stores management and reporting/ordering.
- Report findings, progress & constraints and coordinate implementation of decisions from DHMT/DHO/DPT
- Coordinate medicine management in the district including medicine redistribution, health facility emergency orders, support DPT to forecast of district needs, collaborate with district/zonal program coordinators for HIV, TB, Malaria, RH.

The time-frame for establishment of these positions shall be dictated by availability of funding and expression of interest by districts. This model may not require piloting given that it has worked well and produced good results in districts such as Thyolo where this position is supported by MSF. The same model is employed in Ethiopia, Uganda and other parts of Africa.

The rationale behind proposing this set up is to strengthen the medicines needs planning, management and monitoring capabilities at the district so that the inventory and stores management policies and guidelines are followed in letter and spirit at all SDPs. The returns on investment in this project depend on a well functioning district level. HTSS/P will map partners in each district and make a request for their support in this regard. The DMMS will be required to prepare district reports and monitor and report facility medicine utilization and stock levels. The presence of such a cadre will lessen the burden on the facilities in preparing periodic LMIS reports and improve accuracy of data received by the center. The selection, training and supervision of this person by the DHO are key to success of this intervention.

The training and deployment of HSAs to support health centers in stores records management has greatly improved stores practices as well. There is need for continued support of this cadre and the DMMS will be responsible. Furthermore, there is need for an incentive scheme to recognize those HSAs that make great improvements. A simple recognition scheme shall be developed involving, for example, the issue of certificates, advanced training opportunities, branded T-shirts and counting trays.

Activities

1. *Develop concept paper on medicine management performance monitoring and supportive supervision model*
2. *DMMS selection, training and facilitation*
3. *Monthly Performance monitoring of health facility medicine management*
4. *Data management and reporting capacity building for DMMS*
5. *Develop and disseminate medicine redistribution guidelines*
6. *Support DHMT meetings on medicine management*
7. *Strengthen DTCs in hospitals (STTA)*
8. *Support dissemination of hospital pharmacy management guidelines*
9. *Quarterly HTSS meetings with districts/zones*
10. *Recognition scheme for medicine store keepers and medicine supervisors*
11. *Study tour for 4 key persons to 2 countries implementing district supervision intervention*
12. *Optimize/strengthen VEN implementation*

6.5 Strengthen accountability systems and use consumption tracking records

Accountability for public medicine resources at the district and service delivery points is still weak with many reports of unexplained losses and inconsistencies in stores access controls. The recent SWAP review meeting of stakeholders including donors and senior government representation debated priorities for strengthening medicine accountability systems at all levels. Without accountability systems delivery of public health services especially to the poor is likely to deteriorate especially as the government's ability to mobilize resources for service delivery from partners will be undermined.

Under this technical assistance, HTSS/P shall support key actors in health service delivery to implement improved accountability actions. The strengthening of community involvement in monitoring service delivery and the introduction of dispensing records are primary interventions under this goal of strengthening accountability. Empowering community health committees with information on medicine availability and budget allocation to their service delivery points will be a useful advocacy tools for HTSS/P. HTSS/P shall help to bring together the service providers and service consumers to create an environment in which public servants give accountability to the communities they serve. The existing policy environment already provides for creation of a "Health Center Advisory Committee". HTSS/P working with its district and facility based partners aspires to revitalize the role of these committees and sharing

success stories of their work. Again, this approach is already being implemented and spearheaded by the Hon. Minister of health working with cultural leaders.

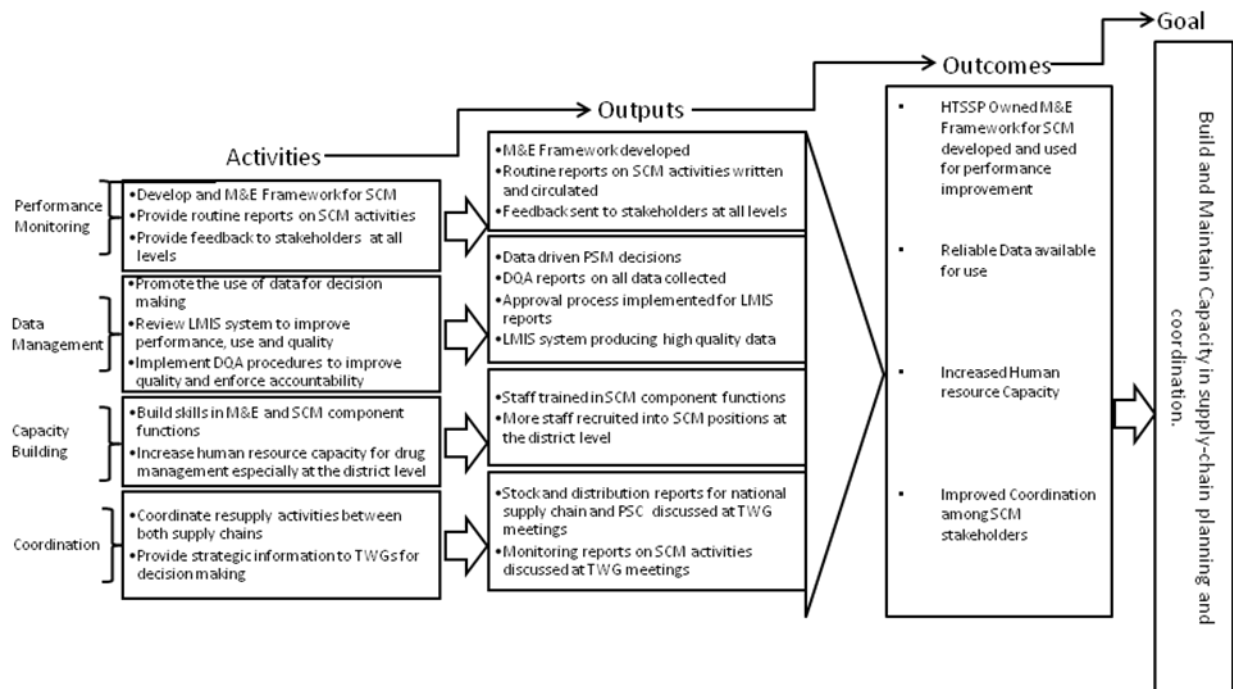
HTSS/P shall develop appropriate dispensing tools that track and trace consumption of selected items at the health facility. The supervision tools shall be adjusted to make use of the dispensing records including the reconciliation of quantities issued and quantities dispensed in the reporting period.

On the other hand, there is apparent wastage of resources given the level of expiries in public health facilities. Given the limited resources, the project team noted with concern the poor implementation of VEN with large expenditures and emergency procurements targeting E-items. Through this assistance and project HTSS/P shall monitor the proportional of district budgets spent on V-items as means to guide districts to priorities products needed for delivery of vital services.

Activities

- Develop and increase utilization of dispensing tools
- Support and strengthen role of the health center advisory committees: share information, advocate for its increased role through partners, publish committee successes
- Strengthen security and stores access control; develop guidelines for 3/2-lock systems.

7.0 OUTPUTS/OUTCOME & IMPACT CONCEPTUAL FRAMEWORK



(to add notes here)

8.0 STRENGTHENING SUPPLY-CHAIN PERFORMANCE MONITORING

8.1 Introduction to the project M&E strategy

The proposed performance monitoring plan under this project serves two purposes namely: to monitor and assess project implementation progress and to monitor medicine supply-chain performance in general. The M&E strategy is formulated considering the needs for strategic supply-chain information of different stakeholders, including Ministry of health senior management, technical program management, donors and other partners and the HTSS/P team.

Because of the challenges in data quality and timeliness, the HTSS/P project team shall collaborate with partners to invest in improvement in supply-chain monitoring systems and strengthening data collection systems particularly at district level. The M&E strategy focuses on collection of strategic information at all levels (central, district and facility level) to guide supply-chain management operational and planning decisions. As with any progress monitoring system, the strategy provides for flexibility to accommodate changes as required.

A project monitoring plan (PMP) shall be developed detailing the supply-chain data collection schedules and tools. The M&E function will aggregate data from health facilities and run cross analysis with other data available at CMED, CMST and supervision data available with support from various technical programs. The PMP shall be available by June 1, 2013.

Priority indicators have been identified to measure performance of the medicine supply-chains. A baseline assessment is partially complete to establish the status of the supply-chain function at present. A definitive list of indicators shall be agreed upon with stakeholders taking into account the desire to capture all information needs in the monitoring plan. The plan provides for stakeholders and HTSS/P establishing targets. That said some of the areas being monitored may not be targeted for interventions under this project.

The monitoring plan combines routine LMIS tools and supervision tools for data collection. Also, the M&E data base shall share information from CMED data base and other program data bases to support cross tabulation of data and enrich analysis of findings where possible. Special studies have been included to assess effectiveness of the interventions implemented under this project.

8.2 Progress and process monitoring and reporting

To ensure adherence to planned activities, HTSS/P will track project implementation by using output-level indicators pegged to milestones on key activities. HTSS/P staff shall present progress results to the PMG/DMS TWG on a quarterly basis. HTSS/P project team will prepare periodic reports to promote the effective use of data for supply-chain decision-making.

The M&E unit shall design an appropriate study to evaluate the impact of the project. That notwithstanding, the HTSS/P project team shall welcome any external evaluation after 8 months and at the end of the project implementation.

Below is a summary of planned M&E Activities:

Activities

1. *Develop PMP for PSP, prioritizes SCM (Indicators, data collection tools and schedules)*
2. *Baseline assessment based on existing reports and setting of targets*
3. *Coordinate partners in monitoring and reporting performance to HTSS*
4. *Project management meetings*
5. *Data Quality Assurance SOPs and reviews*
6. *Monthly/Quarterly Performance and progress monitoring reports*
7. *Intervention studies (up to 3) and publication*
8. *Capacity building (M&E) training (STTA)*
9. *Support annual Performance Reporting on pharmaceutical service delivery*

8.3 Proposed Supply-Chain Indicators

As in many other countries, the performance of the medicine supply-chain operations in Malawi is a balanced tradeoff between speed/efficiency, cost and accuracy in relation to the type and quantities of medicines delivered. Balancing the tradeoff requires a means for measuring supply-chain performance. The use of simple indicators helps digest the data routinely collected into information that tells the story on how well the supply-chain is performing. Examples of indicators proposed below are intended to assess performance of the different stages of the different supply-chains (these will be reviewed at the stakeholders meeting).

Demand forecast & procurement performance:

- *Proportion of completed tasks in the forecast calendar*
- *CMS-T prices : international price ratio*
- *District access prices : international price ratio*

Warehousing/storage & Distribution Performance:

- *Level of expiries as percentage of average stock value*
- *Order fill rate by central warehouses*
- *%age of orders delivered on schedule*
- *Stock losses as percentage of quarterly stock value*
- *Proportion of facility stores implementing good storage practices*
- *Stock out rates for key commodities*

Facility Inventory control & Reporting performance

- *Proportion of items stocked out at facility*
- *Proportion of items stocked in excess at facility*
- *Proportion of facilities reporting on time*
- *Proportion reporting accurately (correct consumption, order quantities and stock levels)*
- *Proportion with correct stock card use*
- *Proportion with correct dispensing record use*

Financial management (VEN implementation)

- *Proportion with budget and procurement plan*
- *Value of V items as percentage of total procurements*

Rational Medicine Use

- *Percentage of prescriptions with injections*
- *Percentage of prescriptions with antibiotics (for non-bloody diarrhea or uncomplicated malaria)*

Human Resource

- *Proportion of health facilities receiving supportive supervision*
- *Proportion of districts supervised*
- *Number of persons receiving training in SCM and/or M&E*

The M&E function shall define these indicators provide data collection tools and define a schedule for data collection as part of the PMP.

8.4 Capacity building in M&E

This project is, in part, aimed at building pharmaceutical M&E capacity at HTSS/P and to provide technical assistance in establishing an M&E framework. Working in collaboration with partners, the project will organize M&E training to equip key logistics persons with knowledge on basic M&E principles, sampling techniques, data collection methods, and data quality and use, data analysis, designing intervention studies, monitoring tools in supply-chain management, and presentation skills. Based on the assessment, data utilization is a challenge at all levels and therefore the project will organize a data utilization workshop focusing on supply-chain data available and how it can be used to support decision making. Over and above all, we envisage skills transfer through HTSS/P staff working with technical experts participating in this project.

9.0 SUSTAINABILITY STRATEGY

First and foremost, the overriding goal of this project is to contribute to the HSSP goal of saving and improving lives by increasing availability of vital medicines and supplies needed to delivery priority health interventions. The need for such an effort shall remain valid even after this project closes. This is what frames the sustainability strategy which is detailed below.

The project is developed by HTSS/P with technical assistance from USAID working with the entire HTSS/P team and ensuring that there is effective skills transfer during implementation. The goal of the HTSS/P project sustainability is to create new partnerships and strengthen existing ones. The project is structured to ensure effective and continued information exchange among stakeholders to increase the chance that this behavior shall continue even after the actual project closes. The successful implementation of this project under the leadership of HTSS/P is intended to transform the management and planning process of the department and increase visibility of its role in medicines management.

A number of training events have been included in the plan to be delivered by local counterparts and therefore contributing to their own capacity-building.

There will be a deliberate effort to create project visibility by promoting its results and strengthening its leadership. The project is designed to attract a diverse base of funders including GoM and its development partners in order that it has a wide range of high level stakeholders. The activities planned focus on systems change and provide for great collaboration with communities at the district and SDP level. We hope that this set up shall allow for continued demand for services and standards promoted under this project.

While Malawi has received technical support in pharmaceutical management, this is one of the few areas where project delivery is directly led by government and it identifies a niche of high impact innovative interventions that address current problems which are not addressed by any of the existing players adequately. Through the proposed progress monitoring arrangements and communication plans, the project is committed to sharing of results and to accommodate the needed changes so that the project objectives (and not outputs) can be met.

10.0 PROJECT ACTIVITY PLAN (LOGFRAME),

(See excel file)

11.0 FINANCIAL/BUDGET PLAN

(TBD, in consultation with counterparts)

12.0 ANNEXES

List of persons interviewed

Reference Documents

Terms of Reference