**Pharmaceutical Supply Process**

**Reengineering For**

**Pharmaceuticals Fund and Supply Agency**

Feb 18 2017

**ADAMA**

Part One:

Pharmaceutical Supply Core Processes



# Executive summary

**Background**

Ethiopia is implementing the second growth and transformation plan which majorly give emphasis towards moving to industrial led economy. During GTP II (2015-2020), the country envisages to raise the share of domestic pharmaceuticals industry market to 60% so as to make essential medicines affordable to the public at large and contribute to the country foreign currency reserve. In line with the country’s grand plan, the health sector have also developed transformation plan that gives a due account to disease prevention and control to both communicable and non-communicable diseases. In connection with this, the expenditure to health commodities is supposed to grow due to the significant improvement in health seeking behavior and new health sector initiatives.

In line with, the Pharmaceuticals Fund and Supply Agency (PFSA) is striving to meet the ever increasing health product demand since its establishment in 2007 GC, through expanding hubs, warehouse infrastructure, increase procurement volume, implementation of integrates the management of pharmaceuticals that were previously managed vertically, enhancement of direct delivery to 71% of health facilities, deployment of automated health commodities management system (HCMIS) at all branches and at most of the high volume health facilities were some of the major achievements., increasing direct delivery using the PFSA business process design conducted before nine years.

Despite significant achievements in the last nine years, there are challenges which still remain to be addressed to create a highly responsive and seamless pharmaceutical supply chain which enable to meet the growing demand of health products. With regard to this, assessments at different levels and by different organizations identified interrupted supply, delayed installation of medical equipment, wastage and inefficiencies as major problems across the entire supply chain. In effect, there is high dissatisfaction of stakeholders, health providers, patients and the community at large.

Cognizant of this fact; FMOH executives, PFSA Board of directors decided to undertake Business process redesigning and assigned a BPR team comprised of professionals from FMOH, PFSA, EPHI, USAID/SIAPS, USAID/DELIVER/AIDSFree, SCMS/PSM, Save the children, JSI and Gates Foundation.

**Objective**

The objectives of the reengineering are to assess the existing business processes and identify performance gaps by bench marking best experiences, redesign the new model that can bring radical change and to develop management and measurement tool, SOPs, implementation plan and costing to leverage successful implementation.

**Methods**

Cross sectional descriptive study was used employing both quantitative and qualitative methods. Using tested questionnaire, 584 agency’s staffs were interviewed for their satisfaction and attitude on the agency. Secondary data were reviewed; onsite visit and desk review benchmarking were also used. Prior studies by various organizations including; MCkinsey & company consult, management science institute, WHO, MSH, GSI, general audits findings were used as inputs for the design.

The major findings of the business process reengineering encompasses development of performance baseline, identification of customers/stakeholders needs & expectations, identification of problems, development of assumptions and rules, development of desired outcomes and stretched objectives, and selection of sub processes which have got their own input & output. Furthermore, cascading of competencies, pinpointing responsibilities, location of task, estimation of HR need and defining the measurement and management tool are also covered in the redesigning process.

The findings and suggested solutions were presented at serious of workshops and meetings including at Annual Review Meeting of the health sector, Health Partners Network (HPN), annual meeting of the branch managers of PFSA, Management of FMOH, the board of PFSA and executives of FMOH from which valid comments have been included.

**Scope**

The scope of BPR study covers assessment and redesign of the existing four processes of the agency; pharmaceuticals supply process, the fund management processes, the human resource and general service process and the management information processes. *Note: this document comprises only the pharmaceutical supply process redesign.*

**Findings of Problems**

In the redesigning process, two grand problems have been identified in the supply chain; which are, interrupted supply of health products and inefficiency in the supply chain management. Then, the primary and secondary causes have been identified based on WHO problem prioritization techniques which includes but not limited to lack of predefined list, inadequate registered medicines, data quality, non-coordinated forecast, year round tendering, long lead time, poor inventory control practice, scattered warehouse and nonstandard storage practice, absence of bonded warehouse in ports, poor contract management, lack of logistic data visibility, in adequate mix of human resources with required motivation and inefficient fund management process. This AS IS findings had been presented to the health sector executives and get endorsement in July 2016.

**New Design**

The business process reengineering started with benchmarking by reviewing of internal best practices desk review and onsite visiting and then performance gaps has been identified based on the agreed measurement criteria’s such as cost, coverage, quality and time. In line with the dramatically increasing expectations and inputs from the gap analysis, extensive brainstorming was made so as to identify the desired outcomes and to further stretch expected performance and achievement for the new business process to be designed. Based on this Improved availability of pharmaceuticals, enhanced pharmaceuticals services, ensured affordability, improved efficiency and ensured quality and equity has been identified as desired outcomes. Then the designing team identified stretched objectives and strategies which can serve as performance measurement yardsticks. The major millstones identified are:

* Increase continuous availability at Secondary and Tertiary Level to 100%
* Achieve customer satisfaction to greater than 95 %
* Reduce the wastage rate from 3.5% to less than 2%
* Reduce international average procurement lead time from 299days to 150 days

Following the development of mission and vision of the organization based on the desired outcomes and stretched objectives, the redesign team proceeds to redefining and describing the pharmaceutical supply core process as part of redesign the pharmaceutical supply core processes. Breaking old assumptions, reviewing design principles, brainstorming the whacko ideas, and information technology are used as processes redesigning techniques. And then, process options have been designed, mapped and merits and demerits has been identified to address the major problems of the agency based on the performance baseline, achievements from benchmarked agencies and countries so as to reduce redundancies by avoiding non value adding activities thereby increasing efficiencies and transparency. The next step was mapping the selected option which is generic end to end supply chain for all health products including medicines, laboratory reagents, medical supplies and medical equipment with due consideration of peculiarities of the different product categories.

Based on the major activities and detail activities identified earlier for the selected process, the human resource requirement for the newly designed process has been determined through identifying location of work, when to accomplish, how fast to accomplish in days and the total time per year. Accordingly, the list of job areas have been identified with their respective roles and responsibilities in the sub processes and measurement and management tools are designed to measure plans against targets.

In connection with this, organizational Values and beliefs that support the vision, shape the culture and reflect the belief of the organization are identified. In addition, standard operating procedures are drafted which guides the implementation of the redesigned business process. Finally, implementation and communication plan are developed for successful implementation of the redesigned business process.

**Recommendation**

1. Procurement list of medicines, reagents, medical supplies and equipment should be prepared with specification for medical equipment list
2. All manuals, SOPs and regulations should be endorsed
3. Warehouse infrastructure should be modified and be with minimum standard
4. The proposed option of the organogram need to be endorsed since the difference from the previous organogram are identified in critical areas that can radically change the organization; including finance management, procurement, warehouse and inventory management and quality management
5. The years-of-audit backlog should be cleared before implementation
6. The agency needs to change to business model (public enterprise) within years
7. Implementing ERP and GPS (technologies) is very important
8. List of pharmaceuticals (medicines, reagents, medical supplies and equipment) should be registered by EFMHACA
9. Platform for medical equipment should be prepared
10. The test menu should be prepared for laboratory reagents
11. Necessary budget should be allocated for the implementation
12. Availability of refrigerator tracks (cold chain vans) is very important
13. Bonded warehouse should be built at various ports
14. Health facilities should be committed for their demand
15. PFSA should align with HF to create transparency across the supply chain using tools recommended
16. prequalified suppliers should be identified and long term agreement for procurement should be implemented
17. Management and measurement tools (Daily summary and BSC) should be implemented
18. Disposal firm should be established
19. The agency should collaborate with FMOH /RHBs /EFMHACA more than before for better outcomes
20. The organization need to have a mandated change agent with consultants on various fields of the supply chain to actually put the design on the ground

# Acronyms

|  |  |
| --- | --- |
| ADB | Africa Development Bank |
| *APD* | Average percentage deviation of forecast |
| AMC | Average monthly consumption |
| APTS | Auditable pharmaceuticals Transaction and Services |
| ART | Antiretroviral therapy |
| ASIS | As the process is now |
| BPR | Business process redesign |
| BSC | balance score card |
| CAD | cash against document |
| CHAI | Clinton health access initiative |
| CPD | continuous professional development |
| CPO | cash payment order |
| CSA | Consumption to stock ratio assessment |
| DG | deputy director general |
| DHS | Demographic health survey |
| DN | Delivery note |
| DSF | Daily summary format |
| DTC | Drug and therapeutic committee |
| DU | Dispensing unit |
| EAL | Ethiopia Air Line |
| EBY | Ethiopia Budget year |
| EPHI | Ethiopia Public health institute |
| ERCA | Ethiopia Revenue and custom Authority |
| ERP | Enterprise resources planning |
| ESL | Ethiopia shipping line |
| ETB | Ethiopian birr |
| FEFO | Frist expire First Out |
| FMHACA | Food Medicine health administration and control authority |
| FMOH | Federal Ministry of health |
| GMP | Good manufacturing practice |
| GPS | Geographic positioning system |
| GRNF | Good receiving notification format |
| GRV | Good receiving Voucher |
| GSP | Good storage practice |
| HAD | Health development army |
| HAPCO | HIV AIDS prevention control office |
| HCMIS | health commodity management information system |
| HF | Health facility |
| HIV/ADIS | HIV/AIDS |
| HPMRRF | Health Post Monthly report requisition format |
| HR | Human resources |
| HSTP | Health sector transformation Plan |
| IFFR | Internal facility report and resupply format |
| IGRV | Inter good receiving voucher |
| IPLS | integrated pharmaceuticals Logistics System |
| ISO | International standard organization |
| IST | Integrated supportive supervision |
| ISTV | inter store transfer voucher |
| IT | Information Technology |
| KPI | Key performance indicator |
| LC | Letter of credit |
| LEFO | Low expire first out |
| LMIS | Logistics management information system |
| LTA | Long term agreement |
| M&E | Monitoring and evaluation |
| MHE | Material handling Equipment |
| MIS | Management information System |
| MOS | Month of stock |
| MOU | Memorandum of understanding |
| MRF | Monthly reporting format |
| MRP | Maximum retail price |
| NCD | Non communicable disease |
| NPS | Narcotic Psychotropic Substance |
| NTD | Non communicable tropical diseases |
| ODDG | Operation deputy director general |
| OJT | On Job training |
| POD | proof of delivery |
| PPA | Public procurement agency |
| PSCMIS | Pharmaceuticals supply chain management information system |
| PSTP | pharmaceuticals Supply transformation plan |
| QC | Quality control |
| QM | quality management |
| RDF | Revolving drug fund |
| RDU | rational drug use |
| RHB | Regional Health bureau |
| RRF | Report and requisition format |
| SCM | Supply chain management |
| SDG | Sustainable development Goal |
| SDP | service delivery point |
| SKU | stock keeping unit |
| SOH | stock on hand |
| SOP | standard operation procedure |
| SS | supportive supervision |
| SSA | stock assessment |
| STG | standard treatment guideline |
| STV | stock transfer voucher |
| SWOT | strength weakness opportunity and treat |
| TB | Tuberculosis |
| TOR | terms of reference |
| TOT | training of trainer |
| TWG | technical working group |
| VAR | vaccine arrival report |
| VEN | vital , Essential and non-essential |
| WB | world bank |
| WHO | World health organization |
| WIM | Warehouse and inventory management |
| WMS | warehouse management system |
| WoHO | Woreda Health Office |
| ZHD | Zone health department |

# Forward

Ethiopia is implementing the second growth and transformation plan which majorly give emphasis towards moving to industrial led economy. During GTP II (2015-2020), the country’s grand plan, the health sector have also developed transformation plan that gives a due account to disease prevention and control to both communicable and non-communicable diseases.

Following the countries development, in the last ten years, to fulfil the health service needs, the number of government health facilities in the country skyrocketed; (number of hospitals increased from 73 to 411, health centers from 673 to 3562 and health posts from none to 16,000) with various new initiatives including vaccines, food by prescription, medicines for non- communicable disease and medicines for NTD like. In order all these health facilities to deliver proper services, the agency is expected to equip them and continuously supply pharmaceuticals and medical devices.

In line with, the Pharmaceuticals Fund and Supply Agency (PFSA) is striving to meet the ever increasing health product demand, since its establishment in 2007 GC. The PFSA under took business process design before nine years as part of the health sector reform and made significant contribution to the achievements of the health sector.

However, even with such developments, the agency is not in a position to address the aforementioned needs. Therefore, to continuously supply pharmaceuticals and medical devices for all these health facilities in efficient manner, the agency needs to be radically changed. These are some of the main reasons why redesigning is needed. We believe this design will bring radical change to the agency and address the needs of the country.

Finally, change can’t be materialized with a mere effort of leaders and managers. Neither a nicely designed process nor few individuals can bring change. We are extremely happy to deliver our sincere appreciation and warmest thanks to all staff of the agency (Central and Branches) who are going to be an ironic structure of the agency in the change process. We are grateful to all partners that have participated in the development of the design and giving comments.

Dear all, PFSA alone cannot bring the intended change, but together we can deliver.

Hon. Minister Yifru Birhane (Prof. MD, Gyn, OBs)

Minister of Health, Federal Democratic Republic of Ethiopia

# Acknowledgements

The Pharmaceuticals Fund and Supply Agency Board of Directors are profoundly indebted to the Federal Ministry of Health of Ethiopia and the Executive Committee of the health sector for the initiation of the redesign process of the Agency. The board of directors and the executive of the Ministry of Health would like to recognize and acknowledge the following organizations for their financial and technical support, and for the comment they provided

1. **Financial and Technical Support providers (alphabetically listed)**
2. AIDS/FREE projects,
3. CHAI,
4. GATE Foundation
5. GAVI
6. Global Fund
7. GHSC/PSM/Chemonics
8. Save the Children and
9. UNFPA,
10. USAID/SIAPs,
11. **Participation and comment providers (alphabetically listed)**
12. EFMHACA
13. FMOH
14. HPN
15. RHBs
16. Various organizations and HF those participated in ARM 2016

The board and executives of the FMOH would also like to forward their gratitude forthe management, individuals and the organizations that helped the design by sharing their best experiences on modern supply chain, fund management, fleet management, human resource management and management information system. We are very much thankful for their warmest reception and generosity in helping the redesign team.

1. **Onsite Bench Marked Organizations (alphabetically listed**)
2. ALLE Bejimla,
3. East African Bottling Share Company (Coca-Cola Company)
4. Commercial Bank of Ethiopia
5. Ethiopian Airlines
6. Ethiopian Sugar Corporation,
7. FMOH
8. KEMSA (The Kenya Medical Supplies Agency
9. **To the redesign team**

Last but not the least, the board of directors of the agency and the executives of FMOH, would like to express their appreciation to the team for the marvelous contribution on the redesigning of the four processes of the pharmaceutical fund and supply agency. List includes:-

|  |  |  |
| --- | --- | --- |
| **No** | **Team Members (alphabetically listed)** | **Organization** |
|  | Abdissa Megesha | PFSA/Bahir Dar Hub/ |
|  | Alemayehu Belay | PFSA/Hawassa Hub/ |
|  | Alemayohu G/Mariam | PFSA/Mekele Hub/ |
|  | Alemwork Tilahun | GHSC-PSM |
|  | Andargachew Gashu | EPHI |
|  | Ayalew Adinew | USAID/SIAPS and /GHSC-PSM |
|  | Bekele Ashagire | PFSA Central |
|  | Biruk Tafesse | PFSA Central |
|  | Demeke Bitew | PFSA Central |
|  | Daniel Tadesse | Save the children and /GHSC-PSM |
|  | Debela Legesse | PFSA Central |
|  | Dawit Getahun | PFSA Central |
|  | Malefia Dereje | FMoH/UNICEF-HPF |
|  | Menefese Tadesse | PFSA Central |
|  | Motuma Admasu | Gates Foundation |
|  | Mulugeta Getaneh | PFSA Central |
|  | Nasir Abdey | PFSA Central |
|  | Rehumush Abdo | PFSA Central |
|  | Welelaw Necho | JSI-AIDS Free |
|  | Yared Yigezu | PFSA Central |
|  | Zelalem T/Mariam | PFSA Central |

|  |
| --- |
| **Note:-**  *The design team was hand-picked by the board of directors and the executive committee of the ministry in June 2016 and all team members have been working restlessly in the redesign periods from June to December 2016. In doing so, the team faced tremendous challenges that can shock and may reverse their effort. However the team members were so dedicated and strong that they accomplished this marvelous design that will radically transform the agency to a big jump*  *Among the many challenges the team faced includes:-*   * *One of the team member’s knee was broken being tired in the evening meetings, discussions and admitted in hospital for repeated surgery* * *Few persons were so against the redesign process and tried to destruct it from various directions* * *Two of the team members’ wives needed help from their husbands since they were in hospitals for delivery, however, the two team members could not arrive during that emergency and their wives delivered in the absence of their husbands* * *Two of the team members’ develop tachycardia /hypertension and started medicine therapy* * *Two of the team members’ mothers were seriously sick and needed help from their sons however, the two team members could not arrive during that emergency period and their mothers passed away in the absence of their sons*   *The Board and the Ministry understand and assist the team to withstand all the challenges faced and finalize the design.* |

Table of Contents

[Executive summary 3](#_Toc475431872)

[Acronyms 8](#_Toc475431873)

[Forward 11](#_Toc475431874)

[Acknowledgements 12](#_Toc475431875)

[CHAPTER ONE 18](#_Toc475431876)

[1. INTRODUCTION 18](#_Toc475431877)

[1.1. Methodology 19](#_Toc475431878)

[1.2. Scope 19](#_Toc475431879)

[1.3. Objective 19](#_Toc475431880)

[CHAPTER TWO 20](#_Toc475431881)

[2. UNDERSTANDING THE EXISTING BUSSINESS PROCESS (AS IS) 20](#_Toc475431882)

[2.1. Description on the current pharmaceuticals core process 20](#_Toc475431883)

[2.2. Process description with its sub process 20](#_Toc475431884)

[2.2.1. Forecasting sub-process 20](#_Toc475431885)

[2.2.2. Procurement sub-process 21](#_Toc475431886)

[2.2.3. Medical Equipment Management 22](#_Toc475431887)

[2.2.4. Laboratory Reagents and Chemicals Management 22](#_Toc475431888)

[2.2.5. Fund Management Process 22](#_Toc475431889)

[2.2.6. Storage and Inventory Management sub-process 23](#_Toc475431890)

[2.2.7. Distribution, Fleet Management and Maintenance sub-process 24](#_Toc475431891)

[2.2.8. Quality Assurance 25](#_Toc475431892)

[2.2.9. Human Resource and General Service Process 25](#_Toc475431893)

[2.2.10. Technology (MIS Process) 26](#_Toc475431894)

[2.3. Customer and Stakeholder Need/Expectation Analysis 28](#_Toc475431895)

[2.4. Input process output and outcome 37](#_Toc475431896)

[2.5. Work flow mapping 38](#_Toc475431897)

[2.5.1. High level activity Flow 38](#_Toc475431898)

[2.5.2. High level Process Work flow description 39](#_Toc475431899)

[2.5.3. Functional Work Flow Process description 44](#_Toc475431900)

[2.6. Process Time 51](#_Toc475431901)

[2.7. Process Interface 55](#_Toc475431902)

[2.8. Performance baseline 56](#_Toc475431903)

[2.9. Major Problems, Rules and Assumptions 59](#_Toc475431904)

[2.9.1. Top 16 selected problems and their causes 68](#_Toc475431905)

[2.9.2. Fishbone 79](#_Toc475431906)

[CHAPTER THREE 82](#_Toc475431907)

[3. REDESIGNING THE BUSINESS PROCESS 82](#_Toc475431908)

[3.1. Benchmarking 82](#_Toc475431909)

[3.2. Performance Gap 95](#_Toc475431910)

[3.3. Desired outcomes and stretched objectives 98](#_Toc475431911)

[3.4. Designing From Clean Sheet 104](#_Toc475431912)

[3.4.1. Vision 104](#_Toc475431913)

[3.4.2. Mission 104](#_Toc475431914)

[3.4.3. Process Redefinition 104](#_Toc475431915)

[3.4.4. Process redesigning Techniques 105](#_Toc475431916)

[3.4.5. Breaking the Old Assumption 106](#_Toc475431917)

[3.4.6. Review Design Principles: 119](#_Toc475431918)

[3.4.7. Information Technology 121](#_Toc475431919)

[3.4.8. Brainstorming the whacko Ideas 122](#_Toc475431920)

[3.5. Process Options 123](#_Toc475431921)

[3.6. Process map 127](#_Toc475431922)

[3.6.1. Quantification (forecasting and supply planning) and Marketing sub process 128](#_Toc475431923)

[3.6.2. Procurement Sub-Process 138](#_Toc475431924)

[3.6.3. Warehousing and Inventory Management sub process 144](#_Toc475431925)

[3.6.4. Distribution and fleet management sub process 155](#_Toc475431926)

[3.6.5. Capacity Building and Operational Research Sub Process 167](#_Toc475431927)

[*3.6.6.* *Quality Management sub process* 176](#_Toc475431928)

[3.6.7. Planning and project coordination sub process 179](#_Toc475431929)

[CHAPTER FOUR 190](#_Toc475431930)

[4. PROCESS ORGANIZING AND TOGETHERNESS 190](#_Toc475431931)

[4.1. Determination of Human resources requirement 190](#_Toc475431932)

[4.1.1. HR determination for Forecasting and Supply Planning sub Process 190](#_Toc475431933)

[4.1.2. Process time for Procurement sub process 202](#_Toc475431934)

[4.1.3. Process time for warehousing and inventory management 215](#_Toc475431935)

[4.1.4. Process time for Distribution sub process 227](#_Toc475431936)

[4.1.5. Process time for Capacity Building and Operational Research 240](#_Toc475431937)

[4.1.6. Process time for Quality Management 252](#_Toc475431938)

[4.1.7. Process time for Planning and project coordination (Resource Mobilization) 258](#_Toc475431939)

[4.1.8. Job Description 272](#_Toc475431940)

[4.1.8.1. Job description for Forecasting and Supply planning sub process 272](#_Toc475431941)

[4.1.8.2. Job descriptions for procurement sub pprocess 288](#_Toc475431942)

[4.1.8.3. Job descriptions for warehouse and inventory management sub process 306](#_Toc475431943)

[4.1.8.4. Job description for distribution and fleet management sub process 327](#_Toc475431944)

[4.1.8.5. Job description for Capacity Building sub process 344](#_Toc475431945)

[4.1.8.6. Job Description for Quality Assurance sub process 347](#_Toc475431946)

[Chapter Five 352](#_Toc475431947)

[5. Organo-gram of PFSA 352](#_Toc475431948)

[6. Management and Measurement 357](#_Toc475431949)

[6.1. Daily Summary 358](#_Toc475431950)

[6.1.1. Forecasting and Supply Planning 359](#_Toc475431951)

[6.1.2. Procurement sub process 366](#_Toc475431952)

[6.1.3. Warehouse and Inventory Management 366](#_Toc475431953)

[6.1.4. Distribution and Fleet Management Sub Process 371](#_Toc475431954)

[6.2. Balanced Score Card (BSC) 375](#_Toc475431955)

[Chapter Seven 378](#_Toc475431956)

[7. Values and Beliefs 378](#_Toc475431957)

[Chapter Eight 382](#_Toc475431958)

[8. ASIS TO BE Comparison 382](#_Toc475431959)

[Chapter Nine 385](#_Toc475431960)

[9. Annex 385](#_Toc475431961)

[PFSA interfacing stakeholders 385](#_Toc475431962)

[Summary Recommendation and Precondition 390](#_Toc475431963)

[Chapter Ten 391](#_Toc475431964)

[10. References 391](#_Toc475431965)

# CHAPTER ONE

# INTRODUCTION

The Pharmaceuticals Fund and Supply Agency (PFSA) is established to ensure continuous availability of pharmaceuticals through enhancing financial and human resources capacity, implementing need-based efficient pool procurement and implementing modern inventory management system to meet the ever-increasing demand of health commodities.

The agency has made remarkable achievements over the five years in terms of procurement, distribution, and warehousing and inventory management. The value of pharmaceuticals procured in 2008 budget year was more than ETB 6.5 billion. This indicates that the procurement of pharmaceuticals has increased by more than 80% from 2003 to 2008 EBY. Regarding distribution of pharmaceuticals, that worth more than ETB 12.6 billion, were distributed in 2008 budget year which shows an increase of 147% from 2003 EBY. With respect to infrastructure, a total of 17 modern warehouses were constructed at the center and branches of the Agency during the last five years. This has increased the warehouse capacity of the Agency by 289,150 m3 and the total Agency-owned warehouses capacity to 305,910 m3. The inventory management across the supply chain has showed significant improvement. As part of major interventions to improve inventory management in the country, the Integrated Pharmaceuticals Logistics System (IPLS) has been implemented at the health facility level.

As a result, the availability of tracer drugs at the time of visit was 89% based on IPLS survey conducted in 2014 at 270 public health facilities. The 2013 facility assessment on reproductive health commodities and services indicated that on the average, 97.9% of all the surveyed health facilities had offered at least three modern contraceptive methods depicting an increase of 1.5% over the 2012 survey. The availability of ARVs at health facilities is about 98% according to assessments conducted by MSH/SCM.

Despite the aforementioned achievements, there is still a long way to go to continuously avail products across the supply chain. In connection with this, facility level assessments on the availability of essential medicines, different consultative meetings with stakeholders, audit findings by Public Procurement Agency and Office of the Federal General Auditors, report on PFSA staff meetings on good governance, public relation summary reports from free toll line and business process optimization study identified interrupted supply, delayed installation of medical equipment, wastage and inefficiencies as major problems across the entire supply chain. In effect, there is high dissatisfaction of stakeholders, health providers, patients and the community at large.

Furthermore, integration of used to be vertical programs, new program initiatives (Cancer, NTD, NCD ….), and launch of social and community health insurance, and health coverage expansion necessitates a more responsive and seamless pharmaceutical supply chain.

Cognizant of this fact; FMOH, PFSA Board and PFSA management decided to undertake Business process redesigning and assigned a BPR team comprised of PFSA sub-process owners, branch managers, and senior experts from partners. The team is tasked to assess and identify bottlenecks in the existing process and to redesign a more responsive and efficient pharmaceutical supply chain using BPR principles that can bear the increasing demand of health facilities.

## Methodology

The methodology and approach used in collecting information required to redesign the pharmaceuticals supply process were the following.

* Primary data collected through structured questioners from key stakeholders including RHBs, ZHDs, WoHO and health facilities.
* Focus group discussion with selected hospitals and health centers
* Reviewing technical documents: statement of operational requirement (2010), detail process inventory (2010), PFSA transportation assessment report (2015), business process optimization (2015)
* Using secondary data from facility level assessments: IPLS Survey (2014), DTC Survey ( 2014), ffacility level assessment on RHC (2013), (2015), APTS survey ( 2015)
* Evaluation reports: PFSA good governance meetings, PFSA board meeting reports, Audit reports
* Assessment of secondary data from desktop benchmarked organizations.
* Feedbacks from health sector executive committee, PFSA managements, and staffs

Using the information collected by the virtue of the above stated approaches and taking in to consideration constructive comments forwarded from the discussion with the top level executive committee and PFSA management, the AS IS part is further enriched to its current shape.

## Scope

The scope of BPR study covers assessment and redesign of the pharmaceutical supply chain management business processes from end-to-end.

## Objective

* To assess existing business processes and identify performance gap for change
* To identify benchmark from both internal operation and external sources
* To redesign and model new business process that would bring radical and dramatic changes
* To develop management and measurement tools that would leverage successful implementation of new business processes.

# CHAPTER TWO

# UNDERSTANDING THE EXISTING BUSSINESS PROCESS (AS IS)

Pharmaceuticals supply core process addresses forecasting, procurement, storage and inventory management, and distribution of pharmaceuticals and medical devices.

## Description on the current pharmaceuticals core process

To fully understand the core process and its sub-processes as it is currently operating, a brief review of the process is depicted as follows

## Process description with its sub process

### Forecasting sub-process

Forecasting is a crucial step in ensuring uninterrupted and demand-based supply. Unlike program pharmaceuticals’ forecasting, which is carried out centrally, the forecasting of RDF pharmaceuticals is decentralized and health facilities are responsible to forecast their requirement annually which is aggregated at the respective PFSA branches; the branch level aggregated requirement is further consolidated at central PFSA level to come up with procurement request. In addition to the consolidation of the RDF products, the forecasting sub-process is currently leading the annual quantification of HIV/AIDS commodities in close collaboration with relevant stakeholders; the sub-process also contributes to other health programs’ quantification and supply planning activities.

However, poor data quality in terms of accuracy, completeness and timeliness; lack of appropriate and standard electronic tools; absence of customized level-specific product list; and lack of capacity and commitment at the different levels are some of the challenges that hamper the forecasting process. Moreover, for the RDF products, the need from health facilities is not usually supported by budget posing additional challenge in planning. In addition to these, while there are some progresses made in clarifying the roles and responsibilities of stakeholders in forecasting and supply planning, the existing process is characterized by inadequate coordination and lack of harmonization of plans, which results in duplication of efforts and wastage of resources.

Over the past years, this process has been engaged in the capacity building activities in the area of inventory management (IPLS implementation), promoting RDUs, and strengthening DTCs. This capacity building effort served as a springboard to the major achievements of the supply chain. Despite these huge efforts, the system lacks coordinated capacity building activities for the development of supply chain workforce through establishing training center for health supply chain management.

### Procurement sub-process

The Agency’s Procurement volume has increased by value, item line and diversity. The lists of products that the Agency procures include essential medicines, specialty medicines, NCD, health programs, and modern technology medical devices. The trend shows increment over the years in the range of 25-35%. In addition to this, tender competitiveness has increased over the years; for instance, in 2007 E.B.Y., more than 85% by value of PFSA procurement were managed through international competitive bid which increased competitiveness there by enhancing transparency and achieving value for money. On the other hand, there are areas of efficiency loss that include increasing procurement request for meager quantities (no benefit from economies of scale), inadequate procurement visibility, poor contract administration, lack of supplier contractual performance evaluations and not applying the framework contract. Additionally, the sub-process lacks comprehensive plan and suffers from non-need-based donations that are not accompanied by proper and complete documentation, and resulting in high demurrage cost at port. Absence of comprehensive procurement plan forces the sub-process to run a year-round tendering and procurement, which is inefficient both in terms of staff time and resources. Moreover, there is a practice of staggering orders that is not properly planned.

The other challenge is inadequate integration and absence of joint-discussion forum with major stakeholders such as banks, ESL, ERCA and FMHACA; this resulted in a long delay in availing pharmaceuticals on time. Some examples of the challenges include delay in bank foreign currency approval and clearance processing, lack of bonded-warehouses, lack of updated suppliers list, and inappropriate handling of pharmaceuticals during transit and at ports. For instance, the fact that there is no pool of selected pre-qualified suppliers and FMHACA’s strict requirement for purchase of only registered-products force the sub-process to run repetitive tendering for some products and purchase some products for expensive price.

The current payment modality doesn’t allow direct transfer to suppliers, which creates a challenge especially during national emergencies. Additionally, the sub-process is not supported by IT tool, inadequately staffed and not supported with regular capacity building scheme.

### Medical Equipment Management

Even though, the agency restructured medical device management in to a directorate level with number of professionals; still there are persistently lack of a standard medical device specification, lack of standardized equipment platform, poor quality of some medical devices, and huge back-log in installation of equipment, lengthy technical evaluation, poor warrantee management, inadequate health facility interface and shortage of spare parts remain to be major challenges. Since the final destinations of some of medical equipment procured are not well known and planned, lots of medical equipment accumulated in the hubs and central medical store that incur unnecessary inventory handling costs.

The presence of multiple varieties of medical instruments (e.g. closed) which has similar functions at HFs leads to demanding variety of reagents and consumables which resulted in dis-economy of scale in supplying spare parts and reagents. The existence of poor tracking and tracing of medical equipment at different levels of the supply chain contributes to the poor management of medical equipment. In addition the maintenance tasks of medical equipment don’t seem to have owner at all while suppliers are expected to take care of these important mile stone duties.

### Laboratory Reagents and Chemicals Management

The demand for laboratory reagents and chemicals supply has got a tremendous increment for the last ten years along with the increasing health facilities expansion. Findings showed that there is a huge gap identified between demand and supply of chemicals and reagents. The major causes include limited capacity of the PFSA, inadequate capacity at facility level in generating demand on time, absence of laboratory test menu at national level, limited capacity of local producers and absence of regulatory prequalification.

In addition, absence of standard national laboratory equipment platform creates difficulty in the procurement and supply management process. Furthermore, the existence of weak coordination and harmonization among key stakeholders adds challenges to poor management of chemicals and reagents.

### Fund Management Process

Fund management is a key element of the pharmaceuticals supply process to sustainably avail program and essential pharmaceuticals at an affordable price. For this reason, it is critical to manage the limited available funds effectively and efficiently. Unfortunately, the fund management of the Agency has many limitations. Some of the limitations include; lack of updated financial manuals, absence of adequate IT support, challenges of Peachtree and HCMIS costing reconciliation, irregular bank and inter-branch financial reconciliations, inadequate system for tracking payments for orders reserved in banks, unclear detailed budget allocations mechanisms, delayed reconciliation of inventory with account, delay in costing pharmaceuticals (forcing products distribution without costs via ‘delivery note’ further complicating the financial transactions), irregularity of consolidated financial reports, late liquidation of accounts (receivables and payables), backlogs in financial treasury, difficulty of traceability and visibility of shared documents between branches and the center, centralization of all financial activities (agreement with RHBs, and HFs and collection of credits sales), late collection of distribution fee and poor documentation or filling of receiving voucher (Model 19). In addition to this, there is significant delay in finalizing the annual-inventory reconciliation – mainly due to lack of updated manual stock recording card and deciding on the overages and shortages as required. *Note: Please see the details in the Fund management processes design document*

### Storage and Inventory Management sub-process

The Agency’s storage capacity has seen dramatic increase over the past years, with notable improvements in warehouse management practices. But still, huge room for improvement remains with regard to the set-up of the warehouses and their convenience/appropriateness, security & safety practices, compliance with warehouse management policies, use of appropriate technologies and productivity of the operation.

For existing warehouse establishments (both rental and PFSA owned), scattered warehouse location and poor door and internal layout design hampers smooth running of the operation. Furthermore, the current warehouses suffer from poor floor quality, leaking roofs, and vulnerability to rodents. The floor and roof of the warehouses receive significant wear and tear while the maintenance system and activities are not as fast as expected. Given the ever expanding quantity and volume of consignments managed, intermittent shortage of storage space for both cold and dry items is observed. For most warehouses, shortage of material handling equipment (MHE) and lack of preventive and curative maintenance further constrained efforts for better utilization of warehouse spaces and implementation of improved warehouse management practices, including stock rotation (based on FEFO) and batch management.

Safety and security in the warehouses is another critical area requiring improvement. Virtual lack of fire alarm, air conditioning and temperature and humidity control systems, emergency exit, and rodent control system need immediate attention.

Gaps in adopting and implementing policies, guidelines, and technologies were observed during receiving, storage and/or dispatch of pharmaceuticals. Current warehouse management practices indicate delays in receiving (due to lack of information ahead of receipt of pharmaceuticals - especially for donations, lengthy medical equipment inspection upon receipt, lengthy visual inspection of incoming goods, etc), extended product transit time in store. There is also lack of basic kitting and packaging materials for proper warehouse operations. In addition, limited application of SKUs and use of supporting technologies (such as barcoding system) has contributed to difficulties in tracking and tracing commodities throughout the supply chain.

The inventory management system across the supply chain has showed significant improvement in the previous years. IPLS is one of the major interventions that have brought substantial improvement in the overall inventory management system. The inventory control system designed helps facilities always keep optimal stock to serve their clients. Among other activities, annual inventory is conducted customarily across all PFSA hubs and central level to check and balance the status of the inventory, and take appropriate action in cases of discrepancies.

Even though there are astonishing achievements, there are challenges which still remain to be addressed to create well established inventory management system at all levels. Inconsistent implementation of IPLS particularly at referral hospitals and smaller health centers hampered the supply chain process. Data quality problems, absence of proper implementation of the inventory control system, and absence of cyclic inventory implementation can be taken as major challenges. On top of this, the mechanism to transfer stock from one branch to another with the objective of minimizing wastage rate is not properly defined and implemented. Disposing of pharmaceutical at regular interval - quarterly as stipulated on the storage and distribution SOP - is not practiced currently. There is also lack of proper utilization and weak enforcement of FEFO principle and batch number tracking. Lack of ownership and commitment, inadequate staffing, staff turnover, limited support and follow-up from the higher level can be mentioned as a bottleneck at health facility level for the implementation of initiatives such as IPLS, DTC and APTS which are supposed to have significant contribution for the improvement of inventory control system.

### Distribution, Fleet Management and Maintenance sub-process

The Agency’s distribution capacity has significantly increased over the past few years that enabled direct delivery of program commodities to more than 1,500 health facilities. While most deliveries are based on demand generated by the facilities (pull), allocation from the center and branches (push) is also significant. The in-house restructuring helped in improving the efficiency of utilizing the existing fleet as the sub-process assumed overall control on vehicle scheduling. The Agency also developed a standard operating procedure to guide the distribution and redistribution activities in line with GDP which, however, is not strictly followed at all times.

Yet, there are a number of areas for improvement. The significant proportion of the trucks owned by PFSA is more than 5 years old contributing to about 20% down-time; this, coupled with the ever expanding health service and program integration to the IPLS, resulted in huge demand for additional trucks. To further stretch the current capacity, inadequate storage space at facility level cannot accommodate the predefined maximum stock, which forces PFSA to make frequent deliveries outside the anticipated bi-monthly schedule. However, the Agency does not have a documented truck replacement policy and plan. To fill this gap, the Agency incurs huge cost to rent commercial trucks from the private sector that are usually sub-standard for pharmaceuticals distribution and posing huge risk to the Agency. Even with the support through transportation outsourcing, the direct delivery coverage is very limited.

The other challenge that makes timely distribution of pharmaceuticals difficult is the very long time that it takes to collect pharmaceuticals from the geographically-scattered central leased warehouses. There are also inefficiencies in utilizing the existing fleet optimally due to unavailability of proper vehicle scheduling and route planning tool that is used as a standard in the Agency. Furthermore, there is no accurate facility map and distribution optimization plan to improve the situation. To add to this, there are challenges in preload planning and loading the trucks to their optimum capacity – due to lack of volumetric measurements - resulting in avoidable wastage. A manual fleet management system is practiced but it is inefficient and inaccurate as it is not supported by appropriate procedures and practical tools.

The Agency does not have an acceptable preventive and repair maintenance strategy for its trucks, material handling equipment and warehouse facilities. Lack of a regular preventive maintenance program, inadequate capacity of the maintenance team at PFSA, unavailability of spare parts in the market, and shortage of competent maintenance service providers in the local market are amongst the main challenges in this area. With the anticipated growth in PFSA capacity, the number and type of warehouses, trucks and equipment is expected to grow in the coming few years and this will only add to the existing maintenance problem.

### Quality Assurance

Currently, there are a number of problems with regards to assuring the quality of the products through the supply chain system. For example, products are damaged during transport to the warehouses, while in storage and during distribution down the supply chain; this is mainly due to lack of standardization in the supply chain processes and practices. While some of the processes are properly documented as standard operating procedure (SOP), there is no mechanism to enforce and monitor their implementation; there is also a gap in standardizing and documenting some of the remaining processes. The warehouse operatives, drivers and other staff are not adequately trained on proper handling of pharmaceuticals and equipment. There is no system for data validation and verification which is required to run an effective and efficient supply system. The agency has got a structure for quality assurance including a quality control laboratory which is fitted with high-tech equipment; however, it is not adequately staffed yet. There is no comprehensive quality management system and quality assurance plan in place; to date, only physical quality inspection is regularly conducted during receiving at the warehouses.

### Human Resource and General Service Process

Due to the huge PFSA service expansion, there is a significant increase in its manpower over the years and by far over the planned staffing. Nevertheless, the organogram is not tailored in such a way that adequately satisfies the current work load of business processes both at the center and its branches. Additionally, there is no clear strategy and plan for staff motivation, personal development, succession planning and competency based career path. Due to poor performance appraisal practice, employees are treated indifferently, which might result in dissatisfaction and ultimately lack of motivation for the good–performers. Moreover, to add to staff dissatisfaction, the safety practices at the work place for employees are inadequate and the indemnity for the warehouse managers, who are bearing huge responsibility, is very low.

On the other hand, staff meeting report evaluation revealed that there are tough challenges for the agency that some staffs are found accomplishing their day- to-day activity indifferently, having low commitment, poor responsibility, nagging behavior, with conflict of interest and intension of rent seeking –resulting in delayed and very poor deliverables. Even though, these problems are identified, management was found reluctant to solve them.

*Note: Please refer the details in the human resource and general services processes design document*

### Technology (MIS Process)

In this era use of technology is valuable for success of any business. When it comes to supply chain it becomes more important. Considering these benefits, the Agency used different tools to support its day to day activities. Over the years, the deployment of Pharmid System (in house), HCMIS, HCTS/PLITS, and Peachtree (for Fund Management) were important initiatives in the effort to create an automated Management Information System for product and financial management. The automated Inventory Management System (HCMIS) has been deployed at PFSA Central, branches and some health facilities. The Agency had also launched a webpage ([www.pfsa.gov.et](http://www.pfsa.gov.et)) which is becoming an important web portal for communicating and disseminating information with its stakeholders.

However, the supply chain of the country still demands more robust information management system through application of technologies such as RFID, barcoding and security systems as existing tools and systems faces the following major challenges:

* Lack of integration (between processes and between Center & Hubs) and interconnection of information system across the supply chain levels (SDPs, Hubs and Center).
* Limited Data Visibility.
* Lack of ownership, challenges with version stability, and concerns regarding sustainability for systems in use.
* Lack of accuracy and concerns of reliability for logistics data & reports generated from HCMIS
* Non-standardized Product Directory Services management, resulting data quality problems.
* No integrated system is available for Forecasting and Supply Planning, Procurement, Fund Management, Human Resource, and Asset Management including automated Fleet Management Systems, such as GPS Systems.

*Note: Please refer the details in the Management Information System Process redesign document*

## Customer and Stakeholder Need/Expectation Analysis

| **Customers and Stakeholders** | **PFSA needs and Expectation from customers and stakeholders** | **Customers’ and stakeholders’ needs and expectations from PFSA** |
| --- | --- | --- |
| Community | * Seek and get information on rational use of medicines * Appropriate use of medicines * Provide feedback on the supply of medicines and provision of pharmaceutical services | * Access to quality assured and affordable pharmaceuticals * Awareness on rational use of medicines * Up-to-date information on pharmaceutical supply and service * Transparency and accountability |
| House of Peoples Representatives | * Input and support to appropriate législations and proclamation * Follow up, support and feedback * Support on law enfoncement regarding supply related matters * Support to strengthen local pharmaceutical manufacturers | * Uninterrupted supply of quality pharmaceuticals at an affordable price * Regular report and up-to-date information on supply and service * Action on the feedback provided * Providing timely response to enquiries of the public * Transparency and accountability * Good governance |
| Federal Ministry of Health | * Issue updated directions on Health Policy, Drug Policy, Proclamation, guidelines and directives * Strategic leadership * Resource mobilisation for pharmaceuticals * Encourage collaboration and coordination between Regions and PFSA * Follow-up, support and feedback * Coordinating development partners * Strengthen the interface and alignment between the Ministry and the Agency on Pharmacy related issues | * Uninterrupted supply of quality pharmaceuticals at an affordable price to health facilites * Efficiency * Good governance * Regular performance report * Real time information visibility * Regular financial and audit reports * Transparency, accountability and timely response to the public |
| RHBs | * Collaboration and coordination regarding pharmaceuticals suppplied through PFSA and in capacity building efforts * Verify and approve the compiled health facilities’ annual pharmaceuticals requierement to the Agency * Engagement in regional level planning and execution * Enforce and monitor helath facilities to follow PFSA procedure and processes * Follow-up, support and feedback * Coordinating development partners | * Uninterrupted supply of quality pharmaceuticals at an affordable price to public health facilities * Regular performance report * Real time information visibility * Capacity building to regional institutions * Engagement in regional level planning and execution * Transparency, accountability and timely response to the public |
| Higher Teaching and Research Institutions | * Competent professionals for pharmaceutical supply chain management and service * Evidence to support PFSA’s plan and process * Inclusion of IPLS, DTC, APTS and clinical pharmacy service in pre-service curriculum * Technical support in capacity building activities | * Timely supply of adequate quantity of quality-assured pharmaceuticals and laboratory chemicals at an affordable price * Collaboration in research * Real time information visibility |
| Public Health Facilities | * Up-to-date consumption and forecast data * Rational cost to the users * Timely payment for RDF products * Follow PFSA procedure and processes; fulfill legal requirements * Identification of capacity building needs * Owning and implementing IPLS, DTC, APTS and clinical pharmacy service * Undertaking activities as per MOU (for NGO and private health facilities) | * Timely supply of adequate quantity of quality-assured pharmaceuticals and at an affordable price * Real time information visibility * Capacity building support |
| Not for profit Non-governmental health facilities |
| Private Health Facilities |
| FMHACA | * Guidelines, Directives, quality control, import permission, up-to-date list of importers, post-marketing surveillance, pharmaceutical waste disposal certificate, strengthening the control of illegal drug trade | * Ensuring the quality of pharmaceuticals throughout the supply chain * Pharmacaeuticals import and distribution data * Cooperation during post-marketing surveillance * Recalling pharmaceuticals with quality problems * Real time information visibility * Transparency, accountability and timely response |
| HIV/AIDS Prevention and Control Office (HAPCO) | * Forecast data and budget * Allocation and timely release of funds * Coordination of resources * Technical support and joint planning * Up-to-date information on clinical and programmatic matters | * Uninterrupted supply of HIV/AIDS commodities * Regular transaction and expenditure report * Timely financial and audit report * Real time information visibility * Transparency, accountability and timely response |
| Health Insurance Agency | * List of pharmaceuticals that will be covered by the health insurance system * Information on Health Insurance coverage and plan | * Uninterrupted and timely supply of pharmaceuticals at an affordable price * Price index for pharmaceuticals |
| Ethiopian Public Health Institute (EPHI) | * Quality control on medical equipment during import and after distribution * Epidemic forecast data * Information on disease patterns | * Timely and uninterrupted supply of pharmaceuticals and research commodities * Collaboration on research on the quality of medicines so as to initiate recall * Real time information visibility * Transparency, accountability and timely response |
| Development partners, donors and NGOs, | * Align plan with HSTP and PSTP * Financial, material and technical support * Timely payment for procurement and distribution services | * Use of resource for the intended purpose in time * Implementing effective control system * Regular performance reports as per the agreement * Audited financial report * Real time information visibility * Transparency, accountability and timely response * Health commodités utilisation * Asses impact of contribution |
| Local Pharmaceutical Manufacturers | * Increase supply of pharmaceuticals both in type and volume * Meeting Good Manufacturing Practice (GMP) requirements * Supplying pharmaceuticals as per the terms and conditions of the supply agreement * Price to other customer * Limited Batch size | * Forecasting and procurement data for future * Predictability * On time information and fair competition process * Timely payment as per the agreement * Facilitating bank loans * Protection of the local firms * Transparency, accountability and timely response |
| Pharmaceutical Suppliers | * Meeting the legal requirements of the country * Increase supply of pharmaceuticals both in type and volume * Meeting GSP and GSP to ensure quality * Supplying pharmaceuticals as per the terms and conditions of the supply agreement * Limited number of batch (proper batch size ) * Send complete shipping document timely | * Forecast and approved procurement plan * On time information and fair competition process * Facilitation of LCD and CAD * Timely payment as per the agreement * Transparency, accountability and timely response |
| Banks and Insurance Companies | * Getting foreign currency in priority * Timely LC and CAD processing * Providing timely and complete information during deposit and withdrawal of money * Providing timely account information * Providing bank loan to local pharmaceutical manufacturers based on tripartite agreement * Settle payment to customer timely * Safety and security to the resources | * Meeting all the requirements and presenting complete documents for service requested * Timely financial reconciliation * Reliable financial capacity * Agreement made with local manufacturers * Timely communication of authorized persons for bank accounts * Timely insurance payment |
| Ethiopian Air Lines | * Priority in loading * Maintaining appropriate storage conditions during transportation * Providing timely shipping information * Safety of product during handover | * Presenting complete documents * Meeting all the requirements for service requested * Timely payment for service received * Timely receiving pharmaceuticals from respective ports |
| Shipping Lines and Logistics Service |
| Ethiopian Revenue and Customs Authority | * Priority during service provision * Timely approval of release of consignments based on letter of cooperation * Uniform/fair tax rate for public health commodity | * Meeting all the requirements and presenting complete documents for service requested * Timely sharing of distribution information made to private health institutions * Timely payment for service received |
| Public Procurement Agency | * Approving special procurements * Announcing black-listed suppliers * Updated list of suppliers * Annual procurement audit * Capacity building support on procurement regulations and guidelines | * Annual procurement plan and report * List of suppliers that failed to deliver after they are awarded * Timely submission of request for special procurements * Seeking advice and clarification |
| Public Procurement and Property Disposal Service | * List of suppliers that won framework of contract procurement GS goods * Disposal of unusable supplies * Special treatment for health commodities | * Communicating annual procurement plan and report * Procurement performance report * Preparing and communicating list of supplies to be disposed |
| Auditor General / Audit Service Corporation | * Annual financial audit report * Capacity building on financial guidelines | * Availing financial reports and other relevant documents * Acting on audit feedback |
| Internal customer | * Professionalism * Integrity and loyalty * Presence in the time of need * Ownership * Accountability * Adherence HR policy and legal standards | * Good governance * Conducive and safe working environment * Capacity development * Clear career path * Competitive |

## Input process output and outcome

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Description of core process | Input | Out put | | Outcome | |
| Pharmaceutical supply core process | | | | | |
| Forecasting | * Request from health facilities , * health program * MIS data | | * Forecasted Estimate and supply plan | | Sustained availability of quality assured affordable medicines |
| Procurement sub process | * Procurement request * Budget * tools , * market information | | * Avail quality affordable pharmaceuticals to PFSA warehouse | |
| Storage and inventory management | Warehouse , inventory control tool, MHE, Pharmaceuticals | | Store product in good condition | |
| Distribution and Fleet management | Truck, fleet management tool, route planning, transaction vouchers | | Quality product delivered to health facilities | |

## Work flow mapping

### High level activity Flow

The following are high level activities flow in their natural order while executing the supply chain core process:-

1. Tool preparation for Forecasting and supply planning
2. Quantification tool communicated to branches
3. The tool Communicated to health facilities
4. Forecast data communicated to PFSA hubs by health facilities
5. Aggregation HF forecast to make up branch request
6. Branch Communicate to head office on catchment forecast
7. Aggregating, reconciling branch request and generating procurement request to ODDG
8. Procurement proposal preparation
9. Get no objection from ODDG
10. No Objection from DG
11. Tender documents preparation
12. Tender document no Objection
13. Advertising on Press agency
14. Tender flotation
15. Tender opening to evaluation
16. Review and Endorsement of evaluation proposal
17. Award notification
18. Purchase order preparation to approval
19. Contract signing
20. LC opening
21. Delivery time
22. Port clearance time
23. Transfer to warehouse
24. Receiving and generating GRNF
25. Generating good receiving voucher
26. Request from hubs RRF(breakdown , )
27. STV issued to hub
28. Handing over to deliverer
29. Unloading and receiving by hub
30. Batch Sorting and GRNF issues
31. Generating GRV
32. Facility request
33. STV , (Invoice)
34. Handing Over To Customer
35. Delivering to health facility with POD
36. POD Communicated to document follow up responsible person
37. Report with IFFR and issue to dispensary issues

### High level Process Work flow description

National public health pharmaceutical supply system assessment conducted in 2004 identified a number of challenges in the supply chain of health commodities, where set of vertical programs involving multiple stakeholders were responsible for managing supply chain for ART, TB, Family Health, EPI, etc, and other essential medicines. To avert historical problems associated with the pharmaceutical supply chain system, Pharmaceutical Fund and Supply Agency (PFSA), a semi-autonomous agency under Federal Ministry of Health, was nationally established by the House of People’s Representatives, with proclamation number of 553/2007, having the mandate to run and coordinate the whole pharmaceutical supply chain operations for public health system.

PFSA has mission of ensuring uninterrupted and direct delivery of quality assured and affordable pharmaceuticals primarily to public health facilities and promoting rational use of medicines by enhancing financial and human resources capacity, implementing need-based efficient pool procurement system and establishing modern inventory management system.

Integrated Pharmaceutical Logistics System (IPLS) is a primary mechanism to ensure un-interrupted supply and continuous availability of quality-assured essential medicines at all public health facilities at affordable prices. It is the term applied to a single pharmaceuticals reporting and distribution system, integrating the supply chain management of all types of pharmaceuticals in the public health sector. IPLS has three main components including the policies and guidelines for LMIS, inventory control and storage of pharmaceuticals at all levels of the supply chain system throughout the country.

PFSA conducts the forecasting and quantification, procurement, warehousing, inventory management, and distribution of health program (HIV/AIDS, TB, Family Health, Vaccines, Malaria, etc) and RDF (budget) based essential pharmaceuticals. Revolving Drug Fund (RDF) is the primary funding mechanism for availing need based essential pharmaceuticals based on initial seed fund.

The quantification process uses both centralized and decentralized forecasting approach based. For RDF based essential medicines, the forecasting process starts at health facilities. Based on health services they render, health facilities identify their pharmaceutical needs and estimate their future requirements making use of available historical data (consumption, service, morbidity, demographic, etc). Forecasted facility requirements are collected, aggregated and consolidated at hub level to produce hub based forecasted requirement. Respective hubs subsequently send their forecasted requirements to center. Nationally, hub forecast data are reviewed, aggregated, and adjusted for anticipated changes in future requirements and eventually used in the preparation of supply plans. Conversely, forecasting of health program commodities is performed by national quantification team centrally nominated/selected from all stakeholders. Subsequently, supply plans are prepared and will be used for procurement later on.

Making use of the quantification outputs, the procurement directorate prepares procurement proposal which will be used for floating tender once approved by the Deputy and Director General of PFSA. Advertisement using appropriate and approved channels is used to attract tenders thereby providing equal market opportunities for suppliers and ensuring competitiveness. Next, bid opening and evaluation of tender takes place so as to identify the winning supplier. Outcomes of tender evaluation are first endorsed so that the winning suppliers are awarded. Framework of contract is then prepared so that contractual agreements are entered between PFSA and the supplier. Contract management activity continues until the products are received at central PFSA warehouses and necessary payments are made. For medical equipment, the agreement may include installation, commissioning, and conducting maintenance activities within the warranty period

Distribution from the central warehouse to branches is conducted following requests from branches using RRF or following an informed push system. For RDF based pharmaceuticals, distribution from branches to health facilities starts when facilities present their purchase request to supplying PFSA branches. Based on these requests, the hubs prepare issue vouchers, dispatch medicines and handover to the clients. Occasionally, regional special agreement between PFSA and RHBs would serve as an input for commencing distribution activity. In such circumstances, distribution plan generated by regions shall be used to undertake the direct delivery operations as per the agreements.

In the case of health program product, bimonthly requests from health facilities and/or woreda health offices (for pass through sites) using RRF shall be used for planning and implementing distribution activities, in line with IPLS policies and guidelines. Direct delivery is made to accessible health facilities while WoHOs are used as a pass through for hard to reach health facilities.

.





### Functional Work Flow Process description

Since its establishment, PFSA has made significant strides to ensure uninterrupted supply and continuous availability of quality assured pharmaceuticals. Integrated Pharmaceuticals Logistics System governs the pharmaceutical supply system, dictating product and information flow as well the roles and responsibilities of individual supply chain units.

Quantification of health commodities plays indispensable role in the supply chain management. The forecasting process follows either centralized or decentralized approach based on the type and nature of commodities forecasted.

The forecasting and quantification of RDF commodities follows decentralized approach. Here, quantification tools are first prepared nationally and sent to hubs. From the hubs, the tools will be distributed to selected/identified health facilities (direct supply) and woreda health offices (pass through woreda for hard to reach health facilities) under their catchment areas. Making use of available data (consumption, service, morbidity, etc), health facilities/WoHOs prepare forecast of their estimated pharmaceutical requirement. PFSA Hubs, in collaboration with RHBs, ZHDs, WoHOs, and partners provide ongoing support to the facilities during the quantification process. In addition, engagement of DTC, wherever available, has been found to be critical during this endeavor.

Once the quantification is completed, the health facilities/WoHOs communicate their quantification outputs to respective PFSA hubs. PFSA hubs review and aggregate these forecasts to prepare consolidated hub forecasts, after making necessary adjustments. The final consolidated hub forecast will then be sent to PFSA Central where they undergo further review and aggregation into national forecast, and for preparation of supply plans after making necessary adjustments based on stock situation, program growth and expansion, etc. Supply plans will then be prepared and communicated to Procurement Directorate via ODDG for subsequent actions.

Contrary to procedures for quantification of RDF commodities, Health Program Products quantification is conducted nationally in a more centralized fashion. The quantification process starts by first establishing a national quantification team with the right mix of all stakeholders (including PFSA, FMOH, RHBs, Donors, and Partners). During preparatory phase, in addition, data items that are useful for quantification exercise and supply planning will be collected and consolidated. The national quantification team will then select appropriate method to use after analyzing available data, building assumptions, calculate forecasted requirements, and do comparison/reconciliation of alternative methods to produce the final forecasting output. Using the forecasting output and after reviewing various data, supply plans are prepared and communicated to Procurement Directorate via the Operations Deputy Director General (ODDG).

The Procurement process starts with receipt of supply plan from ODDG. Subsequently, procurement request will be prepared and sent to ODDG for approval. Once approved, procurement proposal will be prepared and sent again to ODDG and, followed by, Director General (DG) to obtain no objection. In an event there is an objection, the process may be backtracked to make appropriate adjustments or the procurement may be suspended. Once no objection is received from ODDG and DG, tender documents are prepared. Following this, the tender will be advertised using appropriate media/channel. Bid evaluation will then be conducted to identify the winning bidder, followed by preparation of purchase orders, signing of contracts and LC opening. Procurement follow-up and contract administration is an ongoing activity until the consignments are cleared from ports of entry and transferred to PFSA warehouses or other logical locations.

Pharmaceuticals cleared from ports are received at PFSA warehouses after appropriate inspections are conducted. Following inspection and proper receipt at warehouses, GRNF is produced (using HCMIS) and transferred to Fund Management Directorate for costing purpose.

As long the pharmaceuticals are kept in stores, appropriate storage management operations and inventory management practices are conducted continuously. The distribution of pharmaceuticals from Center to Hubs and, subsequently, health facilities starts when either requests from hubs to center are made or based distribution breakdown made centrally (by PFSA, FMOH, etc) following informed push system. As such, even if pull system is the predominant distribution system in use, hybrid of both pull and push system are frequently observed. Similar distribution practices are observed for hubs to health facilities (direct supply) and/or WoHOs/ZHDs, etc.

For health program products, irrespective of the distribution system (pull or informed push) used and destination of delivery sites (health facilities, WoHOs, ZHDs, etc), PFSA is responsible for delivering the products. Occasional product collection by the recipients is also observed.

For RDF products, direct delivery to health facilities/WoHOs is only made when special agreements and arrangements are made. Here, regional agreements between PFSA and the big regions (e.g. Oromiya, Amhara) are made while distribution is made as per preplanned breakdown and distribution schedules. The process is complete when products are delivered to intended sites as per shipment vouchers, handed over to the receiving facilities; proof-of-deliveries are collected and submitted back to the document follow-up team at the hubs or center for center-to-hub deliveries. In addition, even if limited in scope direct deliveries are also made even when there are no special agreements made particularly for large hospitals. Apart from such circumstances, collection method is predominantly observed for RDF based medicines (budget medicines).

The distribution of RDF based medicines (budget medicines) starts when health facilities present their purchase requests (prepared by facilities based on their list of priority medicines) to PFSA hubs. At hubs level, the officer in charge of distribution reviews the requests, assesses stock situation at the hub, prepares issue vouchers, which will later be used to dispatch and handover the products to the customers (health facilities). Whenever there is product stock-out, stock out certificate may be issued to the health facilities based on their requests.

Pharmaceutical Supply Chain Management Information System (PSCMIS) plays indispensable role for smooth running of the logistics system. Currently, HCMIS (an automated tool) is in use both at PFSA Central and Hubs level for managing transactions (receiving and issuing) and inventory management purposes. For direct delivery facilities, combined report and request form (RRF) is completed by health centers and hospitals as per IPLS design every other month and sent to PFSA Hubs for refills. Health center orders account pharmaceuticals requirements for the health posts. For non-direct delivery facilities, RRF is completed by health centers and sent to PFSA branches through WoHOs. A copy of the health center RRF is sent to WoHOs for management and supervision purpose; one copy of hospital RRF is sent to RHB for management and supervision purpose.

Even if it is less than one would expect, feedback system is also used occasionally. In feedback reports, facilities will be able to see how they are performing compared to other facilities in their area and will be able to facilitate stock transfer. For instance, WoHO or PFSA hub may provide short report to all health centers highlighting the stock status of priority products (vital pharmaceuticals), number of stock outs, reporting rate, and consumptions trend at different health centers. The Woreda or PFSA might also provide specific reports to health centers pointing out errors in their reports

Successive capacity building packages through training and supportive supervisions were made to enhance the skills and capability of pharmaceutical workforce towards instituting stronger pharmaceutical supply and services. Towards this end, PFSA (in collaboration with FMOH, RHBs, ZHDs, WoHOs & partners) has conducted multiple trainings on IPLS, DTC, RMU and APTS. By doing so, even if at its infancy and didn’t cover all, health facilities are in better capacity to prepare facility specific drug list, prioritize their medicine list (by VEN, ABC analysis), quantify their medicine need and reconcile with their budget, tracing items using bin management and collective responsibility have shown improvements. Supportive supervision is also becoming integral part of assessing and improving performance.



## Process Time

Measurements of process time for various activities have been made by assessing specific supply chain function. For instance, process time for forecasting essential medicines encompasses time consumed between tool preparation to generating procurement request, and is generated by assessing experiences from the last three years – involving PFSA central, hubs and health facilities. For procurement, similarly, measurement of time elapsed was conducted by assessing the length of time consumed for tendering process for medicines (RDF & health program), medical supplies, medical instruments and laboratory chemicals and reagents when using international competitive bidding during the last three years, and has identified and documented process time for each sub-categories and average process time is computed to obtain an average for all products.

Similarly, process time for major activities in warehousing, inventory management, fleet and distribution system until the products reach health facilities was assessed by reviewing HCMIS and other records (at Center and Hubs), through observation of customer service operation at PFSA Adama hub, and informant interviews, and average for key process time findings are presented in table below.

| **S. No** | **Process flow** | **RDF** | | | **Health Program** | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Processing time | Waiting time | Total time in days | Processing time | Waiting time | Total time in days |
| 1 | Tool preparation for Forecasting and supply planning | 4 | 1 | 5 | - | - | - |
| 2 | Quantification tool communicated to branches | 1 | 3 | 4 | - | - | - |
| 3 | The tool Communicated to health facilities | 10 | 11 | 30 | - | - | - |
| 4 | Forecast data communicated to PFSA hubs by health facilities/ Establish team for health quantification | 34 | 20 | 54 | 6 | 4 | 10 |
| 5 | Aggregation HF forecast to make up branch request/ | 20 | 7 | 27 | - | - | - |
| 6 | Branch Communicate to head office on catchment forecast (organize National work shop until reporting of result | 1 | 0 | 1 | 19 | 36 | 55 |
| 7 | Aggregating, reconciling branch request and generating procurement request to ODDG | 14 | 8 | 14 | 1 | 1 | 2 |
| 8 | Procurement proposal preparation | 3 | 7 | 10 | 1 | 6 | 7 |
| 9 | Get no objection from ODDG | 1 | 3 | 4 | 1 | 7 | 8 |
| 10 | No Objection from DG | 1 | 1 | 2 | 1 | 0 | 1 |
| 11 | Tender documents preparation | 2 | 8 | 10 | 1 | 5 | 6 |
| 12 | Tender document no Objection | 1 | 6 | 7 | 1 | 9 | 10 |
| 13 | Advertising on Press | 7 | 13 | 20 | 10 | 2 | 12 |
| 14 | Tender floatation | 35 | 0 | 35 | 35 | 2 | 37 |
| 15 | Tender opening to evaluation | 21 | 28 | 49 | 17 | 3 | 20 |
| 16 | Review and Endorsement of evaluation proposal | 1 | 11 | 12 | 1 | 7 | 8 |
| 17 | Award notification | 1 | 5 | 6 | 1 | 7 | 8 |
| 18 | Purchase order preparation to approval | 3 | 30 | 33 | 3 | 30 | 33 |
| 19 | Contract signing (PI, PB) | 10 | 15 | 25 | 10 | 15 | 25 |
| 20 | LC opening | 5 | 7 | 12 | 5 | 7 | 12 |
| 21 | Delivery time | 64 | - | 64 | 64 | 0 | 64 |
| 22 | Port clearance time | 3 | 9 | 12 | 3 | 9 | 12 |
| 23 | Transfer to warehouse | 1 | 2 | 3 | 1 | 2 | 3 |
| 24 | Receiving and generating GRNF | 8 | 14 | 22 | 6 | 10 | 16 |
| 25 | Generating good receiving voucher | 1 | 21 | 22 | 0.25 | 18.75 | 19 |
| 26 | Receiving Request from hubs RRF (breakdown) | 0.5 | - | 0.5 | 0.5 | 0 | 0.5 |
| 27 | STV issued to hub | 2 | 0 | 2 | 2 | 0 | 2 |
| 28 | Handing over to deliverer | 3 | 6 | 9 | 3 | 6 | 9 |
| 29 | Travel and Unloading time by hub | 3 | 0 | 3 | 3 | 0 | 3 |
| 30 | Batch Sorting and GRNF issues | 1 | 1 | 2 | 1 | 1 | 2 |
| 31 | Generating GRV | 0.5 | 0.5 | 1 | 0.5 | 0.5 | 1 |
| 32 | Facility Report and request (RRF) | 1 | 9 | 10 | 1 | 9 | 10 |
| 33 | STV , (Invoice) | 1 | 1 | 2 | 1 | 1 | 2 |
| 34 | Handing Over To Customer | 1 | 2 | 3 | 1 | 2 | 3 |
| 35 | Delivering to health facility with POD | 3.5 | 1 | 4.5 | 3.5 | 1 | 4.5 |
| 36 | POD Communicated to document follow up responsible person | 1 | - | 1 | 1 | - | 1 |
| 37 | Issue to DUs | 1 | - | 1 | 1 | - | 1 |

## Process Interface



## Performance baseline

These describe the current process performance with contemporary process measurement parameters that includes time, cost, coverage and quality. It is summarized with the following table:-

| **Criteria** | **Indicators** | | **Formula** | **Baseline** | **Data source** |
| --- | --- | --- | --- | --- | --- |
| Time | Forecasting lead time in days | At Hubs | *Time elapsed to aggregate HF demand & send to PFSA center* | 28 | Docs. review,  June 2016 |
| At Center | *Time elapsed to issue purchase request to procurement sub process* | 22 | Docs. review,  June 2016 |
| Procurement lead time in days | | *Time taken from purchase request till product arrived at warehouse* | 299 | Docs. review,  June 2016 |
| Process cycle time in days | | *Time elapsed from request receiving from health facilities to product arrives to the at HF store* | 513 | Docs. review,  June 2016 |
| Forecasting error from quantity & value perspective | | *ADP=|Forecasted demand – Actual demand| \*100*  *Actual demand* | 35% | PSTP, Industry standard 25% |
| Port clearance time in day | | *Warehouse arrival date and time – port arrival date and time* |  |  |
| *Warehouse arrival date and time – airport arrival date and time* | 12 | Docs. review,  June 2016 |
| Time for physical inventory in days | | *Days needed to conduct annual physical inventory and service readiness* | 60 | Document review, June 2016 |
| Down time | | *Time for Maintenance and Servicing* | 18% | PFSA transport assess, May 2015 |
| Order turnaround time | | *Sum of the number of days to process all orders received*  *Total number of orders processed* |  | IPLS,  N= 270HF, 2014 |
| Coverage (Service delivery) | Order fill rate | |  | 60% | IPLS,  N= 270HF, 2014 |
| Product Availability for tracer | |  | 89% | IPLS,  N = 270HF, 2014 |
| Continuous tracer product availability | |  | 82.3% | APTS,  N=17HF, 2015 |
| Percentage of drugs actually dispensed | |  | 81% | APTS;  N= 1700, 2015 |
| Percent of fleet availability at the time of request | | *Number of vehicles available for use/ number of vehicles requested* |  |  |
| Proportion of medical equipment ready for use | | *Number of ME installed & commissioned timely & ready for use*  *Total number of ME received* |  | Document review |
| Cost | Pharmaceuticals wastage rate | |  | 3.5% | PSTP docs.  March 2016 |
| Inventory Turnover Rate | | *Total value of items distributed*  *Average value of inventory* | 1.68 | PSTP docs.  March 2016 |
| Consumption to Stock Ratio (Monthly) | |  | Range:  2 - 21% | APTS; N=43 HF  June 2016 |
| Demurrage cost ratio | | *Proportion of demurrage cost to total value of goods cleared x100* | 0.23% | PFSA Doc. review, June 2016 |
| Affordability in days’ wage | | *Av. price of medicines dispensed per patients on cash (P)X 30*  *Smallest salary of unskilled government worker (690).* | 1.8 | APTS; N=43 HF  June 2016 |
| Quality | Proportion of Pharmaceuticals for which assay conducted | | *Number of Pharmaceuticals for which assay conducted /20 x100* | 0 | PSTP document, March 2016 |
| % of recalled pharmaceuticals | |  |  |  |
| Proportion of key processes supported by updated SOP | | *# of key processes supported with updated SOP/ Total number of key processes X100* | 45%?? |  |
| % of ISO certified warehouses | | *Proportion of ISO certified Warehouses/Total Warehouses X100* | 0 |  |
| Inventory accuracy rate | |  |  | Annual inventory record,2016 |

## Major Problems, Rules and Assumptions

The pharmaceuticals supply system of country suffers from frequent supply interruption, inefficient utilization and high wastage of resources. Constellation of multiple problems and challenges in the pharmaceutical supply chain management has been contributing to these shortcomings and poor performance. Summary of major challenges and problems identified are presented in table below along with their guiding business rules (both written and unwritten) and underlying assumptions that have existed.

|  | **Major problems** | **Rules/ Enforcement** | **Assumptions** |
| --- | --- | --- | --- |
|  | Long Procurement lead time | * Public Procurement law doesn’t adequately entertain the special nature of pharmaceuticals. * Challenge in enforcement of National priority by Banks and ERCA to the health sector product | * Rules ensure transparency and offers competitive price * PFSA has the capacity to strictly enforce contract terms * Suppliers always adhere to terms and conditions * Procurements are always well-planned |
|  | All year-round procurement, repetitive tendering process | * PFSA has to import FMHACA-registered products as a priority * PFSA needs to have a comprehensive annual procurement plan * Procure whenever request arises | * There is a list of prequalified suppliers * There are adequate number of FMHACA-registered products to meet need and create competitiveness * FMHACA Will authorize provision for product having no registered supplier in country * All health initiatives will be planned well by involving all stakeholder |
|  | Delayed port clearance leading to high demurrage cost | * Consignee pays demurrage at port for incoming goods * Full documentation is must to get the product released from port | * Shipment notification will happen with all proper documentations * Donation agreement and pre-import permit will be ready and communicated well in advance * Procurement will consider direct delivery to the branches as appropriate |
|  | Poor medical equipment supply administration in the system | * PFSA manages procurement, installation and commissioning of required medical equipment | * Standardized list and specification of equipment, spare parts, and consumables will be available * Appropriate equipment maintenance strategy and plan will be in place * Data will be available on type and number of medical equipment at all level of the SCM * HFs will be ready on time for receiving and installation of equipment * Suppliers will adhere to the contracts |
|  | Pharmaceuticals donation aren’t adequately planned and sometimes resulted in duplication of efforts | * PFSA shall clear donation pharmaceuticals (unwritten) * There shall be consolidated and harmonized procurement and supply planning | * PFSA and its stakeholders work in a coordinated manner hence relevant shipping documents are shared with PFSA on time and prior to product arrival |
|  | Redundant and extended forecasting with high inaccuracy | * PFSA primarily pool demand from public health facility (proc. 553/2007) | * Health facility pharmaceuticals request will be reviewed, validated by DTC and get approval by health facility management in time. * Capacity in the supply chain is consistent and improves with time * Health program pharmaceutical will be forecasted when initiated by the Ministry |
|  | Absence of pre-defined and agreed list of pharmaceuticals, | * PFSA and HFs will have specific drug list prioritized by VEN and reconciled with ABC, * PFSA shall avail essential medicines to selected health facilities and districts, | * PFSA and HFs have the capacity to prepare their own specific list, * The health sector (RHB, ZHD, WoHO) enforces accountability, * DTC leads facility level drug list preparation |
|  | Irrational drug use | * Medicines prescribed and dispensed with full information shall be recorded and documented * Health facilities promote Rational Drug Use through DTCs and other awareness creation mechanisms | * Awareness on rational use of drugs will be created to the citizen, dispensers and prescriber * Health professionals will provide appropriate medicine with full information to the patient |
|  | Lack of visibility of inventory information and poor accountability | * PFSA develops and implements appropriate LMIS throughout the supply chain system | * PFSA and HFs will have the capacity to implement appropriate recording and reporting system * The health sector (RHB, ZHD, WoHO) owns the LMIS and enforces adherence to system at HF level * There will be strong auditing (APTS) and reconciliation system across supply chain |
|  | Poor inventory management at the different levels of the supply chain | * Appropriate inventory management system shall be implemented at PFSA and health facilities * PFSA shall have warehouses that are suitable for inventory management | * PFSA and health facilities strictly follow stock rotation, batch tracking and FEFO principles * Comprehensive and user-friendly MIS tool will be in place * There will be ownership of and adherence to existing MIS tools * PFSA warehouses should have adequate space, and proper layout design, adequately equipped |
|  | Substandard warehouses with inefficient space utilization | * Warehouses across the supply chain shall meet the standard criteria | * Health facilities will have storage space adequate for their optimum stock * PFSA will receive and issue regularly to branches and health facilities * PFSA will have adequate warehouse with good warehouse management practice * HCMIS will be properly used to optimize space and product tracking in the system |
|  | Poor fund management | * PFSA shall manage the fund for revolving drugs (proclamation no. 553/2007) | * The fund management supported by the peach-tree and HCMIS will be perfect for financial transactions and will not have any discrepancy between the two systems * The two systems are enough to manage the fund * Staffs can work being dedicated with the manual system |
|  | Delayed reconciliation of inventory with books of account | * PFSA has to conduct annual and cyclic physical inventory and reconcile results with stock records and generate draft accounts | * Reconciliation helps to safeguard public resources * PFSA implements stock record cards for its inventory * Internal audit is adequately staffed with capable professionals * Variations will be timely and appropriately dealt with |
|  | Long time in receiving incoming shipments at the warehouse, especially for equipment | * Pharmaceuticals including instruments shall be physically inspected with checklist by appropriate expert * Storage has different Zoning area and storage categories (NPS, Dangerous goods, quarantine….) | * Single door operation and warehouse layout design is suitable and adequate for receiving and dispatching * Number of batches of a product is manageable * The medical equipment follow-up directorate work as technical arm for all medical equipment SC processes * PFSA warehouses have adequate receipt, dispatch and storage space in a similar location. * Shipment with complete documentation will reach both the center and branch warehouse on time |
|  | Long lead time of delivery of pharmaceuticals to health facilities | * PFSA shall deliver pharmaceuticals to health facilities within two weeks * PFSA shall deliver essential medicines to selected health facilities and districts (proclamation no. 553/2007) * PFSA shall deliver products directly to all public health facilities ( 2008 BPR) | * Pharmaceuticals are always available in PFSA stock * PFSA has the capacity to run its operations (e.g. Vehicle, HR…) * There are limited emergency requests from health facilities * Health facilities are assumed to report complete and quality data regularly based on the schedule * Central PFSA should deliver products to all branches as required |
|  | Limited direct delivery coverage to health facilities | * PFSA shall deliver products directly to all public health facilities ( 2008 BPR) | * PFSA will have the capacity for direct delivery * Stakeholders shall timely pay service fee to PFSA * Health facilities will be clearly mapped and accessible |
|  | Short and over supply of program pharmaceuticals to health facilities | * Refill should be guided by the forced-ordering min-max inventory system | * Health facilities submit timely, accurate and quality RRF * Health facilities will have storage space adequate for their optimum stock * PFSA has the capacity to refill all health facilities as per their request * Pharmaceuticals distribution will be primarily based on pull system |
|  | Shortage of pharmaceuticals at health facility level which has led patients to dissatisfaction, non-adherence or expose them to expensive options | * Health facilities will have DTCs to guide their prescription and drug management functions * Health facilities shall avail all the required pharmaceuticals | * Health facilities have adequate budget for essential pharmaceuticals * Health facilities have the capacity to estimate their requirements * PFSA can supply all the required pharmaceuticals when requested * Supply management at health facility will reach acceptable standard |
|  | Shortage of laboratory chemicals and reagents and poor quality led patients to dissatisfaction | * Health facilities will have DTCs that has laboratory technologists as a member * standard national laboratory equipment platform and standard list of chemicals and reagents * Health facilities shall avail all the required laboratory reagents and chemicals | There will not be a problem whether using either closed or open system  The quality products will be available at local market |
|  | The human resources in the supply chain have not yet right attitude, lack serving culture on top of that inadequate knowledge and skill for running operation | * Employee will fit the job based on the minimum requirement for the post | * Market will provide adequately trained manpower to the operations |
|  | The Work force in the supply chain don’t have adequate motivation and satisfaction resulting in high attrition of experienced manpower | * Human resource is allocated as per the experience and process requirement * Recognition of better performance following performance appraisal * Staff who are exposed to risky working environment will be compensated * PFSA will ensure safe and healthy work environment | * Staffs are well experienced and can do the job well * The performance management and measurement system will be in place (BSC). * There is clear career structure * The indemnity for staff working in safeguarding public resources with high and low stocks is adequate * Personal protective and safety apparel will be provided to all who require them * Operations support procedures and input will be in place * PFSA will pay better than the other organization in the civil services * The organization shall have Esprit de corps |
|  | Inadequate number and inappropriate mix of human resource to address increasing demand | * PFSA shall have a clearly defined organization chart and structure * PFSA shall have its own HR management manual | * Workload analysis and level of effort was defined during PFSA establishment * PFSA will have clear job description and level of effort required for each activity * The hubs under construction will be opened and functional in time |
|  | Accumulated pharmaceutical waste awaiting disposal; inappropriate disposal practice due to lack of environment- friendly infrastructure | * Expired and damaged products shall be stored separately * Expired and damaged pharmaceuticals shall be verified approved, disposed and certified by the appropriate authority (Board of Directors, FMHACA) * Unfit-for-use items shall be disposed properly within six months | * PFSA has the mechanism, infrastructure, and system to handle pharmaceutical waste disposal on time * If not disposed, unfit-for-use items take space and could be misused * Disposal guideline have exhaustive method of disposal for all categories of products * Pharmaceuticals waste will be disposed at different level of the supply chain * Disposal committee from different part of the organization will analyze the reason and verify the expired and damaged products in either central or branch warehouse then write minute |
|  | Wastage due to expiry, and product damage | * Pharmaceuticals shall be availed to all who need them (unwritten) * Pharmaceuticals should have at least acceptable shelf-life upon arrival at port * Good inventory and warehouse management principles shall be practiced at all level of the supply chain * Pharmaceuticals in the supply chain will be traceable | * Warehouse along the supply chain will have standard area for receiving, storing and dispatching * Quantification assumption will have no significant deviation from actual consumption * Request from health facilities will be reviewed, validated by DTC and approved by health facility manager * Health facilities have the capacity and willingness to receive/collect their requests on time |
|  | Poor fleet management, inadequate maintenance (vehicle, MHE, spare part, replacement and inadequate vehicles) | * PFSA has to manage resources efficiently | * PFSA has the capacity to manage fleet and maintenance, * PFSA shall have truck history record, route plan and log sheet * PFSA will implement electronic fleet management system, * PFSA shall have maintenance strategy and plan, * Vehicle need and replacement plan will be in place, * There is adequate local capacity for spare parts provision and maintenance, |

While the above table lists the specific root causes that contribute to the major problems of the supply chain, lack of good governance and inadequate leadership hegemony are other major cross-cutting problems.

### Top 16 selected problems and their causes

The major supply chain problems were further analyzed based on WHO problem prioritization criteria that include risk, scale, coverage and solution to overcome the problem. Accordingly, the top sixteen problems are prioritized out of the list identified above using a multi-voting process. To better understand these problems and help in designing future corrective interventions, the first and second level root causes that contribute to these prioritized problems were identified through brainstorming and extensive discussion.

| **Top 16 Supply Chain Management Problems** | | | |
| --- | --- | --- | --- |
| **No.** | **Top 16 problems** | **Causes** | |
| **Level 1** | **Level 2** |
|  | Long procurement-lead-time and all year-round procurement of medicines, supplies and reagents | Delayed approval of foreign currency,  Repetitive tendering process,  Weak suppliers' capacity  Longer tender evaluation time  Poor contract administration Lack of supplier pre-qualification | PPA regulation (ICB) does not entertain the special nature of pharmaceuticals  Unable to secure priority for foreign currency  Lack of comprehensive procurement plan  Inadequate HR, lack of capacity and weak motivation  Weak follow-up system,  Lack of system for contractual performance evaluation  Lack of IT support |
|  | Poor medical instrument management | Very long procurement lead time, including lengthy technical evaluation | Long specification development time  Delayed tender document preparation  Long evaluation time  Lack of methods for check and balance  Weak interfacing with stakeholders  Duplication of effort for specification preparation, budgeting, purchase order preparation and poor follow-up  Poor competency of staffs,  Irresponsiveness and lack accountability  Lack of monitoring and evaluation |
| Long-time to install, commission and ready for use, resulting in high customer dissatisfaction | Weak and lengthy inspection before receipt at central warehouses  Lack of distribution plan information, long-time for actual distribution of equipment to branch and facility thereafter.  Unavailability of spare part supply  Delayed site preparation by HF  HFs lock-up the equipment in store and keep at bay even if functional  Equipment breakdown and fails to give the intended services |
| Inferior quality equipment: | Lack of standard specification for medical instrument,  Poor coordination with customers and stakeholders for instrument supply  Lack of supplier prequalification schemes  Weak contract administration, M&E – including failure to capitalize on warranty  Lack of contract performance evaluation practices  Spare part unavailability,  Lack of maintenance policies, strategies, guidelines, & SOPs; and there-of preventive and curative maintenance practices.  Rent seeking behavior  No equipment platform  Presence of multiple variety of medical instruments (e.g. open/closed) having similar utilities at HFs leading to dis-economy of scale in supplying spare parts, lab chemicals and reagents;  Poor tracking and tracing for equipment, inadequate use of IT for managing medical equipment |
| Poor knowledge management system and workforce responsiveness | Poor competency of staffs,  Rent seeking behavior  Structure and arrangement which don’t account actual requirement/expectations  Poor responsiveness of staffs;  Lack-of or diffused accountability framework  Knowledge acquisition, lack of transfer of new knowledge, dissemination and retention |
| Presence of multiple variety of medical instruments (e.g. open/closed) having similar utilities at HFs leading to dis-economy of scale in supplying spare parts, lab chemicals and reagents;  Poor tracking and tracing for equipment, inadequate use of IT for managing medical equipment |  |
|  | Redundant and extended forecasting with high inaccuracy | Unplanned donation  Involvement of many stakeholders in the process  Absence of agreed and defined quantification tool/s  Poor data quality  Unavailability of agreed and pre-defined level specific list at HFs  Weak coordination and integration of forecasting activities across the supply chain | Poor record keeping practice at all levels  Weak enforcement of procedures and processes |
|  | Absence of denominator (pre-defined and agreed list of pharmaceuticals), prioritized by VEN and reconciled with ABC, at all levels (at HF and PFSA) | Lack of enforcement and accountability for adherence to drug selection guidelines,  Lack of ownership at the different level,  Lack of at all levels of the supply chain | PFSA is expected to procure all requested products,  Increasing new initiatives and accompanying products,  Conflict of interest at HF level, |
|  | Poor stock visibility and accountability at all levels (incoming stock, stock at hand, distributed, consumed,) | Poor storage arrangement and storage condition,  Poor information exchange between PFSA, Hubs and HFS  Too many batches distributed  Difficult to trace by batch and expiry,  Absence of auditing practice,  Poor information management system  (less developed LMIS, HR competency, lack of policies, procedures, manuals for PLMIS | Type and number of medical equipment at all levels of SCM is not known  Lack of comprehensive automated system at all levels and absence of strict use, |
|  | Poor Inventory management at different level (PFSA and Health facilities), characterized by poor stock rotation and FEFO implementation | Poor stock recording practice,  Lack of comprehensiveness of current warehouse management system,  Inappropriate warehouse layout,  Lack of ownership and non-adherence to existing system  Shortage and frequent failure of MHE,  Good storage practice (GSP) is not properly implemented, | Time taking physical inventory practice,  Absence of cyclic inventory,,  Substandard warehouses/store,  Delayed reconciliation and taking measures, |
|  | Long time in receiving incoming shipments at the warehouse | Too many batches,  Incomplete shipping document,  Shortage of material handling equipment (MHE),  Scattered rented central-warehouses,  Inspection delay for medical equipment,  Connectivity related challenges to add net items to HCMIS, and delay in synchronization for these new items  Inadequately trained operatives for smooth and effective operation | Erratic and frequent procurement orders Low document tracking and follow-up system,  Procurement orders with less quantity than batch size,  Absence of special agreement and training with airlines for special shipment and precaution,  Absence of standard methodologies for medical equipment inspection,  PFSA does not have enough warehouse space, |
|  | Low productivity of supply chain workforce | Low employee morale (dissatisfaction, lack of motivation, lack of responsibility/accountability, and Rent seeking) | Indifferent employee attitude to responsibilities, poor sense of accountability, and rent seeking behavior  Unavailability of employee code of conduct |
| Inadequate employee competency (knowledge, skills) | Absence of competency requirement for SCM at all levels  The higher level curriculum doesn’t adequately address the SCMHealth service expansion and new initiatives (such as HI, vaccines, NCD, NTD, …)  Lack of qualified and competent professionals specifically for supply chain in the market |
| Shortage of tools for doing jobs |  |
| Organizational structure and appropriateness | Absence of comprehensive HR structure and plan   * HR mix and number not updated in line with growing number and volume of commodities managed and responsibilities assigned   Absence of Job description and clearly defined Level of Effort (LOE)  Job description are not shared uniformly across the Agency,  Centralized and long recruitment process |
| Inadequate leadership and management | * No performance based incentive mechanism- Absence of performance management system (such as BSC) * Lack of accountability |
|  | Delayed disposal of waste products leading to accumulation in store and space occupation | Absence of regular tracking and reporting of wasted products,  PFSA does not have the mechanism, infrastructure, and system to handle pharmaceutical waste disposal on time,  Shortage of resources for waste disposal, | Absence of private sector facility for disposal; |
|  | Inadequate vehicles, poor fleet management and inadequate maintenance (vehicle, MHE, spare part, replacement) | Increasing distribution need,  Long downtime for vehicles,  Manual and inadequate fleet management system,  Absence of GPS supported fleet management (electronic transport management system/TMS),  Absence of projected fleet demand, Absence of maintenance strategy and plan,  Lack of vehicle replacement plan, | Increasing direct delivery points,  Private market don’t offer reliable 3PL |
|  | Shortage of laboratory chemicals and reagents; Poor quality chemicals and reagent | Unavailability/interrupted supply | Lack of standard national equipment platform  No standard list of chemicals and reagents; duplication of items needed to conduct similar/same tests  Peculiarity of certain reagents used, that are SSL/TTSPP in nature (e.g. control tests) |
| Quality concerns | Quality concerns for locally manufactured/diluted chemicals and reagents, quality concerns pertaining to packaging |
| HR Competency to manage lab chemicals and reagents | Low competency in managing chemicals and reagent logistics; |
| Unresponsive Logistics System to peculiarities of lab chemicals and reagents | Lack of well-defined and adhered to - information and product flow (distinct system for test kits, chemistry, hematology, chemicals, etc).  Mix of push and pull systems are used for distributing items;  IPLS has limitations to be applied to chemical and reagents management at facility level, leading to poor coordination between laboratory department and pharmacy units. |
| Weak coordination between different stakeholders involved in management | Very weak coordination between PFSA, EPHI, Regional Laboratories, HFs  Roles and responsibilities of different units involved in lab logistics are not well defined, including reconstituting powder chemicals. |
|  | Poor Fund management | Weak recording and documentation and delayed report and poor reconciliation  Backlogs in financial transactions and audits | Lack of updated stock recording card -  Absence of adequate system for document sharing including IT support,  Document lost in transit (original vouchers/ documents  Poor human resource competency  Delayed reconciliation of inventory with account shortages as required.  Irregular bank and inter-branch financial reconciliations,  Irregularity of consolidated financial reports,  Inadequate system for tracking payments for orders reserved in banks,  Challenges of Peachtree and HCMIS costing reconciliation,  Late collection of distribution fee and poor documentation or filling of receiving voucher (Model 19).  Late liquidation of account receivables and payables – leading to deterioration of credibility by DONORS to do so. |
|  | Poor Fund Management | Delay in costing pharmaceuticals   * Delay in costing pharmaceuticals (forcing products distribution without costs via ‘delivery note’ further complicating the financial transactions), * Capital Items - depreciation costs are not updated | Lack of updated costing financial manuals,  Lack of commitment and accountability  Inadequate human power  Document lost in transit (original vouchers/ documents |
| Financial planning and budgeting | Lack of system for detailed budget allocations mechanisms, |
| Delayed, poor credit collections and reconciliation taking very long time | Unnecessary centralization of financial activities (agreement with RHB/HFs vs Payment facilitation)  Loose accountability  Hubs are expected to collect payments whereas documents are in central  Document exchange to central and lost in doing so. |
|  | Disarray in internal and external communications | The scope, channel, and network for communication are not well-defined per respective structures and high level of disarray in communication practices | Lack of policy, guidelines, procedures – for internal and external communication  Inappropriate communication  Excess/incomplete communication |
| Less developed information dissemination practices (formal and informal, written and unwritten)  Lack of clarity on information/letter/document whereabouts  Multiple, and often conflicting/confusing, information are transmitted | Time-lag in conveying information to intended recipients and impact on responsiveness  High ***Grapevine*** (circulation of rumors and unofficial information circulating) – and often dominating/swallowing official ones  Poor understanding of level of urgency – leading to compromise/delays in major and important operations  Lack of accountability for communication malpractice  Lack of feedback system  Lack of Information clearing house |
|  | **Poor and uncoordinated IT system** | * No integrated IPFSMIS * Limited Datavvisibility. * Lack of integration resulted in varying information between HCMIS and Peachtree * Low level of ownership | Absence of standard IT systems in the agency  Very poor competency of IT professionals in the agency  Low number of IT professionals  Challenges with existing software version stability, and concerns regarding sustainability for systems in use.  Underdeveloped Institutional Capacity for data utilization in decision-making processes.  Non-standardized pproduct directory services management (absence of uniquely identifying codes) resulting data quality problems.  Power and network interruption and associated system problems.  Legal limitation to use electronic transaction and stock keeping documents. |
|  | **Weak interface management** | * Inadequate accountability in the activity handing over * Absence of continuum of activity management Payment to press, transit fund replenishment, * Duplication of activity * Weak coordination of medical equipment management with stakeholder * Communication gaps * Absence of prioritization | * Weak system of monitoring and evaluation * Not making sure the activity continued to the next level due negligence * Lack of fixed responsibility for payment and replenishment of transit fund leading to demurrage cost * Reentering same data in different work environment * Absence of proper clear role responsibility |

### Fishbone

For easier understanding of the cause-effect relationship, a fishbone diagram was drawn for the prioritized problems in such a way that shows their respective contribution to the two major supply chain problems: interrupted supply and inefficient utilization and wastage of resources.

***Fishbone diagram for interrupted Supply of pharmaceuticals*** ***Wastage and efficacy loss***



CHAPTER THREE

# REDESIGNING THE BUSINESS PROCESS

## Benchmarking

**Benchmarking** is a way of discovering what is the best performance being achieved – whether in a particular company, by a competitor or by an entirely different industry. This benchmarking has been conducted by reviewing of internal best practice, desk review and onsite visiting. Based on the agreed measurement criteria’s such as cost, coverage, quality and time; the performance gap has been identified using selected key performance indicators. In the process of this benchmarking, the achievements as well as the methods through which benchmarked companies achieved success has been depicted. The bottom line is the best experiences shared from successful organizations will be adapted with due consideration of our context that can in turn enhance our performance level in terms of cost, efficiency, availability, quality and time.

The following table summarizes countries and organizations from which benchmarking is shared with the attributes captured

| **Measurement Criteria** | **Performance Indicators** | **Institution/ Countries/ Standards Benchmarked** | **Measured Achievement (baseline)** | **The method through which success achieved** | **References** |
| --- | --- | --- | --- | --- | --- |
| Cost | Affordability | Ethiopia/  Philippines | Median wage days: 1 days for either one month chronic treatment or seven days full course of acute treatment – WHO golden standard  However; Philippines 2.4 days for generic products, Ethiopia; range (0.9 days to 3 affordability in wage days), Median 1.88 days. | * Higher proportion of medicines procured from government institutions (from PFSA for Ethiopia) * forcing suppliers and pharmacies by insurance * direct delivery to HF PFSA | Medicine prices, availability, affordability and price components  WHO; 2003  Philippines  National APTS Review meeting report ; 2015 Addis Ababa |
| Ethiopia  India | Ethiopia: The cost variation for 20 key-selected same-brand medicines: range was from 0.6% (Lidocaine injection 20mg/ml), TAT injection (107%), glucose 40% injection (322%), and Indomethacin Suppository (418%).  India: 0% cost variation between government and private pharmacies | India, and Canada  By shaping the market using  -MRP  -Agency logo labeling  -Bar coding  Result:  -Medicines at the same cost in private and government pharmacies (0% difference) Ethiopia: HSTP 2015 to 2020 target  -Lowest price –generic products  -Government to increase transparency in manufacturer-set MRP.  -Government to remove all tariffs on medicines to increase access.  -Develop a policy for generic substitution and generic prescribing.  -Establish links between procurement offices of central government, DHS, MCD  -NDMC to share information on procurement and reduce replicated effort.  Central government to investigate use of | WHO report :  Anita Kotwani, Libby Levison Date: April 27, 2007  <http://apps.who.int/medicinedocs/documents/s19208en/s19208en.pdf>  -The findings of MCPI baseline assessment  From all over Ethiopia  N=18 pharmacies; and N=20 selected same brand medicines  FMOH; 2016  HSTP 2015 to 2020 target |
| Pakistan | 1.4 days | * Lowest price –generic | National surveys conducted using WHO/HAI standard methodology. http://www.haiweb.org/medicineprices/. |
| Demurrage cost | ALLE Bejimila Ethiopia | significantly reduced its demurrage cost | * Owned bonded warehouse at Kiltie | Site visit |
| UNICEF | Significantly reduced clearance time, demurrage cost and quality complaint | * Owned bonded warehouse at airport | Site visit |
| Fuel consumption | Coca-Cola Company | Decreased fuel consumption | * GPS Implementation * Schedule maintenance * Vehicles replacement policy by calculating maintenance cost per kilometer travelled | Site visit |
| Coverage /Service | Product availability | Kenya, Uganda, Ghana | Referral Hospital product availability – 82%, 78%, 76% respectively | * Improving inventory management * Efficient transportation | Masters SH, Burstein R, DeCenso B,  Moore K, Haakenstad A, et al. (2014) Pharmaceutical  Availability across Levels of Care: Evidence from  Facility Surveys in Ghana, Kenya, and Uganda. PL o S  ONE 9(12): e114762. doi:10.1371/journal. Pone.  0114762 N = 54 products |
| Product Availability of Health Program commodities | PFSA ( Internal Best Practice) | HIV/AIDS products ; 98 %  FP products ; 97% | * Better coordination among stake holders during planning phase * Availability of adequate financial budget for procurement * Limited product line items ( predefined list) with known morbidity cases * Direct delivery to facilities by PFSA Hubs | IPLS National Survey 2015 |
| Prescribed vs dispensed  Availability | Ethiopia | The range of availability of prescribed medicines: 72% to 96% | Identifying top ten disease and medicines to treat them: Result Patients served in a hospital which identified medicines for top ten diseases and follow regularly, have got their prescribed medicines 7.5 times more than otherwise (AOR=7.5. C.I. 3.88-14.47) | The findings of the APTS evaluation;  Essential Medicines and Health Products Information Portal ;A World Health Organization  N=1000 Patients; 2015 |
| Malawi | Malawi conducted quantification exercises at the central level, with limited input from district staff. Given the wide variation in needs across the districts, these exercises often led to incorrect forecasting and supply planning estimates for a given area or district. As a result, some facilities received too much stock of certain commodities, leading to expiration and wastage, while other facilities experienced stock-outs of the same commodities. | To address these issues, the first district-based quantification in 2013 was organized involving Multidisciplinary National Quantification Committee from various levels of the health system. This brought improvement | Malawi 2013, National survey |
|  | Vehicle Availability | Coca-Cola | 85% | * Fleet and distribution team plan together on weekly basis * Trucking vehicle using GPS * Strict follow up for maintenance schedule * Standardized delivery schedule and availability of forklifts for off loading | Site visit |
|  | Order Fill Rate (Service Level) | Namibia | Order Fill Rate (Service Level): 80% | * Adherence to guidelines and SOPs for reporting and refill requests as per stipulated timeframes * Frequent and close communication between the issuing and receiving facilities. * Ensuring optimal stock level at issuing facilities * Enhanced competency of pharmaceutical supply chain workforce | Levenger, M., Ongeri, B., Wolde, A., & Kagoya, H.R. 2013. *Namibia National Supply Chain Assessment: Capability and Performance*. |
| Quality | Barcoding | Ethiopia | ALLE Bejimla improved data visibility and traceability of records and transactions along its supply chain | * Codded 783 products based on item name and location using alphanumeric codes ( ex – 81RI0001072BD) * Use either company or new barcode for products coming * They acquire barcode stickers and prepare barcodes for non-barcoded item that contains description, uniquely identifying codes, price, batch number, and expiry. * ALLE Bejimila has been supported by a consultant, Andre Tomas Carney) (AT Carney) for two years * UNCEIF is using ERP for all commodities in its office across the globe | ALLE Bejimla Bench marking ( On Site Visit and UNICEF Copenhagen ) |
| Bar Code Implementation | Tanzania | The new system allowed for improved management of shipments, faster distribution of products to the sub-national level with easier tracking of dispatches, and improved control of leaks and theft. Because of the new system, the staff workload declined by approximately 30%, freeing them to complete other warehouse management functions. In addition, the time it takes to produce reports were reduced by 40% to 50% and reporting errors were substantially decreased. | * .Key staff involved in warehouse operations received training on generating, printing, and scanning barcodes, as well as on how to receive, issue, and adjust stock, and create invoices using barcodes. * Motivating staff to embrace the changes and experience the benefits of the new system is critical for successful implementation of barcoding. Ongoing staff training with standard operating procedures, job aids, and supportive supervision and monitoring have a positive impact on system implementation and can counter the challenges of moving existing staff to a new system, as well as staff turnover and other changes. * Warehouse rehabilitation and computer literate human resources are essential for implementation of barcoding at the provincial level. * Rehabilitation requirements include installation of warehouse equipment, such as a pallet racking system; a stacker or lifter; and trolleys. * Once this pre-requisite is in place, barcode enabled WMS can easily be replicated from the Central Warehouse system. | Barcoding: Modernizing Warehouses to Lighten the Workload, DELIVER PROJECT  SEPTEMBER 2012 |
| Data Visibility via  ERP Implementation | Ethiopia | Enhance Data Visibility through implementation of ERP system;  Purchase orders are visible for respective branches, which enables the branch to get ready  to receives items so that costing will be made at central level hence payment will be ready for suppliers  Every receive and issue transactions monitored at central office | * Supported by international consulting firm AT Kearney for two years from requirement identification ,designing and launching * Cimac – a Microsoft local agent supports the organization in the acquisition and implementation of ERP software for two years | ALLE Bejimilla (Site Visit) |
| **KEMSA** LMIS-Self Service Portal | KEMSA | * Improve Quantification and Forecasting * Improved procurement * Warehousing & Distribution * Reduced wastage * Efficient warehousing and inventory management practice * Efficient customer service and on time delivery * Efficient and productive human resource with sprit of aspiration | • Chat system which enhances Customer Service  • Service Delivery  . Utilization of marketing and business model  Implementation of medical supermarket  Batch by batch quality assurance tests  • Data Warehouse on Orders Processed  • Track Medical commodities in the Facilities | Kenya eHalth Conference |
| ERP | **ERP procurement module**  - records keeping and management digitalize  - frame work contracting adopted  - compliance with best practice and standards,  **Warehouse Management System Module**  WMS Module in place which has automated all activities within the warehouse.  Electronic and physical locations of commodities synchronized facilitating a paperless environment  All regional warehouses are linked to the WMS.  **Distribution Module**   * distribute to over 6000 facilities and * 5047 HIV/AIDS testing sites   mapped and geocodes established   * Outsource distribution vehicles having GPS tracking |
| Forecast Error planning | Malawi | 97% | The median Forecast error of six essential contraceptives in Malawi, Ghana, Tanzania & Rawanda during 2010 were 97%, 33%, 21% and 7% respectively. The finding indicated that countries with the most accurate forecasts (e.g. Rawanda) represented here have logistics data from lower levels of the supply chain, and they use it for forecasting. Countries with the highest error rates (e.g Malawi) are characterized by poor logistics data, often available from the central level only | **US**AID | DELIVER PROJECT. *Technical Assistance for Supply Chain Strengthening and Commodity Security in Public Health: Annual Report. October 2011–September 2012.* |
| Tanzania | 21% |
| Rwanda | 7% |
| Namibia | 74% | Working with programs managers improved assumptions used in forecasting by making adjustments to program targets | Levenger, M., Ongeri, B., Wolde, A., & Kagoya, H.R. 2013. *Namibia National Supply Chain Assessment: Capability and Performance*. |
| Time | Inventory Turnover Rate | Global pharmaceutical Industries | Inventory Turnover Rate – 2.33 | * Extended work time in multiple shifts * Implementation of Lean Management * focusing on the entire supply chain | Robert E. Spector (Aug 03, 2010). How Lean is Pharma: A 10-Year Progress Report. Available at: <http://www.pharmamanufacturing.com/articles/2010/109/> |
| Delivery time for Vaccine Campaign from Central to hub and also from hub to woreda health office | PFSA ( Internal Best Practice) | < 1 week | * Strong engagement and follow up by PFSA top management * Strong coordination among stake holders ( FMOH,RHB,PFSA Central, PFSA Hubs etc) * Orientation to drivers, Delivery personnel, store managers, laborers * Incentive as a per diem to driver and delivery man * Ad hoc committee establishment as deemed necessary | PFSA Vaccine Campaign distribution (internal better practices ) |
| Delivery from Branch (Province) store to public health facilities | Zimbabwe | 7.3 – 12.9 days | * Good Distribution Practice (GDP) * Direct Delivery * Intermediate drop-off points * Large hospitals collect by themselves * Using CMS Own Vehicle * cross docking distribution | Zimbabwe Pharmaceutical Country Profile  Published by Ministry of Health and Child Welfare- Directorate of Pharmacy  Services, in collaboration with the World Health Organization  June 2011  Managing Drug Supply  Management Science for Health Second Edition |
| South Africa/Nigeria | 3 days for routine and 24 hours for Emergency | * Developing capacity to handle contract management * High trust and transparency between government and third party provider * Orders are ready on schedule and provide clear direction on where and what to transport * Strengthen Public- private partnership * Distribution Outsourcing ( 3PL) | Promising Practices  DISTRIBUTION  Brief #4 in the *Promising Practices in Supply Chain Management* Series |
| Zambia | Reduce stock out from 29 days to 5 days at health facilities | * Cross-docking distribution |
| Vehicle Down time | Coca-Cola company | 3 days | * Availability of own Garage. * Availability of own spare parts * Strict follow up using Excel. * Analyzing GPS indicators * Schedule preventive maintenance | Site visit to East Africa Bottling Company |
| Lead time | UNICEF | Reduced procurement lead-time | * Supplier prequalification * Suppliers price list * Catalog - Standardized Specification list * Close communication with suppliers and customers * Long term agreement * Outsource non pharmaceutical product procurement needed for emergency ( 1 -2 years) including inspection * Check suppliers financial capacity * Strong contract management and follow-up | Site visit UNICEF Ethiopia office |

## Performance Gap

In the performance gap analysis process, the baseline for selected performance indicators has been identified. Then, the baseline  has been compared  with  the customer need as well as internal and external benchmark  to identify the performance gap.  The objective of  this section is to indicate the gap between  the existing situation with the intended one which in turn helps in developing concrete strategy to close the existing gap.

| **Comparison Criteria** | | **Performance baseline (AS IS)**  **(A)** | **Customer need**  **(B)** | **Performance benchmark** | | **Performance gap** | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Internal**  **(C1 )** | **External**  **(C2)** | **Customer perspective**  **(D=A-B)** | **Best benchmark**  **(E=A-C)** |
| **Time** | International Procurement lead time | 299 days | 180 days | 240 |  | 119 days |  |
| Process cycle time | 429 days | 365 days |  |  | 64 days |  |
| Forecasting error from quantity & value perspective | 42% | < 25% | 12% (HIV program) | 7% | 17% | 30% |
| Port clearance time in day (air shipment) | 9 days | 3 day | 4 days |  | 6 days | 5 Days |
| Time for physical inventory in days | 60 days | 15 days | 7 days |  | 45 | 53 |
| Down time (220 working days) | 26% | 11.3% |  | 6.8% | 14.7% | 19.2% |
| **Quality** | Number of Pharmaceuticals for which assay conducted annually | 0 | 4 items |  |  | 4 |  |
| Number of recalled pharmaceuticals by post marketing surveillance per year | 6 items | 100% (all 6) | 100% (all 6) |  | 0% | 0% |
| Number (%) of key sub-processes supported by updated SOP/manuals  (N=8): Note: see list in appendix | 2.5 (31%) | 100% | 100 |  | 69% | 69% |
| % of ISO certified warehouses with its practices  (N=19) | 0 | 100% | 0% | 100% | 100% | 100% |
| Inventory accuracy rate |  | 98% |  |  |  |  |
| **Cost** | Pharmaceuticals wastage rate | 3.5% | 2% (HSTP target 2015-2020) |  |  | 1.5% |  |
| Inventory Turnover Rate (RDF) | 1.37 | 2 | 1.68 | 2.7 | 0.31 | 1.33 |
| Consumption to Stock Ratio (Monthly) | Range:  (2 - 21%) | 25% | 21% |  |  | 19% |
| Demurrage cost ratio | 0.23% |  |  |  |  |  |
| Affordability in days’ wage | Range (0.9-3 days) median 1.8 | 1 day (WHO golden standard | 0.9 days | 0.3 days | 2 days | 2.7 days |
| **Coverage (service delivery)** | Order fill rate | 60% | 100% |  |  | 39 | 38 |
| Tracer product Availability at the time of visit (cross sectional study) | 89% | 100% (HSTP golden standard | 98% (HIV) |  | 11% | 9% |
| Continuous tracer product availability for the last 6 months | 78.1% | 100% |  |  | 21.9% |  |
| Percentage of drugs actually dispensed | 81% | 100% |  |  | 19% |  |
| Percent of fleet availability at the time of request | 74% | 90% | 85% | 85% | 16% | 11% |
| Proportion of Medical instrument installed timely\* and ready for use (\*2 moth) |  |  |  |  |  |  |

## Desired outcomes and stretched objectives

The performances, gaps and problems in the existing pharmaceutical supply chain system were first identified through brainstorming. The brainstorming session started with describing the current business processes, analysis of the inputs, outputs and outcomes for existing business processes, end-to-end work flow mapping, and analysis and mapping of interfaces. Following this, major problems (perceived and actual) were identified, and prioritized according to their magnitude, severity, urgency and feasibility.

The findings were further enriched and validated through interview with key informants, stakeholder analysis (involving internal customers, PFSA Boards, FMHACA, RHBs, Health facilities, local suppliers, etc), review of routine performance reports and secondary data, survey of employee perception using structured questionnaire, and site visits involving business operations. Subsequently, the root causes for the problems were assessed using fish bone analysis. Underlying rules and assumptions associated with the problems were then analyzed.

Furthermore, measurement of performance time (both process time and waiting time) was conducted to substantiate existing performance of the pharmaceutical supply chain system. Critical findings for existing performance level are then compared to benchmarked best performances (internal, desktop, and domestic firms). Subsequently, performance gap analysis was conducted. Benchmarking was conducted over scores of performance criteria including: time, cost, quality, and service responsiveness. Set of indicators such as availability, quality and affordability of medicines, process lead times (procurement, distribution), inventory management (accuracy, fill rate), fleet (availability, fuel consumption, down time), etc, and strategies and best practices were conducted from various countries (Kenya, Malawi, Tanzania, Zimbabwe, Sudan, Zambia, Nigeria, Ghana, Uganda, South Africa, Namibia, Pakistan, Sri Lanka, India, Philippines, etc)

In line with the dramatically increasing expectations and inputs from the gap analysis, extensive brainstorming was made so as to identify the desired outcomes and to further stretch the reach of expected performance and achievement for the new business process to be designed. Thus, the redesign shall be conducted to achieve/contribute to desired outcome of *improved customer satisfaction*’ through:

* Improved availability of pharmaceuticals
* Enhanced pharmaceuticals services
* Ensured affordability
* Improved efficiency
* Ensured quality and equity

The stretched objectives shall serve as performance measurement yardsticks. They are used to set indicators for measuring the achievement of mission and objectives. Detailed summary of the stretched objectives are presented in table below.

Table : Stretched Objectives

|  |  |  |
| --- | --- | --- |
| S.No. | Stretched Objectives | Strategies |
|  | Achieve customer satisfaction greater than 95 % | * Introduce periodic customer satisfaction survey( develop tool , Assess customer demand (semiannually ) * Good customers relation management (Devise communication means with stakeholders and customers , rely on information sharing and provide better services * Expand direct delivery to health facilities * Ensure availability of quality essential products continuously through joint monitoring and evaluation * Delivering ethical and compassionate services * Installing and commissioning of medical instruments on time |
|  | Increase internal customer satisfaction to more than 95 % | * Develop Code of conduct and monitor its implementation * Strengthen regular appraisal and use it for recognitions (Daily summary, monthly evaluation and feedback system ) * Ensure Good governance in the supply chain (Improving the work environment * Empowerment of middle class managers and front line workers * Strengthen planned Human resource development schemes (induction, OJT, IJT, SS, coaching ) |
|  | Increase Continuous availability of medicines to 100% | * Develop health facility specific product list and PFSA procurement List for all category of product * Expanding direct delivery to health facility * Improve quality, timeliness of health facility reports ( improve stock visibility) * Strengthen alignment with health facility parterres and collaborators * Establish and strengthen Local reconstitution of laboratory reagents and other chemicals (extemporaneous compounding) |
|  | Reduce international average procurement lead time from 299days to 150 days  In case of LTA, reduce to 90 days | * Strengthen transparent and ethical pooled procurement of committed demand * Implementing long term agreement (LTA) * Establishing continuous suppliers pre –qualification   + Post contract performance evaluation * Strengthening contract administration   + Owning bonded warehouse and office in the port   + Processing donation clearance   + Tender management   + Payment management   + Advocate the revising of PPA procurement regulation   + information Technology utilization * Monitoring and evaluation |
|  | Reduce medicine treatment cost from current 1.88 wage days to less than 1 wage day (WHO gold standard ) | * Assessing and shaping the market price (Subsidizing, by selling at cost for selected medicines, Applying market intelligence (banning non-compliant from PFSA etc.) * Strengthen Public private partnership engagement (Working with community pharmacy, working with consumer society association to shape the market, Community awareness creation on pricing) * Setting the maximum retail price (MRP) and closely monitor its implementation * Strategic partnership with suppliers (price negotiations) |
|  | Reduce the wastage rate from 3.5% to less than 2% | * Reducing forecasting error for RDF from 42% to less than 25% * Increase inventory turnover rate for RDF from 1.37 to 2 * Implementing vender managed inventory in Hospitals and high volume health facilities (Command post) |
|  | Improve medical instrument installation instantly from current 17% to 100% | * Strengthen partnership with health facility, health bureaus and suppliers * Leasing of medical devices |
|  | Reducing disparity in product availability among health facility from 60 % to less than 10% | * Streamlining supply chain functions * Develop and Implement manuals and SOPS to all work process * Ethical (professional, accountable, transparent, equitable and responsive) service delivery * Expand the agencies branches from 17 to 23 * Improved transparency, accountability and improving supply chain governance * improving recording and reporting |
|  | Increasing staff working with sense of ownership from current 52 % to 97.5 % | * Develop Code of conduct * Clearly defined accountability matrix * Good governance and role modeling * Applying the benefit package in parallel to annual performance against target * Improving empowerment of middle class managers and front liner Implementing appraisal and use it for Recognition , * Human resource development (induction, OJT, IJT, SS, coaching ) * Improving the work environment * Summarizing daily accomplishments * Providing feedback on monthly basis * Explicit job description |

## Designing From Clean Sheet

The purpose of designing the new process from clean sheet is to help the team come up with ideas that lead to a dramatically improved process. It's difficult if not impossible to make a fundamental change if we start with our current process firmly fixed in our minds and ask ourselves to improve it. Beginning with a clean sheet challenges us to turn our back on the map of the current process and to ask the question, "If we could start over, with no history or turf problems, and if our only task were to achieve the process's desired outcomes and meet our stretch objectives, how we do it?"

### Vision

To see all citizens fulfilled their needs for quality assured pharmaceuticals by 2030

### Mission

Ensure sustainable supply of quality assured pharmaceuticals to health facilities at affordable price through establishing committed demand, pooled procurement, robust inventory management and direct distribution, efficient fund administration, Integrated Management Information System and building competent institutional capacity.

### Process Redefinition

The pharmaceuticals supply core process encompasses all activities from collection of customer request from health facilities up to satisfaction of the same through delivery of quality pharmaceuticals at an affordable price by using revolving drug fund and direct delivery distribution system. In order to complete the pharmaceuticals supply management cycle and assure economy of scale; capacity building with respect to inventory management system at public health facilities and assurance of rational use of pharmaceuticals becomes the building block of the process.

**List of sub-processes**:

* Quantification (forecasting and supply planning) and marketing sub processes
* Procurement sub process
* Warehouse and inventory management sub process
* Distribution/ customer service/ and fleet management sub process

**Description of the core process:**

The pharmaceuticals supply core process encompasses a wide array of sub-processes from product selection to use; including forecasting supply planning, procurement, warehousing, inventory management, distribution, fleet management, and customer service. This is the primary process through which quality assured pharmaceuticals are availed to clients.

### Process redesigning Techniques

The following processes redesigning techniques have been deployed to redesign the pharmaceutical supply core processes.

### Breaking the Old Assumption

The agency has been working beneath the assumptions outlined in the AS IS section that led the current performance level. Hence breaking the old assumption help for fundamental thinking and radical redesign to evasion the desired outcomes. Therefore, these assumptions have to be broken, replaced by forthcoming proficient assumptions before designing the new processes.

Table : Breaking Old Assumptions

| SN | Major problems | Rules/ Enforcement | Old Assumptions | New Assumption |
| --- | --- | --- | --- | --- |
|  | Long procurement lead time | * Public Procurement law doesn’t adequately entertain the special nature of pharmaceuticals. * Challenge in enforcement of National priority by Banks and ERCA to the health sector product | * Rules ensure transparency and offers competitive price * PFSA has the capacity to strictly enforce contract terms * Suppliers always adhere to terms and conditions * Procurements are always well-planned | By reducing tender evaluation time;  - Through empowerment, using SOPs; and coaching  -Strengthening contract management system;  Updating suppliers prequalification list based on their performance procurement lead time can be reduced.   * Through communication with concerned authorities on special nature of health products appropriate legal frame work suitable for healthcare products procurement can be adopted. |
|  | All year-round procurement, repetitive tendering process | * PFSA has to import FMHACA-registered products as a priority * PFSA needs to have a comprehensive annual procurement plan * Procure whenever request arises | * There is a list of prequalified suppliers * There are adequate number of FMHACA-registered products to meet need and create competitiveness * FMHACA Will authorize provision for product having no registered supplier in country * All health initiatives will be planned well by involving all stakeholder | * By strengthening pooled demand forecast mechanism & working with EFMHACA in getting registered list of suppliers for health products, repetitive tendering can be minimized. * By getting EFMHACA approval/waiver for items that are not registered, repetitive tendering & lead time can be minimized. |
|  | Delayed port clearance leading to high demurrage cost | * Consignee pays demurrage at port for incoming goods * Full documentation is must to get the product released from port | * Shipment notification will happen with all proper documentations * Donation agreement and pre-import permit will be ready and communicated well in advance * Procurement will consider direct delivery to the branches as appropriate | * Through proactive follow up of all new arrivals at port of entry with full documentations, port clearance time can be reduced. * By owning bonded warehouse at both airport, and dry port, demurrage cost can be reduced. |
|  | Poor medical equipment supply administration in the system | * PFSA manages procurement, installation and commissioning of required medical equipment | * Standardized list and specification of equipment, spare parts, and consumables will be available * Appropriate equipment maintenance strategy and plan will be in place * Data will be available on type and number of medical equipment at all level of the SCM * HFs will be ready on time for receiving and installation of equipment * Suppliers will adhere to the contracts | - Through making all tender process activities and documents visible to all concerned stakeholders;  - Through different leasing mechanisms;  - By conducting procurement after ensuring site readiness with strict contract agreement for procurement, installation and maintenance and supporting health facilities by linking them with suppliers as per the contract agreement for spare part availability  - By directly delivering (cross docking ) medical devices, directly to health facilities;  - By conducting inspection at port with Regulatory body,  - By creating link with either local agent of the company or EPHI for maintenance after the warrantee period;   * There will be modern equipment unique ID (related with serial number of ME) at health facility and inventory management * Regional maintenance workshops will be established for low and medium complex equipment maintenance |
|  | Pharmaceuticals donation aren’t adequately planned and sometimes resulted in duplication of efforts | * PFSA shall receive and distributed all donated pharmaceuticals (unwritten) * There shall be consolidated and harmonized procurement and supply planning | * PFSA and its stakeholders work in a coordinated manner hence relevant shipping documents are shared with PFSA on time and prior to product arrival | * Through coordinated effort & planning, donated products will be received from donors & delivered to facilities. * Aid and donation should be based on the country’s actual need and situation, standardize medical equipment and consumables, spare parts, reagents and services etc. |
|  | Redundant and extended forecasting with high inaccuracy | * PFSA primarily pool demand from public health facility (proc. 553/2007) | * Health facility pharmaceuticals request will be reviewed, validated by DTC and get approval by health facility management in time. * Capacity in the supply chain is consistent and improves with time * Health program pharmaceutical will be forecasted when initiated by the Ministry | * Through strengthening DTC, the annual pharmaceutical request will be validated and approved * By providing ongoing capacity building including OJT and onsite support forecast accuracy, will be improved * Agreed and proper forecasting tool for all program quantification process shall be implemented * PFSA will lead quantification processes to reduce duplication of efforts through collaborative forecasting |
|  | Absence of pre-defined and agreed list of pharmaceuticals, | * PFSA and HFs will have specific drug list prioritized by VEN and reconciled with ABC, * PFSA shall avail essential medicines to selected health facilities and districts, | * PFSA and HFs have the capacity to prepare their own specific list, * The health sector (RHB, ZHD, WoHO) enforces accountability, * DTC leads facility level drug list preparation | * There will be agreed and predefined facility specific list of pharmaceuticals at all levels ( PFSA, Hospitals and Health centers) |
|  | Irrational drug use | * Medicines prescribed and dispensed with full information shall be recorded and documented * Health facilities promote Rational Drug Use through DTCs and other awareness creation mechanisms | * Awareness on rational use of drugs will be created to the citizen, dispensers and prescriber * Health professionals will provide appropriate medicine with full information to the patient | * By using toll free line and electronic and paper based media, appropriate awareness will be created on RMU * PFSA will avail pharmaceuticals in sustainable and affordable manner * Through collaborated effort, strategies to promote RMU will be improved. |
|  | Lack of visibility of inventory information and poor accountability | * PFSA develops and implements appropriate LMIS throughout the supply chain system | * PFSA and HFs will have the capacity to implement appropriate recording and reporting system * The health sector (RHB, ZHD, WoHO) owns the LMIS and enforces adherence to system at HF level * There will be strong auditing (APTS) and reconciliation system across supply chain | * By implementing contractual agreement with suppliers, barcoding will be implemented * By expanding APTS, traceability will be improved at the facility level * By implementing robust automated LMIS at all level, data visibility along the supply chain will be realized * There will be an electronic dashboard to get real time logistics information |
|  | Poor inventory management at the different levels of the supply chain | * Appropriate inventory management system shall be implemented at PFSA and health facilities * PFSA shall have warehouses that are suitable for inventory management | * PFSA and health facilities strictly follow stock rotation, batch tracking and FEFO principles * Comprehensive and user-friendly MIS tool will be in place * There will be ownership of and adherence to existing MIS tools * PFSA warehouses should have adequate space, and proper layout design, adequately equipped | * By implementing RFID/ barcode, * Medify the existing warehouse layout and buildings to state of the art warehouse, appropriate inventory management system will be in place; and achieve ISO standard inventory management system * There will be standard chain of warehouses to accommodate the increasing volume of pharmaceuticals & ease loading & unloading (Dispatching & issuance). * By improving ownership and institutionalization of IPLS, inventory management will be improved |
|  | Substandard warehouses with inefficient space utilization | * Warehouses across the supply chain shall meet the standard criteria | * Health facilities will have storage space adequate for their optimum stock * PFSA will receive and issue regularly to branches and health facilities * PFSA will have adequate warehouse with good warehouse management practice * HCMIS will be properly used to optimize space and product tracking in the system | * Health facilities will have standardized warehouses as per FMHACA standard. * By implementing good storage practice, warehouse space utilization can be enhanced * PFSA will own additional standardized chain warehouses at central level |
|  | Poor fund management | * PFSA shall manage the fund for revolving drugs (proclamation no. 553/2007) | * The fund management supported by the peach-tree and HCMIS will be perfect for financial transactions and will not have any discrepancy between the two systems * The two systems are enough to manage the fund * Staffs can work being dedicated with the manual system | * Integrated , Robust IT system will be in use for financial management and including reconciled and adjusted daily summary of delivery (cash, credit, free) and monthly reporting systems, * PFSA shall enforce stakeholders for timely payment for service fee to PFSA * The agency will have strict follow up and enforcing mechanisms to collect receivables from delivery of commodities * Filling and documentation will follow kaizen principle * Timely financial reconciliation with hubs |
|  | Delayed reconciliation of inventory with books of account | * PFSA has to conduct annual and cyclic physical inventory and reconcile results with stock records and generate draft accounts | * Reconciliation helps to safeguard public resources * PFSA implements stock record cards for its inventory * Internal audit is adequately staffed with capable professionals * Variations will be timely and appropriately dealt with | * By strengthening internal audits with professionals * Reconciliation helps to safeguard public resources * PFSA implements stock record cards for its inventory * Internal audit is adequately staffed with capable professionals * Variations will be timely and appropriately dealt with |
|  | Long time in receiving incoming shipments at the warehouse, especially for medical equipment | * Pharmaceuticals including instruments shall be physically inspected with checklist by appropriate expert * Storage has different Zoning area and storage categories (NPS, Dangerous goods, quarantine….) | * Single door operation and warehouse layout design is suitable and adequate for receiving and dispatching * Number of batches of a product is manageable * The medical equipment follow-up directorate work as technical arm for all medical equipment SC processes * PFSA warehouses have adequate receipt, dispatch and storage space in a similar location. * Shipment with complete documentation will reach both the center and branch warehouse on time | * PFSA will have standard warehouses with multiple receiving, dispatch doors and emergency exits * By implementing proper batch management during procurement, * Medical equipment (capital equipment) shall be directly transferred to destination sites through cross-docking. |
|  | Long lead time of delivery of pharmaceuticals to health facilities | * PFSA shall deliver pharmaceuticals to health facilities within two weeks * PFSA shall deliver essential medicines to selected health facilities and districts (proclamation no. 553/2007) * PFSA shall deliver products directly to all public health facilities ( 2008 BPR) | * Pharmaceuticals are always available in PFSA stock * PFSA has the capacity to run its operations (e.g. Vehicle, HR…) * There are limited emergency requests from health facilities * Health facilities are assumed to report complete and quality data regularly based on the schedule * Central PFSA should deliver products to all branches as required | Reduction of lead time is possible through:   * Delivering some consignments directly from port to branches * PFSA will build its capacity to run its operations (e.g. Vehicle, HR…)   + Whenever there is shortage of resources – PFFSA shall use outsourcing or other means of resource * Products are delivered to Health Facilities from Center as required (e.g. Medical Equipment) |
|  | Limited direct delivery coverage to health facilities | * PFSA shall deliver products directly to all public health facilities ( 2008 BPR) | * PFSA will have the capacity for direct delivery * Stakeholders shall timely pay service fee to PFSA * Health facilities will be clearly mapped and accessible | Improve direct delivery through:   * Mapping health facilities clearly using GPS and building additional accessible hubs * Owning additional vehicles, |
|  | Short and over supply of program pharmaceuticals to health facilities | * Refill should be guided by the forced-ordering min-max inventory system | * Health facilities submit timely, accurate and quality RRF * Health facilities will have storage space adequate for their optimum stock * PFSA has the capacity to refill all health facilities as per their request * Pharmaceuticals distribution will be primarily based on pull system | * By enforcing health facilities through FMOH and RHBs, enables health facilities to submit timely, accurately and quality based RRF * Health facilities will have significant expansion of cold storage capacities supported with reliable power systems * The organization has the capacity to refill all health facilities as per their pre-defined list of request * Pharmaceuticals distribution will be primarily based on pull system |
|  | Shortage of pharmaceuticals at health facility level which has led patients to dissatisfaction, non-adherence or expose them to expensive options | * Health facilities will have DTCs to guide their prescription and drug management functions * Health facilities shall avail all the required pharmaceuticals | * Health facilities have adequate budget for essential pharmaceuticals * Health facilities have the capacity to estimate their requirements * PFSA can supply all the required pharmaceuticals when requested * Supply management at health facility will reach acceptable standard | * Health facilities have adequate budget for essential pharmaceuticals. * Support Health facilities to have the capacity of estimation their requirements * Supply management at health facility shall reach acceptable standard * The Organization shall work to create collaborative partnership with various supply chain that stakeholders ensures availability, quality and affordability * The organization will deliver RDF products to Health Facilities |
|  | Shortage of laboratory chemicals and reagents and poor quality led patients to dissatisfaction | * Health facilities will have DTCs that has laboratory technologists as a member * standard national laboratory equipment platform and standard list of chemicals and reagents * Health facilities shall avail all the required laboratory reagents and chemicals | There will not be a problem whether using either closed or open system  The quality products will be available at local market | By giving attention to laboratory supplies through;   * Building the capacity of health facilities to accurately and timely forecast their need and report on time * Lab professionals deployment & mix in the organization * Standardization and harmonization of laboratory equipment and test methods * facilitate procurement on economy of scale * Prequalification of suppliers and having long term agreement (LTA) especially for closed systems * Procure standardized and validated reagents, quality controls/certified reference material (CRM) * Collaboration with relevant stakeholders in conducting pre and post market surveillances (PMS) * Establishing compounding laboratory unit at central level and major hubs as necessary |
|  | The human resources in the supply chain have not yet right attitude, lack serving culture on top of that inadequate knowledge and skill for running operation | * Employee will fit the job based on the minimum requirement for the post | * Market will provide adequately trained manpower to the operations | Serving culture and compassionate workforce can be realized through;   * Continuous capacity building * Empowerment * Coaching * Continuous (daily and monthly) appraisal * HDA |
|  | The work force in the supply chain don’t have adequate motivation and satisfaction resulting in high attrition of experienced manpower | * Human resource is allocated as per the experience and process requirement * Recognition of better performance following performance appraisal * Staff who are exposed to risky working environment will be compensated * PFSA will ensure safe and healthy work environment | * Staffs are well experienced and can do the job well * The performance management and measurement system will be in place (BSC). * There is clear career structure * The indemnity for staff working in safeguarding public resources with high and low stocks is adequate * Personal protective and safety apparel will be provided to all who require them * Operations support procedures and input will be in place * PFSA will pay better than the other organization in the civil services * The organization shall have Esprit de corps | Dissatisfaction and de-motivation of the workforce can be alleviated by   * establishing staff motivation, retention scheme and succession plan * implementing the human resources benefit package based on contribution to the goal * Job rotation and organizing the team around outcome * building training-hub (being center of excellence) * Rewarding and recognition |
|  | Inadequate number and inappropriate mix of human resource to address increasing demand | * PFSA shall have a clearly defined organization chart and structure * PFSA shall have its own HR management manual | * Workload analysis and level of effort was defined during PFSA establishment * PFSA will have clear job description and level of effort required for each activity * The hubs under construction will be opened and functional in time | By analyzing workload and level of effort:   * Required number, professional mix, can be deployed properly |
|  | Accumulated pharmaceutical waste awaiting disposal; inappropriate disposal practice due to lack of environment- friendly infrastructure | * Expired and damaged products shall be stored separately * Expired and damaged pharmaceuticals shall be verified approved, disposed and certified by the appropriate authority (Board of Directors, FMHACA) * Unfit-for-use items shall be disposed properly within six months | * PFSA has the mechanism, infrastructure, and system to handle pharmaceutical waste disposal on time * If not disposed, unfit-for-use items take space and could be misused * Disposal guideline have exhaustive method of disposal for all categories of products * Pharmaceuticals waste will be disposed at different level of the supply chain * Disposal committee from different part of the organization will analyze the reason and verify the expired and damaged products in either central or branch warehouse then write minute | * building disposal facility owned by the Organization at selected strategic areas in the country; * Disposing on time |
|  | Wastage due to expiry, and product damage | * Pharmaceuticals shall be availed to all who need them (unwritten) * Pharmaceuticals should have at least acceptable shelf-life upon arrival at port * Good inventory and warehouse management principles shall be practiced at all level of the supply chain * Pharmaceuticals in the supply chain will be traceable | * Warehouse along the supply chain will have standard area for receiving, storing and dispatching * Quantification assumption will have no significant deviation from actual consumption * Request from health facilities will be reviewed, validated by DTC and approved by health facility manager * Health facilities have the capacity and willingness to receive/collect their requests on time | * improving the capacity of professionals along the supply chain on proper demandforecasting and inventory management * improving distribution efficiency as per the forecasted demand through strict follow up according to the contract agreement ; * preparing enough warehouse in the hub and central sufficient for receiving, storing and dispatching * developing system and organogram for on-time-stock rotation among hubs and central warehouse * Fast trucking system for short shelf life products * Crane mounted trucks for loading/Unloading heavy medical equipment * Capacitating warehouse operatives, drivers, housekeepers, deliverers and warehouse managers on proper handling of commodities |
|  | Poor fleet management, inadequate maintenance (vehicle, MHE, spare part, replacement and inadequate vehicles) | * PFSA has to manage resources efficiently | * PFSA has the capacity to manage fleet and maintenance, * PFSA shall have truck history record, route plan and log sheet * PFSA will implement electronic fleet management system, * PFSA shall have maintenance strategy and plan, * Vehicle need and replacement plan will be in place, * There is adequate local capacity for spare parts provision and maintenance, | * By designing and implementing modern fleet management system (GPS supported); * Establishing organogram that address the fleet management including maintenance workshop * By owning additional vehicles; |

### Review Design Principles:

The basic reengineering principles up held throughout the consequent steps are the following:-

1. Several jobs are combined in to one

In order to assure efficiency & customer satisfaction different jobs which used to be performed at different level of public sector pharmaceuticals supply system are organized together.

1. Organize around outcomes (customer, product and process) not function

As the basic reason for organization to exist is to achieve its outcome which is the result the customer requires. Therefore, in the redesigning process works are organized around outcomes not functions.

In order to see the outcome the organization must be in a position to look at the end and comeback. The very question to organize around outcomes is "what deliverables do my customers want and what organization and work process inside my company will directly provide these deliverables?"

There are three ways to organize around outcomes. These are by customer, by product and by process. At every level activities are organized around outcomes of the pharmaceuticals supply system. Special emphasis is endowed to produce a process based organization which will nurture in every employee the habit of putting in front the outcome of the process. Subordination of individual activity towards delivery of quality pharmaceuticals at an affordable price to the customer is considered as the life line of the whole PFSA performance.

1. Ensure continuous flow of the main sequences of activities that directly add value to customer. With respect to this principle non value adding activities are eliminated.
2. In order to avoid possibility of error, delay, turf building and frustration for staff & customer; in redesigning the pharmaceutical supply process information is captured once from the appropriate source shared among the case team.
3. Whenever appropriate provision of a single contact point for customer and supplier is considered. The more employees a customer must deal with to obtain pharmaceuticals or service the less satisfaction customers have with the organization. Fragmented processes are replaced with simple and integrated ones.
4. In addition to the above listed basic principles in order to fruitfully exploit maximum benefit out of the new process design, technological support is considered critically.
5. Information flow from center to periphery
6. Work is done where it gives sense

Capacity building with respect to inventory management and rational use aspect of the pharmaceuticals supply process is dealt with forecasting sub process in order to efficiently utilize the time and resource dedicated for the sub process. By consolidating the three activities efficiency can be achieved through proper utilization of experts effort, time, logistics and other resources dedicated for forecasting activity through utilization of the idle time, movement & routine periodic contact with public health facilities to at the same time serve the other activities which give sense when performed together.

### Information Technology

Information technology is valuable for any business. When it comes to supply chain it becomes more important. Considering these benefits, the Agency used different tools to support its day to day activities. Over the years, the deployment of Pharmid System (in house), HCMIS, HCTS/PLITS, and Peachtree (for Fund Management) were important initiatives in the effort to create an automated Management Information System for product and financial management. The Agency has also launched a webpage ([www.pfsa.gov.et](http://www.pfsa.gov.et)) which is becoming an important web portal for communicating and disseminating information with its stakeholders.

Currently, there is automated Inventory Management System (HCMIS) at both PFSA Central and Hubs level. Peachtree has been in use for different accounting purposes in the Agency. But these tools are not integrated and some of the processes are not supported by Information technology solution. Due to this the following challenges observed

* Lack of integration (between processes and between Center & Hubs) and interconnection of information system across the supply chain levels (SDPs, Hubs and Center).
* Limited Data Visibility.
* Lack of ownership, challenges with version stability, and concerns regarding sustainability for systems in use.
* Lack of accuracy and concerns of reliability for logistics data & reports generated from HCMIS
* Non-standardized Product Directory Services management, resulting data quality problems.
* No integrated system is available for Forecasting and Supply Planning, Procurement, Fund Management, Human Resource, and Asset Management including automated Fleet Management Systems, such as GPS Systems.

To solve the above listed and other related problems, integrated information system should be implemented to improved forecasting on re-supply requirement planning, Procurement, storage and distribution, Fund management, cost recovery works of pharmaceuticals and medical equipment. Furthermore, in order to support process and manage Human resource and the Agency’s property. Extensive investment on appropriate infrastructure for MIS, HR Capacity for administration and use of the MIS, and investment on system approach to institutionalize will be required.

### Brainstorming the whacko Ideas

The Ethiopian health system is under transformation to align with the radically raising customer needs and worldwide developments. It is well known that medicines play major roles to attain health care transformation. In turn, the pharmaceutical supply chain is very crucial to achieve availability of medicines. Therefore, in order to bring radical change that enable the agency to arrive at the bench marked level, sustain itself for the future, implement the desired outcomes and stretched objectives, the following Wacko ideas are developed:-

1. All procured product will have label with the organization name and Maximum Retail Price (visibility)in the primary packages /barcode item number logo ……
2. Advocate advance payment and or cash sales and discourage credit sales
3. Advocate health facility product regular audit
4. Vender management inventory (VMI) for all hospitals
5. Mobile warehouse and delivery system type of inventory management for hospitals /toping up / (remote STV printing, cash collection ….)
6. Summarized all service provided including financial transaction and organize daily, monthly report /electronic performance recording
7. Capital medical devices-maintenance system (spare parts, and technical support) should be agreed with the manufacturer even after the warrantee period
8. Leasing/ cost of ownership/ system of capital medical devices and procured medical device will be arranged in away to directly delivered to health facility
9. The agency will have a training center for supply management (center of excellence ) for African countries
10. Applying Central Medical Store user-fee principles (check public corporate benefit schemes )
11. Export pre packed pharmaceuticals to African countries
12. Distribute with kit based distribution to destination system
13. Partnership to have single bank branch by PFSA name
14. Outsourcing : cleaning, guard(check in finance sector like bank ), maintenance (cold room, vehicles), inspection, some fleet, etc (check maintenance in other government corporations ) (coca if there is special agreement
15. Integrated vehicle management (where about will be communicated to all in advance ) GPS
16. Expand Reverse logistics: the agency shall use opportunities in using reverse logistics
17. Own environmentally friendly disposal facility that will be used for other health facilities for rent too
18. Renting capital medical equipment by the organization
19. Design system following health facility service load with different period for reporting and resupply
20. Maximizing planned cross docking
21. Medical device will be procured LC opened only when the site is ready
22. Supplier shall confirm site readiness
23. Product track able and traceable
24. Use of score cards for min max monitoring
25. Inventory visibility
26. Advocate for expansion of health facilities warehouse to meet standard
27. Advocate Supplier Platform decision
28. Engaging in multiple year tendering (framework contract )
29. Warehouse construction in different strategic place /rent outside Addis Ababa
30. Warehouse safety assessment
31. Electronic GIT monitoring
32. electronic tender evaluation
33. volumetric warehouse space management
34. truck volume and Weight based loading/dispatch analysis
35. labeling machine to distribute to different sites
36. packing with SKU

## Process Options

Process options have been designed to address the major problems of the agency based on the performance baseline, achievements from benchmarked agencies and countries so as to reduce redundancies by avoiding non value adding activities thereby increasing efficiencies and transparency of transactions across the supply chain.

Two Process flows of options of pharmaceuticals, Laboratory and Medical Equipment medical supply management

**Option one**

This option is generic end to end supply chain for all health products including medicines, laboratory reagents, medical supplies and medical equipment with due consideration of peculiarities of the different product categories. In this option, the majority of processes like procurement, warehouse and inventory management, storage and distribution, fleet management and customer services should be considered altogether in holistic approach that can save time, improve efficiency and attain best customer needs. However, in this option, some peculiar activities and customer needs should be attained by versions. Examples during specification, procurement of large scale equipment, identification of closed and open system for laboratory reagents, installations of medical equipment and post marking surveillances for medicines and equipment should be considered by versions.

**Option Two**

This option handles product-based-parallel and separate end to end supply chain processes. In this option, various similar activities will be conducted separately to simply address the various peculiarities of medical products. Therefore, in this option, four various end to end processes for each medicines, laboratory reagents, medical supplies and medical equipment will be considered.

**Process Maps for Option I and Option II**



**Merits and demerits of option I and Option II**

|  |  |  |
| --- | --- | --- |
| Option | Merit | Demerit |
| I | * Brings all the same activities together based on BPR principles -has great efficiency * Holistically all products are handled together that enables customers to get all products from the same source at once (example: reagents, supplies, medicines) * It allows integration of forecasting, procurement, WIM, Storage, Fleet management and customer services for different product categories * Ensure transparency - check and balance between sub processes by having professional mix | * May not be simplified that the handling of health products may not be easy as compared to option two * Is not product based * Attention for some products may be minimized |
| II | * Specific attention for each medical product categories will be addressed * Every process (example laboratory) goes by its own without interference of the other | * Eefficiency loss due to fragmented similar processes (one organization will have four procurement, four WIM, four distribution and four fleet management) * Will require higher number of human resource * Create confusion due to four different sections for one process to serve one customer (The process may require multiple request from one customer) |

## Process map

Work flow for the selected option

The design of the selected process started from clean sheet. The process encompasses description of workflow, major activities, detail activities and process time and determination of human resource requirement. The sequences of processes have been described by linear workflow chart using graphic symbols and pictures to depict nature and flow of the steps.

### Quantification (forecasting and supply planning) and Marketing sub process

Description

Predefine list; is the national list of pharmaceuticals prepared ahead  
of time being comprehensive in a way that can cover the needs of all  
health facilities in the country. The list of pharmaceuticals  
incorporates drugs, chemicals, supplies, medical equipment and  
laboratory reagents.  Acquiring such pharmaceutical list at hand will  
enable the agency to plan properly and use pool procurement, to create  
obligation for suppliers, shorten requisition and procurement  
processes and deliver on time.  The predefined list will also serve as  
a denominator across the supply chain to create transparency and  
accountability from where and which product to be procured, when and  
for whom to be supplied.  Further to this, presence of predefined list  
will simplify the process for control authority to avail and oversee  
various quality controlling data (including: analytical control data,  
sterility testing data, bioavailability data, bioequivalence,  
descriptions of testing procedures for raw materials, finished  
products and equipment to ensure quality)  
Predefined list will be prepared by participating concerned  
stakeholders and developmental partners, mix of professionals  
including; pharmacists, physicians, various specialists, laboratory  
technologists, radiologists, biomedical engineers etc.

Once the national list is prepared, every health facility will prepare their  
list by selecting from the national predefined procurement list,  
quantify, reconcile their budget against the request, request the  
agency with committed demand and made agreement as per the commitment.  
If a health facility wants to add some list of products that was not  
committed before, the additional one will be considered as a special  
order and the agency’s accountability and performance will not be  
measured by the same dimension compared with the committed demand. The  
list will be prepared at the beginning of the year and will be revised  
yearly.

Health facilities have been requesting pharmaceuticals whenever they  
wish; without enforcement to adhere receiving of what they have  
selected, ordered and with no accountability for the inefficiency that  
might occur due to such actions.  The agency was expected to procure  
all requested products and had been taking full accountability.  
Therefore, lack of predefined list was the cause for creating  
erraticism of availability of medicines and high wastage across the  
supply chain.

Furthermore, there was no defined system to communicate health facilities on available medicines and related supplies in PFSA system in general and new products for tertiary level of care in particular. As a result in recent years new molecules purchased as per request of health facilities has been expired at central and or PFSA branch warehouse which in turn necessitate the need to have marketing team who can effectively communicate health facilities and also bridge the knowledge gap (on inventory management, quantification, placing an order/ online request or proper filling of RRF … etc) at health facilities during OJT and supervisory visit. Moreover, marketing officers can also support facilities in settling payments in advance that has significant effect in strengthening PFSA RDF. Hence, quantification and marketing sub process has been designed so as to solve the aforementioned problems and  
to create simple, transparent, accountable and seamless supply chain  
system.

**Workflow for Forecasting and supply planning sub process: (RDF version)**

* Develop agreed national procurement list
* Develop the agency’s agreed procurement list
* Quantification at Facility level
* Collection and aggregation of data from health facilities
* Aggregate and validate branches annual demand forecast
* Determine net requirement and estimate total cost
* Prioritize and adjust net requirement with available fund
* Develop supply planning
* Pipeline monitoring

**Workflow for Forecasting and supply planning (Program version)**

* Preparation for quantification
* Forecast program requirement
* Supply planning
* Pipeline monitoring

Table 3: Major and Detail Activities for Forecasting and Supply Planning Sub process

|  |  |  |  |
| --- | --- | --- | --- |
| **Ser. No** | **Major Activities** | **Detail Activities** | |
|  | **RDF Pharmaceuticals** | | |
|  | Develop National agreed procurement list | Assist FMOH/EFMHACA to develop national agreed procurement list | |
|  | Develop the agency’s agreed procurement list and revise annually | * 1. Develop predefined PFSA procurement list from the national list with unique identifier codes through involving representatives health facilities with proper mix of professionals and close communication with relevant stakeholders   2. Develop draft documents   3. Organize workshop by involving various specialists, professionals including pharmacists, laboratory technologists, biomedical engineers, professionals associations , RHB and FMOH   4. Incorporate comments and finalize the document   5. Communicate and send for approval to health sector executive/ Director general of PFSA   6. Communicate the approved list to health facilities, organize orientation workshop for branches so that each branch will provide orientation to all health facilities about the predefined list   7. Follow facilities to develop their procurement list based on the agreed national list   8. Provide mentorship training to RHB, Zone and Woreda logistics officers on ABC and VEN analyses so that they assist HF to prioritize their list based on VEN | |
|  | Quantification at Facility level | 3.1.PFSA central prepares quantification tool with update price and communicate the tool with the approved list to health facilities through respective branches   * 1. Branches provide the necessary support (training, mentoring, supportive supervision) to facilities throughout the quantification process using trained logistic officers   2. Follow HF facilities to quantify their annual committed demand using quantification tool   3. Follow facilities reconcile with their annual budget based on ABC/VEN matrix reconciliation analyses   4. Follow approval by the facility DTC   5. Follow Health centers submit committed demand to Woreda for approval   6. Follow Woredas and Hospitals submit their committed demand to respective PFSA branches through corresponding logistic officers   7. Branches properly document the committed demand | |
|  | Collection and aggregation of data from health facilities | * 1. PFSA branches receive & aggregate the committed demand from hospitals and Woreda health office and RHB/ZHD   2. Branches shall account demand of new health facilities, private facilities and faith based health facilities   3. Data validation and segregation   4. Prepare branches’ annual net requirement considering their SOH   5. Submit the net requirement to center | |
|  | Aggregate and validate branches annual demand forecast | * 1. The information collected from all branches will be consolidated and segregated by categories   2. Update AMC based on facility report / average monthly issue data as proxy to AMC   3. Conduct validation workshop (branches and stakeholders) to reach consensus on assumptions | |
|  | Determine net requirement and estimate total cost | * 1. Update stock status of all items at central warehouses (Stock on hand with expiry date, stock on transit and stock on procurement process)   2. Calculate MOS for each items based on updated stock status   3. Determine net requirement   4. Consider safety stock based on agreed lead time and review period   5. Calculate the net requirement [gross requirement-(stock available on hand+ scheduled receipt)]   6. Budget the net requirement (including freight, insurance, bank service charge etc.) | |
|  | Prioritize and adjust net requirement with available fund | * 1. Reconcile net requirement with available fund   2. Prioritize final quantities using VEN,ABC analysis   3. Adjust final quantities | |
|  | Develop supply plan | * 1. Prepare and send purchase request for each categories to procurement sub process in hard copy and feed electronically to the system   2. Prepare distribution plan for each branch and communicate to distribution sub process and branches | |
|  | Pipeline monitoring | * 1. Get relevant data (SOH from hubs and center, transit report and stock on procurement)   2. Prepare stock status report every month for RDF pharmaceuticals (medicines, medical supplies, laboratory reagents and medical equipment)   3. Present the stock status report to relevant sub process   4. Communicate the agreed report to relevant sub processes and branches for action | |
|  | Program Pharmaceuticals | | |
| 1 | Preparation for quantification | | * 1. Discuss with relevant stakeholders and form quantification team—for each program— (program: HIV, TB, Malaria, FP/MNCH, NTD and NCD, vaccine etc)   2. Describe the program, define scope and purpose of quantification   3. Collect all relevant data ( morbidity, consumption and service statistics ….ETC)   4. Organize and analyze data   5. Review and summarize relevant documents(consumption trend analysis)   6. Develop draft assumption   7. Identify stakeholders that will participate on consultative workshop |
| 2 | Forecast program requirement | | * 1. Conduct consultative workshop and (present program and supply chain update, consumption tend, and relevant information to workshop participants on all topics),   2. Enrich forecast assumptions and arrive at in to consensus   3. Calculate total requirement and cost using relevant quantification tool for each program   4. Write up the final forecast |
| 3 | Supply planning | | * 1. Calculate the net requirement [gross requirement-(stock available on hand+ scheduled receipt)]   2. Budget the net requirement (including freight, insurance, bank service charge etc.)   3. Reconcile requirement with available fund   4. Solicit additional fund (if there is any budget gap)   5. Prepare and send purchase request for each program to procurement sub process in hard copy and feed electronically to the system   6. Write-up the final forecast |
| 4 | Pipeline monitoring for Health programs | | * 1. Get relevant data (SOH from hubs and center, transit report and stock on procurement)   2. Develop stock status report every month for pharmaceuticals for health programs   3. Present the sock status report monthly to TWG meetings for discussion   4. Communicate agreed report timely to internal and external stakeholder |
| 1. III | Work flow for emergency request during epidemic & disaster situation | | |
|  | Emergency request handling procedure | | * 1. Established ad-hoc quantification team from relevant stockholders   2. Get information on emergency situations(disease burden/coverage)   3. Identified required medicines and related product for the emergency situation   4. Forecast emergency supply requirement and get approval from FMOH   5. Assess the stock status for the needed products, identify gaps   6. Communicate the emergency purchase request with supply plan to procurement sub process for immediate action   Public health emergencies include: (Influenza, watery diarrhea, dysentery, pneumonia, malaria, etc.) |
| 1. IV | Capital medical Instrument specification preparation | | |
|  | Develop Specification for capital items (Instrument) | | * 1. Receive medical instrument request from FMOH, RHB and HF   2. PFSA reviews the specification by its technical expert/ the ad-hoc team of expert using national medical instrument list (prepared by FMHACA) as reference material   3. The technical expert/ad-hoc team will finalize the specification in close consultation with the end user   4. Communicate the final list to the customer to get written agreement to procced with the procurement   5. Communicate the purchase request to procurement sub process |
| 1. V | Laboratory reagents and supplies quantification for health program version | | |
|  | Preparation and quantification for lab reagents and supplies used for lab equipment | | * 1. Form a quantification team from PFSA, EPHI and relevant stakeholders   2. Conduct assessment to collect instrument information (maximum through put, utilization rate), facility quality control practice, number of testing sites, number of referral sites, and no of testing days per year at national level   3. Review and summarize relevant documents (instrument functionality rate, control and calibrator utilization rate, consumption trend …etc.)   4. Calculate total requirement and cost using relevant quantification tool (Labfor® , QuantTB®) for each program   5. Adjust quantities with machine numbers and number of testing sites   N.B: The other process are the same as program quantification |

Linear work flow for Forecasting and supply planning and Supply planning sub process (for RDF and Program pharmaceuticals)



Linear Workflow for Pipeline Monitoring



### Procurement Sub-Process

**Workflow for Procurement Sub-Process**

* Pre-qualification
* Annual Procurement plan preparation
* Preparation of procurement proposal and approval
* No-objection to procurement proposal
* Tendering
* Public bid opening
* Evaluation of tender
* Award notification
* Issue P/O and Contract signing
* Contract Management
* Complete custom & import formalities
* Arrange transport service
* Deliver consignment to store
* Settlement of damaged and missing products
* Post contract performance evaluation of supplier
* Procurement security management
* Claim settlement
* Supplier relation management
* Local manufacturer contract management

Table : Procurement sub process major and detailed activities

| S.No | Activity Flows |
| --- | --- |
| 1.1 | Develop prequalification requirements |
| 1.2 | Acquire no-objection from Endorsing committee and Regulatory Body |
| 1.3 | Announce open pre-qualification notice to supplier(on web page |
| 1.4 | Accept pre-qualification application with relevant documents |
| 1.5 | Maintain register of suppliers that apply for pre-qualification |
| 1.6 | Evaluate submitted pre-qualification Application months |
| 1.7 | Inform suppliers on decision (rejected/approved) |
| 1.8 | Maintain list of updated prequalified suppliers per the list of items |
| 2.1 | Receive demand with supply schedule |
| 2.2 | Determine the procurement method and procurement plan will be filled |
| 2.3 | Submit to board of director for endorsement |
| 2.4 | Publish the endorsed annual plan |
| 3.1 | Determine the method of procurement |
| 3.2 | Schedule and assign activities |
|  | Write letter of request for procurement |
| 3.3 | Approve the action plan |
| 3.4 | Communicate & follow up the procurement proposal from next level |
| 4.1 | Review the procurement proposal |
| 4.2 | Follow for Feedback on the procurement proposal |
| 5.1 | Revise the standard tender document filled based on the feedback |
| 5.2 | Write Letter for request of no objection |
| 5.3 | Follow up on Endorsement by the procurement endorsing committee |
| 5.4 | Prior Review of funding agency (purchase financed by donors) |
| 5.5 | Write invitation letter and approve SPN (advertisement) in case of open tender with condition |
| 5.6 | Invitations to Bid (restricted tender) using standard Letter |
| 5.7 | Distribute to respective supplier by ensuring the issues of letter |
| 6.1 | Identify any point for amendment |
| 6.2 | Prepare and get reviewed the amendment |
| 6.3 | Announce any amendment in case happened with Letter by making sure issued to all potential bidders |
| 6.4 | Receive clarification request |
| 6.5 | Prepare clarification response |
|  | Review the clarification accompanied with letter |
| 6.6 | Confirm issue and receipt by all supplier in the biding process |
| 7.1 | Tender document selling and recording and reporting the summary |
| 7.2 | Sealing of the tender box in the pre-set date and time |
| 7.3 | Present complete tender document sales report and prepare submission format |
| 7.4 | Facilitate attendants signature on of the bid opening participant attendance sheet |
| 7.5 | Open the tender box with full view of all the attendance |
| 7.6 | Receive the sample if any before bid opening by properly filling on the format for sample submission |
| 7.7 | Proper read out and stamping/signing of the bids/ quotations |
| 7.8 | Prepare minutes of the proceedings |
| 7.9 | Make sure that the bid documents are kept in a proper safe place |
| 8.1 | Preliminary assessment of the supplier bid documents |
| 8.2 | Technical evaluation and posting of preliminary prequalified bids |
| 8.3 | Evaluate the total process and Approve posting |
| 8.4 | Prepare decision proposal |
| 8.5 | Follow on final decision by endorsing committee |
| 9.1 | Prepare official winner list |
| 9.2 | Review and Endorse The Winner List and issues with cover letter |
| 9.3 | Make Sure all Participants received the result by their signature on attachment list of supplier |
| 9.4 | Receive, Record complaints and prepare response from BID document acritical and evaluation result |
| 9.5 | Review and Verify the response |
| 9.6 | Follow the response as issued to the complainer until the issue is closed |
| 10.1 | Prepare purchase order |
| 10.4 | Prepare contract agreement |
| 10.5 | Follow Contract signing by authorized body from both parties |
| 10.6 | Follow receipt of Performance security and Proforma Invoice |
| 11.1 | Fill and verify the insurance form (Arrange insurance and transport if supplier is not responsible) |
| 11.2 | Verify the format |
| 11.3 | Approve the insurance and submit to insurance company |
| 11.4 | Make sure National bank authorization letter is issued and filled along the contract |
| 11.5 | Follow to get foreign currency permit |
| 11.6 | Follow Opening of LC or cash reserve for CAD |
| 11.7 | Proactive notification of suppliers on CAD |
| 11.8 | Electronic mail reminder to concerned supplier to initiate shipment |
| 11.09 | Collect relevant shipping document from supplier/bank and check the completeness of the documents |
| 11.1 | Measure performance of the supplier |
| 11.11 | Take necessary action |
| 11.12 | Maintain and communicate the performance records of the suppliers |
| 12.1 | Post the details of the shipping documents on transit registration format |
| 12.2 | Identify the mode of shipment |
| 12.3 | Complete declaration formality and import permit |
| 12.4 | Settlement of freight charges |
| 12.5 | Follow ,Arrange inspection and get release permit from regulatory body |
| 12.6 | Collect tax assessment |
| 12.7 | Prepare exemption paper or pay tax if any ( e.g. CPO) |
| 12.8 | Follow and Settlement of storage and demurrage charges |
| 12.9 | Identify and follow up on the final destination warehouse of the product |
| 13.1 | Determine the volume & nature of the shipment |
| 13.2 | Estimate the transport needs (kind & number of trucks) |
| 13.3 | Instruct the transport unit/ out source |
| 13.4 | Receive the product from port custom and monitor load on trucks and deliver to its identified destination. |
| 14.1 | Inspection for damage & missing products at receiving area |
| 14.2 | Transfer consignment to store by filling transfer note |
| 15.1 | Define criteria for evaluation |
| 15.3 | Conduct evaluation |
| 15.4 | Rank the supplier performance(green, yellow and red) |
| 17.1 | Identify shipment with pitfall and report |
| 17.2 | Fill and submit claim form to insurance company within the intended period |
| 17.3 | Follow up the settlement for the claim from Fund mgt process |
| 17.4 | Prepare summary report |
| 18.2 | Prioritize supplier |
| 19.1 | Prepare and follow Contracting with the awarded supplier |
| 19.3 | Aggregate report on delivery to respective destination , Rank on the performance level against the contract, present and discuss on the outcome |
| 22.5 | Place warranty claim to the supplier for maintenance |

Linear workflow for procurement sub process



### Warehousing and Inventory Management sub process

**Description**

In addition to major activities depicted below, implementation of strategic warehousing with proper layout design will be considered in this process. Strategic warehousing encompasses site selection based on the service strategy, cost, and vicinity to ports as well as proper warehouse design through considering areas for receipts, storage, dispatch, returns, expired pharmaceuticals and quarantine. Strategic warehousing will also consider material handling equipments (hand pallet-trucks, conveyors, rollers, pushers, sorters), functional height of the warehouse, size of doors, floor requirements such as resistance in loads, level of flatness, joints, type of trucks that can be served, load and dimension of ramps. Strategic warehousing again accounts future expansions, warehouse and MHE maintenance as strategic issues.

In addition, implementing packaging and kitting, will improve the overall warehousing and inventory activities. Standardizing and availing packing, ramping, labeling and sealing materials can be considered as a primary activity for packaging and kitting.

For efficient management of inventory management at all levels, improving storage capacity at health facilities can be one of the major activities under warehousing and inventory management sub process. This can be accomplished through interfacing with FMOH, FMHACA and RHBs. Advocating to enhance storage capacity of health facilities through standardization, renovating and improving mechanisms will also part of this process.

Finally, ensuring occupational health, security and safety can be considered as essential activity to enhance warehousing and inventory management activities. Availing necessary infrastructure such as personnel protective equipment’s and security cameras and monitoring their day to day utilization and functionality will contribute to the enhancement of the overall warehousing and inventory control activities.

**Work flow for Warehousing and Inventory Management process**

* + 1. **Workflow for Warehousing Pprocess**
  + Receive advance shipping notice and prepare for arrival
  + Cross-Docking
  + Unload consignments
  + Sort consignment received
  + Check stock against documentation
  + Conduct physical inspection/
  + Put in yellow quarantine zone and conduct Quality Check tests batch by batch and put in green quarantine or red quarantine as per the result /
  + Check status of temperature monitoring devices for vaccines
  + Acknowledge receipt, prepare VAR (vaccine arrival report) for vaccines
  + Prepare GRNF/IGRNF
  + Costing [Interface]
  + Put Away to storage area/location
  + Conduct good storage management practices
  + Picking
  + Replenishing
  + Checking
  + Dispatching and packing
  + Product kitting
  + Report and follow up on maintenance of warehouse and MHE
    1. Workflow for Inventory management Process
* Standardize LMIS
* Define inventory levels for all levels
* Implement Vendor managed inventory monitoring mechanism at facility level
* Conduct Stock Situation assessment
* Management of short expiry and slow moving products
* Management of customer request and refills
* Assess order fulfillment and manage back orders
* Enhance stock visibility at all levels
* Conduct Perpetual Physical Inventory
* Conduct annual physical inventory

|  |  |  |
| --- | --- | --- |
|  | 1. **Workflow for warehousing process:** | |
|  | **Major activities** | **Detail activities** |
|  | Receive Advance shipping notice and prepare for arrival [INTERFACE] | * 1. Receive advance shipment notification   2. Communicate respective warehouses and prepare storage location   3. Plan for unloading/receipt   4. Avail MHE, personnel for unloading   5. Determine the most efficient way of unloading |
|  | Cross-Docking [Interfaces] | * 1. Receive pre-shipment notification notice and make necessary preparations   2. Communicate respective warehouses   3. Receive products (SSL, capital medical device, bed nets, emergency need products).   4. Check shipment documents against shipped consignments   5. Costing (if required)   6. Prepare issue vouchers   7. Cross-dock consignment to next vehicle   8. Delivery to destination sites   9. Collect POD *( for medical devices the unique ID and serial number should be register on the POD)* |
|  | Unloading | * 1. warehouse manager inspects arriving vehicle and the way shipment has been packed   2. Conduct unloading |
|  | Sorting | * 1. Sorting Segregate incoming consignments with ITEM TYPE, batch, expiry etc |
|  | Checking stock against documentation- | * 1. Check/ verify the package, quantities and condition or quality against the documentation   2. Check for any discrepancy (product difference, quantity difference, quality difference, batch difference and expiry difference)   3. Deal with discrepancy if any- |
|  | Conduct physical inspection/conduct QC tests for sampled lots [INTERFACE] | * 1. Put incoming items in yellow tagged zone for quarantine   2. Check for physical quality indicators   3. Monitor package integrity/tampering   4. Check temperature monitoring device readings for excursions   5. Physical inspection for medical devices may only be conducted at ports of entry, PFSA warehouses, or health facility stores for an event of cross-docked direct deliveries   6. Sort by batch and check quality test   7. Register a unique ID and serial number of medical devices at receiving and HFs level   8. Put in green if products are perfect quality   9. Put in red tag quarantine zone if there are defective products |
|  | Acknowledge receipt and capture data of received stock | * 1. Put signature for proof of receipt on shipping documents   2. Record goods received on appropriate formats |
|  | Prepare GRNF/IGRNF | * 1. Capture receipt data on HCMIS   2. Review receipt, approve and generate GRNF |
|  | Costing [Interface] | * 1. Costing and print GRV (GRV for costing, distribution of GRV copies – aka procurement & distribution) |
|  | Put Away | * 1. Identify of Storage Location (vacant spaces in the rack, in bulk area, pick face etc.)   2. Move Products (using forklift transport to the allocated space)   3. Apply APTS principles for warehouse management:      1. Divide products based on their weight, flow, volume, cost (ABC analysis)      2. Perform ABC/VEN matrix reconciliation analysis to identify the vital few from the trivial many and the high cost consuming from the cheapest ones (80/20 principles)      3. Rearrange the stock accordingly, taking high cost and vital in the front line      4. Implement bin management system      5. Identify individual and collective responsibility, individual and collective accountability using APTS principles by revising accountability regulations of the agency      6. Assign limited number of products for each bin owner      7. Give responsibility for every bin owner concerning; stock flow (threesome analysis),      8. Follow on product coding, availability status, batch, wastage, expiry, pilferage, loss and use the record for alignment with health facilities to take further actions      9. Apply perpetual physical inventory using bin owners (the before, during and after principles)      10. Receive report from every bin manager regularly (monthly)      11. Use the data to measure level of effort of each bin owner      12. Measure and compare workload in each bin owner      13. Readjust human power need based on the work load      14. Use the summary of level of effort (LOE) for measurement of performance appraisal   4. Update records |
|  | Conduct good storage management practices | * 1. Monitoring of storage conditions such as temperature, humidity, lighting and sunlight.   2. Cleaning and maintenance of the warehouse   3. Monitoring store security and safety to ensure that relevant equipment and security procedures are adhered to.   4. Conduct ongoing risk assessment and plan for risk mitigation   5. Monitoring the product quality (visually inspect commodities and check expiration dates).   6. Ensure that products are stacked correctly.   7. Updating of stock records.   8. Standard list of items stocked, bin cards, and maintaining related files.   9. Monitoring and updating the stock levels, stock quantities, and safety stocks.   10. Check fire safety procedures, fire extinguishers, smoke detectors and stand-by generator and take appropriate actions. |
|  | Picking | * 1. Prepared issue vouchers (invoices, STV/DN) and clustering the customer orders   2. Picking products from the correct storage   3. Marshalling/staging the picked products |
|  | Replenishing | * 1. Identify product and quantity to be replenished   2. Generate pick list for replenishment   3. Pick and move products to the fine pick/half pallet area |
|  | Checking | * 1. Check marshaled orders against the pick list, STV to ensure that the correct product, quantity, and batch number has been picked.   2. Identify nature of products picked (NPS, hazardous, cold chain, etc).   3. Move products directly from receiving to the shipping dock – these products are not at all stored in the specific locations |
|  | Dispatching and Packing [INTERFACE] | * 1. Check dispatched products against shipping vouchers   2. Pack orders by (destination) into the correct sized box or boxes or onto a pallet OR wrapping up of a single item into a casing, or sealing loose cartons and box orders that have been picked.   + Apply temperature conditioned packing for vaccines and TSPs   1. Combine pharmaceutical that contribute to a single order.   2. Apply right labels containing consignment description and description of receiving destination facility   3. Assemble the Pharmaceuticals in the Pharmaceutical loading/assembly areas   4. Ensure that the vehicle is safe before loading.   5. Load the vehicle.   6. Position/fix the security locking system, for example seal(s), with the driver present.   7. Obtain the driver’s signature.   8. Record the departure of the vehicle and note the security locking seal(s) or number(s). |
|  | Product kitting | * 1. Identify products to be kitted, for which program and facility   2. Ensure kitting material readiness (packaging materials, labels)   3. Pick, check and Kit the product   4. Labeling the kit (MRP, Logo….)   5. Store and dispatch the kit when needed |
|  | Report and follow up on maintenance of warehouse and MHE | * 1. Identify premises and MHE for maintenance   2. Report and request for maintenance   3. Follow up and provide feed back |



1. Work flow for Inventory Management process

|  |  |  |
| --- | --- | --- |
|  | **Major activities** | **Detail activities** |
|  | Standardize LMIS | * 1. Redesign recording and reporting formats (Bin card, stock card, HPMRR, RRF, IFRR...)   2. Familiarize the format (Conduct LMIS related capacity building activities)   3. Print and distribute formats (at cost, if necessary)   4. Facilitate Implementation and utilization of formats (record and update transactions)   5. Collect feedback and annual update if there is any   6. Facilitate automation and enhance data visibility (strengthening LMIS and dashboard) |
|  | Define inventory levels for all levels | * 1. Form virtual team from relevant stakeholder   2. Draft the proposal to define inventory management models and refill period   3. Develop Program/product specific inventory for all levels   4. Endorse of the proposed design   5. Follow the implementation of inventory control policies |
|  | Implement Vendor managed inventory monitoring mechanism at facility level | * 1. Establish a team for monitoring facility inventory level   2. Identify candidate facilities for inventory level follow-up   3. Conduct on-going follow-up stock situation   4. Identify gaps, if any, and communicate appropriate bodies   5. Follow-up of response, product supply or otherwise |
|  | Conduct Stock Situation assessment | * 1. Aggregate Calculated AMC from health facility   2. Assess stock situation (MOS, SSA, CSA,)   3. Prepare and communicate the report to relevant units (Monthly, quarterly, semiannual, annually )   4. Take action based on the report |
|  | Management of short expiry and slow moving products | * 1. Identify items with short expiry (less than six month and less than one year), non moving within six month, slow moving based on AMC and over stock based on MOS through email and system communication.   2. Aggregate and evaluate the report   3. Communicate and take appropriate measures including      1. Transfer ( branch to branch, branch to center)      2. Smart push (communicate to various HFs)      3. Use mobile sales      4. Mange with consignments to either governments or private      5. Selling at cost or price reduction when the problem is cost      6. Account to account transfer      7. Donation to HFs (NGO and government )      8. Strengthen Partnership with other supply chain firms |
|  | Management of customer request and refills | * 1. Establish reporting schedule by routes   2. Collect and consolidate refill requests   3. Collect RRF and Verify against the checklist (quality, completeness, timeliness, service static data against their budgeted annual forecasted demand)   4. Provide feedback to health facilities/hubs based on the findings of verification;   5. Prepare wish list   6. Provide feedback to Facilities /hubs regarding difference back order   7. Review stock status and approve refill quantity   8. Prepare pick list and reconcile with budget for RDF if any difference (may require contact with health facility)   9. Approve and send pick list to invoice clerk, warehouse manager and DP   10. Generate issue vouchers ( invoice or STVs/DNs)   11. Handover issue vouchers to DP   12. Send electronic issue vouchers to destination sites |
|  | Assess order fulfillment and manage back orders | * 1. Review issues data by Hub/facility following review period issues   2. Assess level of order fulfillment   3. Identify back orders, if any   4. Fill back order as soon as possible (if any) |
|  | Enhance stock visibility at all levels | * 1. Strengthen electronic inventory management system at PFSA center, hubs and facilities (ERP, Mobile logistics, HCMIS FE….)   2. Improve data sharing across the supply chain using electronic data interchange mechanisms (dashboard, web based, email, manual, fax……)   3. Implementation of It supported score card mechanisms for routine stock status monitoring |
|  | Conduct Perpetual Physical Inventory | * 1. Identify important items these have high transaction, high cost, black market value, sensitivity to damage and expiry. Use either of: Segregation by ABC, Zone counting, Zero on book/record condition, Zero on shelf condition, Negative balance   2. Prepare cyclic inventory count sheet & write an identified items   3. Signing on the inventory count result   4. Conduct physical inventory /cycle count/surprise count   5. Compare to stock control record counts with physical count   6. Investigate in case there is discrepancy(if any )   7. Report the discrepancy for the directorate   8. write a letter and report on cyclic inventory   9. submit the report finance & ODDG |
|  | Conduct annual physical inventory | * 1. Make necessary preparation for annual inventory ( get ready for cut of , sorting of the socks, prepare inventory count sheet & write an identified items, ID and serial number for medical device)   2. Assign team, conduct orientation, prepare material inputs for the count   3. Conduct the physical inventory and reconcile the count as per the guide   4. Conduct shortage and overage analysis |



### Distribution and fleet management sub process

**Process Description**

Distribution sub process will develop distribution schedule and notify to respective hubs. This delivery schedule can be updated on bimonthly basis and then the update in turn notify to hubs or facilities for their further action. In addition to the direct delivery schedule the distribution modality also include intermediate drop off approaches. The distribution sub process receive distribution documents from WIM for further action such as quantifying vehicles based on the weight and volume of products to be loaded, recording the documents for reconciliation between what has been distributed and confirmed receiving by hubs etc

Mostly the pharmaceutical distribution from hubs can be done directly to health facility; however, woreda health office also can be used as a pass through for inaccessible health facilities. The products delivered to woreda health offices are expected to reach the health centers. In this case the confirmations of proof of delivery seem difficult. But the distribution is enhanced through supportive supervisions. do not necessary confirm its arrival to destination site we need to strictly follow its arrival to respective facilities either by informing the woredas to send a copy of proof of delivery from the receiver facility or confirm its distribution from woreda to the facilities by our driver personnel during our second refill time.

Other than the formal distribution process this sub process also use either cross docking or Delivery Duty Paid (DDP). In cross docking distribution approach products are directly delivered from the port of entry to destination hub or can be also applicable in distributing products from hubs to facilities. This approach can be applicable to capital items and other bulk pharmaceuticals. In addition to this approach DDP can be also applicable in case of distributing capital items to facility level as per the prior agreement entered between PFSA and health facilities.

The distribution team along with the fleet management team can estimate the amount of vehicles needed to load the products. These teams can use the volumetric and weight measurements to estimate the required vehicles. If there is adequate vehicle from the organization they can make it ready for loading but if there is shortage of organizational trucks these team can sought for other alternatives such as outsourcing to third party. Each vehicle from the organization and the outsourced should be installed with modernized GPS tools for vehicle trucking and other driver performance measurements.

The hard copy invoices hand over to drivers to be delivered to WIM sub process for dispatching and marshaling. Once the products are dispatched they are checked against the documents and received by dispatcher’s. The dispatcher then in turn handover the products to the driver. The driver using standardized packaging and labeling materials he/she can pack and label the cartons to be loaded to the truck.

Using the notification form the receiving hub makes ready the warehouse for the incoming products. The driver from central office can submit the documents to WIM sub process at hub for off loading and other transactions activities. The driver then receive IGRV from the receiver hub and submitted to documentation follow up for follow up of what has been distributed are received by the receiver hub. The document follow up will rectify the documents technically and report to immediate supervisors if there is any discrepancy or can submit the document to fund management for further financial activities.

Reverse distribution or reverse logistics is the backward flow of goods from the point of arrival back to the origin. This can be from Health facilities to hubs or from hubs to the center. The reverse flow of products can be initiated due to several reasons like recall due to quality reason, reprocessing, redistribution due to overstock at some point and shortage at another facility, short expiry, destruction at a specific place or any other.

Reverse Logistics has its own advantage from availability perspective, environmental friendliness, and safety of the patients and warehouse space management and beyond. When products are declared for quality problem from different bodies like EFMHACA, the customers or distributors themselves notified in letters removal of the products from the shelves and counting is conducted. The products are then controlled from health facilities, private retailers, received by the hubs and receipt voucher is issued. The stocks at hubs & are organized with the received stocks & sent to the central warehouse using the usual flow. The same procedure is followed for short expiry and overstock for redistribution. Reverse flow of quality failed products is finalized when all the products are either sent to the original supplier or destructed and destruction certificate is collected and claim for payment or replacement in item is concluded.

**Work flow for RDF/Program from Center to Hub**

1. Receive copy of distribution documents ( Pick List, STV, DN) from WIM for planning
2. Arrange distribution plan and assigned fleets
3. Receive dispatched products from WIM Sub process
4. Packing, labeling, sealing and signing
5. loading and delivery to hubs
6. Unload and received by hub
7. Submit POD to Document follow up at Central

**Work flow for Fleet management Version**

1. Receive distribution and schedule plan from RDF/Program Versions
2. Reconcile available vehicle along with the distribution plan
3. Avail the required vehicle or initiate mechanism for out sourcing
4. Follow up the loading and unloading of pharmaceuticals
5. Truck where about the vehicles using GPS
6. Utilize GPS report for further decision
7. Evaluate fleet availability performance and report to distribution sub process

**RDF/ Health Programs Major and Detail Activities for Distribution from Center to Hub**

| **No** | **Major Activities** | **Detail Activities** | |
| --- | --- | --- | --- |
| 1 | Receive copy of distribution documents ( STV) | * 1. Receive Issue documents to prepare transportation schedule | |
| 2 | Arrange distribution plan and assigned fleets | * 1. Preparing delivery and route plan   2. Estimate weight and volume of the products   3. Determine the number of vehicles   4. Assess own vehicle capacity and the need for outsourcing   5. Truck the where about of vehicles using GPS   6. Summarize GPS reports/outputs such as driver behavior, risk management…. | |
| 3 | Receive dispatched products from WIM Sub process | * 1. Dispatched products are verified against STVs/DNs   2. Products received by dispatcher   3. Dispatcher in turn hand over to driver | |
| 4 | Packing, labeling, sealing and signing | * 1. Pack items   2. labeled and sealed cartons with PFSA logo |
| 5 | loading and delivery to hubs | * 1. Loading on trucks   2. Present the STVs / DNs/ to WIM at the Hub   3. WIM forward the documents to documentation clerk   4. Documentation clerk register the documents and forward it to receive store manager |
| 6 | Unload and received by hub | 6.1. Receive STVs/DNs by receiver warehouse manager   * 1. Unloading and sorting the products by batch number, expiry date…   2. Inspection for damage and missing and report to immediate supervisor   3. Stored the product for transit time at receiving area then transfer it to storage area using intra office transferring voucher   4. Driver receive a copy of signed and stamped STVs/DNs along with IGRV |
| 7 | Submit POD to Document follow up clerk at Central | 7.1. Keep a copy of all transaction documents which are finalized  7.2. Verify the validity of transaction documents by looking signatures, dates, etc.  7.3.Receive authorized copies of invoices, STVs, delivery notes and receiving vouchers as a proof of receipt for items delivered  7.4. Verify the quantities, price, etc. of receipt documents with the original issue documents  7.5.Report discrepancies to his immediate supervisor  7.6. Communicate documents and amounts to insurance company when insurance coverage is required. |

**Linear Work flow for distribution from Center to Hub**



**B. Major workflow for Distribution from hub to health facilities:**

**RDF/Health Program**

1. Prepare distribution schedule
2. Receive copy of distribution documents from WIM
3. Fleet arrangement
4. Dispatching and Handing Over products
5. Packing, labeling and signing
6. Proof of delivery collection
7. Document follow up

**Major and detail Activities for Distribution from Hub to Health Facility**

| **No** | **Major Activities** | **Detail Activities** |
| --- | --- | --- |
| 1 | Prepare distribution schedule | * 1. Prepare distribution plan   2. Prepare route map   3. Communicate facilities on delivery schedule |
| 2 | Receive copy of distribution documents from WIM | 2.1. Receive and evaluate Issue documents to prepare transportation schedule  2.2. Arrange the distribution documents orderly  2.3. Registered each distribution documents on registration book  2.4. Hand over the documents to driver/delivery personnel |
| 3 | Fleet arrangement | 3.1. Communicate the route volume and weight to fleet unit to assign trucks  3.2. Decide whether to use its own trucks or outsourcing  3.3. Decides the transport requirement Products are loaded to trucks if customers take it in person or Products are loaded according to the health facilities route map if direct delivery is practiced |
| 4 | Dispatching and handing over products | 4.1. Products are dispatched as per the documents  4.2. Check the product description, batch number, Expiry date, quantity etc  4.3. Warehouse managers hand over products to dispatch officers  4.4. Receive products by delivery personnel’s |
| 5 | Packing, labeling and signing | * 1. Post MRP on the items/primary packaging materials/   2. Dispatched are packed as per SOP   3. Labeled and sealed cartons with PFSA Logo   4. Signing appropriate documents   5. Products are loaded or cross docked as necessary |
| 6 | Proof of delivery collection | * 1. Deliver products to facilities and preparation of model 19 ( Quantity, cost, batch number, expiry date etc should be key in)   2. One signed and stamped copy of Invoice or STVs/DNs along with model 19 will submitted to documentation follow up |
| 7 | Document follow up | * 1. Keep a copy of all transaction documents which are finalized   2. Verify the validity of transaction documents by looking signatures, dates, etc.   3. Receive authorized copies of invoices, STVs, delivery notes and receiving vouchers from health facilities and other customers as a proof of receipt for items delivered   4. Verify the quantities, price, etc. of receipt documents with the original issue documents   5. Report discrepancies to his/her immediate supervisor   6. Communicate documents and amounts to insurance company when insurance coverage is required.   7. Model 19 will submitted to fund management for further action |

**Linear Work Flow for distribution from Hub to health facilities**



C. Major workflow for Stock Transfer between Hubs:

* Share stock movement status
* Initiation of stock transfer
* Document preparation
* Decide the delivery route
* Receipt Confirmation

Major and Detail Activities for Stock Transfer between Hubs

|  |  |  |
| --- | --- | --- |
| **Ser. No** | **Major Activities** | **Detail Activities** |
| 1 | Share stock movement information | * 1. Report slow moving, over stock and short shelf life products from hubs to central office and vice versa   2. Central office shared the report among hubs |
| 2 | Initiation of stock transfer | * 1. Check stock status of the reported product by considering stock at center, hubs, and GIT   2. Hub forwards requisition form to central and sender hub   3. Reports are analyzed by sender hub for decision |
| 3 | Document preparation | 3.1. Follow the same procedures as distribution from hubs to facilities along with letters |
| 4 | Decide the delivery route | * 1. Determine whether the product should pass through the head office or between the hubs.   2. If delivery is directly to the hub follow the same procedure to transfer stock from the hubs to facilities along with official letter   3. If delivery is through the central PFSA, follow the same procedure like delivering from center to hubs but the product should be received by responsible staff and stored temporarily at transit cage until transfer to the destination branch.   4. Another option is for transfer through center is to include the item in the stock by preparing an SRM then follow the procedure for center to hub transfer |
| 5 | Receipt Confirmation | 5.1. Receiver hub or head office will send copy of IGRV and Stamped STVs/DNs following similar procedure as distribution from central to hub. |

Linear work flow for redistribution among hubs



### Capacity Building and Operational Research Sub Process

**Description**

The performance of supply chain systems depends ultimately on knowledge, skills, motivations, operational researches; change management and organizational culture, all resulted in improving service delivery. Thus developing capable and motivated workforce is essential for overcoming existing bottlenecks so as to achieve national agenda vested on the agency.

Having this in mind, the operational research and capacity building sub process is designed to transform the capacity of workforce across the supply chain; by performing activities comprising of facilitation of events, trainings, supportive supervision, mentorship, material preparation and support, research and introduction of new technology along the supply chain. Thus, capacity building sub process is a cross cutting process expected to deliver capacity building for both—internal and external stakeholders so as to develop supply chain –center-of-excellence. The internal capacity building will serve as a spring board for transformation of organizational culture by changing the internal staff capacity and motivation to the level that feat the best performing supply chain.

Whereas the external capacity building initiatives will focus on health facilities, zones, regional health bureaus in relation to the key supply chain operations.

These efforts in the long run will bring strong country capacity that will help both external and internal clients from Ethiopia and beyond in the areas of developing knowledge and skill gaps for managing pharmaceutical logistic system and rational use.

The capacity building activities of health facilities for both the pharmaceutical service and supply management had been conducted by the agency for long years and showed great improvement in the area. This was happening since there was no organized pharmacy service unit /department at regional health bureau /FMOH level. However, this time FMOH/RHBs have already established department for pharmacy services. Therefore, the design team has agreed that the leading role of the pharmacy service capacity building activities for health facility professionals including on RDU, AMR, DTC, DIS, APTS and clinical pharmacy should be handled by FMOH/RHBs/. Even though, the agency will have significant role especially on DTC, APTS and RDU capacity building related activities , the lead should be given to FMOH/RHBs and the agency can collaborate focusing on its main roles.

However, Supply chain related capacity building activities including practical sessions, materials, medical equipment workshops, warehouse practices, actual activities with regards to forecasting and supply planning, inventory management, distribution and fleet management, finance, IT, medical equipment management, laboratory chemicals and reagent management, cold chain management and human resource development for each activities. In addition, the capacity building activities are actually related with the routine supply chain operations that interface health facilities with the agency. Therefore, the leading role for these activities should be played by the agency in collaboration with the FMOH and RHBs

Capacity building activities includes trainings in the areas of integrated pharmaceuticals logistics system (IPLS), supply chain over view (selection/specification, quantification using DTC), procurement, storage, warehouse management, distribution, transactions, transparency and coding using APTS costing and coding principles, Supply chain Monitoring & Evaluation, financial management (credit management, Proof of delivery) , medical equipment specification, warrantee management and installation, etc. Building the capacity of supply chain professionals on these areas will smooth operations across the supply chain.

**Work flow for operational research capacity building sub process**

**Training**

* + - Gap analysis for both internal and external clients in the area of supply chain
    - Curriculum development and testing
    - Conducting TOT and rollout trainings
    - Evaluation the training methodologies and the outcome of the training
    - Establish Training Center for supply chain

**Supportive supervision and Mentorship on supply chain related activities**

* + Mentorship
  + Supportive supersession
  + Material support

**Event Organizing and Facilitation**

* + Preparation for event organization
  + organize event and write proceeding

**Operational Research and Development**

* + Agenda/case Identification (Assessment)
  + Conduct operational researches
  + Facilitate Surveys
  + Implement, recommendations and disseminate the findings

Table : Major and detail activities for supply chain management capacity building

| **S/n** | **Major Activities** | **Detail Activities** |
| --- | --- | --- |
|  | **Training** |  |
|  | 1. Capacity-gap analysis along the supply chain | * 1. Identify the current and required level of skill and knowledge across the pharmaceutical supply chain (external)   2. Identify the current and required level of skill and knowledge-gaps within the agency   3. Prioritize the interventions |
|  | 1. Curriculum development and testing | * 1. In collaboration with ministry of health/RHBs and other related stakeholders, develop draft training curriculum/revise the existing systems in health supply chain management functions including: procurement, inventory management, store management, LMIS, financial management, medical equipment and supplies management of laboratory reagent, medical equipment, distribution and fleet management, IPLS, utilization of drug and therapeutic committee for supply chain, medical equipment installation-user-trainings, chemicals management, health facility procurement list development, reporting, recording, reverse logistics principles etc.)   2. Enrich the draft by technical team meetings   3. Test the curriculum through organizing TOT and rollout trainings.   4. Revise the curriculum if there is any feedback   5. Incorporate comments and develop the final training documents   6. Present for endorsement by top management |
|  | 1. Training rollout | * 1. Map available resources for training scale up in collaboration with development partners ( Technical and financial)   2. Give trainings to relevant internal staffs to boost their capability in the their respective areas and   3. Train professionals from health facilities |
|  | 1. Evaluation the training methodologies and the outcome of the training | * 1. Prepare pre-test and post-test to measure how much the trainees acquire the skill, attitude and knowledge   2. Develop checklists to evaluate the daily activities of the training to evaluate the reaction and behavioral change   3. Develop assessment tool to evaluate the training outcomes (implementation of the systems and tools trained)   4. Conduct assessment after implementation (organize team, plan, travel, collect data)   5. Organize the assessed data and evaluate for further analysis of the result   6. Take interventions as per the analysis results |
| **II.** | **Mentorship and Supportive Supervision** |  |
|  | 1. Mentorship | * 1. In collaboration with developmental partners Identify areas that need mentorship including: IPLS, APTS (only in relation to Health facilities alignment with the agency), Medical equipment management, DTC’s activity for supply chain, etc.   2. Develop mentorship tool   3. Secure necessary resources (budget, mix of professional with right expertise and logistics)   4. Develop action plan   5. Deliver on site mentorships as per the identified area and relevant expertise |
|  | 1. Supportive supersession | * 1. Develop checklist to ensure adherence on request and use of supplied products   2. Establish team from relevant stakeholders   3. In collaboration with FMOH/RHBs select health facilities eligible for supportive supervision   4. Conduct joint supportive supervision on supply chain process related activities, product quality related issues, credit settlement and proof of delivery issues etc.   5. Give oral and written feedbacks to facilities   6. Follow up on further interventions based on the findings   7. Prepare supportive supervision report   8. In collaboration with FMOH/RHBs, oorganize review meeting to share best experiences and settle hassles |
|  | 1. Material support | * 1. Identify gaps and quantify the material (during JSS, telephone communication, structured assessment, monthly report)   2. Mobilize resources to purchase and print the materials   3. Acquire the necessary materials such as warehouse handling materials, (shelf, palate, trolley, Ventilator, ladder, Job aids, warehouse guidelines, locators, sign and symbols, posters, shelves, pallets, trolley), recording and reporting vouchers and formats (IFRR, RRF, HPMRR, BIN card, stock card, vouchers (Model 19, model 22, sales tickets, registers, pad registers etc) STG, Formularies, assessment findings, guidelines, regulations and so on.   4. Distribute the material to its destination area   5. Write a report and continue follow up |
| IV. | **Event Organizing and facilitation** |  |
|  | 1. **Preparation for event organization related to the supply chain** | * 1. Receive request of event plan from both external and internal   2. Display training/workshop schedules   3. In collaboration with the general service, aarrange hall, refreshment, procure materials (microphone, training manual printing, duplication, stationaries and materials, banner, LCD projector, tables, etc.) for the event |
|  | 1. **Organize event and write proceeding** | * 1. Organize the event and facilitate the training/ workshop   2. Assist event holders during accomplishment   3. Produce report together with event holders by (news preparation, proceeding writing, taking pictures) |
| V | **Operational Research and Development** |  |
|  | Area Identification (Assessment) | * 1. Identify and prioritize area for operational research to identify factors affecting the supply chain and financial management,   2. Get approval from director general or deputy director general on the selected areas   3. Develop action plan including mobilization of resources and coordinating developmental partners |
|  | Conduct operational researches (when done internally) | * 1. Prepare operational research tool that help identify supply chain problems and take interventions   2. Develop methodologies   3. Collect data   4. Analysis the data and produce findings   5. Design mechanisms for intervention   6. Pilot intervention |
|  | Facilitate Surveys (National, subnational, program specific operational researches) | * 1. In collaboration with FMOH/RHBs and other related stake holders, develop concept note, TOR and get approval   2. Select the research firm   3. Assist preparation of operational research tool   4. Assist development of methodologies   5. Facilitate data collection   6. Oversee and validate the processes of the research   7. Receive the findings   8. Design intervention based on the findings   9. Pilot intervention |
|  | Implement and Disseminate the findings | * 1. Familiarize & scale up the intervention to the area in need and other users.   2. Upload the intervention to the agency web-site and other media out lets |
|  | 1. Establish Training Center for supply chain | * 1. Establish comprehensive supply chain management training center   2. Fulfil the necessary materials and activities so as to certify the center by ISO   3. Register training center by the continuous professionals development (CPD) at Ministry of Education   4. Collaborate with different professional associations to develop curriculums and give the training   5. Announce on CPD service on different media out lets to register trainees   6. Deliver different capacity building trainings on pharmaceuticals supply chain management   7. Continuous monitoring and evaluation of the quality of the trainings |

**Linear work flow for capacity building**

****

### *Quality Management sub process*

**Description**

Quality management system is a set of interrelated or interacting supply chain processes or elements that an organization uses to direct and control the manner in which quality policies are implemented and quality objectives are achieved. It is therefore a network of processes – activities that are physically performed and not merely manual with information.

The quality management sub processes encompasses process standardization, processes audit, batch by batch quality assurance for most of products, and ISO certification processes. To guide the implementation of the quality management system, the quality manual with comprehensive list of SOP’s will be developed. The quality manual will be customized to the organization context. The Manual will contain policy, scope of quality management, quality objectives of the organization and responsibilities.

Workflow for Quality Management

* Develop quality manual ( Policy, objectives, list of all SOPs)
* Validation of premises, and material handling equipment
* Conduct process audit as per agreed standards
* Occupational health, and safety
* Physical inspection of incoming shipments
* Quality control test for products batch by batch s
* Product recall and disposal of obsolete ones
* Work towards compliance to ISO requirement

Table : Table 20: Major and detail activities for quality management sub process

| **S.N** | **Major Activities** | **Detail Activities** |
| --- | --- | --- |
|  | Develop quality manual (Policy, objectives, list of all SOPs) | * 1. Develop draft quality manual ( by customizing the experiences of other supply chain organizations)   2. Enrich the draft through consultative workshop   3. Get approval of the management   4. Familiarize the quality management system to relevant processes |
|  | Validation of Premises, and Material Handling Equipment | 2.1. Identify the premises and material handling equipment  2.2. Assess that premises and equipment is suitable for the intended purpose  2.3. Identify the gap  2.4. Take corrective actions with relevant processes  2.5. Validate the premises and material handling equipment |
|  | Conduct process audit as per agreed standards | * 1. Get approved SOPs   2. Develop standard checklist for process audit   3. Conduct regular process audit   4. Provide feedback based on audit findings   5. Process Improvement plan   6. Adopt and follow implementation of directives and requlations by regulatory authorities   7. Documentation |
|  | Occupational health, and safety | * 1. Make sure that SOPs are prepared for Occupational health, and safety   2. Ensure the availability of appropriate protective equipment   3. Enforce the implementation of the SOP   4. Documentation |
|  | Physical inspection of incoming shipments | * 1. Develop inspection protocol   2. Conduct physical inspection   3. Provide feedback and take appropriate action   4. Documentation the findings |
|  | Quality control test for most products batch by batch | * 1. Avail the required resources for quality test   2. Select products for quality test or products with quality concern   3. Conduct quality test   4. Report the result   5. Take appropriate action |
|  | Product recall | * 1. Identify products with confirmed quality concern   2. notify EFMHACA of recall initiation.   3. facilitate product recall ( interface with distribution sub process)   4. assess the effectiveness of the recall and report any recall they made to EFMHACA |
|  | Work towards compliance to ISO requirement | * 1. Select ISO standard   2. Revise and update the documents   3. Comply with the new requirement   4. Self-audit/ conduct internal audit   5. Action plan preparation   6. Apply for ISO certification   7. Facilitate document revision and onsite visit by the certifying body   8. Receive nonconformance report   9. Clearance of non-conformance   10. Report the clearance to the certifying body   11. Get ISO certificate   12. Maintain the ISO standard |

### Planning and project coordination sub process

**Description**

**Planning;** may be defined as the way of setting goals, developing strategies, figuring out the implementation methodologies, mobilizing and assigning resources to meet the targeted goals. Planning is critical step specifically for pharmaceutical supply chain since products are liable for expiry and high wastage of resources as well as unavailability of essential products may result in human life losses.

**Monitoring;** can be defined as the ongoing process by which the supply firm and stakeholders obtain regular feedback on the daily implementation of activities that lead towards achieving goals and objectives. Monitoring is the systematic and routine collection of information from supply agencies for four main purposes:

* To learn from experiences to improve practices and activities in the future;
* To have internal and external accountability of the resources used and the results obtained;
* To take informed decisions on the future of the initiative;
* To promote empowerment of beneficiaries of the initiative.

**Evaluation;** is a rigorous assessment conducted either by internal or independent assessor to determine the extent to which the supply chain firm is achieving stated objectives and contributing to decision making. Evaluation appraises data and information that help for strategic decisions, thus improving the supply chain performance in the future.

Evaluation helps to figure out five main aspects of the intervention:

* Relevance
* Effectiveness
* Efficiency
* Impact
* Sustainability

Good planning combined with effective monitoring and evaluation can play a major role in enhancing the effectiveness of the supply chain firm. Therefore, the efficiency of pharmaceutical supply chain systems is reliant on planning, monitoring and evaluation, measures taken upon the findings of the organizational performance evaluation. Furthermore, planning, monitoring and evaluation also help to award the agency branches and individuals as per their performance.

The agency supply chain was working with poor planning and unclear articulation of intended results, it was not clear what should be monitored and how; hence monitoring cannot be done well. With such ineffective planning, which is the main input for monitoring and evaluation, follow up and performance evaluation was also inconsistent. So, due to such problems, the agency was unable to achieve goals, measure outcomes and encourage individual staffs for their best performance. The human resource number and mix of the P.M.E team was not so comprehensive.

**Resource mobilization:**

Resource mobilization is the process of getting resource from various sources by using different mechanisms, to implement the organization‘s work for achieving the pre-determined organizational goals. It deals in acquiring the needed resources in a timely-cost effective manner‘. Resource mobilization advocates upon having the right type of resource, at the right time, at right price with making right use of acquired resources thus ensuring optimum utilization of the same.

Financial Resource Mobilization

It is apparent that the government is not able to allocate sufficient amount of budget for pharmaceuticals that could address the public’s demand for drugs. In order to obtain sufficient amount of fund to supply essential and vital drugs to the public, mobilizing fund for drugs from government, health insurance scheme, donors and loans from national and international financial institutions is indispensable. Therefore, fund/financial resource mobilization sub-process is designed to address aforementioned issues.

The Financial Resource Mobilization process deals with ensuring availability of adequate financial resources for the implementation of the agency’s core activities at various level of the health system. Systematic mobilization of resources requires, among others, long-term, medium-term and short-term comprehensive and costed plans, regular mapping of resources and gap analysis, a systematic approach to identification and ensuring of funds in harmonized manner to close prevailing financing gap.

A fundamental principle behind BPR is linking and aligning core processes and support processes. Accordingly, the Financial Resource Mobilization process has strong linkage with the Planning process. This process has major outputs that are corner stone. For instance, resource gap analysis is the key input and in fact a stepping stone for resource mobilization. The fact that the resource mobilization starts from gap analysis ensures the relevance of mobilized resources to the prevailing financing gaps i.e. makes it demand driven.

According to the design, the Financial Resource Mobilization sub process will use different fund mobilization strategies that are developed by PFSA management and will develop new strategies based on the prevailing situation at the time fund mobilization, interest of PFSA and development partners. It is believed that the best method that will benefit PFSA will be followed rather than specific “do” or “do not do” principles in this regard.

Foreign Currency Availing Possible Options;

**Description**

Since Ethiopia is under transformation, the number of health facilities in Ethiopia is sky rocketing from 1000 health centers to more than 4000 health centers and from 73 hospitals to 411 hospitals within the last 15 years. To furnish and establish the new hospitals and health centers with medical equipment, laboratory equipment and fulfil all the necessary supplies and medicines, the government allocates huge amount of money in Birr. However, since the national production is only 25% of the local needs, majority of these products have to be imported using foreign currency. In general, the agency distributes health products (medicines, reagents, laboratory and medical equipment) that cost 18 billion birr annually. So, the need of foreign currency to procure these products is increasing correspondingly.

The health sector is one of the largest contributors of foreign currency for the country due to lots of grants signed and foreign aids comes to help the sector. However, health products like medical equipment in the country have been inaccessible for long periods mainly due to the shortage of foreign currency. Therefore, it is mandatory to figure-out sources of foreign currency especially by, project Coordination (Resource Mobilization) unit and writing proposals using:-

* Mobilization of grants from Bilateral organizations and governments, Multilateral organization, Global initiatives (GFATM, GAVI, PEPFAR, UN Organization and other potential Funders ), Private donors, National and international NGOs
* Proposals for provision of FCY support (e.g. program support of SDG -MDG for RDF, PBS for RDF)
* Proposals for special local activities like system strengthening activities (IT infrastructure, construction, training provision, provision of Technical Assistance or experts)
* Follow negotiation with the potential customers for transfer of FCY to PFSA for procurement services (e.g. regions, hospitals…grant)
* Follow negotiation with all program supporters for advance transfer of estimated service charges in FCY
* Follow strengthening follow-up on cancelled LCs (through Procurement and Fund Management process)
* Follow abiding requirements, rules and regulations of agreements with funders or proper *“grant management practice”* and meeting CPs (condition precedents) so that funds held due to these are released on time
* Follow periodic review of grant financial statements and proactive action thereon;
  + Automatic transfer of service charge recognized through statement of expenditure (SoEs) to the RDF FCY account
  + Proactive request of service charge for distribution service provided through donations from different partners (based on the donation certificates and communications from partners and/or the sector)
* Negotiation with government to ensure sustainable supply of foreign currency for availing essential medicines and medical supplies
  + Discuss with regional health bureau to own foreign currency account so as to help transfer any foreign currency aid to PFSA in their need to request procurement
  + Negotiating on any special arrangement with national bank
* Dealing with IGAD member countries to export prepacked kitted products to increase foreign currency pool
* Ensure separation of bank accounts;
  + expending from RDF local account for local expenditures of program procurement,
  + opening of local currency account for programs,
  + transferring FCY from program accounts to RDF FCY account being refund of expenditures made in local currency,
* Ensure negotiation with private banks
  + Directing portion of FCY from the existing bank account to the new private bank FCY account
  + Discover the availing process of FCY for procurement services
  + Negotiate for having interest bearing accounts
  + Possible use of overdrafts for LCs
  + FCY loans based on an approved business proposal
* Proposals to other Governmental structures (peer ministries, authorities and organizations) and negotiations thereon
  + provision of procurement or distribution services
  + provision of trainings and other technical services
  + printing services
* Facilitate and follow the organization to sign agreement with manufacturers to be agent in the region so that neighboring countries and suppliers from within can get access for medicines and suppliers

Possible Source of Fund

Before description of strategies that could be implemented in order to effectively locate and solicit funds, it is worth clarifying the possible sources of funds for PFSA as follows;

* Governmental structures (peer ministries, authorities and organizations)
* National and international NGOs
* Financial institutions
* Bilateral organizations and governments
* Multilateral organization
* Global initiatives (GFATM, GAVI, PEPFAR, etc.)
* Private donors

The resource to be mobilized from the aforementioned sources could be in various sources. In fact it could be in cash or in kind based on the agreement entered. Loans, infrastructural support, technical assistance through professional support, system strengthening initiatives, capacity building initiatives, budgetary support, service charges for overhead costs recovery, in-kind contributions to the system are some of the forms of the resources that could be gained through an effective fund mobilization process.

**Grant Management**

A grant is a resource provided by the government or some other organizations under a written agreement to carry out particular set of activities.

The grant fund can be received from wide variety of stakeholders and partners including government, bilateral organizations, multilateral organizations, equivalent private organization, global initiatives and private donors having different requirements and expectations. To accomplish grant management, a process that can manage the resource is needed.

Having this in mind the agency prepared this planning, monitoring and evaluation detailed activities and process time that can resolve the aforementioned problems; in the meanwhile to achieve these duties, the planning, monitoring and evaluation sub process is designed.

**Workflow for Planning, Monitoring and Evaluation sub process**

1. Develop Strategic Planning (five year strategic plan)
2. Annual planning (one year plan)
3. Performance Monitoring and Evaluation
4. Develop M&E strategy
5. Develop M&E plan
6. Process improvement

Major Activities of Financial Resource Mobilization Process

The following are depicted as the major activities of this process;

* Identification of the adequacy of available fund
* Conduct financial Gap Analysis
* Formulate fund mobilization strategy
* Approaching funding organization using different modalities and
* Securing fund

In fact, these activities are not a one-time activity. They also require collaboration of pharmaceutical supply core process, other support processes and other collaborations outside PFSA. Thus every time these activities are done, they are going to be as per the procedures prepared based on the major and detail activities here under.

Part 1 Planning, Monitoring and Evaluation

|  |  |  |
| --- | --- | --- |
| **S.N** | Major Activities | Detail Activities |
| 1 | Develop Strategic Planning (five year strategic plan) | * Perform SWOT Analysis * Define mission and vision of the organization * Define strategies and strategic measurable objectives of the organization * Develop a draft five year strategic plan with specific performance each year, based on the agency mission, vison and objectives, * Organize workshop and receive feedbacks from relevant stakeholders * Incorporate the feedback and finalize the strategic five plan * Get approval from the top management and relevant stakeholders * Monitor and evaluate yearly performance accordingly |
| 2 | Annual planning (one year plan) | * Develop and distribute planning tools to each section * Receive annual plan from each section based on the five year strategic plan * Compile and prepare draft annual organizational plan * Organize workshop/meeting in the presence of staffs and relevant stakeholders * Edit and refine the final organizational plan * Approve the final organizational plan by top management * Distribute the approved plan to relevant stakeholders |
| 3 | **Performance Monitoring and Evaluation** | * Identify key performance indicators for each section prepare monitoring and evaluation plan for each section * Identify activities that could be summarized daily * Prepare daily summary formats (DSF) and monthly reporting formats (MRF) for each activity in all processes * Summarize performance of each activity daily * Receive performance reports from each section regularly ( Monthly, Quarterly, , , and annually) * Compile the performance and draft report in each reporting period * Send the draft report to each section for comment * Evaluate the draft report with relevant staffs * Incorporate the comment and finalize the performance report * Approve the final report by top management * Distribute the report to relevant staffs and stakeholders * Prepare workshop to review annual performance and next year draft plan * Use the findings for decision making * Use the findings from this plan to next plan |
| 4 | Develop M&E strategy | * Set goal and objectives * Identify indicators * Collect and analyze data * provide feedback for decision making |
| 5 | Develop M&E plan | * Set Goal * develop smart objectives * Address the key problems identified * Set time frame |
| 6 | Process improvement | * Conduct assessment * Analyze data * Develop recommendation * Define goal and objective * Facilitate development of plan for intervention * Monitor intervention |

**Part II**

Major and Detail Activities Workflow for Financial Resource Mobilization Process

|  |  |
| --- | --- |
| **Major Activities** | **Detail Activities** |
| 1. **Identify the available fund** | * 1. Collect strategic plan, financial documents and data from MIS |
| * 1. Insert data to computer |
| * 1. Process the data and identify the available fund |
| * 1. Prepare draft report and submit for comment |
| * 1. Incorporate the comment and produce final report |
| 1. **Collect data and determine financial gap**   **(Conduct Gap Analysis)** | * 1. Prepare/Revised plan of action and present to the concerned staff for approval |
| * 1. Plan of action approved |
| * 1. Collect and quantify data to forecast demand |
| * 1. Insert data to computer |
| * 1. Process the data and forecast the demand for and supply of pharmaceuticals in terms of quantity and value |
| * 1. Identify the financial gap |
| * 1. Analyze the identified gap, prepare the draft report and submit for comment |
| * 1. Incorporate comment given and produce the final report |
| * 1. Get the Gap Analysis approved |
| 1. **Formulate financial resource mobilization strategy** | * 1. Identify the source of fund |
| * 1. Prepare resource mapping |
| * 1. Prepare financial resource mobilization strategy |
| 1. **Approaching funding organization** | * 1. Prepare/revise special price offering or credit purchase facility proposal and present it for comment |
| * 1. Incorporate comments in the proposal and produce the final proposal |
| * 1. Participate in the negotiation process and signing agreement |
| * 1. Follow up the implementation of agreement by securing fund |
| **Local Commercial Banks** |
| * 1. Prepare/revise loan or overdraft request proposal and present for comment |
| * 1. Incorporate comments and produce final overdraft request |
| * 1. Participate in the negotiation process and signing of agreement |
| * 1. Follow-up the securing of the funds |
| **International Banks such as the WB, ADB, etc** |
| * 1. Prepare loan request proposal and present for comment |
| * 1. Incorporate comments and produce final proposal |
| * 1. Follow-up the loan request process |
| * 1. Participate in the negotiation process and signing of agreement |
| * 1. Follow-up the securing of funds |
| **Bilateral or Multilateral organizations and donors** |
| * 1. Receive and review the gap analysis document |
| * 1. Review the requirement of the donor |
| * 1. Structure the gap analysis with the requirement of the donor and prepare proposal |
| * 1. Cost the proposal |
| * 1. Conduct review of the proposal based on the gap analysis and bilateral guideline |
| * 1. Send the proposal for comment |
| * 1. Incorporate comment and submit to the donor through an official letter |
| * 1. Follow-up the securing of fund |
| **By preparing project proposal/selling ready-made proposal** |
| * 1. Prepare/revise project proposal and present for comment |
| * 1. Incorporate comment and submit for management approval |
| * 1. Participate in the negotiation process and signing of agreements |
| * 1. Follow-up the securing of fund |
| * 1. Highlight activities to be implemented at all level |
| * 1. Prepare cascaded plan at all level for implementation |
| * 1. Ensure that funds are transferred to respective level |
| **By preparing memorandum of understanding** |
| * 1. Prepare MoU and present for comment |
| * 1. Incorporate comments and submit for management approval |
| * 1. Participate in the negotiation process and signing of agreement |
| * 1. Follow-up the securing of funds |
| **By simple request** |
| * 1. Participate in approaching donors |
| * 1. Prepare request letter for comment |
| * 1. Incorporate comments and submit for management approval |
| * 1. Participate in the negotiation process and signing of agreement |
| * 1. Follow-up the securing of funds |
| **Advance payment from RHBs, HFs, and other governmental offices** |
| * 1. Prepare/revise proposal to negotiate with RHBs, HFs and Gov’t offices for advance payment |
| * 1. Incorporate the comments in the proposal and produce the final proposal |
| * 1. Participate in the negotiation and signing of agreement |
| * 1. Follow-up the securing of fund |

# CHAPTER FOUR

# PROCESS ORGANIZING AND TOGETHERNESS

These parts encompass the detail work flow outlining, process time and location each steps takes to accomplish. It also comprises job description, work force requirement with the right professional, skill mix.

## Determination of Human resources requirement

Based on the steps identified in the designed process, location of work when to accomplish, how fast to accomplish in days and the total time per year is depicted as follow

### HR determination for Forecasting and Supply Planning sub Process

Table : Forecasting and supply planning sub process

| S.N | Detail Activities | Location of work | When to accomplish | How fast to accomplish (days) central | Total days at center/  year | How fast to accomplish (days) branches | Total branch/ year | Competency and Job title |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | Develop predefined PFSA procurement list through involving with relevant stakeholder with proper mix of professionals and close communication with relevant stakeholders | Center | annually | 149 | 149 |  |  | P,L,B |
| 2 | Communicate for approval to health sector executive/ Director general of PFSA | Center | annually | 1 | 1 |  |  | P,L,B |
| 3 | Communicate the approved list to health facilities, organize orientation workshop and provide orientation to health facilities about the predefined list | Center/ Branch | annually | 115 | 115 | 3 | 3 | P,L,B |
| 4 | Follow facilities to develop their procurement list based on the agreed national list | Branch | annually |  |  | 11 | 11 | P,L,B |
| 5 | Center provides mentorship training to RHB and branches and then, Branches, train ZHD and woreda health office logistics officers so that health facilities to prioritize their list based on ABC/VEN analysis | Center/ Branch | annually | 5 | 5 | 15 | 15 | P,L,B |
| 6 | PFSA central communicate quantification tool with approved list and updated unit price to health facilities through respective branches | Center | annually | 40 | 40 |  |  | P,L,B |
| 7 | Branches provide the necessary support (mentoring, supportive supervision) to facilities throughout the quantification process using trained logistic officers | Branch | annually |  |  | 54 | 54 | P,L,B |
| 8 | Follow HFs to quantify their annual committed demand using quantification tool through respective logistic officers | Branch | annually |  |  | 2.5 | 2.5 | P,L,B |
| 9 | Follow to reconcile with their annual budget based on ABC/VEN matrix reconciliation analysis through respective logistic officers | Branch | annually |  |  | 2.5 | 2.5 | P,L,B |
| 10 | Follow approval by the facility DTC through respective logistic officers | Branch | annually |  |  | 2.5 | 2.5 | P,L,B |
| 11 | Follow health centers submit committed demand to Woreda for approval through respective logistic officers | Branch | annually |  |  | 2.5 | 2.5 | P,L,B |
| 12 | Follow woredas and Hospitals submit their committed demand to respective PFSA branches | Branch | annually |  |  | 2.5 | 2.5 | P,L,B |
| 13 | PFSA branches receive & aggregate the committed demand from hospitals, Woreda health office and RHB/ZHD | Branch | annually |  |  | 22 | 22 | P,L,B |
| 14 | Branches forecast demand of new health facilities, private facilities and faith based health facilities | Branch | annually |  |  | 3 | 3 | P,L,B |
| 15 | Data validation workshop and segregation | Branch | annually |  |  | 15 | 15 | P,L,B |
| 16 | Prepare branches annual net requirement considering their SOH | Branch | annually |  |  | 5 | 5 | P,L,B |
| 17 | Submit the net requirement to center | Branch | annually |  |  | 1 | 1 | P,L,B |
| 18 | The information collected from all branches will be consolidated and segregated by categories | Center | annually | 30 | 30 |  |  | P,L,B |
| 19 | Get the updated AMC based on facility report / average monthly issue data as proxy to AMC from all branches | Center | annually | 7 | 7 |  |  | P,L,B |
| 20 | Conduct validation workshop (branches and stakeholders) to reach consensus on assumptions and incorporate comments | Center | annually | 9 | 9 | 6 | 6 | P,L,B |
| 21 | Update stock status of all items at central warehouses (Stock on hand with expiry date, stock on transit and stock on procurement process) | Center | annually | 10 | 10 |  |  | P,L,B |
| 22 | Calculate MOS for each items based on updated stock status | Center | annually | 4 | 4 |  |  | P,L,B |
| 23 | Determine net requirement | Center | annually | 4 | 4 |  |  | P,L,B |
| 24 | Consider safety stock based on agreed lead time and review period | Center | annually | 2 | 2 |  |  | P,L,B |
| 25 | Calculate the net requirement [gross requirement-(stock available on hand+ scheduled receipt)] | Center | annually | 2 | 2 |  |  | P,L,B |
| 26 | Budget the net requirement (including freight, insurance, bank service charge etc.) | Center | annually | 2 | 2 |  |  | P,L,B |
| 27 | Reconcile net requirement with available fund | Center | annually | 1 | 1 |  |  | P,L,B |
| 28 | Prioritize final quantities using VEN,ABC analysis | Center | annually | 3 | 3 |  |  | P,L,B |
| 29 | Adjust final quantities | Center |  | 1 | 1 |  |  | P,L,B |
| 30 | Prepare and send purchase request for each categories to procurement sub process in hard copy and feed electronically to the system | Center | annually | 2 | 2 |  |  | P,L,B |
| 31 | Prepare distribution plan for each branch and communicate to distribution sub process and branches | Center | annually | 0.5 | 0.5 |  |  | P,L,B |
| 32 | Review the quantification document workshop with branches | Center/ Branch | annually | 12 | 12 | 5 | 5 | P,L,B |
|  | Pipeline monitoring |  |  |  |  |  |  |  |
| 33 | Get relevant data (SOH from branches and center, transit report and stock on procurement) | Center | every month | 10 | 120 |  |  | P,L,B |
| 34 | Prepare stock status report (vital report) every month for RDF pharmaceuticals (medicines, medical supplies, laboratory reagents and medical equipment) | Center | every month | 20 | 240 |  |  | P,L,B |
| 35 | Prepare presentation and present the stock status report to relevant sub process | Center | every month | 8 | 96 |  |  | P,L,B |
| 36 | Communicate the agreed report to relevant sub processes and branches for action | Center | every month | 0.5 | 6 |  |  | P,L,B |
|  | Program Pharmaceuticals |  |  |  |  |  |  |  |
| 37 | Discuss with relevant stakeholders and form quantification team (for each program) | Center | annually | 3 | 3 |  |  | P,L,B |
| 38 | Discuss the program, define scope and purpose of quantification with quantification national team | Center | annually | 6 | 6 |  |  | P,L,B |
| 39 | Collect all relevant data (morbidity, regimen data, consumption and service statistics, new initiatives, service area expansion ….ETC) | Center/ Branch | annually | 44 | 44 | 30 | 30 | P,L,B |
| 40 | Organize and analyze data | Center | annually | 30 | 30 |  |  | P,L,B |
| 41 | Review and summarize relevant documents(consumption trend analysis) | Center | annually | 6 | 6 |  |  | P,L,B |
| 42 | Develop draft assumption | Center | annually | 1 | 1 |  |  | P,L,B |
| 43 | Preparation for consultative workshop, | Center | annually | 2 | 2 |  |  | P,L, B |
| 44 | Conduct consultative quantification workshop and present program and supply chain update, consumption tend, and relevant information to workshop participants on all topics | Center/ Branch | annually | 30 | 30 | 30 | 30 | P,L, B |
| 45 | Comment incorporation | Center | annually | 15 | 15 |  |  | P,L, B |
| 46 | Calculate total requirement and cost using relevant quantification tool for each program | Center | annually | 3 | 3 |  |  | P,L, B |
| 47 | Calculate the net requirement [gross requirement-(stock available on hand+ scheduled receipt)] | Center | annually | 15 | 15 |  |  | P,L, B |
| 48 | Budget the net requirement (including freight, insurance, bank service charge etc.) | Center | annually | 4 | 4 |  |  | P,L, B |
| 49 | Reconcile requirement with available fund | Center | annually | 3 | 3 |  |  | P,L, B |
| 50 | Solicit additional fund / budget (if there is any budget gap) | Center | annually | 15 | 15 |  |  | P,L, B |
| 51 | Write up final forecast, present for comment | Center | annually | 60 | 60 |  |  | P,L, B |
| 52 | Incorporate comments | Center | annually | 10 | 10 |  |  | P,L, B |
| 53 | Prepare and send purchase request for each program to procurement sub process in hard copy and feed electronically to the system | Center | annually | 3 | 3 |  |  | P,L, B |
| 54 | Prepare for revision of quantification document | Center | annually | 12 | 12 |  |  | P,L,B |
| 55 | Organize and conduct workshop for quantification document to the relevant stakeholders and branches | Center/ Branch | annually | 30 | 30 | 30 | 30 | P,L,B |
|  | Pipeline monitoring for Health programs |  |  |  |  |  |  | P,L,B |
| 56 | Get relevant data (SOH from hubs and center, transit report and stock on procurement) | Center | monthly | 12 | 144 |  |  | P,L,B |
| 57 | Analysis (Develop stock status report every month for pharmaceuticals for all health programs) | Center | monthly | 50 | 600 |  |  | P,L,B |
| 58 | Present the stock status report monthly to TWG meetings for discussion | Center | monthly | 3 | 36 |  |  | P,L,B |
| 59 | Communicate agreed report timely to internal and external stakeholder | Center | monthly | 3 | 36 |  |  | P,L,B |
|  | Miscellaneous activities |  |  |  |  |  |  |  |
| 60 | Work flow for emergency request during epidemic & disaster situation |  |  |  |  |  |  | P,L,B |
| 61 | Established ad-hoc quantification team from relevant stockholders | Center | 5 times/ year | 1 | 5 |  |  | P,L,B |
| 62 | Get information on emergency situations(disease burden/coverage) | Center | 5 times/ year | 2 | 10 |  |  | P,L,B |
| 63 | Identified required medicines and related product for the emergency situation | Center | 5 times/ year | 2 | 10 |  |  | P,L,B |
| 64 | Forecast emergency supply requirement and get approval from FMOH | Center | 5 times/ year | 3 | 15 |  |  | P,L,B |
| 65 | Assess the stock status for the needed products, identify gaps | Center | 5 times/ year | 1 | 5 |  |  | P,L,B |
| 66 | Communicate the emergency purchase request with supply plan to procurement sub process for immediate action | Center | 5 times/ year | 1 | 5 |  |  | P,L,B |
|  | Capital medical Instrument specification preparation |  |  |  |  |  |  |  |
| 67 | Receive medical instrument request from FMOH, RHB and health facilities | Center | Weekly | 0.25 | 6.5 |  |  | P,L,B |
| 68 | PFSA reviews the specification by its technical expert/ the ad-hoc team of expert using national medical instrument list (prepared by FMHACA) as reference material | Center | Biannually | 40 | 80 |  |  | P,L,B |
| 69 | The technical expert/ad-hoc team will finalize the specification in close consultation with the end user | Center | Biannually | 3 | 6 |  |  | P,L,B |
| 70 | Prepare specification for each equipment and per customer and communicate the final list to the customer to get written agreement to procced with the procurement | Center | Biweekly | 8 | 208 |  |  | P,L,B |
| 71 | Communicate the purchase request to procurement sub process | Center | Biweekly | 0.25 | 6.5 |  |  | P,L,B |
|  | Laboratory reagents and supplies quantification for health program version |  |  |  |  |  |  |  |
| 72 | Form a quantification team from PFSA, EPHI and relevant stakeholders | Center | Bi-annually | 9 | 18 |  |  | P,L,B |
| 73 | Conduct assessment to collect instrument information (maximum through put, utilization rate), facility quality control practice, number of testing sites, number of referral sites, and no of testing days per year at national level | Center/ Branch | Bi-annually | 60 | 120 | 30 | 360 | P,L,B |
| 74 | Review and summarize relevant documents (instrument functionality rate, control and calibrator utilization rate, consumption trend …etc.) | Center | Bi-annually | 75 | 150 |  |  | P,L,B |
| 75 | Calculate total requirement and cost using relevant quantification tool (Labfor® , QuantTB®) for each program | Center | Bi-annually | 30 | 60 |  |  | P,L,B |
| 76 | Adjust quantities with machine numbers and number of testing sites | Center | Quarterly | 15 | 60 |  |  | P,L,B |
| 77 | Federal/regional review meeting | Center | Quarterly | 7 | 28 |  |  | P,L,B |
| 78 | Stakeholder meeting | Center | Quarterly | 2 | 8 |  |  | P,L,B |
| 79 | STG Revision with FMHACA | Center | Annually | 7 | 28 |  |  | P,L,B |
| 80 | Joint Supportive supervision with FMOH | Center | Biannually | 120 | 720 | 45 | 270 | P,L,B |
| 81 | Joint Supportive supervision with regions |  | Biannually | 120 | 720 | 42 | 252 | P,L,B |
| 82 | National survey | Center | Annually | 10 | 40 | 5 | 20 | P,L,B |
| 83 | Plan development, daily performance evaluation | Center | Daily | 0.06 | 15 | 0.06 | 12 | P,L,B |
| 84 | Plan development, weekly performance evaluation | Center | Weekly | 0.06 | 3 | 0.06 | 3 | P,L,B |
| 85 | Plan development, monthly performance evaluation | Center | Monthly | 0.06 | 1 | 0.06 | 1 | P,L,B |
| 86 | Plan development, monthly performance evaluation | Center | Quarterly | 0.06 | 0.18 | 0.06 | 0.18 | P,L,B |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | HR Summary for forecasting and sub process at center | | | |
| Code | Job Title | Competency | Total days/year Center | No of HR estimated |
| D | Forecasting and supply planning Sub process owner | B. Pharm with Master’s degree relevant supply chain management, Pharmacology, MPH, and with at least five years practical experience on the process ( sub-process owner) |  |  |
| E | Laboratory technologist (Senior Forecasting and supply planning Officer) | BSc in Laboratory | 390 | 2 |
| F | Laboratory technologist ( Forecasting and supply planning expert) | BSc in Laboratory | 405 | 2 |
| G | Biomedical Engineer (Senior Forecasting and supply planning Officer) | BSc in Bio Medical Technology | 380 | 2 |
| H | Biomedical Engineer ( Forecasting and supply planning expert) | BSc in Bio Medical Technology | 207 | 1 |
| I | Pharmacist (Senior Forecasting and supply planning officer) | B. Pharm with Medical Supplies Management Training | 1007 | 4 |
| J | Pharmacist(Forecasting and supply planning expert) | B. Pharm (Pipeline monitoring Pharmacist) | 1250 | 5 |
| K | Senior Forecasting and supply planning Officer (Public Health) | B. Pharm with MSC Public Health | 398 | 2 |
| L | Senior forecasting officer | MSC in pharmacology /clinical pharmacy | 395 | 2 |
|  | | Total Estimate | | 20 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | HR Summary for forecasting and supply planning sub process at branch | | | |
| Code | Job Title | Competency | Total days/year Center | No of HR estimated |
| D | Forecasting and supply planning | B. Pharm with other relevant training on Forecasting and supply planning (team leader |  | 1 |
| E | Laboratory technologist (Senior Forecasting and supply planning Officer) | BSc in Laboratory | 195 | 1 |
| G | Biomedical Engineer (Senior Forecasting and supply planning Officer) | BSc in Bio Medical Technology | 184 | 1 |
| I | Pharmacist (Senior Forecasting and supply planning officer) | B. Pharm with Medical Supplies Management Training | 293 | 2 |
| J | Pharmacist(Forecasting and supply planning expert) | B. Pharm | 387 | 1 |
|  | Total Estimate | | | 6 |

*Note: Total days/year for each activity is calculated by multiplying:*

* + *Annual accomplishments by 1*
  + *Quarterly accomplishments by 4*
  + *Monthly accomplishments by 12*
  + *Biweekly accomplishments by 26*
  + *Weekly accomplishments by 52*
  + *Daily accomplishments by 250*

### Process time for Procurement sub process

| S.No. | **Detail Activities** | **When to accomplish** | **How fast to accomplish (days) Program** | **How fast to accomplish (days) RDF** | **Total RDF and Health Program** | **Total days/ year** | **Competency** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1.1 | Develop prequalification requirements | Annually | 15 |  | 15 | 15 | B,L,P |
| 1.2 | Acquire no-objection from Endorsing committee and Regulatory Body | Annually | 5 |  | 5 | 5 | Tender Clark IT technician |
| 1.3 | Announce open pre-qualification notice to supplier(on web page | Annually | 1 |  | 1 | 1 | Management |
| 1.4 | Accept pre-qualification application with relevant documents | Daily | 0.25 | 0.25 | 0.5 | 125 | Management |
| 1.5 | Maintain register of suppliers that apply for pre-qualification | Daily | 0.125 | 0.125 | 0.25 | 62.5 | Management |
| 1.6 | Evaluate submitted pre-qualification Application months | monthly | 1 | 1 | 2 | 24 | PBL |
| 1.7 | Inform suppliers on decision (rejected/approved) | monthly | 0.25 | 0.25 | 0.5 | 6 | Management |
| 1.8 | Maintain list of updated prequalified suppliers per the list of items | Daily | 0.125 | 0.125 | 0.25 | 62.5 | Management |
| 2.1 | Receive demand with supply schedule | Annually | 0.125 | 0.125 | 0.25 | 0.25 | Seceratory |
| 2.2 | Determine the procurement method and procurement plan will be filled | Annually | 1 | 1 | 2 | 2 | B, L,P |
| 2.3 | Submit to board of director for endorsement | Annually | 0.5 | 0.5 | 1 | 1 | B, L,P |
| 2.4 | Publish the endorsed annual plan | Annually | 1 |  | 1 | 1 | B, L,P |
| 3.1 | Determine the method of procurement | weekly | 0.25 | 0.25 | 0.5 | 26 | B, L,P |
| 3.2 | Schedule and assign activities | weekly | 0.125 | 0.125 | 0.25 | 13 | B, L,P |
|  | Write letter of request for procurement | Weekly | 0.25 | 0.25 | 0.5 | 26 | B, L,P |
| 3.3 | Approve the action plan | weekly | 0.125 | 0.125 | 0.25 | 13 | B, L,P |
| 3.4 | Communicate & follow up the procurement proposal from next level | weekly | 0.125 | 0.125 | 0.25 | 13 | B, L,P |
| 4.1 | Review the procurement proposal | weekly | 0.125 | 0.125 | 0.25 | 13 |  |
| 4.2 | Follow for Feedback on the procurement proposal | weekly | 0.125 | 0.125 | 0.25 | 13 | B,L,P |
| 5.1 | Revise the standard tender document filled based on the feedback | weekly | 1 | 1 | 2 | 104 | B,L,P |
| 5.2 | Write Letter for request of no objection | Weekly | 0.125 | 0.125 | 0.25 | 13 | secreatery |
| 5.3 | Follow up on Endorsement by the procurement endorsing committee | weekly | 0.25 | 0.25 | 0.5 | 26 | secreatery |
| 5.4 | Prior Review of funding agency (purchase financed by donors) | monthly |  | 1 | 1 | 12 | B,L,P |
| 5.5 | Write invitation letter and approve SPN (advertisement) in case of open tender with condition | weekly | 0.5 |  | 0.5 | 26 | B,L,P |
| 5.6 | Invitations to Bid (restricted tender) using standard Letter | Weekly | 1 |  | 1 | 20 | secretary |
| 5.7 | Distribute to respective supplier by ensuring the issues of letter | Weekly | 2 |  | 2 | 104 | Secretory |
| 6.1 | Identify any point for amendment | monthly | 0.125 | 0.125 | 0.25 | 3 | B,L,P |
| 6.2 | Prepare and get reviewed the amendment | monthly | 0.5 | 0.5 | 1 | 12 | B,L,P |
| 6.3 | Announce any amendment in case happened with Letter by making sure issued to all potential bidders | monthly | 3 |  | 3 | 36 | Secretory |
| 6.4 | Receive clarification request | Daily | 0.03125 | 0.03125 | 0.0625 | 15.625 | Secretory B,L, P |
| 6.5 | Prepare clarification response | Weekly | 0.125 | 0.125 | 0.25 | 62.5 | B, L, P |
|  | Review the clarification accompanied with letter | Weekly | 0.0625 |  | 0.0625 | 15.625 | B,L,P |
| 6.6 | Confirm issue and receipt by all supplier in the biding process | Weekly | 0.125 | 0.125 | 0.25 | 62.5 | Secretory |
| 7.1 | Tender document selling and recording and reporting the summary | Daily | 0.5 |  | 0.5 | 125 | Tender Clark IT technician |
| 7.2 | Sealing of the tender box in the pre-set date and time | weekly | 0.5 | 0.5 | 1 | 52 | Tender Clark IT technician |
| 7.3 | Present complete tender document sales report and prepare submission format | weekly | 0.125 | 0.125 | 0.25 | 13 | Tender Clark IT technician |
| 7.4 | Facilitate attendants signature on of the bid opening participant attendance sheet | weekly | 0.125 | 0.125 | 0.25 | 13 | B,L,P |
| 7.5 | Open the tender box with full view of all the attendance | weekly | 0.125 | 0.125 | 0.25 | 13 | B,L,P |
| 7.6 | Receive the sample if any before bid opening by properly filling on the format for sample submission | Weekly | 0.5 |  | 0.5 | 26 | B, L, P |
| 7.7 | Proper read out and stamping/signing of the bids/ quotations | weekly | 0.125 | 0.125 | 0.25 | 13 | B,L,P |
| 7.8 | Prepare minutes of the proceedings | weekly | 1 | 1 | 2 | 104 | B,L,P |
| 7.9 | Make sure that the bid documents are kept in a proper safe place | weekly | 0.125 | 0.125 | 0.25 | 13 | B,L,P |
| 8.1 | Preliminary assessment of the supplier bid documents | Daily | 9.375 |  | 9.375 | 1875 | B,L,P |
| 8.2 | Technical evaluation and posting of preliminary prequalified bids | Daily | 6.25 |  | 6.25 | 1562.5 | B,L,P |
| 8.3 | Evaluate the total process and Approve posting | Daily | 0.0625 |  | 0.0625 | 1093.75 | B,L,P |
| 8.4 | Prepare decision proposal | weekly | 1 | 1 | 2 | 104 | B,L,P |
| 8.5 | Follow on final decision by endorsing committee | weekly | 1 | 1 | 2 | 104 | B,L,P |
| 9.1 | Prepare official winner list | weekly | 0.5 | 0.5 | 1 | 52 | B,L,P |
| 9.2 | Review and endorse the winner List and issues with cover letter | weekly | 0.125 | 0.125 | 0.25 | 13 | secretary |
| 9.3 | Make sure all participants received the result by their signature on attachment list of supplier | weekly | 0.25 | 0.25 | 0.5 | 26 | secretary |
| 9.4 | Receive, Record complaints and prepare response from BID document acritical and evaluation result | weekly | 0.5 | 0.5 | 1 | 52 | Tender Clark IT technician |
| 9.5 | Review and Verify the response | weekly | 0.125 | 0.125 | 0.25 | 13 | D |
| 9.6 | Follow the response as issued to the complaint until the issue is closed | weekly | 0.25 | 0.25 | 0.5 | 26 | B, L,P |
| 10.1 | Prepare purchase order | Daily | 0.25 | 0.25 | 0.5 | 125 | B, L,P |
| 10.4 | Prepare contract agreement | Daily | 0.25 | 0.25 | 0.5 | 250 | B, L,P |
| 10.5 | Follow Contract signing by authorized body from both parties | Daily | 0.125 | 0.125 | 0.25 | 62.5 | B, L,P |
| 10.6 | Follow receipt of performance security and Performa Invoice | Daily | 0.0625 | 0.0625 | 0.125 | 31.25 | B, L,P |
| 11.1 | Fill and verify the insurance form (Arrange insurance and transport if supplier is not responsible) | Daily | 0.25 | 0.25 | 0.5 | 250 | Clerk |
| 11.2 | Verify the format | daily | 0.0625 | 0.0625 | 0.125 | 31.25 | Contract reviewer |
| 11.3 | Approve the insurance and submit to insurance company | Daily | 0.125 |  | 0.125 | 31.25 | Supply Chain management graduate |
| 11.4 | Make sure National bank authorization letter is issued and filled along the contract | daily | 0.042 | 0.042 | 0.083 | 20.83 | banking |
| 11.5 | Follow to get foreign currency permit | daily | 1 |  | 1 | 250 | Bank |
| 11.6 | Follow Opening of LC or cash reserve for CAD | Daily | 0.25 | 0.125 | 0.375 | 187.5 | Bank |
| 11.7 | Proactive notification of suppliers on CAD | daily | 0.125 | 0.125 | 0.25 | 125 | Management |
| 11.8 | Electronic mail reminder to concerned supplier to initiate shipment | daliy | 0.0625 | 0.0625 | 0.125 | 62.5 | P |
| 11.09 | Collect relevant shipping document from supplier/bank and check the completeness of the documents | Daily | 0.0625 | 0.0625 | 0.125 | 62.5 | Management |
| 11.1 | Measure performance of the supplier | Monthly | 0.5 | 0.5 | 1 | 12 | B,L,P |
| 11.11 | Take necessary action | monthly | 0.5 | 0.5 | 1 | 12 | B,L,P |
| 11.12 | Maintain and communicate the performance records of the suppliers | monthly | 0.0625 | 0.0625 | 0.125 | 31.25 | B,L,P |
| 12.1 | Post the details of the shipping documents on transit registration format | Daily | 0.0625 | 0.0625 | 0.125 | 31.25 | P |
| 12.2 | Identify the mode of shipment | Daily | 0.0625 | 0.0625 | 0.125 | 3.125 | P |
| 12.3 | Complete declaration formality and import permit | daliy | 0.125 | 0.125 | 0.25 | 62.5 | Management |
| 12.4 | Settlement of freight charges | daliy | 0.125 | 0.125 | 0.25 | 62.5 | Bank |
| 12.5 | Follow ,Arrange inspection and get release permit from regulatory body | Daily | 0.125 | 0.125 | 0.25 | 62.5 | P |
| 12.6 | Collect tax assessment | daliy | 0.25 | 0.25 | 0.5 | 125 | P |
| 12.7 | Prepare exemption paper or pay tax if any ( e.g. CPO) | daily | 0.125 | 0.125 | 0.25 | 62.5 | Management |
| 12.8 | Follow and Settlement of storage and demurrage charges | Daily | 0.125 | 0.125 | 0.25 | 125 | Management |
| 12.9 | Identify and follow up on the final destination warehouse of the product | Daily | 0.5 | 0.5 | 1 | 315 | P |
| 13.1 | Determine the volume & nature of the shipment | weekly | 0.125 | 0.125 | 0.25 | 13 | P |
| 13.2 | Estimate the transport needs (kind & number of trucks) | weekly | 0.125 | 0.125 | 0.25 | 13 | P |
| 13.3 | Instruct the transport unit/ out source | weekly | 0.25 |  | 0.25 | 13 | Management |
| 13.4 | Receive the product from air port custom and monitor load on trucks and deliver to its identified destination. | Daily | 1.5 | 1.5 | 3 | 750 | P |
| 14.1 | Inspection for damage & missing products at receiving area | Daily | 1 | 1 | 2 | 500 | P |
| 14.2 | Transfer consignment to store by filling transfer note | Daily | 1 | 1 | 2 | 630 | P |
| 15.1 | Define criteria for evaluation | Annually | 1 | 1 | 2 | 2 | B, L,P |
| 15.3 | Conduct evaluation | Quarterly | 1 | 1 | 2 | 8 | B, L,P |
| 15.4 | Rank the supplier performance(green, yellow and red) | Quarterly | 0.25 | 0.25 | 0.5 | 2 | B, L,P |
| 17.1 | Identify shipment with pitfall and report | Daily | 0.125 | 0.125 | 0.25 | 62.5 | P |
| 17.2 | Fill and submit claim form to insurance company within the intended period | Weekly | 0.125 | 0.125 | 0.25 | 13 | Bank |
| 17.3 | Follow up the settlement for the claim from Fund mgt process | weekly | 0.0625 | 0.0625 | 0.125 | 6.5 | Bank |
| 17.4 | Prepare summary report | weekly | 0.0625 | 0.0625 | 0.125 | 6.5 | bank |
| 18.2 | Prioritize supplier | Quarterly | 0.5 | 0.5 | 1 | 4 | B, L,P |
| 19.1 | Prepare and follow Contracting with the awarded supplier | Daily | 0.0625 | 0.0625 | 0.125 | 31.25 | L, P |
| 19.3 | Aggregate report on delivery to respective destination , Rank on the performance level against the contract, present and discuss on the outcome | Quarterly | 0.25 | 0.25 | 0.5 | 2 | B, L, P |
| 22.5 | Place warranty claim to the supplier for maintenance | monthly | 0.125 | 0.125 | 0.25 | 3 | Bank |
|  |  |  |  |  |  |  |  |

Table : Procurement HR summary

| S.No | Title | Competence requirement | Total days /year | # of requirement | Estimated # net requirement |  |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | Director | PHD 3 year  MSC/MBA 5 years  7 years for Pharm+ Management graduate or B. Pharm and MSC/MBA |  |  | 2 |  |
| 2 | Installation and Surveillance Officer | Biomedical Engineer 2 years’ experience | 369.5 | 1.68 | 2 |  |
| 3 | Banking and insurance | Management/ Supply chain and logistics graduate 3 years’ experience | 707.5 | 3.22 | 3 |  |
| 4 | Medical equipment Tender Management Officer | Biomedical engineers 2 years’ experience | 570.45 | 2.59 | 3 |  |
| 5 | Laboratory product tender management Officer | Lab Technologist 5 years or pharmacist and 4 years’ experience | 772.835 | 3.51 | 4 |  |
| 6 | Assistant tender Security officer | IT or Accounting or management Level IV and 2 years’ experience | 218.75 | 0.99 | 1 |  |
| 7 | Banking and documentation officer | Management or Supply chain graduate with 3 years’ experience | 878 | 3.99 | 4 |  |
| 8 | Order triage Officer | Diploma In pharm 2 years’ experience | 250 | 1.14 | 1 |  |
| 9 | Medicine tender management Officer | Pharmacist with 3 and 4 years’ experience | 6307.05 | 28.67 | 18 |  |
|  | Port clearance officer | Pharmacist |  |  | 8 |  |
|  | Contract follow up officer | Pharmacist |  |  | 2 |  |
|  | Medical Supplies tender management Officer | Biomedical engineer or pharmacist or Nurses | 684.54 | 3.11 | 3 |  |
|  | Tender management clerk | Tender clerk | 242 | 1.1 | 1 |  |
|  | Secretary | Secretarial course Level IV or degree | 316.375 | 1.44 | 2 |  |
|  |  |  |  | 51.44 | 54 |  |

### Process time for warehousing and inventory management

Table : Process time for Warehousing and Inventory Management Sub process (at Centre/Branch)

| **Ser No** | **Detail Activities** | **Location of work** | **When to accomplish** | Branch | | center | | **Competency and Job title** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **How fast to accomplish (days)** | **Total days/ year** | **How fast to accomplish (days)** | **Total days/ year** |
| 1.1 | Based on advance shipment notification, Communicate respective warehouses [INTERFACE] | Process | Monthly/ Every day | 0.25 | 3 | 0.03125 | 7.8 | C |
|
| 1.2 | Prepare storage location/receiving area and plan for unloading/receipt | Process | Monthly/ Every day | 4 | 48 | 1.25 | 312.5 | C |
|
| 2.1 | warehouse manager inspects arriving shipment and prepare for unloading ( avail MHE, personnel for unloading) | Process | Monthly/ Every day | 2.5 | 30 | 1 | 250 | C |
|
| 2.2 | Conduct unloading | Process | Monthly/  Every day | 4 | 48 | 1.5 | 375 | I |
|
| 3.1. | Segregate incoming consignments with item type, batch, expiry etc | Process | Monthly/ Every day | 32 | 384 | 1.25 | 312.5 | C,I |
| 4.1. | Check/ verify the package, quantities and condition or quality against the documentation  ( Physical inspection) | Process | Monthly/ Every day | 8 | 96 | 2 | 500 | C,B |
|
| 4.2 | Check for any discrepancy (difference in product, quantity, quality, batch and expiry ) and notify if any | Process | Monthly/ Every day | 2 | 24 | 1.5 | 375 | C,B |
|
| 5.1 | Conduct physical inspection for QC | QM | Every day | 0.25 | 3 | 0.25 | 62.5 | C,B |
| 5.2 | Monitor package integrity/tampering | QM | Every day | 0.25 | 3 | 0.25 | 62.5 | C,B |
| 5.3 | Check temperature monitoring device readings for excursions | QM | Every day | 0.125 | 31.25 | 1.25 | 312.5 | C,B |
| 5.4 | Physical inspection for medical devices: at ports of entry, PFSA warehouses, or at health facility stores for cross-docked items. | Process | Every day | 0.25 | 62.5 | 0.25 | 62.5 | C,B |
|
| 5.5. | Register a unique ID and serial number of medical devices at receiving and HFs level | Process | Every day | 0.25 | 62.5 | 0.25 | 62.5 | C,B |
| 6.1 | Put signature for proof of receipt on shipping documents | process | Monthly/ Every day | 2.5 | 30 | 0.25 | 62.5 | C |
|
| 6.2 | Record goods received on appropriate formats | Process | Monthly/ Every day | 1 | 12 | 0.0625 | 15.6 | C,G |
|
| 7.1 | Capture receipt data on HCMIS | Process | Monthly/ Every day | 2.08 | 25 | 0.665 | 167 | C,G |
|
| 7.2 | Review receipt, approve and generate GRNF | Process | Monthly/ Every day | 1 | 12 | 0.25 | 62.5 | C,B,A |
|
| 8.1 | Costing and print GRV (GRV for costing, distribution of GRV copies -procurement & distribution) | Fund Mgt | 0 | 0 | 0 | 0 | 0 |  |
| 9.1 | Identify Storage Location (vacant spaces in the rack, bulk storage area, pick face etc.) | Process | Monthly/ Every day | 1 | 12 | 0.125 | 31.25 | C,B |
|
| 9.2 | Move Products (using forklift transport to the allocated space) | Process | Monthly/ Every day | 8 | 96 | 8 | 2000 | H,I |
|
| 10.1 | Update records (Bin card) | Process | Monthly/ Every day | 10 | 120 | 1.25 | 312.5 | G |
|
| 10.2 | Monitoring of storage conditions including cold chain such as temperature, humidity, lighting and sunlight. | Process | Every day | 0.125 | 31.25 | 1.25 | 312.5 | C |
|
| 10.3 | Cleaning of the warehouse | Process | Every day | 4 | 1000 | 40 | 4000 | J |
|
| 10.4 | Monitoring store security and safety to ensure that relevant equipment and security procedures are adhered | Process | Every day | 1 | 250 | 10 | 2500 | K |
|
| 10.5 | Conduct ongoing risk assessment and plan for risk mitigation | Process | Every week | 1 | 52 | 10 | 520 | K |
| 10.6 | Check fire safety procedures, fire extinguishers, smoke detectors and stand-by generator and take appropriate actions. | Process | Every day | 0.375 | 93.75 | 3.75 | 937.5 | K |
|
| 11.1 | Receiving STV and clustering the customer orders | Process | Every day | 1.86 | 468 | 1.25 | 312.5 | C,E |
|
| 11.2 | Picking products from the correct storage location and marshalling/staging | Process | Every day | 5 | 1250 | 5 | 1250 | I |
|
| 12.1 | Identify product and quantity to be replenished | Process | Every day | 1.25 | 312.5 | 2 | 500 | C,B |
|
| 12.2 | Move /replenish products to the fine pick area/half pallet rack | Process | Every day | 1.25 | 312.5 | 2 | 500 | I |
|
| 13.1 | Check orders against the STV to ensure that the correct product, quantity, expiry and batch number has been picked. | Process | Every day | 2.5 | 625 | 1.25 | 312.5 | E |
|
| 13.2 | Identify nature of products picked (NPS, hazardous, cold chain, etc). | Process | Every day | 0.5 | 125 | 0.25 | 62.5 | C,B,E |
|
| 13.3 | Pack orders by destination into the correct sized box or boxes or onto a pallet or wrapping up of a single order into a casing, or sealing loose cartons and box orders that have been picked. | Process | Every day | 1 | 250 | 1.25 | 312.5 | E,I |
|
| 13.4 | Apply right labels containing consignment description and description of receiving destination facility | Process | Every day | 0.3125 | 78.13 | 0.375 | 93.75 | E,I |
|
| 14.1 | Identify products to be kitted, for which program and facility | Process | Every quarter | 5 | 20 | 15 | 60 | C,B,I |
| 14.2 | Ensure kitting material readiness (packaging materials, labels) | Process | Every quarter | 1 | 4 | 2 | 8 | C,B,I |
| 14.3 | Pick, check and kit | Process | Every quarter | 5 | 20 | 15 | 60 | C,B,I |
| 14.4 | Labeling the kit (MRP, Logo) | Process | Every quarter | 5 | 20 | 15 | 60 | C,B,I |
| 14.5 | Store and dispatch the kit when needed | Process | Every quarter | 5 | 20 | 15 | 60 | C,B,I |
| 15.1 | Identify premises and MHE for maintenance | Process | Every week | 0.25 | 62.5 | 0.25 | 62.5 | C,B |
|
| 15.2 | Report and request for maintenance | Process | Every week | 1.25 | 63.5 | 0.25 | 62.5 | A |
| 15.3 | Follow up and provide feed back | Process | Every week | 0.125 | 31.25 | 0.125 | 31.25 | A |
|
| 1.1 | Design recording and reporting formats (Bin card, stock card, HPMRR, RRF, IFRR...) | process | Annually | 0 | 0 | 50 | 50 | A,B |
| 1.2 | Familiarize the format (Conduct LMIS related capacity building activities) | process | Annually | 24 | 24 | 5 | 5 | A,B |
| 1.3 | Print and distribute formats (at cost, if necessary) | process | Biannually | 5 | 10 | 10 | 20 | A,B |
| 1.4 | Facilitate Implementation and utilization of formats | process | Quarterly | 45 | 180 | 45 | 180 | D |
| 1.5 | Facilitate automation and enhance data visibility | process | Every day | 5 | 1250 | 5 | 1250 | D |
| 2.1 | Form virtual team from relevant stakeholder | process | Annually | 0 | 0 | 2 | 2 | B1 |
| 2.2 | Drafting the proposal to define inventory management models and refill period | process | Annually | 0 | 0 | 15 | 15 | A,B |
| 2.3 | Endorse of the proposed design | process | Annually | 0 | 0 | 5 | 5 | A,B |
| 2.4 | Follow the implementation of inventory control policies | process | Every day | 1 | 250 | 1 | 250 | A,B,D |
| 3.1 | Establish command post for routine monitoring of facility inventory level | process | Annually | 5 | 5 | 5 | 5 | A |
| 3.2 | Conduct on-going follow-up stock situation for all hospitals | process | Weekly | 7 | 364 | 10 | 520 | B |
| 3.3 | Identify gaps, if any, and communicate appropriate bodies | process | Weekly | 1 | 52 | 2 | 104 | B |
| 3.4 | Follow-up of response, product supply or otherwise | process | daily | 2.5 | 625 | 5 | 1250 | B |
| 4.1 | Aggregate Calculated AMC from health facility | Process | Bimonthly | 10 | 60 | 40 | 240 | B |
| 4.2 | Assess stock situation (MOS, SSA, CSA,) | Process | Monthly | 25 | 300 | 60 | 720 | B |
| 4.3 | Prepare and communicate the report to relevant units (Monthly quarterly, semiannual, annually ) | Process | Monthly | 3 | 36 | 5 | 60 | B |
| 4.4 | Prepare report on over stock, slow moving, short expire, damaged and expired products and take appropriate action | Process | Quarterly | 5 | 20 | 10 | 40 | B |
| 5.1 | Establish reporting schedule by routes and SDPs update | Process | Biannually | 2 | 4 | 2 | 4 | B |
| 5.2 | Collect RRF and Verify against the checklist (quality, completeness, timeliness, service static data against their budgeted annual forecasted demand) | process | Monthly | 58 | 700 | 10 | 60 | B,D |
| 5.3 | Provide feedback to health facilities/hub based on the findings of verification | process | Monthly | 5 | 60 | 2 | 24 | B,D |
| 5.4 | Review stock status and approve refill quantity | process | Monthly | 60 | 1200 | 80 | 960 | B,D |
| 5.5 | Print pick lists and reconcile with Budget for RDF | process | Daily | 2.75 | 687.75 | 1.25 | 312.5 | D |
| 5.6 | Approve the pick list | process | Daily | 2.75 | 687.75 | 1.25 | 312.5 | B |
| 5.7 | Print issue vouchers ( STV), register STV numbers on registration book & tracking sheet, and hand over to distributor | process | Daily | 8 | 2000 | 6 | 1500 | L |
| 5.8 | Send Electronic Invoice to destination/receiver  ( notification form) | process | Daily | 0.25 | 125 | 3 | 750 | D |
| 6.1 | Assess level of order fulfillment | process | Monthly | 40 | 480 | 20 | 240 | B,D |
| 6.2 | Fill back order as soon as possible (if any) | process | Monthly | 40 | 480 | 20 | 240 | B,D |
| 7.1 | Identify important items those have high transaction, high cost, black market value, sensitivity to damage and expiry. | Process | Quarterly | 40 | 160 | 4 | 16 | A,B |
| 7.2 | Prepare cyclic inventory count sheet & write an identified items | process | Quarterly | 15 | 60 | 6 | 24 | A,B,C |
| 7.3 | Signing on the inventory count result | process | Quarterly | 0 | 0 | 0 | 0 | A,B,C |
| 7.4 | Conduct physical inventory /cycle count/surprise count | process | Quarterly | 10 | 40 | 100 | 400 | A,B,C |
| 7.5 | Compare to stock control record counts with physical count | process | Quarterly | 2.5 | 10 | 12 | 48 | A,B,C |
| 7.6 | Investigate and Report in case there is discrepancy (if any ) | process | Quarterly | 2.5 | 10 | 2.5 | 10 | A,B,C |
| 7.7 | write a letter and report on cyclic inventory | process | Quarterly | 0 | 0 | 0 | 0 | A |
| 7.8 | submit the report finance & ODDG | process | Quarterly | 0 | 0 | 0 | 0 | A |
| 8.1 | Make necessary preparation for annual inventory ( get ready for cut of , sorting of the socks) | process | Daily | 2.5 | 625 | 2.5 | 625 | A,B,C |
| 8.2 | Assign team, conduct orientation, prepare material inputs for the count | process | Annually | 40 | 40 | 5 | 5 | A |
| 8.3 | Conduct physical inventory | process | Annually | 15 | 15 | 15 | 15 | A,B,C |
| 8.4 | Reconcile the count as per the guide | process | Annually | 2 | 2 | 2 | 2 | A,B,C |
| 8.5 | Conduct shortage and overage analysis and submitted report | Fund Mgt | Annually | 0 | 0 | 0 | 0 | 0 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| HR Summary for Warehouse and Inventory Management process at center | | | | |
| Code | Responsible staff | Description | Total days per year | Number of HR estimated (131) |
| A | Process owner/Director | 1. Phar with relevant management training |  | 1 |
| B | WIM officer IV /coordinator | Assistance process owner /manager |  | 2 |
| B | WIM officer (I, II, III,IV) | Degree in B. Pharm, SCM or Master | 4416.5 | 22 |
| Warehouse management coordinator (RDF, Health program) |  |  |
| Warehouse management officers (RDF, health Program) 2 per warehouse |  |  |
| Inventory Control management coordinator (RDF, Health program) |  |  |
| Inventory Control officer for pharmaceuticals (RDF medicines, Health program) as per each program type |  |  |
| Inventory Control officer for Laboratory (RDF, Health program) |  |  |
| Inventory Control officer for medical equipments (RDF, Health program) , Biomedical engineer |  |  |
| C | Warehouse manager | Degree in pharmacy, SCM | 2875 | 15 |
| * Receiving Warehouse manager |  |  |
| * Storage Warehouse manager |  |  |
| * Dispatch Warehouse manager |  |  |
| D | LMIS Officer | B. Pharm with relevant training on LMIS and IT | 4018.5 | 20 |
| * Customer order managing officer |  |  |
| * Report analyzer |  |  |
| E | Dispatch checker | Pharmacy Diploma (2 per warehouse) | 693 | 4 |
| F and G | Document follow-up officer | Diploma in Accounting/Supply chain management | 403 | 2 |
| Store clerk | Diploma in Accounting/Supply chain  Management (2 per warehouse) |
| H | Forklift deriver | High School graduate with special deriving license (The number is based on the no. of forklifts) | 1000 | 5 |
| I | Picker and Packer | High School graduate (As per warehouse 13) | 2584 | 13 |
| J | Warehouse Cleaner | 8th grade complete(As per warehouse 2 cleaner) | 4000 | 20 |
| K | Warehouse health and safety | Diploma in health related fields (As per the warehouse one officer) | 3957 | 20 |
| L | Invoice clerk | Diploma in Accounting/Supply chain  Management | 1500 | 6 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **HR Summary for Warehouse and Inventory Management process at Branch** | | | | |
| Code | Responsible staff | Description | Total days per year | Number of HR estimated  (81) |
| A | Process owner | B. Phar with relevant management training |  | 1 |
| B | WIM officer (I,II,III,IV) | B. Pharm | 4004 | 20 |
| Warehouse management coordinator (RDF, Health program) 2 per warehouse |  |  |
| Warehouse management officers (RDF, health Program) 2 per warehouse |  |  |
| Inventory Control coordinator (RDF, Health program) |  |  |
| Inventory Control officer for Pharmaceuticals (RDF, Health program) |  | 2 |
| Inventory Control officer for Laboratory chemical and reagents (RDF, Health program) |  | 2 |
| Inventory Control officer for Medical equipments (RDF, Health program) |  | 2 |
| C | Warehouse manager | Degree in pharmacy, SCM (as per warehouse 6 | 1286 | 7 |
| * Receiving |  |  |
| * Storage |  |  |
| * Dispatch |  |  |
| D | LMIS Officer | B. Pharm with relevant training on LMIS and IT | 4575.75 | 21 |
| * Customer order management officer |  |  |
| * Report analyzer |  |  |
| E | Dispatch checker | Pharmacy Diploma (As per the warehouse 2 ) | 1064 | 5 |
| F | Document follow-up officer | Diploma in Accounting/Supply chain management | 0 | 0 |
| G | Store clerk | Diploma in Accounting/Supply chain  Management | 134 | 1 |
| H | Forklift deriver | High School graduate with special deriving license | 483 | 3 |
| I | Picker and Packer | High School graduate | 2015 | 11 |
| J | Warehouse Cleaner | 8th grade complete | 1005 | 5 |
| K | Warehouse health and safety | Diploma in health related fields | 396 | 2 |
| L | Invoice clerk | Diploma in Accounting/Supply chain  Management | 1000 | 4 |

### Process time for Distribution sub process

Table : HR Requirement for Distribution from Central to Hubs

| **S/n** | **Major Activities** | **Detail Activities** | **Location of work** | **When to accomplish** | **How fast to accomplish (days) Health Program** | **How fast to accomplish (days) RDF** | **Total RDF and Health Program** | **Total days/ year** | **Competency and Job title** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Ordinary Distribution** |  |  |  |  |  |  |  |
| 1 | Receive copy of distribution documents ( STV) from WIM | Receive Issue documents to prepare transportation schedule | Process | Daily | 0.125 ( 1hours) | 0.125 ( 1hours) | 0.25 | 62.5 | E |
| 2 | Arrange the distribution documents orderly | Process | Daily | 0.125 ( 1hours) | 0.25 ( 2 hours) | 0.375 | 93.75 | E,D |
| 3 | Registered each distribution documents on registration book | Process | Daily | 0.25 ( 2 hours) | 0.5 ( 4 hours) | 0.75 | 187.5 | E |
|  | Hand over the documents to driver/delivery personnel | Process | Daily | 0.125 ( 1hours) | 0.125 ( 1hours) | 0.25 | 62.5 | E |
| 4 | Arrange distribution plan and assign fleets | Preparing delivery schedule and route plan | Fleet | Annually | 3 | 3 | 6 | 6 | E,F,M |
| 5 | Prepare weekly plan for the transport need | Process | Weekly | 0.75 ( 6 Hours) | 0.5 ( 4 hours) | 1.25 | 312.5 | F |
| 6 | Estimate weight ,volume of the products and determine number of vehicle | Process | Daily | 0.5 ( 4 hours) | 0.75 ( 6 Hours) | 1.25 | 312.5 | E,M |
| 8 | Assess own vehicle capacity and the need for outsourcing | Process | Daily | 0.125 ( 1hours) | 0.125 ( 1hours) | 0.25 | 62.5 | F |
| 9 | Truck the where about of vehicles using GPS | Process | Daily | 1 | 1 | 2 | 500 | F |
|  | Summarize GPS reports/outputs such as driver behavior, risk management…. | Process | Daily | 0.125 ( 1hours) | 0.125 ( 1hours) | 0.25 | 62.5 | F |
|  | Receive dispatched products from WIM Sub process | Dispatched products are verified against STVs/DNs | Process | Daily | 0.5 ( 4 hours) | 0.5 ( 4 hours) | 1 | 250 | WIM activities |
|  | Products received by dispatcher | Process | Daily | 0 | 0 | 0 | 0 | WIM activities |
|  | Dispatcher in turn hand over to driver | Process | Daily | 0.5 ( 4 hours) | 0.5 ( 4 hours) | 1 | 250 | Number of drivers can be determined based on the number of available vehicles |
|  | Packing, sealing, labeling and signing | Post MRP on the items/primary packaging materials/ | Process | Daily | 0.5 ( 4 hours) | 0.25 ( 2 hours) | 0.75 | 187.5 | E |
| 15 | Pack items according to SOP | Process | Daily | 0.25 ( 2 hours) | 0.25 ( 2 hours) | 0.5 | 125 | E |
| 16 | labeled and sealed cartons with PFSA logo | Process | Daily | 0.125 ( 1hours) | 0.125 ( 1hours) | 0.25 | 62.5 | E |
| 18 | loading and delivery to hubs | Loading on trucks | Process | Daily | 0 | 0 | 0 | 0 | **Can be done at Hub WIM** |
| 19 | Present the STVs / DNs/ to WIM at the Hub | Process | Daily | 0 | 0 | 0 | 0 |
| 20 | WIM forward the documents to documentation clerk | Process | Daily | 0 | 0 | 0 | 0 |
| 21 | Documentation clerk register the documents and forward it to receiver store manager | Process | Daily | 0 | 0 | 0 | 0 |
|  | Unload and received by hub | Receive STVs/DNs by receiver warehouse manager | Process | Daily | 0 | 0 | 0 | 0 |
|  | Sorting the products by batch number, expiry date… | Process | Daily | 0 | 0 | 0 | 0 |
|  | Inspection for damage and missing and report to immediate supervisor | Process | Daily | 0 | 0 | 0 | 0 |
|  | Stored the product for transit time at receiving area then transfer it to storage area using intran office transferring voucher | Process | Daily | 0 | 0 | 0 | 0 |
|  | Driver receive a copy of signed and stamped STVs/DNs along with IGRV | Process | Daily | 0 | 0 | 0 | 0 |
| 24 | Submit POD to Document follow up team at Central | Organize and keep a copy of all issue transaction documents which are finalized | Process | Daily | 0.375 ( 3 hours) | 0.25 ( 2hours) | 0.625 | 156.25 | D |
| 25 | Verify the validity of transaction documents by looking signatures, dates, etc. | Process | Daily | 0.375 ( 3 hours) | 0.25 ( 2 hours) | 0.625 | 156.25 | D |
| 26 | Receive stamped copies of invoices (STVs and delivery notes) and receiving vouchers as a proof of receipt for items delivered | Process | Daily | 0.375 ( 3 hours) | 0.375 ( 3 hours) | 0.75 | 187.5 | D |
| 27 | Verify the quantities, Exp date, Batch Number, Price, Medical device ID and serial Number etc, etc. of receipt documents with the original issue documents | Process | Daily | 1.25 | 1.25 | 2.5 | 625 | D |
| 28 | Report discrepancies to his /her immediate supervisor | Process | Daily | 0.125 ( 1hours) | 0.25 ( 2hours) | 0.375 | 93.75 | D |
|  | Sort out the reason of discrepancies and put recommendations to relevant bodies | Process | Daily | 0.125 ( 1hours) | 0.25 ( 2hours) | 1.375 | 343.75 | D |
| 29 | Communicate documents and amounts to insurance company when insurance coverage is required. | Process | Daily | 0.25 ( 2hours) | 0.125 ( 1hours) | 0.375 | 93.75 | E,M |
|  |  | **Insurance** |  |  |  |  |  |  |  |
| 1 | Insurance Version | Receive dispatched copy invoices | Process | Daily | 0.125 | 0.125 | 0.25 | 62.5 | G |
| 2 | Calculate total amount of all invoices | Process | Daily | 0.25 | 0.0625 | 0.3125 | 78.125 | G |
| 3 | Estimate the insurance cost | Process | Daily | 0.25 | 0.125 | 0.375 | 93.75 | G |
| 4 | Submit to Insurance Company | Process | Daily | 0.125 | 0.0625 | 0.1875 | 46.875 | G |
| 5 | Collect Debt note and submit to Fund | Process | Daily | 0.125 | 0.0625 | 0.1875 | 46.875 | G |
|  |  | **Disposal of unfit for use products version** |  |  |  |  |  |  |  |
| 1 | Disposal of unfit for use products version | List unfit for use products | WIM | Quarter | 1 | 1 | 2 | 8 | E |
| 2 | Sort out unfit for use products | WIM | Quarter | 1 | 1 | 2 | 8 | E |
| 3 | Reason out the cause of unfit for use | WIM | Quarter | 8 | 5 | 13 | 52 | E |
| 4 | Report to Director General for decision | WIM | Quarter | 0.5 | 0.5 | 1 | 4 | E |
| 5 | Form disposal committee | WIM | Quarter | 0.5 | 0.5 | 1 | 4 | E |
| 6 | Report to FMHACA | WIM | Quarter | 1 | 1 | 2 | 8 | E |
| 7 | Make ready disposal sites | WIM | Quarter | 7 | 3 | 10 | 40 | E |
| 8 | Arrange vehicle and dispose the products | WIM | Quarter | 2 | 2 | 4 | 16 | E |
| 9 | Collect destruction certificate and right off the products from documents | WIM | Quarter | 1 | 1 | 2 | 8 | E |
|  |  | **Medical Equipment** |  |  |  |  |  |  |  |
| 1 | Medical Devices Version | Follow the special precaution of medical device distribution | Process | Daily | 0.125 | 0.125 | 0.25 | 62.5 | M |
| 2 | Truck where about the capital medical device | Process | Daily | 0.125 | 0.125 | 0.25 | 62.5 | M |
| 3 | Follow installation of medical device | Process | Daily | 0.125 | 0.125 | 0.25 | 62.5 | M |
| 4 | training and commissioning of installed devices | Process | Daily | 0.125 | 0.125 | 0.25 | 62.5 | M |
| 5 | Follow until the warranty period | Process | Daily | 0.125 | 0.125 | 0.25 | 62.5 | M |
| 6 | Report to relevant body on installed and commissioned devices | Process | Daily | 0.125 | 0.125 | 0.25 | 62.5 | M |

**HR Summary for Distribution from Central to Hubs**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Code** | **Job Title** | **Competency** | **Total days/year** | **Number of performers Total days per year/200days** | **Number of HR Estimated** |
| A | Process Owner | B.Pharm |  |  | 1 |
| D | Document Follow up | Diploma in Accounting | 1718.5 | 8.5 | 9 |
| E | Distribution Pharmacist | B.Pharm | 1341 | 6.7 | 7 |
| F | Fleet Scheduling and follow up | Degree in Management | 935.5 | 4.7 | 5 |
| G | Insurance officer | Degree in Accounting | 328 | 1.6 | 2 |
| M | Biomedical Engineer | Degree in Biomedical Engineering | 411.75 | 2.1 | 2 |
|  | | **Total Estimate** |  |  | **26** |

Table :HR Requirement for Distribution from Hubs to Health Facilities

| **S/n** | **Major Activities** | **Detail Activities** | **Location of work** | **When to accomplish** | **How fast to accomplish (days) Health Program** | **How fast to accomplish (days) RDF** | **Total RDF and Health Program** | **Total days/ year** | **Competency and Job title** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | Prepare distribution schedule | Prepare distribution schedule and route map | Hub | Bimonthly | 1 | 2 | 3 | 18 | E |
| 2 | Communicate facilities on delivery schedule | Hub | Bimonthly | 2 | 2 | 4 | 24 | E |
| 3 | Receive copy of distribution documents from WIM | Receive and evaluate Issue documents to prepare transportation schedule | Process | Daily | 0.25 ( 2 hour) | 0.375 (3 hours) | 0.615 | 153.75 | E |
| 4 | Arrange the distribution documents orderly | Process | Daily | 0.125 ( 1 hour) | 0.125 ( 1 hour) | 0.25 | 62.5 | D |
| 5 | Registered each distribution documents on registration book | Process | Daily | 0.125 ( 1 hour) | 0.125 ( 1 hour) | 0.25 | 62.5 | D |
| 6 | Hand over the documents to driver/delivery personnel | Process | Daily | 0.125 ( 1 hour) | 0.125 ( 1 hour) | 0.25 | 62.5 | D |
| 7 | Fleet arrangement | Communicate the route volume and weight to fleet unit to assign trucks | Hub | Daily | 0.125 ( 1 hour) | 0.125 ( 1 hour) | 0.25 | 62.5 | E,F |
| 8 | Decide whether to use its own trucks or outsourcing Decides the transport requirement | Hub | Daily | 0.125 ( 1 hour) | 0.125 ( 1 hour) | 0.25 | 62.5 | F |
| 9 | Products are loaded to trucks if customers take it in person or Products are loaded according to the health facilities route map if direct delivery is practiced | Hub | Daily | 0.375 (3 hours) | 0.375 (3 hours) | 0.75 | 187.5 | G |
| 10 | Dispatching and Handing over products | Products are dispatched as per the documents | Hub | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 | Check the products description, batch no., expiry date, quantity etc… | Hub | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | Warehouse managers hand over the product to dispatch officers | Hub | 0 | 0 | 0 | 0 | 0 | 0 |
| 13 | Receive products by deliver personnel | Hub | Daily | 0.375 (3 hours) | 0.5 ( 4 hours) | 0.875 | 218.75 | G |
| 14 | Packing, labeling and signing | Post MRP on the items/primary packaging materials/ | Hub | Daily | 0.125 ( 1 hour) | 0.125 ( 1 hour) | 0.25 | 62.5 | E |
| 15 | Pack items according to SOP | Hub | Daily | 0.125 ( 1 hour) | 0.125 ( 1 hour) | 0.25 | 62.5 | G |
| 16 | labeled and sealed cartons with PFSA logo | Hub | Daily | 0.125 ( 1 hour) | 0.125 ( 1 hour) | 0.25 | 62.5 | G |
| 17 | Proof of delivery collection | Deliver products to facilities and Preparation of model 19 (Quantity, cost, Batch & exp date should be entered) | Hub | Daily | 0.375 (3 hours) | 0.375 (3 hours) | 0.75 | 187.5 | G |
| 18 | One signed and stamped copy of Invoice or STVs/DNs along with model 19 will submitted to documentation follow up | Hub | Daily | 0.125 ( 1 hour) | 0.125 ( 1 hour) | 0.25 | 62.5 | G |
| 19 | Document Follow up | Keep a copy of all transaction documents which are finalized | Hub | Daily | 0.125 ( 1 hour) | 0.125 ( 1 hour) | 0.25 | 62.5 | D |
| 20 | Verify the validity of transaction documents by looking signatures, dates, etc. | Hub | Daily | 0.125 ( 1 hour) | 0.125 ( 1 hour) | 0.25 | 62.5 | D,G |
| 21 | Receive authorized copies of invoices, STVs, delivery notes and receiving vouchers from health facilities and other customers as a proof of receipt for items delivered | Hub | Daily | 0.125 ( 1 hour) | 0.125 ( 1 hour) | 0.25 | 62.5 | D,G |
| 22 | Verify the quantities, price, etc. of receipt documents with the original issue documents | Hub | Daily | 0.375 (3 hours) | 0.5 ( 4 hours) | 0.875 | 218.75 | D,G |
| 23 | Report discrepancies to his/her immediate supervisor | Hub | Weekly | 0.125 ( 1 hour) | 0.125 ( 1 hour) | 0.25 | 13 | D,G |
| 24 | Sort out the reason of discrepancies and put recommendations to relevant bodies | Hub | Weekly | 0.125 ( 1 hour) | 0.125 ( 1 hour) | 0.25 | 13 | E |
| 25 | Model 19 will submitted to fund management for further action | Hub | Weekly | 0.375 (3 hours) | 0.5 ( 4 hours) | 0.875 | 45.5 | D |

**HR Summary for Distribution from Hubs to Health facilities**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Code** | **Job Title** | **Competency** | **Total days/year** | **Number of performers Total days per year/200days** | **Number of HR Estimated** |
| D | Document Follow up | Diploma in Accounting | 714.5 | 3.6 | 3 |
| E | Distribution Pharmacist | B.Pharm | 333.75 | 1.7 | 2 |
| F | Fleet Scheduling and follow up | Degree in Management | 125 | 0.6 | 1 |
| G | Delivery Personnel | Diploma in Pharmacy | 1137.75 | 5.7 | 6 |
|  | | **Total Estimate** |  |  | **13** |

### Process time for Capacity Building and Operational Research

Table : Process time for capacity Building

| Detail Activities | When to accomplish | How fast to accomplish (days) central | Total days at center/  year | How fast to accomplish (days) branches | Total branch/ year | Competency and Job title |
| --- | --- | --- | --- | --- | --- | --- |
| **Training** |  |  |  |  |  |  |
| * 1. Identify the current and required level of skill and knowledge gaps across the pharmaceutical supply chain (external) | Quarter | 2 | 8 | 0 | 0 | P.L.B. M |
| * 1. Identify the current and required level of skill and knowledge gaps within the agency | Biannual | 2 | 4 | 0 | 0 | P.L.B.M |
| * 1. Prioritize the training gaps for intervention both within and outside the agency | Biannual | 8 | 16 | 0 | 0 | P.L.B.M |
| * 1. Develop draft training curriculum/revise the existing systems (IPLS, DTC, APTS, etc.)   *Note: Total 8 sub process develops one document every year. Draft document preparation 10 days, enrich via comment 3 days, incorporate and finalize document 10 days. 3 training documents developed annually which takes 180 days each* | Annually | 180 | 180 | 0 | 0 | P.L.B.M |
| * 1. Enrich the draft curriculum in 3 days workshop   *(SOP, trainer guide, participant guide for (*Quantification, procurement, Supply chain M and E, Distribution and fleet management, Warehouse management and Fund management)by technical team meetings | Annually | 120 | 120 | 15 | 15 | P.L.B.M |
| * 1. Give intense TOT for relevant trainers   *Note: (10 days TOT)* | Annually | 50 | 50 |  |  | P.L.B.M |
| * 1. Incorporate comments and develop the final training documents | Annually | 10 | 10 |  |  | P.L.B.M |
| * 1. Present for endorsement by top management | Annually | 1 | 1 |  |  | P.L.B.M |
| * 1. Map available resources for training scale up in collaboration with development partners (Technical and Financial) | Annually | 10 | 10 |  |  | P.L.B.M |
| * 1. Give trainings to relevant internal staffs to boost their capability in the their respective areas and   Note: *Internal staff: preparation (2) days, travel round trip (2) days, training (3) days x 5 trainers and 2 facilitators* | Annually | 49 | 49 | 5 | 5 | P.L.B.M |
| * 1. Train professionals from health facilities   *Noe: For facilities:- 3 preparation days + 5 training days. 4000HF times two staffs from each divided by 18 hubs and divided by 30 people in a round = 15 rounds. 8 x15 rounds=* | Annually | 5 | 5 | 120 | 120 | P.L.B.M |
| * 1. Prepare pre-test and post-test for all training areas to measure how much the trainees acquire the skill, attitude and knowledge | Annually | 4 | 4 | 0 | 0 | P.L.B.M |
| * 1. Develop checklists to evaluate the daily activities of the training to evaluate the reaction and behavioral change | Annually | 4 | 4 | 0 | 0 | P.L.B.M |
| * 1. Develop assessment tool to evaluate the training outcomes (implementation of the systems and tools trained) | Annually | 5 | 5 | 0 | 0 | P.L.B.M |
| * 1. Conduct assessment after implementation   *Note: (organize team, plan, travel, collect data)* | Annually | 10 | 10 | 120 | 120 | P.L.B.M |
| * 1. Organize the assessed data and evaluate for further analysis of the result | Annually | 20 | 20 | 0 | 0 | P.L.B.M |
| * 1. Take interventions as per the analysis results   *(Note: revise the training methodologies, addressing the right target audience, training approaches, gap filling trainings, editing manuals etc)* | Annually | 80 | 80 | 40 | 40 | P.L.B.M |
| Training center |  |  |  |  |  |  |
| 1. Consult the management and take actions to establish comprehensive supply chain management training center equipped with the latest technology   *(Note: Video conference center, syndicate meeting rooms, training hall, audio and video systems, screens, flip chart stands, cafeteria, health breaking space) so as to get ISO certification and continue with the statuesque* | Annually | 48 | 48 | 0 | 0 | P.L.B.M |
| * 1. Register training center by the continuous professionals development (CPD) at Ministry of Education | Annually | 10 | 10 | 0 | 0 | P.L.B.M |
| * 1. Collaborate with different professional associations to develop CPD curriculums, give the training and update annually | Annual | 30 | 30 | 0 | 0 | P.L.B.M |
| * 1. Announce on CPD service on different media outlets to register trainees | Annual | 2 | 2 | 0 | 0 | P.L.B.M |
| * 1. Deliver different CPD trainings on pharmaceuticals supply chain management   *Note: for both internal and external professionals with payment or by using sponsors.* | Annual | 60 | 60 | 0 | 0 | P.L.B.M |
| * 1. Continuous monitoring and evaluation of the quality of the trainings | Annual | 10 | 10 | 0 | 0 | P.L.B.M |
| **Mentorship** |  |  |  |  |  |  |
| 6.1. In collaboration with developmental partners identify areas that need mentorship (IPLS, APTS, Medical equipment management, DTC etc.) from reports and site visits | Annually | 2 | 2 | 5 | 5 | P.L.B.M |
| * 1. Develop mentorship tool for identified areas, comment and finalize | Annually | 20 | 20 | 5 | 5 | P.L.B.M |
| * 1. Secure necessary resources (budget, mix of professional with right expertise and logistics) | Quarter | 3 | 12 | 0 | 0 | P.L.B.M |
| * 1. Develop action plan | Quarter | 3 | 12 | 3 | 12 | P.L.B.M |
| * 1. Coordinate and deliver on site mentorships as per the identified area and relevant expertise   *Note: 5 days mentorship for health facilities by branches* | Quarter | 10 | 40 | 130 | 520 | P.L.B.M |
| * 1. Graduate and handover the facility | Annual | 5 | 5 | 5 | 5 | P.L.B.M |
| **Supportive supervision** |  |  |  |  |  |  |
| * 1. Develop checklist | Annual | 15 | 15 | 0 | 0 | P.L.B.M |
| * 1. Organize team from relevant, sub processes, partners, and stakeholders to conduct supportive supervisions | Annually | 5 | 5 | 0 | 0 | P.L.B.M |
| * 1. Select facilities eligible for supportive supervision | Quarterly | 5 | 20 | 5 | 20 | P.L.B.M |
| * 1. Conduct joint supportive supervision with relevant stakeholders and partners | Quarterly | 10 | 40 | 100 | 400 | P.L.B.M |
| * 1. Give oral and written feedbacks to facilities | Quarterly | 5 | 20 | 10 | 40 | P.L.B.M |
| * 1. Prepare supportive supervision report | Quarterly | 3 | 12 | 5 | 20 | P.L.B.M |
| * 1. Organize review meeting to share best experiences.   *Note: for 2 days and 2 travel days times 2 preparation days times 4 types of areas (professional mix) by region and one national* | Annually | 24 | 24 | 24 | 24 | P.L.B.M |
| **Material Support** |  |  |  |  |  |  |
| * 1. Identify gaps and quantify material (during JSS, telephone communication, structured assessment, monthly report)   *Note: federal hospitals will be covered by central* | Quarterly | 20 | 80 | 20 | 80 | P.L.B.M |
| * 1. Mobilize resources to purchase and print the materials | quarter | 3 | 12 | 0 | 0 | P.L.B.M |
| * 1. Prepare draft materials, quantify, send for printing, follow-up in printing house (give confirmation), collect the materials centrally | Quarter | 40 | 160 | 0 | 0 | P.L.B.M |
| * 1. Facilitate to acquire the necessary materials, arrange distribution as per the quantification, and make ready by having interface with general service and distribution sub process:   *Note: Materials include warehouse handling materials, (shelf, palate, trolley, Ventilator, ladder, Job aids, warehouse guidelines, locators, sign and symbols, posters, shelves, pallets, trolley), recording and reporting vouchers and formats (IFRR, RRF, HPMRR, BIN card, stock card, APTS vouchers (Model 19, model 22, sales tickets, registers, pad registers etc) STG, Formularies* | Quarter | 15 | 60 | 0 | 0 | P.L.B.M |
| * 1. Distribute the material to its destination (health facilities and or districts):   Note: *4 travel days, 1 days to hand over and 1 day to verify the documents* | Quarter | 6 | 24 |  |  | P.L.B.M |
| * 1. Write a report and continue follow up | Quarter | 4 | 12 |  |  | P.L.B.M |
| **Event Organization** |  |  |  |  |  |  |
| * 1. Receive request of event plan from both external and internal | Weekly | 4 | 208 | 2 | 104 | P.L.B.M. E |
| * 1. Arrange hall, refreshment, materials (microphone, training manual printing, duplication, stationaries, banner, LCD projector, tables, etc) for the event | Monthly | 2 | 24 | 1 | 12 | P.L.B.M. E |
| * 1. Organize and facilitate the event | Monthly | 20 | 240 | 10 | 10 | P.L.B.M. E |
| * 1. Produce report (news preparation, proceeding writing, taking pictures) | Monthly | 5 | 60 | 2 | 24 | P.L.B.M. E |
| **Operational Research** |  |  |  |  |  |  |
| * 1. Identify and prioritize area for operational research | Annually | 10 | 10 | 0 | 0 | P.L.B.M. |
| * 1. Get approval from director general or deputy director general on the selected areas | Annually | 2 | 2 | 0 | 0 | P.L.B.M. |
| * 1. Develop action plan including mobilization of resources and coordinating developmental partners | Annually | 5 | 5 | 0 | 0 | P.L.B.M. |
| * 1. Prepare operational research tool in various areas | Annually | 16 | 16 | 0 | 0 | P.L.B.M. |
| * 1. Develop methodologies | Annually | 16 | 16 | 0 | 0 | P.L.B.M. |
| * 1. Collect data | Annually | 40 | 40 | 40 | 40 | P.L.B.M. |
| * 1. Analysis the data and produce findings | Annually | 16 | 16 | 0 | 0 | P.L.B.M. |
| * 1. Design mechanisms for intervention by interfacing with M & E | Annually | 8 | 8 | 8 | 8 | P.L.B.M. |
| * 1. Pilot intervention in selected areas and recommend for scale up | Annually | 20 | 20 | 20 | 20 | P.L.B.M. |
| **Independent Operational research** |  |  |  |  |  | P.L.B.M. |
| * 1. Develop concept note, TOR and get approval for identified research topics | Annually | 5 | 5 | 0 | 0 | P.L.B.M. |
| * 1. Select the consulting firm jointly with relevant processes | Annually | 5 | 5 | 0 | 0 | P.L.B.M. |
| * 1. Assist preparation of operational research tool | Annually | 16 | 16 | 0 | 0 | P.L.B.M. |
| * 1. Assist development of methodologies | Annually | 16 | 16 | 0 | 0 | P.L.B.M. |
| * 1. Facilitate data collection | Annually | 40 | 40 | 40 | 40 | P.L.B.M. |
| * 1. Oversee and validate the processes of the research | Annually | 10 | 10 | 10 | 10 | P.L.B.M. |
| * 1. Receive the findings | Annually | 1 | 1 | 1 | 1 | P.L.B.M. |
| * 1. Design intervention based on the findings | Annually | 8 | 8 | 8 | 8 | P.L.B.M. |
| * 1. Pilot intervention | Annually | 20 | 20 | 20 | 20 | P.L.B.M. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | HR Summary for Operational research capacity building Sub Process at Center | | | |
| Code | Job Title | Competency | Total days/year Center | No of HR estimated |
| D | Capacity Building Sub-Process Owner | B. Pharm with Master’s degree relevant supply chain management, Pharmacology, or MPH, and with at least five years practical experience on the process ( sub-process owner) |  | 1 |
| E | Laboratory technologist ( capacity building expert) | BSc in Laboratory | 360 | 2 |
| 120G | Biomedical Engineer (Senior Capacity building Officer) | BSc in Bio Medical Technology | 240 | 1 |
| H | Management expert ( capacity building expert) | BA in logistics and supply chain management | 260 | 2 |
| I | Pharmacist (Senior capacity building Officer) | BSc in pharmacy | 780 | 4 |
| L | Event organizer expert | Bachelor in management with Medical Supplies Management Training | 420 | 2 |
| Total | | | 2097 | 11 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | HR Summary for Operational research and Capacity building Sub Process at Branch | | | |
| Code | Job Title | Competency | Total days/year Center | No of HR estimated |
| D | Capacity Building Sub-Process Owner | B. Pharm with Master’s degree relevant supply chain management, Pharmacology, or MPH, and with at least five years practical experience on the process ( sub-process owner) |  | 1 |
| E | Laboratory technologist ( capacity building expert) | BSc in Laboratory | 280 | 1 |
| 120G | Biomedical Engineer (Senior Capacity building Officer) | BSc in Bio Medical Technology | 255 | 1 |
| H | Management expert ( capacity building expert) | BA in logistics and supply chain management | 345 | 2 |
| I | Pharmacist (Senior capacity building Officer) | BSc in pharmacy | 500 | 2 |
| L | Event organizer expert | Bachelor in management with Medical Supplies Management Training | 345 | 2 |
| Total | | | 1728 | 9 |

*Note: Total days/year for each activity is calculated by multiplying:*

* + *Annual accomplishments by 1*
  + *Quarterly accomplishments by 4*
  + *Monthly accomplishments by 12*
  + *Biweekly accomplishments by 26*
  + *Weekly accomplishments by 52*
  + *Daily accomplishments by 250*

### Process time for Quality Management

Table : HR Requirement for Quality Management at Central Level

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Quality Management at Central Office** | | | | | |
| **Major Activities** | **Detail Activities** | **Location of work** | **When to accomplish** | **How fast to accomplish (days)** | **Total days/ year** | **Competency and Job title** |
| Develop quality manual (Policy, objectives, list of all SOPs) | Develop draft quality manual ( by customizing the experiences of other supply chain organizations) | Center | Annually | 50 | 50 | P,L,C |
| Enrich the draft through consultative workshop | Center | Annually | 10 | 10 | P |
| Incorporate the comments to finalize the manual | Center | Annually | 10 | 10 | P |
| Get approval of the management | Center | Annually | 5 | 5 | P |
| Familiarize the quality management system to relevant processes | Center | Annually | 36 | 36 | P,L,C |
| Validation of Premises, and Material Handling Equipments | Identify the premises and material handling equipments | Center | Quarterly | 2 | 8 | P |
| Assess that premises and equipment is suitable for the intended purpose | Center | Quarterly | 20 | 80 | P |
| identify the gaps after the assessment | Center | Quarterly | 2 | 8 | P |
| Take corrective actions with relevant processes | Center | Quarterly | 3 | 12 | P |
| Validate the premises and material handling equipments | Center | Quarterly | 3 | 12 | P |
| Conduct process audit as per agreed standards | Get approved SOPs | Center | Quarterly | 1 | 4 | P |
| Develop standard checklist for process audit | Center | Annually | 10 | 10 | P |
| Conduct regular process audit | Center | Quarterly | 8 | 32 | P |
| Provide feedback based on audit findings | Center | Quarterly | 4 | 16 | P |
| Process Improvement plan | Center | Quarterly | 8 | 32 | P |
| Adopt and follow implementation of directives and regulations by regulatory authorities | Center | Quarterly | 4 | 16 | P |
| Documentation | Center | Quarterly | 1 | 4 | P |
| Occupational health, and safety | Make sure that SOPs are prepared for Occupational health, and safety | Center | Annually | 10 | 10 | P |
| Ensure the availability of appropriate protective equipment | Center | Quarterly | 10 | 40 | P |
| Enforce the implementation of the SOP | Center | Quarterly | 10 | 40 | P |
| Documentation | Center | Quarterly | 1 | 4 | P |
| Physical inspection of incoming shipments | Develop inspection protocol | Center | Annually | 10 | 10 | P |
| Conduct physical inspection | Center | Daily | 0.5 | 125 | P |
| Provide feedback and take appropriate action | Center | Daily | 0.5 | 125 | P |
| Documentation the findings | Center | Daily | 0.125 | 31.25 | P |
| Quality control test on selected products | Avail the required resources for quality test | Center | Annually | 10 | 10 | Top Management |
| Select products for quality test or products with quality concern | Center | Quarterly | 1 | 4 | P |
| Conduct quality test | Center | Bimonthly | 30 | 180 | P,L,C |
| Report the result | Center | Bimonthly | 1 | 6 | P |
| Take appropriate action | Center | Bimonthly | 1 | 6 | P |
| Product recall | Identify products with confirmed quality concern | Center | Bimonthly | 1 | 6 | P |
| notify EFMHACA of recall initiation. | Center | Bimonthly | 1 | 6 | P |
| facilitate product recall ( interface with distribution sub process) | Center | Bimonthly | 1 | 6 | P |
| assess the effectiveness of the recall and report any recall they made to EFMHACA | Center | Bimonthly | 1 | 6 | P |
| Work towards compliance to ISO requirement | Select ISO standard | Center | Annually | 3 | 3 | P |
| Revise and update the documents | Center | Annually | 10 | 10 | P |
| Comply with the new requirement | Center | Annually | 10 | 10 | P |
| Self-audit/ conduct internal audit | Center | Bimonthly | 3 | 18 | P |
| Action plan preparation | Center | Bimonthly | 1 | 6 | P |
| Apply for ISO certification | Center | Annually | 2 | 2 | P |
| Facilitate document revision and onsite visit by the certifying body | Center | Annually | 5 | 5 | P |
| Receive nonconformance report | Center | Annually | 2 | 2 | P |
| Clearance of non-conformance | Center | Annually | 3 | 3 | P |
| Report the clearance to the certifying body | Center | Annually | 1 | 1 | P |
| Get ISO certificate | Center | Annually | 1 | 1 | P |
| Maintain the ISO standard | Center | Bimonthly | 2 | 12 | P |

Table : HR Requirement for Quality Management at Hub Level

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Major Activities** | **Detail Activities** | **Location of work** | **When to accomplish** | **How fast to accomplish (days)** | **Total days/ year** | **Competency and Job title** |
| Develop quality manual (Policy, objectives, list of all SOPs) | Familiarize the quality management system to relevant processes | Center | Annually | 6 | 6 | P |
| Validation of Premises, and Material Handling Equipment | Identify the premises and material handling equipment | Center | Quarterly | 1 | 4 | P |
| Assess that premises and equipment is suitable for the intended purpose | Center | Quarterly | 2 | 8 | P |
| identify the gaps after the assessment | Center | Quarterly | 0.5 | 2 | P |
| Take corrective actions with relevant processes | Center | Quarterly | 1 | 4 | P |
| Validate the premises and material handling equipment | Center | Quarterly | 1 | 4 | P |
| Conduct process audit as per agreed standards | Get approved SOPs | Center | Quarterly | 0.5 | 2 | P |
| Develop standard checklist for process audit | Center | Annually | 2 | 2 | P |
| Conduct regular process audit | Center | Quarterly | 2 | 8 | P |
| Provide feedback based on audit findings | Center | Quarterly | 1 | 4 | P |
| Process Improvement plan | Center | Quarterly | 1 | 4 | P |
| Adopt and follow implementation of directives and regulations by regulatory authorities | Center | Quarterly | 1 | 4 | P |
| Documentation | Center | Quarterly | 0.5 | 2 | P |
| Occupational health, and safety | Adopt SOPs that were prepared for Occupational health, and safety | Center | Annually | 3 | 3 | P |
| Ensure the availability of appropriate protective equipment | Center | Quarterly | 1 | 4 | P |
| Enforce the implementation of the SOP | Center | Quarterly | 2 | 8 | P |
| Documentation | Center | Quarterly | 0.5 | 2 | P |
| Physical inspection of incoming shipments | Develop inspection protocol | Center | Annually | 2 | 2 | P |
| Conduct physical inspection | Center | Daily | 0.125 | 31.25 | P |
| Provide feedback and take appropriate action | Center | Daily | 0.125 | 31.25 | P |
| Documentation the findings | Center | Daily | 0.0625 | 12.5 | P |
| Product recall | Identify products with confirmed quality concern | Center | Bimonthly | 0.5 | 3 | P |
| notify EFMHACA of recall initiation. | Center | Bimonthly | 0.5 | 3 | P |
| facilitate product recall ( interface with distribution sub process) | Center | Bimonthly | 0.5 | 3 | P |
| assess the effectiveness of the recall and report any recall they made to EFMHACA | Center | Bimonthly | 0.5 | 3 | P |
|  | Select ISO standard | Center | Annually | 0 | 0 | Central level |
|  | Revise and update the documents | Center | Annually | 2 | 2 | P |
|  | Comply with the new requirement | Center | Annually | 2 | 2 | P |
|  | Self-audit/ conduct internal audit | Center | Bimonthly | 1 | 6 | P |
|  | Action plan preparation | Center | Bimonthly | 0.5 | 3 | P |
|  | Apply for ISO certification | Center | Annually | 0 | 0 | Central level |
| Work towards compliance to ISO requirement | Facilitate document revision and onsite visit by the certifying body | Center | Annually | 0 | 0 | Central level |
|  | Receive nonconformance report | Center | Annually | 1 | 1 | P |
|  | Clearance of non-conformance | Center | Annually | 1 | 1 | P |
|  | Report the clearance to the certifying body | Center | Annually | 1 | 1 | P |
|  | Get ISO certificate | Center | Annually | 0 | 0 | P |
|  | Maintain the ISO standard | Center | Bimonthly | 0.5 | 3 | P |

### Process time for Planning and project coordination (Resource Mobilization)

**Part I**

Table : Planning, Monitoring and Evaluation sub process HR Determination

| .N | Detail Activities | Location of work | When to accomplish | Center | | Branch | | Competency and Job title |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| How fast to accomplish (days) central | Total days at center/  year | How fast to accomplish (days) branches | Total branch/ year |
| 1 | **Develop Strategic Planning (five year strategic plan)** |  |  |  |  |  |  |  |
|  | Develop a draft five year strategic plan with specific performance each year, based on the agency mission, vison and objectives:  1. Organize national team and orient about the plan  2. Develop strategic them from health sector five years transformation plan  3. Share for comment  4. Incorporate comments | Process | Every five years | 100 | 20 | 0 | 0 |  |
|  | Organize workshop and receive feedbacks from relevant stakeholders | Process | Every five years | 5 | 1 |  |  |  |
|  | Incorporate the feedback and finalize the five year strategic plan | Process | Every five years | 15 | 3 |  |  |  |
|  | Get approval from board and top management | Process | Every five years | 3 | 0.6 |  |  |  |
|  | Monitor and evaluate yearly performance accordingly | Process | Annually | 30 | 30 |  |  |  |
| **2** | **Annual planning (one year plan)** |  |  |  |  |  |  |  |
|  | Develop and distribute planning **tools** to each process and branches | Process | Annually | 7 | 7 |  |  |  |
|  | Receive annual plan from processes and branches  *(Note: waiting time is considered)* | Process | Annually | 10 | 10 | 10 | 10 |  |
|  | Compile and prepare draft annual organizational plan | Process | Annually | 14 | 14 |  |  |  |
|  | Organize workshop/meetings involving staffs to familiarize and enrich the plan | Process | Annually | 3 | 3 |  |  |  |
|  | Edit and refine the final organizational plan | Process | Annually | 5 | 5 |  |  |  |
|  | Approve the final organizational plan by top management | Process | Annually | 3 | 3 |  |  |  |
|  | Distribute the approved plan to all processes, branches and relevant stakeholders | Process | Annually | 3 | 3 |  |  |  |
| 3 | **M and E Plan;**  **Performance Monitoring and Evaluation** |  |  |  |  |  |  |  |
|  | Identify key performance indicators for each process and organizational level (including  daily summary, monthly and quarterly) | Process | Annually | 5 | 5 |  |  |  |
|  | Organize team and prepare monitoring and evaluation plan for the agency | Process | Annually | 5 | 5 |  |  |  |
|  | Follow the performances of each processes, summarize performance of each activity daily, receive performance reports from each process regularly ( Monthly, Quarterly, , , and annually) | Process | Daily | 1 | 250 | 1 | 250 |  |
|  | Compile the daily performances of each processes and prepare report in each day | Process | Daily | 5 | 1250 | 2 | 500 |  |
|  | Compile the monthly /quarterly performances of each processes and prepare monthly/quarterly report | Process | Monthly | 3 | 36 | 2 | 24 |  |
|  | Share the draft report to each processes for comment | Process | Monthly | 1 | 12 | 1 | 12 |  |
|  | Evaluate the draft report with relevant staffs | Process | Monthly | 3 | 36 | 2 | 24 |  |
|  | Incorporate the comment and finalize the performance report | Process | Monthly | 1 | 12 | 1 | 12 |  |
|  | Approve the final report by process owner | Process | Monthly | 2 | 24 | 1 | 12 |  |
|  | Send the report to top management relevant staffs and stakeholders | Process | Monthly | 1 | 12 | 0.5 | 6 |  |
|  | Incorporate comments from top management | Process | Monthly | 0.5 | 6 | 0.5 | 6 |  |
|  | Prepare workshop to review quarterly performance and next quarter plan *(Note: travel and waiting time considered)* | Process | Every quarter | 5 | 20 |  |  |  |
|  | Incorporate the findings of the quarter evaluation and use for the next plan | Process | Every quarter | 1 | 4 |  |  |  |
|  | Monitor /follow implementation of major findings | Process | Weekly | 1 | 52 |  |  |  |
| 4 | **Process improvement** |  |  |  |  |  |  |  |
|  | Prepare tool and conduct survey/assessment / using key selected indicator | Process | Quarterly | 12 | 48 |  |  |  |
|  | Analyze data and develop recommendation | Process | Quarterly | 4 | 16 |  |  |  |
|  | Present the recommendation | Process | Quarterly | 0 | 0 | 0 | 0 |  |
| **Total** | | | | | 1887.6 | 21 | 856 |  |
| 9.438 | 0.105 | 4.28 |  |

**Part II. Process time for financial resource mobilization**

Table : Financial resource mobilization

| .N | Detail Activities | Location of work | When to accomplish | Center | | Branch | | Competency and Job title |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| How fast to accomplish (days) central | Total days at center/  year | How fast to accomplish (days) branches | Total branch/ year |
| 1 | **Identify the available fund** |  |  |  |  |  |  |  |
|  | 1.1. Collect strategic plan, financial documents and data from MIS  1.2. Insert data to computer  1.3. Process the data and identify the available fund  1.4. Prepare draft report and submit for comment  1.5. Incorporate the comment and produce final report | Process | Every year | 80 | 80 | 0 | 0 |  |
| **2** | **Collect data and determine financial gap**  **(Conduct Gap Analysis)** |  |  |  |  |  |  |  |
|  | * 1. Prepare/Revised plan of action and present to the concerned staff for approval | Process | Every year | 5 | 5 | 0 | 0 |  |
|  | * 1. Plan of action approved | Process | Every year | 1 | 1 | 0 | 0 |  |
|  | * 1. Collect and quantify data to forecast demand | Process | Every year | 1 | 1 |  |  |  |
|  | * 1. Insert data to computer | Process | Every year | 1 | 1 | 0 | 0 |  |
|  | * 1. Process the data and forecast the demand for and supply of pharmaceuticals in terms of quantity and value | Process | Every year | 1 | 1 | 0 | 0 |  |
|  | * 1. Identify the financial gap | Process | Every year | 2 | 2 | 0 | 0 |  |
|  | * 1. Analyze the identified gap, prepare the draft report and submit for comment | Process | Every year | 50 | 50 | 0 | 0 |  |
|  | * 1. Incorporate comment given and produce the final report | Process | Every year | 20 | 20 | 0 | 0 |  |
|  | * 1. Get the Gap Analysis approved | Process | Every year | 1 | 1 | 0 | 0 |  |
| **3** | **Formulate financial resource mobilization strategy** |  |  |  |  |  |  |  |
|  | * 1. Identify the source of fund | process | Every year | 3 | 3 | 0 | 0 |  |
|  | * 1. Prepare resource mapping | process | Every year | 2 | 2 | 0 | 0 |  |
|  | * 1. Prepare financial resource mobilization strategy |  |  | 5 | 5 | 0 | 0 |  |
| 4 | **Approaching funding organization** |  |  |  |  |  |  |  |
|  | * 1. Prepare/revise special price offering or credit purchase facility proposal and present it for comment | process | Every year | 5 | 5 |  |  |  |
|  | * 1. Incorporate comments in the proposal and produce the final proposal | process | Every year | 1 | 1 |  |  |  |
|  | * 1. Participate in the negotiation process and signing agreement | process | Every year | 0.5 | 0.5 |  |  |  |
|  | * 1. Follow up the implementation of agreement by securing fund | process | Every year | 4 | 4 |  |  |  |
|  | **Local Commercial Banks** |  |  |  |  |  |  |  |
|  | * 1. Prepare/revise loan or overdraft request proposal and present for comment | process | Every year | 3 | 3 |  |  |  |
|  | * 1. Incorporate comments and produce final overdraft request | process | Every year | 2 | 2 |  |  |  |
|  | * 1. Participate in the negotiation process and signing of agreement | process | Every year | 1 | 1 |  |  |  |
|  | * 1. Follow-up the securing of the funds | process | Every year | 12 | 12 |  |  |  |
|  | **International Banks such as the WB, ADB,** |  |  |  |  |  |  |  |
|  | * 1. Prepare loan request proposal and present for comment | process | Every year | 5 | 5 |  |  |  |
|  | * 1. Incorporate comments and produce final proposal | process | Every year | 2 | 2 |  |  |  |
|  | * 1. Follow-up the loan request process | process | Every year | 12 | 12 |  |  |  |
|  | * 1. Participate in the negotiation process and signing of agreement | process | Every year | 1 | 1 |  |  |  |
|  | * 1. Follow-up the securing of funds | process | Every year | 12 | 12 |  |  |  |
|  | **Bilateral or Multilateral organizations and donors** |  |  |  |  |  |  |  |
|  | * 1. Receive and review the gap analysis document | process | Every year | 36 | 36 |  |  |  |
|  | * 1. Review the requirement of the donor | process | Every year | 12 | 12 |  |  |  |
|  | * 1. Structure the gap analysis with the requirement of the donor and prepare proposal | process | Every year | 12 | 12 |  |  |  |
|  | * 1. Cost the proposal | process | Every year | 4 | 4 |  |  |  |
|  | * 1. Conduct review of the proposal based on the gap analysis and bilateral guideline | process | Every year | 4 | 4 |  |  |  |
|  | * 1. Send the proposal for comment | process | Every year | 4 | 4 |  |  |  |
|  | * 1. Incorporate comment and submit to the donor through an official letter | process | Every year | 4 | 4 |  |  |  |
|  | * 1. Follow-up the securing of fund | process | Every year | 4 | 4 |  |  |  |
|  | **By preparing project proposal/selling ready-made proposal** |  |  |  |  |  |  |  |
|  | * 1. Prepare/revise project proposal and present for comment | process | daily | 0.25 | 5 |  |  |  |
|  | * 1. Incorporate comment and submit for management approval | process | daily | 0.25 | 5 |  |  |  |
|  | * 1. Participate in the negotiation process and signing of agreements | process | daily | 0.25 | 5 |  |  |  |
|  | * 1. Follow-up the securing of fund | process | daily | 0.25 | 5 |  |  |  |
|  | * 1. Highlight activities to be implemented at all level | process | daily | 0.25 | 5 |  |  |  |
|  | * 1. Prepare cascaded plan at all level for implementation | process | daily | 0.25 | 5 |  |  |  |
|  | * 1. Ensure that funds are transferred to respective level | process | daily | 0.25 | 5 |  |  |  |
|  | **By preparing memorandum of understanding** |  |  |  |  |  |  |  |
|  | * 1. Prepare MoU and present for comment | Process | Every year | 1 | 1 |  |  |  |
|  | * 1. Incorporate comments and submit for management approval | Process | Every year | 1 | 1 |  |  |  |
|  | * 1. Participate in the negotiation process and signing of agreement | Process | Every year | 0.25 | 0.25 |  |  |  |
|  | * 1. Follow-up the securing of funds | Process | Every year | 1 | 1 |  |  |  |
|  | **By simple request** |  |  |  |  |  |  |  |
|  | * 1. Participate in approaching donors | Process | Every year | 12 | 12 |  |  |  |
|  | * 1. Prepare request letter for comment | Process | Every year | 1 | 1 |  |  |  |
|  | * 1. Incorporate comments and submit for management approval | Process | Every year | 0.5 | 0.5 |  |  |  |
|  | * 1. Participate in the negotiation process and signing of agreement | Process | Every year | 1 | 1 |  |  |  |
|  | * 1. Follow-up the securing of funds | Process | Every  month | 12 | 12 |  |  |  |
|  | **Advance payment from RHBs, HFs, and other governmental offices** |  |  |  |  |  |  |  |
|  | * 1. Prepare/revise proposal to negotiate with RHBs, HFs and Gov’t offices for advance payment | process | Every year | 5 | 5 |  |  |  |
|  | * 1. Incorporate the comments in the proposal and produce the final proposal | Process | Every year | 2 | 2 |  |  |  |
|  | * 1. Participate in the negotiation and signing of agreement | Process | Every year | 1 | 1 |  |  |  |
|  | * 1. Follow-up the securing of fund | Process | Every year | 4 | 4 |  |  | BA or B. Pharm with master’s degree |
| **Total** | | | | | 389.5 |  |  |
| 1.9475 | 2 |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | HR Summary for Planning, Monitoring and Evaluation and resource mobilization Sub Process at Center | | | |
| Code | Job Title | Competency | Total days/year Center | No of HR estimated |
| M | Planning, Monitoring and Evaluation Sub-Process Owner | B.A or B. Pharm with Master’s degree in relevant supply chain management, Monitoring and evaluation, or MPH, and with at least five years practical experience on the process (sub-process owner) |  | 1 |
| N | Planning officer | BA. In accountant, or business administration or supply chain management | 400 | 2 |
| RM | Resource Mobilization senior officer | BA in Economics, or business administration or supply chain management or pharmacy and masters’ degree in MBA, MPH, Health Economics or Biostatistics with 5 years of relevant experience | 389.25 | 2 |
|  | Monitoring and evaluation officer |  | 1487 | 7 |
| **Total** | | | **1887.6** | **12** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | HR Summary only for planning, Monitoring and Evaluation at Branch | | | |
| Code | Job Title | Competency | Total days/year Center | No of HR estimated |
| M | Planning, Monitoring and Evaluation Sub-Process Owner | B. Pharm with Master’s degree relevant supply chain management፡ Monitoring and evaluation, or MPH, or Health informatics, and with at least five years relevant practical experience |  | 1 |
| N | Planning officer | BA. in business Administration or supply chain management | 210 | 1 |
|  | Monitoring and evaluation officer | BA. accounting or business administration | 676 | 3 |
| **Total** | | | **856** | **5** |

*Note: Total days/year for each activity is calculated by multiplying:*

* + *Annual accomplishments by 1*
  + *Quarterly accomplishments by 4*
  + *Monthly accomplishments by 12*
  + *Biweekly accomplishments by 26*
  + *Weekly accomplishments by 52*
  + *Daily accomplishments by 250*

**List of SOP for Planning and Resource Mobilization**

1. Develop Strategic Planning (five year strategic plan)
2. Preparing annual plan
3. Measuring performance, monitoring and evaluation
4. Follow process improvement
5. Identifying the available fund
6. Data collection and determining financial gaps (Conduct Gap Analysis)
7. Formulate financial resource mobilization strategy
8. Approaching funding organization
9. Approaching International Banks such as the WB, ADB,
10. Approaching Bilateral or Multilateral organizations and donors
11. Preparing project proposal/selling ready-made proposal
12. Preparing memorandum of understanding
13. Facilitating advance payment from RHBs, HFs, and other governmental offices

### Job Description

### Job description for Forecasting and Supply planning sub process

**Job Description for Forecasting & Supply Planning Process Owner**

|  |  |
| --- | --- |
| **Process for which it is responsible** | Pharmaceutical Supply Core Process |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | Forecasting & Supply planning sub process owner |
| **Accountable and Reports to** | Pharmaceutical Supply Core Process Owner |
| **Coordinate with** |  |
| **System & Process in which it participate** |  |
| **Number of Post** | 1 |
| **Expected outcome from the process** | On time forecasting, supply planning and pipeline monitoring Health programs and Pharmaceuticals Managed through RDF |
| **Duties and Responsibilities** | * Contribute to agency wide strategic planning and annual planning, cascade annual plan of the Agency to sub-process plan and develop periodic performance reports of the sub process * Lead national forward planning/ quantification of health programs and pharmaceuticals managed through RDF   + Supervise the development of predefined PFSA procurement list and communicate to health sector executive/ Director general of PFSA for approval   + Communicate the approved list to branches and organize orientation workshop for branches so that each branch will provide orientation to all health facilities about the predefined list (a tool for quantification)   + Make sure on time provision of mentorship training to RHB, Zone and Woreda logistics officers on ABC and VEN analyses so that they assist HF to prioritize their list based on VEN * Lead development and implementation of guidelines and SOPs * Ensure on time reporting of stock status of RDF and program pharmaceuticals and inform relevant internal and external stakeholders to take appropriate action * Work in collaboration with MOH Programs and other stakeholders in accessing data needed for program forecasting * Develop performance measurement tools and regularly evaluate performance in the sub process * Promotes a team spirit among his/her subordinates and creates a learning environment * Build, motivate and evaluate teams |
| **Qualification** | * B. Pharm or B. pharm with advanced degree in supply chain, Public health or business administration |
| **Salary** |  |
| **Minimum Work Experience** | * 7 years of relevant work experience ( Pharm), Five years of experience (B. Pharm with advanced degree) |
| **Knowledge and Skills** | * Strong communication skill, Negotiation skill, Conceptual and team building skill * Expert knowledge in forecasting/ foreword planning and skills in using Microsoft offices. |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and ability to work without time limit and under pressure * High level of responsibility and professional ethics, Determined, proactive and creative * Focused, result oriented and self disciplined, Receptive to and able to facilitate change |
| **Additional Trainings Needed** | * Basic training on supply chain management, relevant training on quantification principles and tools |

**Job description for Forecasting & supply planning team leader (RDF)**

|  |  |
| --- | --- |
| **Process for which it is responsible** | Forecasting & supply planning Sub Process |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | Forecasting & Supply planning team leader for RDF |
| **Accountable and Reports to** | Forecasting & Supply planning Sub process owner |
| **Coordinate with** |  |
| **System & Process in which it participate** |  |
| **Number of Post** | **4** team (DRF medicines, RDF medical equipment, medical supplies, RDF Labs) |
| **Expected outcome from the process** | On time forecasting, supply planning and pipeline monitoring Health programs / Pharmaceuticals Managed through RDF |
| **Duties and Responsibilities** | * Contribute in cascading annual plan of the agency to the sub process, case team and individual level and develop periodic performance reports of case team * Coordinate the preparation tools for forecasting & supply planning * Assess relevant documents and strategies * Update AMC based on facility report / average monthly issue data as proxy to AMC * Coordinate the validation workshop (branches and stakeholders) to reach consensus on assumptions Estimates the annual requirement for each product * Monitors and get the pipeline data ( Scheduled quantity) * Determines net quantities to be procured and prepare Costing for quantities needed * Prepare distribution plan for each hub and share to hubs distribution sub process * Reconciles fund using VEN/ABC analysis when fund is limited and Develop supply plan * supervise preparation of stock status report every month for RDF pharmaceuticals, present the stock status report to relevant sub process, and branches for action * Participate in capacity building intervention in the area of product selection and quantification * Evaluate the performance of team and give feedback |
| **Qualification** | MSc /MA/ Bachelor in pharmacy./ Bsc in Medical Laboratory technology (for labs), BSC in Biomedical Engineering (for Medical equipment) |
| **Minimum Work Experience** | * 5 years of experience for Bachelor Degree and 3 years for Msc or MA |
| **Knowledge and Skills** | * Expert knowledge in forecasting and planning * Team building, communication, coaching skills, problem solving skills and skills in using Microsoft office |
| **Personal Characteristics and attitudes** | * Good interpersonal relationship and high level of responsibility and professional ethics * Focused, result oriented and self disciplined * Receptive to and able to facilitate change |
| **Additional Trainings Needed** | * Relevant training on Quantification of health commodities, supply planning & pipeline monitoring |

**Job description for Forecasting & supply planning team leader (Health program)**

|  |  |
| --- | --- |
| **Process for which it is responsible** | Forecasting & supply planning Sub Process |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | Forecasting & Supply planning team leader for Health program |
| **Accountable and Reports to** | Forecasting & Supply planning Sub process owner |
| **Coordinate with** |  |
| **System & Process in which it participate** |  |
| **Number of Post** | 4 HIV & TB, FP & Malaria, vaccines, NTDs & NCDs) |
| **Expected outcome from the process** | On time forecasting, supply planning and pipeline monitoring Health programs |
| **Duties and Responsibilities**   * + Enrich forecast assumptions and arrive at in to consensus * Calculate total requirement and cost using relevant quantification tool for each program and write up the final forecast | * Contribute in cascading annual plan of the agency to the sub process, case team and individual level * Coordinate the preparation tools for forecasting & supply planning   + In collaboration with relevant stakeholders describe the program, define scope and purpose of quantification   + Review and summarize relevant documents(consumption trend analysis) * Develop draft assumption and Identify stakeholders that will participate on consultative workshop   + Enrich forecast assumptions and arrive at in to consensus * Calculate total requirement and cost using relevant quantification tool for each program and write up the final forecast * Develop supply plan * Follow the preparation of stock status report every month and present to relevant sub process, TWG of all programs and branches for action * Participate in capacity building intervention in the area of product selection and quantification * Participate in joint supportive supervision, mentorship activities with health program staff of MOH and other stakeholders * Motivate and evaluate the performance of team and provide feedback |
| **Qualification** | * MSc /MA/ Bachelor in pharmacy/ Bsc in Medical Laboratory (for labs), BSC in Biomedical Engineering (for Medical equipment) |
| **Minimum Work Experience** | * 5 years of experience for Bachelor Degree and 3 years for Advanced Degree |
| **Knowledge and Skills** | * Expert knowledge in forecasting and planning * Team building, communication, skills in using Microsoft offices, and coaching skills |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work, High level of responsibility and professional ethics * Focused, result oriented and self disciplined * Receptive to and able to facilitate change |
| **Additional Trainings Needed** | * Relevant training on Quantification of health commodities, supply planning & pipeline monitoring |

**Job description for forecasting & Supply planning Officers (I, II, III, IV, and V) for RDF**

|  |  |
| --- | --- |
| **Process for which it is responsible** | Forecasting & supply planning Sub Process |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | Forecasting & Supply planning officer |
| **Accountable and Reports to** | Forecasting & Supply planning team leader |
| **Coordinate with** |  |
| **System & Process in which it participate** |  |
| **Number of Post** | **5 (1 officer V, 1 officer V, 2 officer III, 1 officer II)** |
| **Expected outcome from the process** | On time forecasting, supply planning and pipeline monitoring of Health programs / pharmaceuticals managed through RDF products |
| **Duties and Responsibilities** | * Contribute in cascading annual plan of the sub process to the case team and individual level and develop periodic performance reports of case team * Prepare and send out data collection tools * Assess trend analysis, service expansion unfulfilled demand of private health sector in pharmaceutical forecasting * Compiles logistics data from each hub and determine the gross requirement * Estimates the annual requirement for each product * Monitors and get the pipeline data (Scheduled quantity) * Determines net quantities to be procured * Prepare Costing for quantities needed * Prepares distribution plan for each hub communicate to stakeholders * Reconciles fund using VEN/ABC analysis when fund is limited * Develop supply plan * Prepare stock status report every month and present to relevant sub process and stakeholders * Participate in capacity building intervention in the area of product selection and quantification * Participate in joint supportive supervision, mentorship activities with health program staff of MOH,RHBs and other stakeholders |
| **qualification** | Bachelor degree in Pharmacy with relevant training in quantification |
| **Salary** |  |
| **Minimum Work Experience** | * B. pharm with 5+ years of experience or Msc with 3 years’ experience for officer V, 4 years of experience for officer III, 3 years of experience for officer II, and 2 years of experience for officer II |
| **Knowledge and Skills** | * Expert knowledge in forecasting and planning, skills in using Microsoft excel, word and PowerPoint, technical and communication skill |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and ability to work in a team * Ability to work productively without time limit and under pressure * Determined, proactive and creative * Focused, result oriented and self disciplined |
| **Additional Trainings Needed** | * Relevant training on product selection, quantification methods & tools, pipeline monitoring |

**Job description for Forecasting & Supply planning Officer (for programs)**

|  |  |
| --- | --- |
| **Process for which it is responsible** | Forecasting & supply planning Sub Process |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | Forecasting & Supply planning office |
| **Accountable and Reports to** | Forecasting & Supply planning team leader |
| **Coordinate with** |  |
| **System & Process in which it participate** |  |
| **Number of Post** | **5 (1 officer V, 1 officer V, 2 officer III, 1 officer II)** |
| **Expected outcome from the process** | On time forecasting, supply planning and pipeline monitoring of Health programs / pharmaceuticals managed through RDF products |
| **Duties and Responsibilities** | * Contribute in cascading annual plan of the sub process to the case team and individual level * Prepare and send out data collection tools * Assess trend analysis, service expansion unfulfilled demand of private health sector in pharmaceutical forecasting * Compiles logistics data from each hub and determine the gross requirement * Estimates the annual requirement for each product * Monitors and get the pipeline data (Scheduled quantity) * Determines net quantities to be procured * Prepare Costing for quantities needed * Prepares distribution plan for each hub communicate to all * Reconciles fund using VEN/ABC analysis when fund is limited * Follow the preparation of stock status report every month and present to relevant sub process, TWG of all programs and branches for action * Participate in capacity building intervention in the area of product selection and quantification * Participate in joint supportive supervision, mentorship activities with health program staff of RHBs, MOH and other stakeholders |
| **qualification** | Bachelor degree in Pharmacy with relevant training in quantification |
| **Salary** |  |
| **Minimum Work Experience** | * B. pharm with 5+ years of experience or Msc with 3 years’ experience for officer V, 4 years of experience for officer III, 3 years of experience for officer II, and 2 years of experience for officer II |
| **Knowledge and Skills** | * Expert knowledge in forecasting and planning, skills in using Microsoft excel, word and PowerPoint, technical and communication skill |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and ability to work in a team * Ability to work productively without time limit and under pressure * Determined, proactive and creative * Focused, result oriented and self disciplined |
| **Additional Trainings Needed** | * Relevant training on product selection, quantification methods & tools, pipeline monitoring |

**Job description for forecasting & Supply planning Officer (Biomedical engineer)**

|  |  |
| --- | --- |
| **Process for which it is responsible** | Forecasting & supply planning Sub Process |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | Forecasting & Supply planning officer (for medical equipments selection, quantification and rational use) |
| **Accountable and Reports to** | Forecasting & Supply planning team leader |
| **Coordinate with** |  |
| **System & Process in which it participate** |  |
| **Number of Post** | **2 Officer III** |
| **Expected outcome from the process** | On time forecasting, supply planning and pipeline monitoring of Medical Equipment |
| **Duties and Responsibilities** | * Contribute in cascading annual plan of the sub process to the case team and individual level * Prepare and send out data collection tools for medical equipment forecast   + Receive medical instrument request from FMOH, RHB and health facilities   + Review the specification with technical expert/ the ad-hoc team of experts   + The technical expert/ad-hoc team will finalize the specification in close consultation with the end user   + Communicate the final list to the customer to get written agreement to proceed with the procurement * Communicate the purchase request to procurement sub process * Estimates the annual requirement of consumable medical equipment request from branch offices health facilities * Monitors and get the pipeline data for medical equipment (Scheduled quantity) * Determines net quantities to be procured * Prepare Costing for quantities needed for non capital items/ consumables * Prepares Distribution plan of of forecasted or requested items for each hub and communicate to Distribution sub process * Participate in capacity building intervention in the area of medical equipment selection/ specification preparation and use * Participate in joint supportive supervision, mentorship activities with health program staff of MOH and other stakeholders |
| **Qualification** | BSc Bio Medical Engineering |
| **Salary** |  |
| **Minimum Work Experience** | * BSC, 3 years of experience and MSC, 2 years |
| **Knowledge and Skills** | * Expert knowledge in forecasting and planning, skills in using Microsoft excel, word and PowerPoint, technical and communication skill |
| **Personal Characteristics and attitudes** | * Good inter personal relationship * High level of responsibility and professional ethics * Determined, proactive and creative * Focused, result oriented and self disciplined * Receptive to and able to facilitate change |
| **Additional Trainings Needed** | * Relevant training on product selection, quantification methods & tools, pipeline monitoring |

**Job description for forecasting & Supply planning Officer (Laboratory Technology)**

|  |  |
| --- | --- |
| **Process for which it is responsible** | Forecasting & supply planning Sub Process |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | Forecasting & Supply planning officer (Laboratory products) |
| **Accountable and Reports to** | Forecasting & Supply planning team leader for Lads |
| **Coordinate with** |  |
| **System & Process in which it participate** |  |
| **Number of Post** | **2 officer III** |
| **Expected outcome from the process** | Expert knowledge in forecasting and planning, skills in using Microsoft excel, word and PowerPoint, technical and communication skill |
| **Duties and Responsibilities** | * Contribute in cascading annual plan of the sub process to the case team and individual level * Prepare and data collection tools for Laboratory products /reagents and chemicals quantification & pipeline monitoring * Participate in laboratory equipment platform decision * Conduct assessment to collect instrument information (maximum through put, utilization rate), facility quality control practice, number of testing sites, number of referral sites, and no of testing days per year at national level * Review and summarize relevant documents (instrument functionality rate, control and calibrator utilization rate, consumption trend …etc.) * Calculate total requirement and cost using relevant quantification tool (ForLab® , QuantTB® etc) for each program * Adjust quantities with machine numbers and number of testing sites * Monitors and get the pipeline data for lab reagents (Scheduled quantity) and Determines net quantities to be procured * Prepare Costing for quantities needed for non capital items/ consumables * Prepares Distribution plan of forecasted or requested items for each hub and communicate to Distribution sub process * Participate in capacity building intervention in the area of Laboratory products selection/ specification preparation and use * Participate in joint supportive supervision, mentorship activities with health program staff of MOH and other stakeholders. |
| **Education** | BSc in Medical Laboratory Technology |
| **Salary** |  |
| **Minimum Work Experience** | * BSC, 4 years of experience and MSC , 3 years of experience |
| **Knowledge and Skills** | * Expert knowledge in forecasting and planning, skills in using Microsoft excel, word and PowerPoint, technical and communication skill |
| **Personal Characteristics and attitudes** | * Good inter personal relationship * High level of responsibility and professional ethics * Determined, proactive and creative * Focused, result oriented and self disciplined * Receptive to and able to facilitate change |
| **Additional Trainings Needed** | * Relevant training on product selection, quantification methods & tools, pipeline monitoring |

**Job description of Quality Management sub process owner**

|  |  |
| --- | --- |
| **Process for which it is responsible** | Pharmaceutical Supply Core Process/ DG |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | Quality Management sub process owner |
| **Accountable and Reports to** | Pharmaceutical Supply Core Process Owner/ DG |
| **Coordinate with** |  |
| **System & Process in which it participate** |  |
| **Number of Post** | 1 |
| **Expected outcome from the process** | Quality assured products and properly adhered working procedures |
| **Duties and Responsibilities** | * Contribute to agency wide strategic planning and annual planning, cascade annual plan of the Agency to sub-process plan and develop periodic performance reports of the sub process * Develop a strategy for enhancing pharmaceutical quality management practices across all relevant work processes * Ensure that all relevant work processes activities are properly supported by updated SOPs * Develop operational guidelines and SOPs, revise SOPs and test procedures * Lead and facilitate on job and off job training on quality management techniques and tools * Promote and facilitate timely and accurate reporting of quality management related process * Work in collaboration with internal and external stakeholders in assuring quality of pharmaceuticals along the supply chain * Establish performance indicators and targets for evaluating performance of the sub process * Maintain inventory in laboratory with respect to availability of Chemicals & reagents, glassware, standard solution etc. |
| **Qualification** | * B. Pharm from recognized university, MSc in Pharmaceutical analysis and quality assurance, |
| **Salary** |  |
| **Minimum Work Experience** | * 7 years of experience(B. Pharm), 5 years of experience ( MSC in quality assurance) |
| **Knowledge and Skills** | * Strong communication and persuasive skill * Conceptual and team building skill * Expert knowledge in pharmaceutical quality assurance and process audit * Skills in using Microsoft offices ( excel, word, PowerPoint) |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work * High level of responsibility and professional ethics * Focused, result oriented and self disciplined * Receptive to and able to facilitate change |
| **Additional Trainings Needed** | * Relevant training on quality assurance |

**Job description of Quality Management team leader (Process quality assurance)**

|  |  |
| --- | --- |
| **Process for which it is responsible** | Quality Management Process owner |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | Quality Management team leader |
| **Accountable and Reports to** | Pharmaceutical Supply Core Process Owner/ DG |
| **Coordinate with** |  |
| **System & Process in which it participate** |  |
| **Number of Post** | 1 |
| **Expected outcome from the process** | Quality assured products and properly adhered working procedures |
| **Duties and Responsibilities** | * Contribute in cascade of annual plan of the Agency to sub-process plan and develop periodic performance reports of the team * Contribute during preparation of operational guidelines and SOPs, revise SOPs * Supervise process quality assurance activities of relevant process at head office and branch office * Prepare timely and accurate report of quality management related activities * Ensure that all relevant processes are supported by updated SOPs * Promotes a team spirit and creates a learning environment * Facilitate on job and off job training on quality management techniques and tools * Report to immediate supervisor on the daily analysis activity |
| **Qualification** | * MSc in Pharmaceutical analysis and quality assurance, B.Pharm from recognized university / Chemist/ Laboratory technologist with practical experience on Pharmaceutical quality assurance |
| **Salary** |  |
| **Minimum Work Experience** | * 5 years of relevant work experience preferably on pharmaceutical Quality assurance |
| **Knowledge and Skills** | * Good communication skill * Strong team building skill, skills in using Microsoft offices * Expert knowledge in pharmaceutical quality assurance and process audit |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work * High level of responsibility and professional ethics * Focused, result oriented and self disciplined |
| **Additional Trainings Needed** | * Relevant training on quality assurance |

**Job description of Quality Management team leader (Product Quality assurance)**

|  |  |
| --- | --- |
| **Process for which it is responsible** | Quality Management Process owner |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | Quality Management team leader |
| **Accountable and Reports to** | Pharmaceutical Supply Core Process Owner/ DG |
| **Coordinate with** |  |
| **System & Process in which it participate** |  |
| **Number of Post** | 1 |
| **Expected outcome from the process** | Quality assured products and properly adhered working procedures |
| **Duties and Responsibilities** | * Contribute in cascade of annual plan of the sub process plan to team and individual level and develop periodic performance reports * Conduct quality test for selected products and physical inspection for incoming shipment at warehouse * Contribute during preparation of operational guidelines and SOPs, revise SOPs and test procedures * Perform on job and off job training on product quality testing techniques and tools * Promote and facilitate timely and accurate reporting of quality management related process * Perform quality assurance of pharmaceuticals along the supply chain which includes post marketing surveillance and product recall due to quality problem * Record analytical results in respective books & chart along with samples analyzed |
| **Qualification** | * MSc in Pharmaceutical analysis and quality assurance, B.Pharm from recognized university / Chemist/ Laboratory technologist with practical experience on Pharmaceutical quality assurance |
| **Salary** |  |
| **Minimum Work Experience** | * 5 years of relevant work experience preferably on pharmaceutical Quality assurance |
| **Knowledge and Skills** | * Good inter personal and team building skill * High level of responsibility and professional ethics * Determined, proactive and creative * Expert knowledge in pharmaceutical quality assurance and process audit |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work * High level of responsibility and professional ethics * Focused, result oriented and self disciplined |
| **Additional Trainings Needed** | * Relevant training on quality assurance * Computer training |

**Job description for Quality Management officer (Process quality assurance)**

|  |  |
| --- | --- |
| **Process for which it is responsible** | Quality Management Process owner |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | Quality Management officer |
| **Accountable and Reports to** | Quality Management team leader |
| **Coordinate with** |  |
| **System & Process in which it participate** |  |
| **Number of Post** | 2 |
| **Expected outcome from the process** | Quality assured products and properly adhered working procedures |
| **Duties and Responsibilities** | * Contribute in cascade of annual plan of the sub process to team and individual level and develop periodic performance reports * Contribute during preparation of operational guidelines and SOPs, revise SOPs * Supervise process quality assurance activities of relevant process at head office and branch office * Prepare timely and accurate report of quality management related activities * Ensure that all relevant processes are supported by updated SOPs * Facilitate on job and off job training on quality management techniques and tools * Maintain appropriate record on the process quality assurance activities |
| **Qualification** | * B.Pharm from recognized university / Chemist/ Laboratory technologist with practical experience on Pharmaceutical quality assurance |
| **Salary** |  |
| **Minimum Work Experience** | * 2 years of relevant work experience preferably on pharmaceutical Quality assurance |
| **Knowledge and Skills** | * Good communication skill * Strong team building skill, skills in using the Microsoft offices (word, excel, and power point) * Expert knowledge in pharmaceutical quality assurance and process audit |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work * High level of responsibility and professional ethics * Focused, result oriented and self disciplined |
| **Additional Trainings Needed** | * Relevant training on quality assurance |

**Job description of Quality Management officer (Product Quality assurance)**

|  |  |
| --- | --- |
| **Process for which it is responsible** | Quality Management Process owner |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | Quality Management team leader |
| **Accountable and Reports to** | Pharmaceutical Supply Core Process Owner/ DG |
| **Coordinate with** |  |
| **System & Process in which it participate** |  |
| **Number of Post** | 3 ­­(1officer IV, 1 officer III and 1 officer II) |
| **Expected outcome from the process** | Quality assured products and properly adhered working procedures |
| **Duties and Responsibilities** | * Contribute in cascade of annual plan of the sub process plan to team and individual level and develop periodic performance reports * Conduct quality test for selected products and physical inspection for incoming shipment at warehouse * Contribute during preparation of operational guidelines and SOPs, revise SOPs and test procedures * Perform on job and off job training on product quality testing techniques and tools * Promote and facilitate timely and accurate reporting of quality management related process * Perform quality assurance of pharmaceuticals along the supply chain which includes post marketing surveillance and product recall due to quality problem * Record analytical results in respective books & chart along with samples analyzed |
| **Qualification** | * MSc in Pharmaceutical analysis and quality assurance, B.Pharm from recognized university / Chemist/ Laboratory technologist with practical experience on Pharmaceutical quality assurance |
| **Salary** |  |
| **Minimum Work Experience** | * 4, 3, and 2 years of relevant work experience preferably on pharmaceutical Quality assurance (for officer V, III and II) |
| **Knowledge and Skills** | * Good inter personal and team building skill * High level of responsibility and professional ethics * Determined, proactive and creative * Expert knowledge in pharmaceutical quality assurance and process audit |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work * High level of responsibility and professional ethics * Focused, result oriented and self disciplined |
| **Additional Trainings Needed** | * Relevant training on quality assurance * Computer training |

* + 1. Job descriptions for **p**lanning and project coordination

Job description for **p**lanning and project coordination **process owner**

|  |  |
| --- | --- |
| **Process for which it is responsible** | Planning, Monitoring and Evaluation Process |
| **Process Level (head office or Branch)** | Head Office/ branch office |
| **Job Title** | Planning, Monitoring and Evaluation process owner |
| **Accountable and Reports to** | Director General |
| **Coordinate with** |  |
| **System & Process in which it participate** |  |
| **Number of Post** | **1** |
| **Expected outcome from the process** | On time planning, proper monitoring and evaluation |
| **Duties and Responsibilities** | * Lead strategic and annual planning activities of the organization and ensure proper cascading of the plans to sub-process, team and individual level * Coordinate the development of supply chain M&E strategy and follow its implementation * Ensure that processes develop appropriate KPI * Prepare major thematic areas of the core plan and communicate to management * Lead the monitoring and evaluation efforts of all processes as per agreed key performance indicators and provide feedback as per the findings * coordinate annual performance review meetings with branches and supply chain stakeholders * collaborate with capacity building sub process in coordinating national and subnational surveys and other operational researches and follow implementation of recommendation * Ensure that appropriate planning, monitoring and evaluation tools are in place * coordinate joint supportive supervision activities in collaboration with process, branches and stakeholders * Lead development and implementation of guidelines and SOPs |
| **Qualification** | * BA ( Economics, logistics and supply chain) with advanced degree in business administration and supply chain management |
| **Salary** |  |
| **Minimum Work Experience** | * 10 years of experience |
| **Knowledge and Skills** | * Language proficiency in written and spoken English, Computer training and proven skill (PowerPoint, excel, word etc) * Expert knowledge and skills in planning, monitoring and evaluation |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and contribute to team sprit * High level of responsibility and professional ethics * Determined, proactive and creative, Focused, result oriented and self disciplined |
| **Additional Trainings Needed** | * Relevant training in supply chain management |

Job description for planning team leader

|  |  |
| --- | --- |
| **Process for which it is responsible** | Planning, Monitoring and Evaluation Process |
| **Process Level (head office or Branch)** | Head Office/ branch office |
| **Job Title** | Planning team leader |
| **Accountable and Reports to** | Planning, Monitoring and Evaluation Process owner |
| **Coordinate with** |  |
| **System & Process in which it participate** |  |
| **Number of Post** | **1** |
| **Expected outcome from the process** | On time planning, proper monitoring and evaluation |
| **Duties and Responsibilities** | * Contribute to strategic and annual planning activities of the organization * Cascading strategic plan to annual plan of the agency and to sub process plan * Contribute in preparing major thematic areas of the core annual plan * Coordinate preparatory phase of the annual plan * Contribute in the development of supply chain M&E strategy and follow its implementation * Contribute in the development of appropriate KPI for performance measurement * Coordinate annual performance review meetings with branches and supply chain stakeholders * Contribute in coordinating national and subnational surveys and other operational researches and follow implementation of recommendation * Ensure that appropriate planning, monitoring and evaluation tools are in place * coordinate joint supportive supervision activities in collaboration with process, branches and stakeholders * Contribute during the preparation of operational guidelines and SOPs for the sub process * Contribute to the development and implementation of guidelines and SOPs |
| **Qualification** | * BA ( Economics, logistics and supply chain) with advanced degree in business administration and supply chain management |
| **Salary** |  |
| **Minimum Work Experience** | * 7 years of experience |
| **Knowledge and Skills** | * Language proficiency in written and spoken English, Computer training and proven skill (PowerPoint, excel, word etc) * Expert knowledge and skills in planning, monitoring and evaluation |
| **Personal Characteristics and attitudes** | Good inter personal relationship and contribute to team sprit   * High level of responsibility and professional ethics * Determined, proactive and creative, Focused, result oriented and self-disciplined |
| **Additional Trainings Needed** | * Relevant training in supply chain management |

Job description for Monitoring and Evaluation team leader

|  |  |
| --- | --- |
| **Process for which it is responsible** | Planning, Monitoring and Evaluation Process |
| **Process Level (head office or Branch)** | Head Office/ branch office |
| **Job Title** | Supply chain monitoring and evaluation team leader |
| **Accountable and Reports to** | Planning, Monitoring and Evaluation Process owner |
| **Coordinate with** |  |
| **System & Process in which it participate** |  |
| **Number of Post** | **1** |
| **Expected outcome from the process** | On time planning, proper monitoring and evaluation |
| **Duties and Responsibilities** | * coordinate the development of supply chain M&E strategy and follow its implementation * Contribute to strategic and annual planning activities of the organization * Generate information for decision making * Cascading strategic plan to annual plan of the agency and to sub process plan * Coordinate annual performance review meetings with branches and supply chain stakeholders * Contribute in coordinating national and subnational surveys and other operational researches and follow implementation of recommendation * Develop appropriate planning, monitoring and evaluation tools are in place * Coordinate joint supportive supervision activities in collaboration with process, branches and stakeholders * Contribute to the development and implementation of guidelines and SOPs |
| **Qualification** | * BA ( Economics, logistics and supply chain) with advanced degree in business administration and supply chain management |
| **Salary** |  |
| **Minimum Work Experience** | * 7 years of experience |
| **Knowledge and Skills** | * Language proficiency in written and spoken English, Computer training and proven skill (PowerPoint, excel, word etc) * Expert knowledge and skills in planning, monitoring and evaluation |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and contribute to team sprit * High level of responsibility and professional ethics * Determined, proactive and creative, Focused, result oriented and self-disciplined |
| **Additional Trainings Needed** | * Relevant training in supply chain management |

### Job descriptions for procurement sub pprocess

The list of job areas have been identified with their respective roles and responsibilities in the sub process

Job description

|  |  |
| --- | --- |
| **Process for which it is responsible** | Pharmaceutical Supply Core Process |
| **Process Level** | Head Office |
| **Job Title** | Tender Management process owner ///Procurement Sub Process Owner |
| **Accountable and Reports to** | Pharmaceutical Supply Core Process Owner |
| **Coordinate with** | All sub process in pharmaceuticals supply core process |
| **System & Process in which it participate** |  |
| **Number of Post** | 1 |
| **Expected outcome from the process** | Ensure sustainable supply of pharmaceuticals |
| **Duties and Responsibilities** | * Contribute to agency wide strategic planning * Cascade annual plan of the Agency to sub-process * Ensure the plan are cascaded to the team and sign directorate charter * Conduct on job training for teams in the Tender Management process/ procurement process * Lead, review the development of operational guidelines and standard operating procedures * Devise and propose appropriate procurement modality in an emergency situation * Propose the revision of the standard tender document as required * Propose the revision of bid procedures as required * Develop and implement pre and post qualification criteria for selection of reliable suppliers * Work in collaboration with organization leadership and funding agencies to get “no objection” for proposed tender * Create a constructive relationship with suppliers and other partners * Updates requirements of formats and documents used in procurement * Review and verify tender evaluations with minutes * Establish, monitor and evaluate performance indicators and targets of the sub process * Promotes a team spirit among his/her subordinates and creates a learning environment * Evaluates performance of case teams and repot regularly to all concerned body |
| **Education** | * B..Pharm from recognized university / B.pharm plus Master in pharmacy/master’s in public health preferred if have additional management degrees |
| **Salary** |  |
| **Minimum Work Experience** | * 7 years of experience on procurement for B.Pharm, or 5 years for B.Pharam Plus master’s degree |
| **Knowledge and Skills** | * Language proficiency in written and spoken English/Amharic * Expert knowledge in forecasting/ planning and procurement |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work * Ability to work productively without time limit and under pressure * High level of responsibility and professional ethics * Determined, proactive and creative * Focused, result oriented and self-disciplined * Receptive to and able to facilitate change |
| **Additional Trainings Needed** | * Relevant training on Drug supply management and local and international procurement * Leadership and management course training * Computer training |

Job Description for Coordinators in Procurement Sub process

|  |  |
| --- | --- |
| **Process for which it is responsible** | Procurement Sub Process |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | Coordinator for Tender management of Medicines or health program Medicines or Medical Equipment and Supplies or /Laboratory Supplies |
| **Accountable and Reports to** | Procurement Sub Process Owner |
| **Coordinate with** |  |
| **,System & Process in which it participate** |  |
| **Number of Post** | 1+  2+2+2 = 6 |
| **Expected outcome from the process** | Uninterrupted supply of pharmaceuticals |
| **Duties and Responsibilities** | * Prepares General Procurement Notice for prequalification * Updates pre-qualification documents * Evaluates submitted pre-qualification dossiers * Determines the method of procurement * Schedules activities * Prepares tender document * Conducts evaluation of offer analysis * Prepares decision proposal for offer * Notifies award for tender * Prepare Purchase Order |
| **Education** | B.Sc. Degree from recognized university in  1. Pharmacy  2. Laboratory Technology  3. Biomedical Engineering |
| **Salary** |  |
| **Minimum Work Experience** | * 3 years of experience on procurement |
| **Knowledge and Skills** | * Ability to analyze and communicate information. |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work * Ability to work productively without time limit and under pressure * High level of responsibility and professional ethics * Determined, proactive and creative * Focused, result oriented and self-disciplined * Receptive to and able to facilitate change |
| **Additional Trainings Needed** | * Relevant training on local and international procurement * Computer training |

Coordinators of Tender management Directorates in Procurement sub Process

|  |  |
| --- | --- |
| **Process for which it is responsible** | Procurement Sub Process |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | Procurement Officer (1. Lab, 2. Medical Equipment’s and Supplies, 3. Pharmaceuticals) |
| **Accountable and Reports to** | Procurement Sub Process Owner |
| **Coordinate with** | All Coordinators in the sub process |
| **,System & Process in which it participate** | Tender evaluation , |
| **Number of Post** | 1+1+1+1 = 4 |
| **Expected outcome from the process** | Uninterrupted supply of pharmaceuticals and Medical Supplies respective to specific coordinator post |
| **Duties and Responsibilities** | * Contribute to the directorates plan * Prepare team plan and distribute activities among team member * Follow daily activity of the team and individual performance * Monitor adherence to time line in the tender document and provide support where needed * Check proposed letters for clarification with team members and directorates * Prepares General Procurement Notice for prequalification * Follow on updating pre-qualification documents * Review evaluated submitted pre-qualification dossiers * Determines the method of procurement with the team * Schedules and follow activities alignment in the tender document * Ensure timely execution , quality of work * Prompt team sprit * Participates in the tender evaluation process * Check award proposal form tender * Ensure Prepare Purchase Order and contract timely approval * Participates on regular planning and reporting of the agency * Execute additional tasks related with the post assigned by the immediate supervisor |
| **Education** | B.Sc. Degree from recognized university in  1. Pharmacy  2. Laboratory Technology  3. Biomedical Engineering |
| **Salary** |  |
| **Minimum Work Experience** | * 5 years of experience on procurement |
| **Knowledge and Skills** | * Ability to analyze and communicate information. |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work * Ability to work productively without time limit and under pressure * High level of responsibility and professional ethics * Determined, proactive and creative * Focused, result oriented and self-disciplined * Receptive to and able to facilitate change |
| **Additional Trainings Needed** | * Relevant training on local and international procurement * Computer training |

**Coordinators in Contract administrations**

|  |  |
| --- | --- |
| **Process for which it is responsible** | Procurement Sub Process |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | Coordinator of Shipment follow up and clearance coordinators |
| **Accountable and Reports to** | Procurement Sub Process Owner/ Contract Management Directorates |
| **Coordinate with** | All Coordinators in the sub process |
| **,System & Process in which it participate** | Procurement Sub process and fund management Process |
| **Number of Post** | 1+1 = 2 |
| **Expected outcome from the process** | Uninterrupted supply of pharmaceuticals and Medical Supplies respective to specific coordinator post |
| **Duties and Responsibilities** | * Contribute to the directorates plan * Prepare team plan and distribute activities among team member * Follow daily activity and individual member of the team performance * Monitor adherence to time line in the signed contract document and provide support where needed * Verify and Communicate on the LC and or CAD status * Ensure all contract or orders are properly classified into their fund sources and other categorization for successive reporting * Follow Supplier adherence to contract and report in writing the under preforming ones * Ensure meaningful documentation of all shipments and ensure timely declaration of foreign currency used * Ensure timely execution , quality of work * Prompt team sprit * Check, verify documents for clearance and banking and insurance * Participates on regular planning and reporting of the sub process * Execute additional tasks related with the post assigned by the immediate supervisor |
| **Education** | B.Sc. Degree from recognized university in  Pharmacy plus Management degree preferred or  Supply chain graduate and health degree |
| **Salary** |  |
| **Minimum Work Experience** | * 5 years of experience on procurement |
| **Knowledge and Skills** | * Ability to analyze and communicate information. |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work * Ability to work productively without time limit and under pressure * High level of responsibility and professional ethics * Determined, proactive and creative * Focused, result oriented and self-disciplined * Receptive to and able to facilitate change |
| **Additional Trainings Needed** | * Relevant training on local and international procurement * Computer training |

Job description for: Procurement Officer IV

|  |  |
| --- | --- |
| **Process for which it is responsible** | Procurement Sub Process/ Tender management Directorates |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | Procurement Officer (1. Lab, 2. Medical Equipment’s and Supplies, 3. Pharmaceuticals) |
| **Accountable and Reports to** | Procurement Sub Process Owner/ Tender management Directorates |
| **Coordinate with** | All staff in the sub process |
| **,System & Process in which it participate** |  |
| **Number of Post** | 3+3+2+1 = 9 |
| **Expected outcome from the process** | Uninterrupted supply specific assignment (Medicine, health program medicines Laboratory supplies and medical Devices |
| **Duties and Responsibilities** | * Contribute to the team plan * Prepare induvial plan and report based on established schedule * Prepares Specific procurement Notice for tender * Updates pre-qualification documents * Review evaluation done by others * Evaluates submitted pre-qualification dossiers * Propose the method of procurement * Schedules activities * Prepares tender document * Conducts evaluation of offer analysis * Prepares decision proposal for offer * Notifies award List * Prepare Purchase Order and follow its approval * Ensure contract preparation and signing * Transfer activities to contract management * Report on adherence tender activity schedule |
| **Education** | B.Sc. Degree from recognized university in  1. Pharmacy  2. Laboratory Technology  3. Biomedical Engineering/ Nursing |
| **Salary** |  |
| **Minimum Work Experience** | * 4 years of experience on procurement |
| **Knowledge and Skills** | * Ability to analyze and communicate information. |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work * Ability to work productively without time limit and under pressure * High level of responsibility and professional ethics * Determined, proactive and creative * Focused, result oriented and self-disciplined * Receptive to and able to facilitate change |
| **Additional Trainings Needed** | * Relevant training on local and international procurement * Computer training |

Job description for: Procurement Officer III

|  |  |
| --- | --- |
| **Process for which it is responsible** | Procurement Sub Process/ Tender management Directorates |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | Procurement Officer (1. Lab, 2. Medical Equipment’s and Supplies, 3. Pharmaceuticals) |
| **Accountable and Reports to** | Procurement Sub Process Owner/ Tender management Directorates |
| **Coordinate with** | All staff in the sub process |
| **,System & Process in which it participate** |  |
| **Number of Post** | 3+3+2+1 = 9 |
| **Expected outcome from the process** | Uninterrupted supply specific assignment (Medicine, health program medicines Laboratory supplies and medical Devices |
| **Duties and Responsibilities** | * Contribute to the team plan * Prepare induvial plan and report based on established schedule * Prepares Specific procurement Notice for tender * Updates pre-qualification documents * Evaluates submitted pre-qualification dossiers * Propose the method of procurement * Schedules activities * Prepares tender document * Conducts evaluation of offer analysis * Prepares decision proposal for offer * Notifies award List * Prepare Purchase Order and follow its approval * Ensure contract preparation and signing * Transfer activities to contract management * Report on adherence tender activity schedule |
| **Education** | B.Sc. Degree from recognized university in  1. Pharmacy  2. Laboratory Technology  3. Biomedical Engineering/ Nursing |
| **Salary** |  |
| **Minimum Work Experience** | * 4 years of experience on procurement |
| **Knowledge and Skills** | * Ability to analyze and communicate information. |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work * Ability to work productively without time limit and under pressure * High level of responsibility and professional ethics * Determined, proactive and creative * Focused, result oriented and self-disciplined * Receptive to and able to facilitate change |
| **Additional Trainings Needed** | * Relevant training on local and international procurement * Computer training |

Job description for: Procurement Assistant

|  |  |
| --- | --- |
| **Process for which it is responsible** | Procurement Sub Process |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | Procurement Assistant |
| **Accountable and Reports to** | Procurement Sub Process Owner |
| **Coordinate with** |  |
| **,System & Process in which it participate** |  |
| **Number of Post** | 1 |
| **Expected outcome from the process** | Uninterrupted supply of pharmaceuticals |
| **Duties and Responsibilities** | * On request, provide pre-qualification documents to suppliers * Maintain register of suppliers that apply for pre-qualification * Inform suppliers on decision (rejected/approved) * Inform the procurement committee * Send to funding agency for review * Write SPN (advertisement) * Communicate endorsed Invitations to Bid/Request for quotation * Sealing of the tender box at the pre-set date and time * Present complete tender document sales report * Make records of attendants of the bid opening * Open the tender box with full view of all the attendance * Proper read out and stamping/signing of the bids/ quotations * Prepare minutes of the proceedings in the directorates * Prepare and issue “No objection” package as per SOP for funding agency required (when required ) * Send the signed copies of the contracts and orders to relevant parties (supplier, finance, store, hub) |
| **Education** | * B.A. in Management |
| **Salary** |  |
| **Minimum Work Experience** | * 4 years |
| **Knowledge and Skills** | * Ability to analyze and communicate information. |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work * Ability to work productively without time limit and under pressure * High level of responsibility and professional ethics * Determined, proactive and creative * Focused, result oriented and self disciplined * Receptive to and able to facilitate change |
| **Additional Trainings Needed** | * Office Communication |

Job description for: Banking & Insurance Officer

|  |  |
| --- | --- |
| **Process for which it is responsible** | Procurement Sub Process |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | Banking & Insurance Officer |
| **Accountable and Reports to** | Procurement Sub Process Owner/Contract management Directorates |
| **Coordinate with** | All in the procurement Sub process |
| **System & Process in which it participate** |  |
| **Number of Post** | 3 |
| **Expected outcome from the process** | Uninterrupted supply of pharmaceuticals |
| **Duties and Responsibilities** | * Arrange for insurance and transport if not supplier responsibility * Complete foreign currency permit form and get permission * Ensure opening of LC or cash reserve for CAD * Receive shipping documents /Delivery order from the bank * Check the completeness of the documents |
| **Education** | * Degree Banking and Insurance or BA in management or B.A in supply Chain |
| **Salary** |  |
| **Minimum Work Experience** | * 3 years |
| **Knowledge and Skills** |  |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work * Ability to work productively without time limit and under pressure * High level of responsibility and professional ethics * Determined, proactive and creative * Focused, result oriented and self disciplined * Receptive to and able to facilitate change |
| **Additional Trainings Needed** |  |

Job description for: Transit & Documentation Officer

|  |  |
| --- | --- |
| **Process for which it is responsible** | Procurement Sub Process |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | Transit & Documentation Officer |
| **Accountable and Reports to** | Procurement Sub Process Owner |
| **Coordinate with** |  |
| **,System & Process in which it participate** |  |
| **Number of Post** | 2 |
| **Expected outcome from the process** | Uninterrupted supply of pharmaceuticals |
| **Duties and Responsibilities** | * Contribute team plan * Prepare individual plan and report daily execution based on the agreed format * Arranges for insurance and transport when it is not supplier’s responsibility * Ensure foreign currency permit form and get permission * Follow and make sure Open LC or cash reserve for CAD * Follow up and communicate with suppliers * Take necessary action when required * Maintain and communicate the performance records of the suppliers * Checks the completeness of the documents received from Bank * Identifies the mode of shipment * Follow Settlement of the claim on damaged and missing products * Ensure all performance guaranty are valid as per the contract * Report as per the schedule * Execute additional tasks related to the assignment |
| **Education** | * B.A. in Management (Banking and insurance or Procurement & Supplies Management) or Master’s degree in MBA |
| **Salary** |  |
| **Minimum Work Experience** | * 3years or 1 year for MBA |
| **Knowledge and Skills** | * Ability to analyze and communicate information. |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work * Ability to work productively without time limit and under pressure * High level of responsibility and professional ethics * Determined, proactive and creative * Focused, result oriented and self disciplined * Receptive to and able to facilitate change |
| **Additional Trainings Needed** | * Relevant training on Custom & Clearance. * Computer training |

Job description for: Transit Officer (Custom Clearance Officer)

|  |  |
| --- | --- |
| **Process for which it is responsible** | Procurement Sub-Process |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | Custom Clearance Officer |
| **Accountable and Reports to** | Procurement Sub-process owner / contract management directorates |
| **Coordinate with** |  |
| **System & Process in which it participate** |  |
| **Number of Post** | 8 |
| **Expected outcome from the process** | * Uninterrupted supply of pharmaceuticals |
| **Duties and Responsibilities** | * Posts the details of the shipping documents on transit registration book * Identifies mode of shipment * Completes declaration formality * Settles payment of freight charges * Arranges inspection and get release from regulatory body * Collect tax assessment * Prepares exemption paper or pay tax ( e.g. CPO) * Settles payment of storage and demurrage charges * Strictly follows up on the warehouse of supplies and delivery * Determines the volume and nature of the shipment * Estimates the transport needs ( Kind and number of tracks) * Arranges transport for loading * Receives drugs from custom and monitor load * Handovers supplies at receiving area * Inspects for damage & missing products during handover |
| **Education** | * Diploma in Supply Management/Pharmacy or degree in pharmacy |
| **Salary** |  |
| **Minimum Work Experience** | * 3 years for diploma and 1 year for B. Pharm |
| **Knowledge and Skills** | * Ability to analyze and communicate information. * Good communication skill |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work * Ability to work productively without time limit and under pressure * High level of responsibility and professional ethics * Determined, proactive and creative * Receptive to and able to facilitate change |
| **Additional Trainings Needed** | * Computer training * Custom clearance training * Relevant training on foreign purchase |

### Job descriptions for warehouse and inventory management sub process

The list of Job description category in the sub Process is identified and presented as follow

Job description for: 1. WIM sub process owner

|  |  |
| --- | --- |
| Process for which it is responsible | * Pharmaceutical Supply Core Process |
| Process Level | * Head Office |
| Job Title | * Warehousing and Inventory management sub process owner |
| Accountable and Reports to | * Pharmaceutical Supply Core Process Owner |
| Coordinate with | * Forecasting and supply planning, Procurement and Distribution, MIS, Finance sub process |
| System & Process in which it participate |  |
| Number of Post | * 1 |
| Expected outcome from the sub process | * GSP, Inventory Visibility and traceability |
| Duties and Responsibilities | * Contribute to agency wide strategic planning and annual planning, cascade annual plan of the Agency to sub-process plan and develop periodic performance reports of the sub process * Lead the development and implementation of operational guidelines, procedures and strategy for warehousing and Inventory management of pharmaceuticals * Develop, implement, and monitor strategic, annual, quarter, monthly, weekly and daily work plan of the process. * Oversee warehouse and inventory activities for efficient material storage and handling; maintains labeling system on each stock item; manually stocks inventory shelving with stock items received or returned * Ensures that resources allocated for warehousing and Inventory management are utilized properly * Ensure heavy duty indoor and outdoor forklifts and other warehouse handling equipment are properly operated and managed. * Facilitate timely Receiving, storage and dispatch of pharmaceuticals * Ensure standardize LMIS tools are designed and properly utilized at all level * Define inventory levels for all levels * Follow up the implementation of vendor managed inventory * Make sure that the information from regular stock assessment are utilized for SC decision making * Ensure proper management of short expiry and slow moving products * Follow customer order fulfillment and back orders settlement * Ensure the right mechanisms to enhance stock visibility are in placed at all levels * Ensure a cycle count/perpetual and annual inventory are conducted as per the schedule and take appropriate measures. * Coordinate and collaborate with other sub processes and branch managers * Establish performance indicators and targets for evaluating performance of the sub process * Build, motivate and evaluates performance of case teams * Promotes a team spirit among his/her subordinates and creates a learning environment |
| Education | * B. Pharm or B. pharm with advanced degree in supply chain management/Public health/Business administration or PHD. |
| Salary |  |
| Minimum Work Experience | * 7 years ( B. Pharm), 5 years ( Advanced degree), 3 years (PHD) |
| Knowledge and Skills | * Working knowledge and understanding of WMS, Inventory control concepts * Ability to analyze and communicate information. * Proven problem solving abilities and analytical skills * Effective organizational and interpersonal skills * Strong attention to detail and follow-through skills * Must have the ability to work independently * Coaching and supporting skill * Proven ability in using Microsoft offices ( Word, excel, and PowerPoint) |
| Personal Characteristics and attitudes | * Good inter personal relationship and Capacity for team work * Ability to work productively without time limit and under pressure * High level of responsibility and professional ethics * Determined, proactive and creative * Receptive to and able to facilitate change |
| Additional Trainings Needed | * Supply Management, Warehouse operations or Logistics Management Information system * Experience in forklift operation |

Job description for: 2. Warehouse management coordinator (RDF, Health program)

|  |  |
| --- | --- |
| Process for which it is responsible | WIM Sub process |
| Process Level | Head office or Branch |
| Job Title | Warehouse management coordinator |
| Accountable and Reports to | WIM Sub process owner |
| Coordinate with | Inventory management team, forecasting and supply planning, distribution team, fund |
| System & Process in which it participate |  |
| Number of Post | 2 |
| Expected outcome from the process | * Proper and timely receiving, storage and dispatch of pharmaceuticals at PFSA center and Hubs |
| Duties and Responsibilities | * Develop, implement, and monitor annual, quarter, monthly, weekly and daily work plan of the case team and periodic performance reports of the team * Develop key performance indicators of the receiving, storage, dispatch activities and monitor performance based on the agreed indicators. * Mobilizes more staff or relocates staff to areas with work overloads. * Ensure resources allocated for the implementation of the new WMS * Prepares plan for incoming shipment and arrange areas for receiving, storage and dispatch of pharmaceuticals * Conducts walkthroughs with concerned customers where there are delays * Track damaged & missed items and report to finance and procurement sub processes * Maintains records and coordinates the periodic safety inspection and testing of specialized utility equipment. * Expedites the daily flow of all special order SKU’s to include receiving, labeling, locating and timely shipping. * Troubleshoots all special order problems from time of receipt. * Investigate source and cause for damaged and missing product during receiving * Supervise the proper functioning of cold room, rich trucks and other WHE * Contribute to a cycle count program in a perpetual inventory environment and results to identify necessary recounts and processes to be monitored and provide regular reports on the results with inventory management team * Work with key personnel to effectively implement process improvements to operational procedures in an effort to proactively optimize overall location and item level accuracy and maintain the highest possible productivity levels. * Contribute in managing short expiry and slow moving products * Devise a mechanism to maximize warehouse space utilization * Approve labor cost for contract workers and submit it to process owner * Contribute in enhancing stock visibility and traceability at all levels ( Batch sorting, expiry tracking, FEFO) * Ensures that inventory is managed efficiently and effectively in accordance with guidelines, policies and procedures. * Monitors special order returns, provides reporting and ensures quick returns. * Organizes and maintains warehouse and inventory yard areas for efficient material storage and handling * Motivate and evaluate periodic performance of teams |
| Education | * B. pharm or B. Pharm with advanced degree in supply chain management, business administration, public health or PHD |
| Salary |  |
| Minimum Work Experience | * 5 years (B. pharm), 3 years ( advanced degree) |
| Knowledge and Skills | * Working knowledge and understanding of warehouse management * Ability to analyze and communicate information. * Proven problem solving abilities and analytical skills * Effective organizational and interpersonal skills * Strong attention to detail and follow-through skills * Must have the ability to work independently * Coaching and supporting skill   Proven ability in using Microsoft offices ( Word, excel, and PowerPoint) |
| Personal Characteristics and attitudes | * Good inter personal relationship and Capacity for team work * Ability to work productively without time limit and under pressure * High level of responsibility and professional ethics * Determined, proactive and creative * Focused, result oriented and self-disciplined * Receptive to and able to facilitate change |
| Additional Trainings Needed | * Basic training on warehouse management |

Job description for: 3. Warehouse management officers (RDF, health Program)

|  |  |
| --- | --- |
| Process for which it is responsible | WIM Sub process |
| Process Level | Head office or Branch |
| Job Title | Warehouse management officers |
| Accountable and Reports to | WIM Sub process owner |
| Coordinate with |  |
| System & Process in which it participate |  |
| Number of Post | Branch = 2, center = 11 |
| Expected outcome from the process | * Proper and timely receiving, storage and dispatch of pharmaceuticals at PFSA center and Hubs |
| Duties and Responsibilities | * Prepares incoming shipment plan and area for receiving, storage and dispatch of pharmaceuticals * Conducts walkthroughs with concerned customers where there are delays * Communicate damaged & missed items to WIM process * Maintains records and coordinates the periodic safety inspection and testing of specialized utility equipment. * Expedites the daily flow of all special order SKU’s to include receiving, labeling, locating and timely shipping. * Troubleshoots all special order problems from time of receipt. * Investigate source and cause for damaged and missing product during receiving * Contribute in ensuring timely delivery of drugs to emergency requests of hubs and health facilities * Supervise the proper functioning of cold room, rich trucks and other WHE * Contribute in conducting cyclic or annual physical inventory and taking appropriate action based on the identified root causes of shortages and overages * Work with key personnel to effectively implement process improvements to operational procedures in an effort to proactively optimize overall location and item level accuracy and maintain the highest possible productivity levels. * Assist in devising mechanisms for stock transfer from hub to huband store to store * Handle the receipt and storage of controlled products (Narcotics and Psycho-tropics) * Monitor the proper management of short expiry and slow moving products and report to inventory control team * Monitor daily dispatch activities and conformation * Enhance stock visibility and traceability at all levels * Ensures that good storage practice is implemented in accordance with guidelines, policies and procedures. * Monitors special order returns, provides reporting and ensures quick returns. * Conduct ongoing risk assessment and plan for risk mitigation * Organizes and maintains warehouse and inventory yard areas for efficient material storage and handling |
| Education | * B.pharm, degree in, supply chain management and Laboratory technologies from recognized university |
| Salary |  |
| Minimum Work Experience | * 3 years (B.pharm, Biomedical engineers), 4 years (Lab) |
| Knowledge and Skills | * Working knowledge and understanding of WMS, * Ability to analyze and communicate information. * Technical skill * Coaching and supporting skill * Proven ability in using Microsoft offices ( Word, excel, and PowerPoint) |
| Personal Characteristics and attitudes | * Good interpersonal relationship and capacity for team work * Ability to work productively without time limit and under pressure * High level of responsibility and professional ethics * Determined, proactive and creative * Focused, result oriented and self-disciplined * Receptive to and able to facilitate change |
| Additional Trainings Needed | * Warehouse management, medical equipment, LMIS |

Job description for: 4. Inventory Control coordinator (RDF, Health program)

|  |  |
| --- | --- |
| Process for which it is responsible | * Pharmaceutical Supply Core Process |
| Process Level | * Head Office/Branch |
| Job Title | * Inventory Control officers |
| Accountable and Reports to | * WIM sub process owner |
| Coordinate with | * Forecasting and supply planning, Distribution, MIS, Finance sub process |
| System & Process in which it participate |  |
| Number of Post | * Centre = 2, branch = 2 |
| Expected outcome from the sub process | Inventory Visibility and traceability |
| Duties and Responsibilities | * Develop, implement, and monitor annual, quarter, monthly, weekly and daily work plan of the case team and periodic performance reports of the team * Coordinate the development and implementation of operational guidelines, procedures and strategy for inventory management of pharmaceuticals * Ensures that resources allocated for inventory management are utilized properly * Ensure standardize LMIS tools are designed and properly utilized at all level * Define differential inventory levels based on facility volume, product nature and location * Follow up the implementation of vendor managed inventory * Make sure that the information from regular stock assessment are utilized for SC decision making * Ensure proper management of short expiry and slow moving products * Follow customer order fulfillment and back orders settlement * Ensure the right mechanisms to enhance stock visibility are in placed at all levels * Ensure a cycle count/perpetual and annual inventory are conducted as per the schedule and take appropriate measures. * Coordinate and collaborate with other sub processes and branch managers. * Promotes a team spirit among his/her subordinates and creates a learning environment. * Ensure that appropriate tools are in place for efficient inventory management. * Coordinate the collection, organizing, analyzing and dissemination of information for SC decision making. * Contribute in managing and maintaining databases, information catalogues and web resources * Contribute for project managing the design, development and implementation of new information management systems from time to time. * Ensure quality, completeness, timeliness, accuracy and reliability of LMIS data. * Design, update recording and reporting formats and facilitate printing and distribution of those records and formats * Reviews current inventory and consumption at hub and health facility. * Develop tools for cyclic and annual physical inventory, conduct the physical count and report the result to WIM process * Develop tools to manage short expiry and slow moving products and analyze the data for decision making. * Enhance stock visibility and traceability at all levels * Establish performance indicators and targets for evaluating performance of the inventory team |
| Education | * B. pharm or advanced degree in supply chain management, public health , business administration |
| Salary |  |
| Minimum Work Experience | * 5 years ( B.Pharm), 3 years ( Advanced degree) |
| Knowledge and Skills | * Working knowledge and understanding of WMS, Inventory control concepts * Ability to analyze and communicate information. * Proven problem solving abilities and analytical skills * Effective organizational and interpersonal skills * Strong attention to detail and follow-through skills * Must have the ability to work independently * Coaching and supporting skill * Proven ability in using Microsoft offices ( Word, excel, and PowerPoint) |
| Personal Characteristics and attitudes | * Good inter personal relationship and Capacity for team work * Ability to work productively without time limit and under pressure. * High level of responsibility and professional ethics. * Determined, proactive and creative. * Receptive to and able to facilitate change. |
| Additional Trainings Needed | * Supply Management, Warehouse operations or Logistics Management Information system |

Job description for: 4. Inventory Control officer (RDF, Health program)

|  |  |
| --- | --- |
| Process for which it is responsible | * Pharmaceutical Supply Core Process |
|  |  |
| Process Level | * Head Office/Branch |
| Job Title | * Inventory Control officers |
| Accountable and Reports to | * IM coordinator |
| Coordinate with | * Forecasting and supply planning, Distribution, MIS, Finance sub process |
| System & Process in which it participate |  |
| Number of Post | * Centre = 2, branch = 2 |
| Expected outcome from the sub process | Inventory Visibility and traceability |
| Duties and Responsibilities | * Plan and implement daily, weekly ,monthly, quarterly and annually Inventory control activities * Implement operational guidelines, procedures, SOPs and strategy for inventory management of pharmaceuticals * Proper utilization of resources allocated for inventory management * Ensure standardize LMIS tools are designed and properly utilized at all level * Implement and follow differential inventory levels based on facility volume, product nature and location * Follow up the implementation of vendor managed inventory * Make sure that the information from regular stock assessment are utilized for Supply Chain decision making * Implement and follow proper management of short expiry and slow moving products * Follow customer order fulfillment and back orders settlement * Ensure the right mechanisms to enhance stock visibility are in placed at all levels * Ensure a cycle count/perpetual and annual inventory are conducted as per the schedule and take appropriate measures. * Coordinate and collaborate with other sub processes and branch managers. * Promotes a team spirit among his/her subordinates and creates a learning environment. * Ensure that appropriate tools are in place for efficient inventory management. * Collect, organize, analyze and disseminate Logistics information for Supply Chain decision making. * Manage and maintain databases, information catalogues and web resources * Contribute for project managing the design, development and implementation of new information management systems from time to time. * Ensure quality, completeness, timeliness, accuracy and reliability of LMIS data. * Design, update recording and reporting formats and facilitate printing and distribution of those records and formats * Reviews current inventory and consumption at hub and health facility. * Develop tools for cyclic and annual physical inventory, conduct the physical count and report the result to WIM process * Develop and Implement tools to manage short expiry and slow moving products and analyze the data for decision making. * Enhance stock visibility and traceability at all levels * Establish performance indicators and targets for evaluating performance of the inventory team. |
| Education | * B. pharm or advanced degree in supply chain management, public health , business administration |
| Salary |  |
| Minimum Work Experience | * 2 years ( B.Pharm), 0 years ( Advanced degree) |
| Knowledge and Skills | * Working knowledge and understanding of WMS, Inventory control concepts * Ability to analyze and communicate information. * Proven problem solving abilities and analytical skills * Effective organizational and interpersonal skills * Strong attention to detail and follow-through skills * Must have the ability to work independently * Coaching and supporting skill * Proven ability in using Microsoft offices ( Word, excel, and PowerPoint) |
| Personal Characteristics and attitudes | * Good inter personal relationship and Capacity for team work * Ability to work productively without time limit and under pressure. * High level of responsibility and professional ethics. * Determined, proactive and creative. * Receptive to and able to facilitate change. |
| Additional Trainings Needed | * Supply Management, Warehouse operations or Logistics Management Information system |

Job description for: 5. Warehouse manager (receiving, storage and dispatch)

|  |  |
| --- | --- |
| Process for which it is responsible | Warehouse management sub process |
| Process Level | Head Office/Branch |
| Job Title | Warehouse manager |
| Accountable and Reports to | Warehouse management officer |
| Coordinate with |  |
| System & Process in which it participate |  |
| Number of Post | Center = 2 mangers/warehouse, Branch = 2 managers/warehouse |
| Expected outcome from the process | Timely Receiving, proper storage and dispatch of pharmaceuticals |
| Duties and Responsibilities | * Receive advance shipping notice and arrange space for unloading new arrivals * Coordinate and leadreceiving, storage and dispatching activities in the warehouse * Instruct pickers and packers to avail WHE, unload and arrange new arrivals. * Receive consignment by signing and stamping of the delivery note ( remarks if any) and cross-dock the product * Inspection for damage and missing at receiving area and investigate the cause * Arrange and sort consignment received with batch numbers and expiry date * Check stock against documentation and verify discrepancies between delivery document and received quantity * Ensure special precaution during receiving of thermos labile, fragile and flammable items * check status of temperature monitoring devices for vaccines * Conduct physical inspection for products received * Acknowledge receipt, prepare VAR (vaccine arrival report) for vaccines * Prepare GRNF/IGRNF * keep damaged items and products with quality problem in separate place until disposal and follow the disposal of damaged & expired items * motivating, organize and encourage teamwork within the workforce to ensure set productivity targets are met * Ensure that items in the storage area are put away (placed) in accordance with product type, batch number, and expiry dateto their specific locations * Follow FEFO/LEFO procedures in placement and issue of products * Conduct routine warehouse management tasks (apply good storage management) and Monitoring of storage conditions such as temperature, humidity, lighting and sunlight. * Monitor cleaning and maintenance of warehouse * Monitoring store security and safety to ensure that relevant equipment and security procedures are adhered to. * Monitoring the product quality (visually inspect commodities and check expiration dates). * Ensure that products are stacked correctly (are the lower cartons being crushed). * Make sure timely update of receiving and issuing transactions on the bin card * Check fire safety procedures, fire extinguishers, smoke detectors and stand-by generator and take appropriate actions. * Make sure that the storage conditions are appropriate and the space is used economically * Assigns relevant staff (pickers) to pick and check the customer orders. * Monitor proper picking procedures in place * Measure pickers and packers performances based on KPI * Runs a replenishment list from the system for the stores assistants in order to locate items from the bulk store to the picking area * Ensure that replenishing procedures properly done * Follow the warehouse floor and MHE maintenance regularly done * Check picked items on dispatch area * Verify the quantities in the presence of the authorized recipient * Ensure that newly arrived cold room items are immediately stored in cold room * Monitor the temperature of the cold room regularly and report temperature deviations immediately * Participate in cyclic and annual inventory counts * Conduct and follow product kitting if needed |
| Education | B .Pharm in pharmacy |
| Salary |  |
| Minimum Work Experience |  |
| Knowledge and Skills | * Ability to analyze and communicate information. * Proven problem solving abilities and analytical skills * Technical skill * Must have the ability to work independently * Coaching and supporting skill * Proven ability in using Microsoft offices ( Word, excel, and PowerPoint) |
| Personal Characteristics and attitudes | * Good inter personal relationship and Capacity for team work * Ability to work productively without time limit and under pressure * High level of responsibility and professional ethics * Determined, proactive and creative * Focused, result oriented and self-disciplined |

Job description for: 4. LMIS Officer (RDF, Health program)

|  |  |
| --- | --- |
| Process for which it is responsible | * Pharmaceutical Supply Core Process |
|  |  |
| Process Level | * Head Office/Branch |
| Job Title | * LMIS officer |
| Accountable and Reports to | * Warehousing and Inventory management coordinator |
| Coordinate with | * Forecasting and supply planning, Distribution, MIS, Finance sub process |
| System & Process in which it participate |  |
| Number of Post | * Centre = as per the program type and product nature, branch = as per the program type, product nature and catchment area |
| Expected outcome from the sub process | Inventory Visibility and traceability, Customer order management and fulfillment |
| Duties and Responsibilities | * Plan and implement daily, weekly ,monthly, quarterly and annually Inventory control activities * Implement operational guidelines, procedures, SOPs and strategy for inventory management of pharmaceuticals * Proper utilization of resources allocated for inventory management * Manage customer request and follow order fulfillment * Ensure standardize LMIS tools are designed and properly utilized at all level * Update recording and reporting formats and facilitate printing and distribution of those records and formats * Collect, organize, analyze and disseminate Logistics information for Supply Chain decision making. * Ensure quality, completeness, timeliness, accuracy and reliability of LMIS data. * Assess stocks and mange back orders * up the implementation of vendor managed inventory * Make sure that the information from regular stock assessment are utilized for Supply Chain decision making * Implement and follow proper management of short expiry and slow moving products * Ensure the right mechanisms to enhance stock visibility are in placed at center and hub * Manage and maintain databases, information catalogues and web resources for purpose of customer need * Reviews current inventory and consumption at hub and health facility. * Implement tools to manage short expiry and slow moving products and analyze the data for decision making. * Enhance stock visibility and traceability at all levels |
| Education | * Diploma in pharmacy with relevant training on LMIS and customer handling, HIT, supply chain |
| Salary |  |
| Minimum Work Experience | * 2 years ( diploma), 0 years ( Advanced degree) |
| Knowledge and Skills | * Working knowledge and understanding of customer handling , Inventory control concepts * Ability to analyze and communicate information. * Proven problem solving abilities and analytical skills * Effective organizational and interpersonal skills * Strong attention to detail and follow-through skills * Must have the ability to work independently * Proven ability in using Microsoft offices ( Word, excel, and PowerPoint) |
| Personal Characteristics and attitudes | * Good customer handling skill and knowledge * Ability to work productively without time limit and under pressure. * High level of responsibility and professional ethics. * Determined, proactive and creative. * Receptive to and able to facilitate change. |
| Additional Trainings Needed | * Supply Management, customer handling or Logistics Management Information system |

Job description for: Dispatch Checker/Officer

|  |  |
| --- | --- |
| **Process for which it is responsible** | WIM Sub process |
| **Process Level (head office or Branch)** | Head Office / Branch |
| **Job Title** | Dispatch Checker |
| **Accountable and Reports to** | Warehouse manager officer |
| **Coordinate with** |  |
| **System & Process in which it participate** |  |
| **Number of Post** |  |
| **Expected outcome from the process** | Timely delivery of pharmaceuticals to PFSA hubs |
| **Duties and Responsibilities** | * Welcoming customers Greeting customers with a smile and making them feel comfortable. * Ensuring efficient and timely management of delivering customers’ orders * Organizing the working area (dispatch area) regularly and as may be necessary clearing the boxes. * Identifying picked orders and noting them on a board for quick reference of when customers come to collect. * Picking of ordered items from the store and delivering them to the picking area * Checking orders of all customers; walk-ins, export and drug pool program and dispatch the cleared orders * Verify and checks each and every items on dispatch correspond exactly to the issue order in description, unit, quantity, expiry date, batch no., manufacturer, etc. * Ensures that no item is taken out of warehouse without being authorized and checked. * Verifies items in the presence of authorized recipient. * Corrects discrepancies or errors occurred on dispatch. * Supervise the packing and sealing of not full cartons together with the storage warehouse manager. * Ensures the availability of equipment and materials for packing. * Managing internal and external customer complaints. * Receive, listen, investigate and where appropriate carry out corrective action or advice. * After completion of hand over make it confirm the dispatched items in the HCMIS. * Manual registration should be in place in case of items dispatched in manual delivery and make confirm in the HCMIS as soon as the manual delivery has changed to STV. |
| **Education** | Diploma in Material Management / Pharmacy |
| **Salary** |  |
| **Minimum Work Experience** | 3 years |
| **Knowledge and Skills** |  |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work * Ability to work productively without time limit and under pressure * High level of responsibility and professional ethics * Determined, proactive and creative * Focused, result oriented and self-disciplined * Receptive to and able to facilitate change |
| **Additional Trainings Needed** | Warehouse Management, customer service training |

Job description for: Warehouse workers (Pickers, Packers, labeler, Loaders and un-loaders)

|  |  |
| --- | --- |
| **Process for which it is responsible** | WIM Sub process / Branch… |
| **Process Level (head office or Branch)** | Head Office / Branch |
| **Job Title** | Warehouse workers (Pickers, Packers, labeler, Loaders and Un-loaders) |
| **Accountable and Reports to** | Receiving, Storage warehouse manager and Dispatch checker |
| **Coordinate with** |  |
| **System & Process in which it participate** |  |
| **Number of Post** | Receiving and storage =35 ,distribution =21 , Major Hub=11  Total, H. Office = 56, Major Hub = 15 Per program type WHs |
| **Expected outcome from the process** | Timely delivery of pharmaceuticals to health facilities |
| **Duties and Responsibilities** | * Arranges space for unloading new arrivals. * Avail pallets, hand pallet trucks * Unloads new arrivals at receiving area * Separates damaged items from new arrivals at receiving area * Puts Expired, damaged/QC failed items on separate storage area/ quarantine area. * Arranges and segregate items according to batch numbers and expiry dates. * Moves supplies to quarantine if any * Put away products to their specific locations. * Participate in disposal of damaged & expired items * Picks stock to replenish the pick face and dispatch area * Packs, label and seal * Loading items on trucks * Follows strictly signs and directions on packing materials (different arrows and directions by the manufacturer) * Takes due care for items he/she is handling and also for other warehouse equipment and supplies. * Give special care in case of fragile and inflammable products during loading, unloading and storing. * Prepare kit as per the given standard. * Perform strictly all warehouse safety procedures. * Do other tasks directed by the warehouse manager as needed. |
| **Education** | Grade 10 complete |
| **Salary** |  |
| **Minimum Work Experience** | Not required |
| **Knowledge and Skills** |  |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work |
| **Additional Trainings Needed** | Proper handling of products, warehouse operations sops |

JOB description for: Warehouse Cleaner

|  |  |
| --- | --- |
| **Process for which it is responsible** | WIM Sub process / Branch… |
| **Process Level (head office or Branch)** | Head Office/ Branch |
| **Job Title** | Warehouse cleaner |
| **Accountable and Reports to** | Receiving, Storage warehouse manager and Dispatch checker |
| **Coordinate with** |  |
| **System & Process in which it participate** |  |
| **Number of Post** | 2 \* S  S=number of store |
| **Expected outcome from the process** | Timely delivery of pharmaceuticals to health facilities. |
| **Duties and Responsibilities** | * Clean warehouse floor, racks, cases, cupboards and cold room * Clean the warehouse environment and toilet * Follow the schedule and instructions given for cleaning of receiving and storage warehouse * Sweep and mop or scrub the floors of the room regularly. * Wipe down the shelves and products to remove dust and dirt. * Place garbage in covered container. * Dispose garbage and other wastes. |
| **Education** | Grade 8 complete |
| **Salary** |  |
| **Minimum Work Experience** |  |
| **Knowledge and Skills** |  |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work |
| **Additional Trainings Needed** | Health and safety precaution |

Job description for: Store Clerk / Invoice

|  |  |
| --- | --- |
| **Process for which it is responsible** | WIM Sub process / Branch… |
| **Process Level (head office or Branch)** | Head Office / Branch |
| **Job Title** | Store Clerk |
| **Accountable and Reports to** | Warehouse manager |
| **Coordinate with** |  |
| **System & Process in which it participate** |  |
| **Number of Post** | 2 \* S  S=number of store |
| **Expected outcome from the process** | Timely delivery of pharmaceuticals to Health Facilities |
| **Duties and Responsibilities** | * Based on the given issue order Prepares and keeps records of transaction documents (GRV, IGRV, ISTV, SRM, GRNF, Delivery Note, Invoice etc.) and update inventory. * Maintains the record (Filing) of transaction documents * Files issue orders or other source documents. * Strictly follows procedures for deletion, edition, etc. while preparing transaction documents. * Follows rules of serial numbers for preparing and filing documents. * Follows the agencies IT policy when using computers. * Identify and keep the STVs that are void and reprinted in the HCMIS. * Hand over all STVs to the concerned body by signing in the registration format. * Verifies the description, quantities, price, marginal cost … etc. of the original STV documents with the original issue order and report to the WIM officer if any discrepancy. |
| **Education** | Diploma in Accounting/ Supplies Management |
| **Salary** |  |
| **Minimum Work Experience** | 2 years on related activity |
| **Knowledge and Skills** | Computer usage skill. |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work * Ability to work productively without time limit and under pressure * Receptive to and able to facilitate change |
| **Additional Trainings Needed** | * Basic computer skill |

Job description for: Forklift Driver

|  |  |
| --- | --- |
| **Process for which it is responsible** | Storage and Distribution Sub process / Branch … |
| **Process Level (head office or Branch)** | Head Office/Branch |
| **Job Title** | Forklift Driver |
| **Accountable and Reports to** | Warehouse Manager |
| **Coordinate with** |  |
| **System & Process in which it participate** |  |
| **Number of Post** | One per number of forklift |
| **Expected outcome from the process** | Timely delivery of pharmaceuticals to Health Facilities |
| **Duties and Responsibilities** | * Unload and load products during receiving, storage and Dispatching. * Perform daily put away to destination location in the rack and pick items from storage areas as per the instruction. * Implement palletize and wrapping of products in the rack. * Give special care in case of fragile and inflammable products during loading, unloading and storing. * Perform and follow all warehouse safety procedures and precaution measures. * Properly follow the safety, charging and service maintenance time of the forklift and report in case of any problem if to the maintenance team. * Do other tasks directed by the warehouse manager as needed. |
| **Education** | Special driving license. |
| **Salary** |  |
| **Minimum Work Experience** | 3 years in related activity. |
| **Knowledge and Skills** |  |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work |
| **Additional Trainings Needed** |  |

Job description for: Branch Manager

|  |  |
| --- | --- |
| **Process for which it is responsible** | Pharmaceuticals Supply Core Process |
| **Process Level** | Branch |
| **Job Title** | Branch Manager |
| **Accountable and Reports to** | General Director /Deputy Director General |
| **Coordinate with** |  |
| **System & Process in which it participate** |  |
| **Number of Post** | 1 |
| **Expected outcome from the process** | To full fill the six rights of logistics ,proper utilization of resources |
| **Duties and Responsibilities** | * Contribute to agency wide strategic planning and annual planning, cascade annual plan of the Agency to branch level and all processes in the branch * Develop, implement, and monitor strategic, annual, quarter, monthly, weekly and daily work plan of the branch. * Develop periodic performance reports of the all processes of the branch * Lead the development and implementation of operational guidelines, procedures and strategy for warehousing and Inventory management, Fund management, Forecasting and supply planning and Human resource management. * Develop, implement and maintain strategies and procedures to ensure that all incoming products received on time and outgoing goods are shipped. * Ensures that resources for receiving, storage, dispatch inventory management, Fund management, human resource and for all other processes are utilized properly * Promote strong liaison with public health facilities and facilitate timely response to their request. * Coordinate and collaborate with Regional HB/Zonal HD and Woreda Health Offices to ensure successful implementation of action plan at HF level * Conclude contract with private transport carriers (if required) * Establish and Evaluates performance indicators and targets for evaluating performance of the branch * Promotes a team spirit among his/her subordinates and creates a learning environment |
| **Education** | * Master degree/ B. Pharm /SC with management training |
| **Salary** |  |
| **Minimum Work Experience** | * 8 years |
| **Knowledge and Skills** |  |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work * Good inter personal relationship and Capacity for team work * Ability to work productively without time limit and under pressure * High level of responsibility and professional ethics * Determined, proactive and creative * Receptive to and able to facilitate change |
| **Additional Trainings Needed** | * Management training, Warehouse operation, Distribution, Customer handling |

### Job description for distribution and fleet management sub process

**Job Description for Distribution Sub Process (Central Level)**

**Job Description; for Distribution sub process owner**

|  |  |
| --- | --- |
| **Process for which it is responsible** | Pharmaceutical Supply Core Process |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | **D**istribution sub process owner |
| **Accountable and Reports to** | Pharmaceutical Supply Core Process Owner |
| **Coordinate with** | All Sub process |
| **System & Process in which it participate** | Distribution Sub process |
| **Number of Post** | 1 |
| **Expected outcome from the process** | Timely delivery of pharmaceuticals to PFSA Hubs and Health Facilities as deemed necessary |
| **Duties and Responsibilities** | * Develop and apply operational guidelines, procedures and strategy for Good distribution Practices * Design methods for improving the transport system for delivery of pharmaceuticals. * Ensure that resources for distribution are utilized properly. * Building the capacity of the case teams/ professionals/ * Follow up timely distribution * Coordinate and collaborate with other sub processes and branch managers. * Establish constructive relationship with private transport carriers. * Establish performance indicators and targets for evaluating performance of the sub process. * Promote a team spirit among his/her subordinates and creates a learning environment. * Follow up and take action on the GPS report. * Follow up and take immediate action in case of emergency situation. * Follow up Addis Ababa hospitals in collaboration with Addis Ababa hub and strengthen the command post. * Perform activities directed from the core process. |
| **Education** | B.Pharm from recognized university/ MSC in Pharmacy or Logistic and Supply Chain |
| **Salary** |  |
| **Minimum Work Experience** | 7 years or 5 years |
| **Knowledge and Skills** | Ability to analyze and communicate information. |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work * Ability to work productively without time limit and under pressure * High level of responsibility and professional ethics * Determined, proactive and creative * Receptive to and able to facilitate change |
| **Additional Trainings Needed** | * Supply Management, Warehouse or Logistics Management * Computer training |

**Job description for: Distribution coordinator for RDF**

|  |  |
| --- | --- |
| **Process for which it is responsible** | Pharmaceutical Supply Core Process |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | Distribution sub process |
| **Accountable and Reports to** | Distribution sub process owner |
| **Coordinate with** | All Pharmaceutical supply process |
| **System & Process in which it participate** | Distribution Sub process |
| **Number of Post** | 1 |
| **Expected outcome from the process** | * Timely delivery of pharmaceuticals to PFSA Hubs and Health Facilities |
| **Duties and Responsibilities** | * Prepare delivery schedule with other officers. * Follow up reports and recommendations that is received from WIM * Updates supply plan against actual availability (stock and consumption) at hubs. * Assign vehicles with Health program and fleet mgt coordinator. * Coordinate the disposal of damaged, expired and quality failed items. * Follow up new arrival products and communicate storage and inventory management sub process to get the necessary break down to all hubs as per their annual quantification. * Follow timely delivery of drugs to emergency requests of hubs. * Follow up hub to hub stock transfer (redistribution). * Communicate general service for urgent maintenance of vehicles. * Follow up the document follow up team and make appropriate measure if there is any discrepancy. * Follow up on account to account transfer items. * Follow up medical equipment distribution. * Coach and support team members to promote team spirit among the teams and creates a learning environment * Follow up the stock status of Addis Ababa hospitals and participate in the command post. * Implement direct distribution center operation to ensure achievement of cost, productivity, accuracy, or timeliness objective. * Facilitate timely distribution of pharmaceuticals. * Follow up the timely change of manual delivery notes in to STV. |
| **Education** | * B.Pharm from recognized university/ MSC in Pharmacy or Logistic and Supply Chain |
| **Salary** |  |
| **Minimum Work Experience** | * 5/3 /years on related activity |
| **Knowledge and Skills** | * Ability to analyze and communicate information. |
| **Personal Characteristics and attitudes** | * Ability to coordinate and lead the team. * Good inter personal relationship and Capacity for team work. * Ability to work productively without time limit and under pressure. * High level of responsibility and professional ethics. * Determined, proactive and creative. * Focused, result oriented and self-disciplined. * Receptive to and able to facilitate change |
| **Additional Training needed** | * Good Distribution Practice * Transport management * Computer training |

Job description for: Distribution coordinator for Health Program

|  |  |
| --- | --- |
| **Process for which it is responsible** | Pharmaceutical Supply Core Process |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | **Distribution coordinator** |
| **Accountable and Reports to** | **D**istribution sub process owner |
| **Coordinate with** | All Pharmaceutical supply process |
| **System & Process in which it participate** | Distribution Sub process |
| **Number of Post** | 1 |
| **Expected outcome from the process** | Timely delivery of pharmaceuticals to PFSA Hubs and Health Facilities |
| **Duties and Responsibilities** | * Prepare delivery schedule with other officers. * Follow up reports and recommendations that are given from inventory management and prepare report for their performance. * Updates supply plan against actual availability (stock and consumption) **at** hubs. * Assign vehicles with Health program and fleet mgt coordinator. * Coordinate the disposal of damaged, expired and quality failed items. * Follow up new arrival products and communicate storage and inventory management sub process to get the necessary break down to all hubs as per their annual quantification. * Follow timely delivery of drugs to emergency requests of hubs. * Follow up hub to hub stock transfer (redistribution). * Communicate general service for urgent maintenance of vehicles. * Follow up the document follow up team and make appropriate measure if there is any discrepancy. * Follow up on account to account transfer items. * Follow up medical equipment distribution. * Support and follow up the team. * Implement direct distribution center operation to ensure achievement of cost, productivity, accuracy, or timeliness objective * Facilitate timely distribution of pharmaceuticals. * Follow up the timely change of manual delivery notes in to STV. |
| **Education** | * B.Pharm from recognized university/ MSC in Pharmacy or Logistic and Supply Chain |
| **Salary** |  |
| **Minimum Work Experience** | * 5/3 years on related activity |
| **Knowledge and Skills** |  |
| **Personal Characteristics and attitudes** | * Ability to coordinate and lead the team. * Good inter personal relationship and Capacity for team work * Ability to work productively without time limit and under pressure * High level of responsibility and professional ethics * Determined, proactive and creative * Focused, result oriented and self-disciplined * Receptive to and able to facilitate change |
| **Additional Training needed** | * Good Distribution Practice * Transport management * Computer training |

|  |  |
| --- | --- |
| **Table 17: Job Description; Distribution Pharmacist** | |
| Process for which it is responsible | Distribution Sub process |
| Process Level (head office or Branch) | Head Office |
| Job Title | Distribution Pharmacist |
| Accountable and Reports to | Distribution Sub process owner |
| Coordinate with | All Pharmaceutical supply process |
| System & Process in which it participate | Distribution Sub process |
| Number of Post | 7 |
| Expected outcome from the process | Timely delivery of pharmaceuticals to PFSA Hubs and Health Facilities as deemed necessary |
| Duties and Responsibilities | Receive and evaluate Issue order from WIM  Proper documentation of received documents  Prepare plan for transport and delivery route and update periodically  Communicates distribution plan to central store, transport unit and hubs  Estimate weight and volume of products to determine number of vehicles and arrange vehicle for distribution  Facilitate timely distribution to hubs and health facilities  Facilitate direct delivery to Addis Ababa hospitals and other facilities as deemed necessary  Investigate source and cause for damaged and missing product during distribution  Communicate damaged & missed items to Fund and procurement sub process  Follow up on the disposal of damaged, expired and quality failed items  Labelle and pack items with MRP,PFSA Logo etc  Ensures timely delivery of drugs to emergency requests of hubs and health facilities  Monitors hub to hub transfer of stocks through central stores  Daily summary of activities and report to immediate supervisor  Perform activities assigned to you from your immediate supervisor |
| Education | B.Pharm from recognized university /MSC in Pharmacy or Logistic and Supply Chain |
| Salary |  |
| Minimum Work Experience | 2 /0 years on related activity |
| Knowledge and Skills |  |
| Personal Characteristics and attitudes | Good inter personal relationship and Capacity for team work  Ability to work productively without time limit and under pressure  High level of responsibility and professional ethics  Determined, proactive and creative  Focused, result oriented and self disciplined  Receptive to and able to facilitate change |
| Additional Trainings Needed | Good Distribution Practice  Transport management  Computer training |

**Job description for: Documentation Follow Up Clerk**

|  |  |
| --- | --- |
| **Process for which it is responsible** | Distribution Sub process |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | Documentation Follow Up Clerk |
| **Accountable and Reports to** | Distribution Sub process owner |
| **Coordinate with** | WIM and Fund Sub process |
| **System & Process in which it participate** | Distribution Sub Process |
| **Number of Post** | 9 |
| **Expected outcome from the process** | Timely delivery of pharmaceuticals to Health Facilities |
| **Duties and Responsibilities** | * Follow and Report uncollected POD to immediate supervisors * Keeps a copy of all transaction documents which are finalized * Identify and report issued documents from the system that do not have POD * Verifies the validity of transaction documents by looking signatures, dates, etc. * Receives authorized copies of STVs, delivery notes and receiving vouchers from hubs and other customers as a proof of receipt for items delivered * Verifies the quantities, price, etc. of receipt documents with the original issue documents * Reports discrepancies to his/her immediate supervisor * Aggregate and submitted POD to Fund sub process |
| **Education** | Diploma in Accounting/Supply Management |
| **Salary** |  |
| Minimum Work Experience | 2 years in related activity |
| Knowledge and Skills |  |
| Personal Characteristics and attitudes | Good inter personal relationship and Capacity for team work |
| Additional Trainings Needed | Basic computer skill |

Job description for: Fleet Scheduling and follow up Officer

|  |  |
| --- | --- |
| Process for which it is responsible | Distribution sub-process |
| Process Level (head office or Branch) | Head Office |
| Job Title | Fleet Routing and Scheduling Officer |
| **Accountable and Reports to** | Distribution sub-process Owner |
| **Coordinate with** | Procurement, Fund and General Service sub process |
| **System & Process in which it participate** | Distribution sub process |
| **Number of Post** | 5 |
| **Expected outcome from the process** | Timely delivery of quality pharmaceuticals to public health facilities |
| **Duties and Responsibilities** | * Prepares annual plan for routing and scheduling * Assess the capacity of own vehicles * Analyze the need for transport out sourcing and forward estimated requirements of vehicles * Decides to use own truck or out-source in collaboration with distribution pharmacists * Communicate with private carriers for the timely provision of vehicles. * Continuous monitoring of the performance of private carriers as per contract * Avails required vehicles without delay. * Follow the distribution plan to make arrangement of required vehicles * Communicate with General Services facilitate vehicle maintenance * Truck the where about of vehicles using GPS * Summarize GPS repots/outputs such as driver behavior, risk management…. * Evaluate fleet availability performance and report to immediate supervisor * Assign vehicle to procurement sub process to pick up shipments from ports * Determine most cost effective transport means |
| **Education** | Degree in Management/Auto Mechanics/ |
| **Salary** |  |
| **Minimum Work Experience** | 3 years |
| **Knowledge and Skills** |  |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work |
| **Additional Trainings Needed** | * Transport Management * IT training * Computer basic skills |

Job description for: Biomedical Engineer Officer

|  |  |
| --- | --- |
| Process for which it is responsible | Distribution sub-process |
| Process Level (head office or Branch) | Head Office |
| Job Title | Biomedical Engineer Officer |
| Accountable and Reports to | Distribution sub-process Owner |
| Coordinate with | WIM and Procurement Sub process |
| System & Process in which it participate | Distribution sub-process |
| **Number of Post** | 2 |
| **Expected outcome from the process** | Timely delivery of quality pharmaceuticals to public health facilities |
| **Duties and Responsibilities** | * Follow the special precaution of medical devices distribution * Truck the where about of capital medical devices * Follow installation and communicate to relevant bodies * Follow training and commissioning of medical devices * Follow medical device management until the warranty period |
| **Education** | Degree in Biomedical Engineer/MSC in Biomedical |
| **Salary** |  |
| **Minimum Work Experience** | 3 years |
| **Knowledge and Skills** |  |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work |
| **Additional Trainings Needed** | * Computer training * Medical equipment management training |

Job description for: Insurance Officer

|  |  |
| --- | --- |
| **Process for which it is responsible** | Distribution sub-process |
| **Process Level (head office or Branch)** | Head Office |
| Job Title | Insurance Officer |
| **Accountable and Reports to** | Distribution sub-process Owner |
| **Coordinate with** | Fund Management |
| **System & Process in which it participate** |  |
| **Number of Post** | 2 |
| **Expected outcome from the process** | Timely delivery of quality pharmaceuticals to public health facilities |
| **Duties and Responsibilities** | * Receive documents of dispatched products * Calculate the total amounts of all invoices to be loaded * Estimate the insurance cost * Submit the costs to Insurance company * Collect debt notes and submit to Fund sub process |
| **Education** | Degree in Accounting |
| **Salary** |  |
| **Minimum Work Experience** | 3 years |
| **Knowledge and Skills** |  |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work |
| **Additional Trainings Needed** | * Transport Management |

**Job Description for distribution of pharmaceuticals from Hub to Health facilities**

**Job description for: Distribution coordinator for RDF/Health Program**

|  |  |
| --- | --- |
| **Process for which it is responsible** | Pharmaceutical Supply Core Process |
| **Process Level (head office or Branch)** | Head Office |
| Job Title | Distribution sub process |
| **Accountable and Reports to** | Distribution sub process owner |
| **Coordinate with** | All Pharmaceutical supply process |
| **System & Process in which it participate** | Distribution Sub process |
| **Number of Post** | 1 |
| **Expected outcome from the process** | Timely delivery of pharmaceuticals to PFSA Hubs and Health Facilities |
| **Duties and Responsibilities** | * Prepare delivery schedule with other officers. * Follow up reports and recommendations that is received from WIM * Updates supply plan against actual availability (stock and consumption) at hubs. * Assign vehicles with Health program and fleet mgt coordinator. * Coordinate the disposal of damaged, expired and quality failed items. * Follow up new arrival products and communicate storage and inventory management sub process to get the necessary break down to all hubs as per their annual quantification. * Follow timely delivery of drugs to emergency requests of hubs. * Follow up hub to hub stock transfer (redistribution). * Communicate general service for urgent maintenance of vehicles. * Follow up the document follow up team and make appropriate measure if there is any discrepancy. * Follow up on account to account transfer items. * Follow up medical equipment distribution. * Coach and support team members to promote team spirit among the teams and creates a learning environment * Follow up the stock status of Addis Ababa hospitals and participate in the command post. * Implement direct distribution center operation to ensure achievement of cost, productivity, accuracy, or timeliness objective. * Facilitate timely distribution of pharmaceuticals. * Follow up the timely change of manual delivery notes in to STV. |
| **Education** | * B. Pharm from recognized university/ MSC in Pharmacy or Logistic and Supply Chain |
| **Salary** |  |
| **Minimum Work Experience** | * 5/3 /years on related activity |
| **Knowledge and Skills** | * Ability to analyze and communicate information. |
| **Personal Characteristics and attitudes** | * Ability to coordinate and lead the team. * Good inter personal relationship and Capacity for team work. * Ability to work productively without time limit and under pressure. * High level of responsibility and professional ethics. * Determined, proactive and creative. * Focused, result oriented and self-disciplined. * Receptive to and able to facilitate change |
| **Additional Training needed** | * Good Distribution Practice * Transport management * Computer training |

**Job Description for; Distribution Pharmacist**

|  |  |
| --- | --- |
| **Process for which it is responsible** | Distribution Sub process |
| **Process Level (head office or Branch)** | Branch |
| Job Title | Distribution Pharmacist |
| Accountable and Reports to | Distribution Coordinator |
| **Coordinate with** | All Pharmaceutical supply process |
| **System & Process in which it participate** | Distribution Sub process |
| **Number of Post** | 2 |
| **Expected outcome from the process** | Timely delivery of pharmaceuticals to PFSA Hubs and Health Facilities as deemed necessary |
| **Duties and Responsibilities** | * Receive and evaluate Issue order from WIM * Proper documentation of received documents * Prepare plan for transport and delivery route and update periodically * Communicates distribution plan to central store, transport unit and hubs * Estimate weight and volume of products to determine number of vehicles and arrange vehicle for distribution * Facilitate timely distribution to hubs and health facilities * Facilitate direct delivery to Addis Ababa hospitals and other facilities as deemed necessary * Investigate source and cause for damaged and missing product during distribution * Communicate damaged & missed items to Fund and procurement sub process * Follow up on the disposal of damaged, expired and quality failed items * Labelle and pack items with MRP,PFSA Logo etc * Ensures timely delivery of drugs to emergency requests of hubs and health facilities * Monitors hub to hub transfer of stocks through central stores * Daily summary of activities and report to immediate supervisor * Perform activities assigned to you from your immediate supervisor |
| **Education** | * B.Pharm from recognized university/ MSC in Pharmacy or Logistic and Supply Chain |
| **Salary** |  |
| **Minimum Work Experience** | * 2 / 0 / years on related activity |
| **Knowledge and Skills** |  |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work * Ability to work productively without time limit and under pressure * High level of responsibility and professional ethics * Determined, proactive and creative * Focused, result oriented and self disciplined * Receptive to and able to facilitate change |
| **Additional Trainings Needed** | * Good Distribution Practice * Transport management * Computer training |

**Job description for: Documentation Follow Up Clerk**

|  |  |
| --- | --- |
| **Process for which it is responsible** | Distribution Sub process |
| **Process Level (head office or Branch)** | Branch |
| **Job Title** | Documentation Follow Up Clerk |
| **Accountable and Reports to** | Distribution Coordinator |
| **Coordinate with** | WIM and Fund Sub process |
| **System & Process in which it participate** | Distribution Sub Process |
| **Number of Post** | 3 |
| **Expected outcome from the process** | Timely delivery of pharmaceuticals to Health Facilities |
| **Duties and Responsibilities** | * Follow and Report uncollected POD to immediate supervisors * Keeps a copy of all transaction documents which are finalized * Identify and report issued documents from the system that do not have POD * Verifies the validity of transaction documents by looking signatures, dates, etc. * Receives authorized copies of STVs, delivery notes and receiving vouchers from hubs and other customers as a proof of receipt for items delivered * Verifies the quantities, price, etc. of receipt documents with the original issue documents * Reports discrepancies to his/her immediate supervisor * Aggregate and submitted POD to Fund sub process |
| **Education** | Diploma in Accounting/Supply Management |
| **Salary** |  |
| **Minimum Work Experience** | 2 years in related activity |
| **Knowledge and Skills** |  |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work |
| **Additional Trainings Needed** | Basic computer skill |

Job description for: Fleet Scheduling and Follow up Officer

|  |  |
| --- | --- |
| **Process for which it is responsible** | Distribution sub-process |
| Process Level (head office or Branch) | Branch |
| Job Title | Fleet Routing and Scheduling Officer |
| **Accountable and Reports to** | Distribution Coordinator |
| **Coordinate with** | Fund and General Service sub process |
| **System & Process in which it participate** | Distribution sub process |
| **Number of Post** | 1 |
| **Expected outcome from the process** | Timely delivery of quality pharmaceuticals to public health facilities |
| **Duties and Responsibilities** | * Prepares annual plan for routing and scheduling * Assess the capacity of own vehicles * Analyze the need for transport out sourcing and forward estimated requirements of vehicles * Decides to use own truck or out-source in collaboration with distribution pharmacists * Communicate with private carriers for the timely provision of vehicles. * Continuous monitoring of the performance of private carriers as per contract * Avails required vehicles without delay. * Follow the distribution plan to make arrangement of required vehicles * Communicate with General Services facilitate vehicle maintenance * Truck the where about of vehicles using GPS * Summarize GPS repots/outputs such as driver behavior, risk management…. * Evaluate fleet availability performance and report to immediate supervisor * Assign vehicle to procurement sub process to pick up shipments from ports * Determine most cost effective transport means |
| **Education** | Degree in Management/Auto Mechanics/ |
| **Salary** |  |
| **Minimum Work Experience** | 3 years |
| **Knowledge and Skills** |  |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work |
| **Additional Trainings Needed** | * Transport Management |

Job description for: Delivery Personnel

|  |  |
| --- | --- |
| **Process for which it is responsible** | Distribution sub-process |
| **Process Level (head office or Branch)** | Branch |
| **Job Title** | Delivery Personnel |
| **Accountable and Reports to** | Distribution Coordinator |
| **Coordinate with** | WIM sub process |
| **System & Process in which it participate** | Distribution sub process |
| **Number of Post** | 6 |
| **Expected outcome from the process** | Timely delivery of quality pharmaceuticals to public health facilities |
| **Duties and Responsibilities** | * Receive products from dispatch officer * Pack products according their nature * Labeled cartons with MRP and PFSA logo * Deliver products to facilities * Collect POD ( Model 19) from facilities * Submit POD to Document follow up |
| **Education** | Diploma in Pharmacy |
| **Salary** |  |
| **Minimum Work Experience** | 2 years |
| **Knowledge and Skills** |  |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work |
| **Additional Trainings Needed** | * Pharmaceutical handling * Good Storage Practice |

### Job description for Capacity Building sub process

Job description for Capacity Building sub process owner

|  |  |
| --- | --- |
| **Process for which it is responsible** | Capacity Building Sub process |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | Capacity Building Sub process owner |
| **Accountable and Reports to** | Pharmaceutical supply core process owner/ Director general |
| **Coordinate with** |  |
| **System & Process in which it participate** |  |
| **Number of Post** | 1 |
| **Expected outcome from the process** | Well-developed capacity along the supply chain that contribute to sustainable product availability |
| **Duties and Responsibilities** | * Contribute to agency wide strategic planning and annual planning, cascade annual plan of the Agency to sub-process plan and develop periodic performance reports of the sub process * Lead the capacity building effort of internal and external workforce in the supply chain and in ensuring proper demand generation, inventory management and rational use of medicines (establishing & strengthening DTCs) * Devise strategies for continuous benchmarking of best experiences and innovative ideas and Lead national and international supply chain experience sharing forums * Mobilize resource (develop joint MoU with relevant stakeholders/ development partners) and strive for efficient utilization and on time disbursement * Lead and supervise activities during training curriculum development, TOT and rollout, document preparation, printing and distribution to relevant stakeholders * In collaboration with stakeholders design a strategy for joint supportive supervision and mentorship to branch offices and health facilities * Establish center of excellence for supply chain by working closely with stakeholders * Lead internal operational research, facilitate national sub national surveys, disseminate results and follow implementation of recommendation * Design strategies to evaluate over all capacity building efforts, training methodologies and measure outcome of the trainings * Establish training Center for supply chain and develop operational guidelines and SOPs for the sub process * Build, motivate and evaluate performance of teams |
| **Qualification** | * MSc/ MA in Pharmacy/ Supply chain management |
| **Salary** |  |
| **Minimum Work Experience** | * 7 years of experience (B. Pharm), 5 years of experience ( MSC) |
| **Knowledge and Skills** | * Strong communication & team building skill * Expert knowledge on key supply chain operations, curriculum writing skills, advanced skills in using Microsoft offices ( word, excel, power point) |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and high level of responsibility and professional ethics * Determined, proactive and creative, result oriented and self disciplined, receptive to and able to facilitate change |
| **Additional Trainings Needed** | * Relevant training on health logistics and supply chain management * Experience on operational research and critical appraisal |

Job description for Capacity Building team leader

|  |  |
| --- | --- |
| **Process for which it is responsible** | Pharmaceutical supply core process owner/ Director general |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | Capacity Building team leader |
| **Accountable and Reports to** | Capacity Building Sub process owner |
| **Coordinate with** |  |
| **System & Process in which it participate** |  |
| **Number of Post** | **2** (training document preparation & Dissemination and R&D) |
| **Expected outcome from the process** | Well-developed capacity along the supply chain that contribute to sustainable product availability |
| **Duties and Responsibilities** | * Participate in cascading annual plan of the agency to sub-process, team and individual plan and develop periodic performance reports of the team * coordinate the capacity building effort of internal and external workforce in the supply chain * Ensure strengthening of systems (DTC,IPLS,APTS) by exerting intensive capacity building efforts * Contribute during resource mobilization exercise (develop joint MoU with relevant stakeholders) and strive for efficient utilization and on time disbursement * Facilitate trainings supported by practical attachment and on site visit * Supervise activities and participate during training curriculum development, TOT and rollout training, document preparation, printing and distribution to relevant stakeholders * Insure proper documentation of capacity building efforts i.e. Training manuals, records on number of professionals trained, * Participate during evaluation of overall capacity building efforts, training methodologies and the outcome of the training * Participate in supportive supervision and mentorship to branch and health facility staff * Contribute during the preparation of operational guidelines and SOPs for the sub process * Build, motivate and evaluate performance of team members |
| **Qualification** | * MSc/ MA / B. Pharm in Pharmacy/Supply chain management |
| **Salary** |  |
| **Minimum Work Experience** | * 5 years of experience in health logistics and supply chain management |
| **Knowledge and Skills** | * Language proficiency in written and spoken English * Expert knowledge in capacity building, training curriculum writing, skills in using Microsoft offices ( word, excel, and PowerPoints) |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work * Ability to work productively without time limit and under pressure * High level of responsibility and professional ethics * Determined, proactive and creative, Focused, result oriented and self disciplined |
| **Additional Trainings Needed** | * Relevant training on local and international procurement |

Job description for Capacity Building officer

|  |  |
| --- | --- |
| **Process for which it is responsible** | Pharmaceutical supply core process owner/ Director general |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | Capacity Building team leader |
| **Accountable and Reports to** | Capacity Building Sub process owner |
| **Coordinate with** |  |
| **System & Process in which it participate** |  |
| **Number of Post** | **8 (2 officer V, 2 officer IV, 2 officer III and 2 officer II)** |
| **Expected outcome from the process** | Well-developed capacity along the supply chain that contribute to sustainable product availability |
| **Duties and Responsibilities** | * Participate in cascading annual plan of the agency to sub-process, team and individual plan and develop periodic performance reports of the team * participate the capacity building effort of internal and external workforce in the supply chain * Ensure strengthening of systems (supply chain related capacity building efforts, IPLS, APTS) by exerting intensive capacity building efforts * Contribute during resource mobilization exercise (develop joint MoU with relevant stakeholders) and strive for efficient utilization and on time disbursement * Facilitate trainings supported by practical attachment and on site visit * Supervise activities and participate during training curriculum development, TOT and rollout training, document preparation, printing and distribution to relevant stakeholders * Insure proper documentation of capacity building efforts i.e. Training manuals, records on number of professionals trained, * Participate during evaluation of overall capacity building efforts, training methodologies and the outcome of the training * Participate in supportive supervision and mentorship to branch and health facility staff * Contribute during the preparation of operational guidelines and SOPs for the sub process * Build, motivate and evaluate performance of team members |
| **Qualification** | * MSc/ MA / B. Pharm in Pharmacy/Supply chain management |
| **Salary** |  |
| **Minimum Work Experience** | * 5 for officer V, 4 years for officers IV, 3 years for III and 2 years for officer II and with practical experience in health logistics and supply chain management |
| **Knowledge and Skills** | * Language proficiency in written and spoken English * Expert knowledge in capacity building, training curriculum writing, skills in using Microsoft offices ( word, excel, and PowerPoints) |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work * Ability to work productively without time limit and under pressure * High level of responsibility and professional ethics * Determined, proactive and creative, Focused, result oriented and self disciplined |
| **Additional Trainings Needed** | * Relevant training on local and international procurement |

### Job Description for Quality Assurance sub process

Job description of Quality Management sub process owner

|  |  |
| --- | --- |
| **Process for which it is responsible** | Pharmaceutical Supply Core Process/ DG |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | Quality Management sub process owner |
| **Accountable and Reports to** | Pharmaceutical Supply Core Process Owner/ DG |
| **Coordinate with** |  |
| **System & Process in which it participate** |  |
| **Number of Post** | 1 |
| **Expected outcome from the process** | Quality assured products and properly adhered working procedures |
| **Duties and Responsibilities** | * Contribute to agency wide strategic planning and annual planning, cascade annual plan of the Agency to sub-process plan and develop periodic performance reports of the sub process * Develop a strategy for enhancing pharmaceutical quality management practices across all relevant work processes * Ensure that all relevant work processes activities are properly supported by updated SOPs * Develop operational guidelines and SOPs, revise SOPs and test procedures * Lead and facilitate on job and off job training on quality management techniques and tools * Promote and facilitate timely and accurate reporting of quality management related process * Work in collaboration with internal and external stakeholders in assuring quality of pharmaceuticals along the supply chain * Establish performance indicators and targets for evaluating performance of the sub process * Maintain inventory in laboratory with respect to availability of Chemicals & reagents, glassware, standard solution etc. |
| **Qualification** | * B. Pharm from recognized university, MSc in Pharmaceutical analysis and quality assurance, |
| **Salary** |  |
| **Minimum Work Experience** | * 7 years of experience(B. Pharm), 5 years of experience ( MSC in quality assurance) |
| **Knowledge and Skills** | * Strong communication and persuasive skill * Conceptual and team building skill * Expert knowledge in pharmaceutical quality assurance and process audit * Skills in using Microsoft offices ( excel, word, PowerPoint) |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work * High level of responsibility and professional ethics * Focused, result oriented and self disciplined * Receptive to and able to facilitate change |
| **Additional Trainings Needed** | * Relevant training on quality assurance |

**Job description of Quality Management team leader (Process quality assurance)**

|  |  |
| --- | --- |
| **Process for which it is responsible** | Quality Management Process owner |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | Quality Management team leader |
| **Accountable and Reports to** | Pharmaceutical Supply Core Process Owner/ DG |
| **Coordinate with** |  |
| **System & Process in which it participate** |  |
| **Number of Post** | 1 |
| **Expected outcome from the process** | Quality assured products and properly adhered working procedures |
| **Duties and Responsibilities** | * Contribute in cascade of annual plan of the Agency to sub-process plan and develop periodic performance reports of the team * Contribute during preparation of operational guidelines and SOPs, revise SOPs * Supervise process quality assurance activities of relevant process at head office and branch office * Prepare timely and accurate report of quality management related activities * Ensure that all relevant processes are supported by updated SOPs * Promotes a team spirit and creates a learning environment * Facilitate on job and off job training on quality management techniques and tools * Report to immediate supervisor on the daily analysis activity |
| **Qualification** | * MSc in Pharmaceutical analysis and quality assurance, B.Pharm from recognized university / Chemist/ Laboratory technologist with practical experience on Pharmaceutical quality assurance |
| **Salary** |  |
| **Minimum Work Experience** | * 5 years of relevant work experience preferably on pharmaceutical Quality assurance |
| **Knowledge and Skills** | * Good communication skill * Strong team building skill, skills in using Microsoft offices * Expert knowledge in pharmaceutical quality assurance and process audit |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work * High level of responsibility and professional ethics * Focused, result oriented and self disciplined |
| **Additional Trainings Needed** | * Relevant training on quality assurance |

**Job description of Quality Management team leader (Product Quality assurance)**

|  |  |
| --- | --- |
| **Process for which it is responsible** | Quality Management Process owner |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | Quality Management team leader |
| **Accountable and Reports to** | Pharmaceutical Supply Core Process Owner/ DG |
| **Coordinate with** |  |
| **System & Process in which it participate** |  |
| **Number of Post** | 1 |
| **Expected outcome from the process** | Quality assured products and properly adhered working procedures |
| **Duties and Responsibilities** | * Contribute in cascade of annual plan of the sub process plan to team and individual level and develop periodic performance reports * Conduct quality test for selected products and physical inspection for incoming shipment at warehouse * Contribute during preparation of operational guidelines and SOPs, revise SOPs and test procedures * Perform on job and off job training on product quality testing techniques and tools * Promote and facilitate timely and accurate reporting of quality management related process * Perform quality assurance of pharmaceuticals along the supply chain which includes post marketing surveillance and product recall due to quality problem * Record analytical results in respective books & chart along with samples analyzed |
| **Qualification** | * MSc in Pharmaceutical analysis and quality assurance, B.Pharm from recognized university / Chemist/ Laboratory technologist with practical experience on Pharmaceutical quality assurance |
| **Salary** |  |
| **Minimum Work Experience** | * 5 years of relevant work experience preferably on pharmaceutical Quality assurance |
| **Knowledge and Skills** | * Good inter personal and team building skill * High level of responsibility and professional ethics * Determined, proactive and creative * Expert knowledge in pharmaceutical quality assurance and process audit |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work * High level of responsibility and professional ethics * Focused, result oriented and self disciplined |
| **Additional Trainings Needed** | * Relevant training on quality assurance * Computer training |

**Job description for Quality Management officer (Process quality assurance)**

|  |  |
| --- | --- |
| **Process for which it is responsible** | Quality Management Process owner |
| **Process Level (head office or Branch)** | Head Office |
| **Job Title** | Quality Management officer |
| **Accountable and Reports to** | Quality Management team leader |
| **Coordinate with** |  |
| **System & Process in which it participate** |  |
| **Number of Post** | 2 |
| **Expected outcome from the process** | Quality assured products and properly adhered working procedures |
| **Duties and Responsibilities** | * Contribute in cascade of annual plan of the sub process to team and individual level and develop periodic performance reports * Contribute during preparation of operational guidelines and SOPs, revise SOPs * Supervise process quality assurance activities of relevant process at head office and branch office * Prepare timely and accurate report of quality management related activities * Ensure that all relevant processes are supported by updated SOPs * Facilitate on job and off job training on quality management techniques and tools * Maintain appropriate record on the process quality assurance activities |
| **Qualification** | * B.Pharm from recognized university / Chemist/ Laboratory technologist with practical experience on Pharmaceutical quality assurance |
| **Salary** |  |
| **Minimum Work Experience** | * 2 years of relevant work experience preferably on pharmaceutical Quality assurance |
| **Knowledge and Skills** | * Good communication skill * Strong team building skill, skills in using the Microsoft offices (word, excel, and power point) * Expert knowledge in pharmaceutical quality assurance and process audit |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work * High level of responsibility and professional ethics * Focused, result oriented and self disciplined |
| **Additional Trainings Needed** | * Relevant training on quality assurance |

**Job description of Quality Management officer (Product Quality assurance)**

|  |  |
| --- | --- |
| **Process for which it is responsible** | Quality Management Process owner |
| **Process Level (head/ Branch)** | Head Office |
| **Job Title** | Quality Management team leader |
| **Accountable and Reports to** | Pharmaceutical Supply Core Process Owner/ DG |
| **Coordinate with** |  |
| **System & Process in which it participate** |  |
| **Number of Post** | 3 ­­(1officer IV, 1 officer III and 1 officer II) |
| **Expected outcome from the process** | Quality assured products and properly adhered working procedures |
| **Duties and Responsibilities** | * Contribute in cascade of annual plan of the sub process plan to team and individual level and develop periodic performance reports * Conduct quality test for selected products and physical inspection for incoming shipment at warehouse * Contribute during preparation of operational guidelines and SOPs, revise SOPs and test procedures * Perform on job and off job training on product quality testing techniques and tools * Promote and facilitate timely and accurate reporting of quality management related process * Perform quality assurance of pharmaceuticals along the supply chain which includes post marketing surveillance and product recall due to quality problem * Record analytical results in respective books & chart along with samples analyzed |
| **Qualification** | * MSc in Pharmaceutical analysis and quality assurance, B.Pharm from recognized university / Chemist/ Laboratory technologist with practical experience on Pharmaceutical quality assurance |
| **Salary** |  |
| **Minimum Work Experience** | * 4, 3, and 2 years of relevant work experience preferably on pharmaceutical Quality assurance (for officer V, III and II) |
| **Knowledge and Skills** | * Good inter personal and team building skill * High level of responsibility and professional ethics * Determined, proactive and creative * Expert knowledge in pharmaceutical quality assurance and process audit |
| **Personal Characteristics and attitudes** | * Good inter personal relationship and Capacity for team work * High level of responsibility and professional ethics * Focused, result oriented and self disciplined |
| **Additional Trainings Needed** | * Relevant training on quality assurance * Computer training |

# Chapter Five

# Organo-gram of PFSA

Option 1



Option 2



Primary Hubs (10)



Option Two: Primary Hubs



Secondary Hubs (20)



Note: This document is only for the pharmaceutical core process. The organo gram of the agency is described here to show the interfaces of all process. Please refer the other details of the redesign for fund management, HR and GS, MIS, in their respective documents.

Chapter Six

# Management and Measurement

**Performance Management and Measurement**

Organizational Performance Management and Measurement is one of the most popular terms in today’s public sector management terminology. The term “Performance Management and Measurement” refers to any integrated, systematic approach to improve organizational performance to achieve strategic aims and promote an organization’s mission and values.

Performance Management system aims at improving the results of people’s efforts by linking these to the organization’s goals and objectives. It is the means through which employees’ performance can be improved by ensuring appropriate recognition and reward for their efforts, and by improving communication, learning and working arrangements. Performance Measurement must be considered as part of the overall Performance Management system and can be viewed as the process of quantifying the efficiency and effectiveness of actions.

Performance management reminds us that being busy is not the same as producing results. It also reminds us that training, commitment and lots of hard works alone are not results. The major contribution of performance management is its focus on achieving results, useful products and services for customers inside and outside the organization. Performance management redirects our efforts away from busyness toward effectiveness. The overall goal of performance management in business organizations is to ensure that the business organization and all of its subsystems (processes, sub process, teams, employees, etc.) are working together in an optimum fashion to achieve the results desired by the organization.

There are three real goals of any performance management system. The first is to correct poor performance, the second is to sustain good performance and the last one is to improve performance. All performance management systems should be designed to generate information and data exchange so that the individuals involved can properly dissect performance, discuss it, understand it, and agree on its character and quality to realize the aforementioned goals.

There are different tools to measure and manage the organizations performance but the Agency (PFSA) will adopt the Balanced Score Card tool as a means for measuring the progress of the redesign process. The scorecard translate the organization vision and strategies in to four perspectives; Financial, Customer, Internal business processes and Organizational learning and growth. In addition to these scorecards the agency would select core indicators ( Key Performance Indicators) to monitor and evaluate the progress of the new design during its implementation phase.

## Daily Summary

**Daily Summary for Pharmaceuticals and Medical Devices Supply Management**

**Monitoring and evaluation** across the supply chain (forecasting and supply planning, procurement, operational research and capacity building, warehouse and inventory management, distribution and fleet management) help to reconcile planning against target achievements.

**Monitoring** of the supply chain is the routine collection and analysis of information to track the progress of all transactions against set plans and check compliance to established standards. It enables to continually review the degree to which the supply chain activities are completed and targets are being met. It also helps to identify trends and patterns, adapt strategies and provide information for better improvement.

**Evaluation** in supply chain refers to analyzing progress toward meeting established objectives and targets. It provides feedback on whether plans had been met and the reasons for successor in completeness. It should also provide directions for future plans.

**Problem:** The agency was not in position to measure the daily accomplishments of all units and individuals and was in difficult situation to monitor implementation of detail activities, almost impossible to evaluate outcomes and conduct performance appraisal that resulted in dissatisfaction of the customers in particular and the public and the government in general.

**Daily Summary** **for Supply Chain:** To accomplish monitoring of the daily activities of individual staffs and units, conduct performance appraisal, solve the aforementioned problems, and make the agency performance more transparent and accountable, the daily summary tool has been prepared.

Following the lower-level objectives – inputs, by summarizing daily activities and recording routine outputs will help to capture what is achieved on daily basis; that is why this activity is called daily summary. The daily accomplishments should be compiled and summarized on monthly, quarterly and yearly basis to produce evidence based corresponding reports. The daily summary system is adapted from bench marks including Auditable Pharmaceutical Transactions and Services (APTS) and Banks’ daily cash balance summary

### Forecasting and Supply Planning

**Table 18: Daily Summary form for FSP**

| Name of personnel (position) | Detail Activity | Quantified Activities | Monday | Tuesday | Wednesday | Thursday | Friday | Reference |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| P.L.B Officer | Develop predefined PFSA procurement list through involving with relevant stakeholder with proper mix of professionals and close communication with relevant stakeholders | List developed |  |  |  |  |  | List (annual) |
| P.L.B Officer | Communicate for approval to health sector executive/ Director general of PFSA | List approved |  |  |  |  |  | List (annual) |
| P.L.B Officer | Communicate the approved list to health facilities, organize orientation workshop and provide orientation to health facilities about the predefined list | No of health facilities communicated |  |  |  |  |  | Letter No (Annually) |
| P.L.B Officer (branch) | Follow facilities to develop their procurement list based on the agreed national list | No of HF prepared their procurement list |  |  |  |  |  | List of HF |
| P.L.B Officer branch\ and center | Center provides mentorship training to RHB and branches and then, Branches, train ZHD and woreda health office logistics officers so that health facilities to prioritize their list based on ABC/VEN analysis | No of RHBs and branches trained |  |  |  |  |  | Name List |
| P.L.B Officer branch and center | PFSA central communicate quantification tool with approved list and updated unit price to health facilities through respective branches | No of HF communicated (annually ) |  |  |  |  |  | List of Hf |
| P.L.B Officer center | Branches provide the necessary support (mentoring, supportive supervision) to facilities throughout the quantification process using trained logistic officers | No of HF mentored |  |  |  |  |  | Report and HF list |
| P.L.B Officer branch | Follow HFs to quantify their annual committed demand using quantification tool through respective logistic officers | No HF supported and developed annual demand |  |  |  |  |  | Official letter for quantified products |
| P.L.B Officer branch | Follow to reconcile with their annual budget based on ABC/VEN matrix reconciliation analysis through respective logistic officers | No HF supported and developed ABC/VEN |  |  |  |  |  | Official letter for quantified products |
| P.L.B Officer branch | Follow approval by the facility DTC through respective logistic officers | No of HF approve their list by DTC |  |  |  |  |  | Official letter |
| P.L.B Officer branch | Follow health centers submit committed demand to Woreda for approval through respective logistic officers | No of HC submitted committed demand |  |  |  |  |  | Official letter |
| P.L.B Officer branch | Follow woredas and Hospitals submit their committed demand to respective PFSA branches | No of woredas and hospitals submitted to branch (annually) |  |  |  |  |  | Official letter |
| P.L.B Officer branch | PFSA branches receive & aggregate the committed demand from hospitals, Woreda health office and RHB/ZHD | No of HF ad woredas aggregated |  |  |  |  |  | Aggregated document |
| P.L.B Officer branch | Branches forecast demand of new health facilities, private facilities and faith based health facilities | No of new HF forecasted for |  |  |  |  |  | Actual forecasted documented |
| P.L.B Officer branch | Data validation workshop and segregation | No of workshop conducted |  |  |  |  |  | Workshop report |
| P.L.B Officer branch | Prepare branches annual net requirement considering their SOH | Net requirement prepared (annually) |  |  |  |  |  | Actual Document |
| P.L.B Officer branch | Submit the net requirement to center | No of net requirement submitted |  |  |  |  |  | Official letter |
| P.L.B Officer center | The information collected from all branches will be consolidated and segregated by categories | Data segregated by category |  |  |  |  |  | Data it self |
| P.L.B Officer center | Get the updated AMC based on facility report / average monthly issue data as proxy to AMC from all branches | Updated AMC |  |  |  |  |  | Actual document |
| P.L.B Officer center | Conduct validation workshop (branches and stakeholders) to reach consensus on assumptions and incorporate comments | No of validated workshop; Center |  |  |  |  |  | Workshop Report |
| P.L.B Officer center | Update stock status of all items at central warehouses (Stock on hand with expiry date, stock on transit and stock on procurement process) | SS updated |  |  |  |  |  | Report |
| P.L.B Officer center | Calculate MOS for each items based on updated stock status | MOS calculated; Center |  |  |  |  |  | MOS report |
| P.L.B Officer | Determine net requirement | Net requirement determined; center annually |  |  |  |  |  | Letter No |
| P.L.B Officer | Consider safety stock based on agreed lead time and review period | Safety stock calculated |  |  |  |  |  | Safety stock report |
| P.L.B Officer | Calculate the net requirement [gross requirement-(stock available on hand+ scheduled receipt)] | Net requirement calculated ; center |  |  |  |  |  | Report |
| P.L.B Officer | Budget the net requirement (including freight, insurance, bank service charge etc.) | No of budget net requirement |  |  |  |  |  | Actual budget with letter |
| P.L.B Officer | Reconcile net requirement with available fund |  |  |  |  |  |  |  |
| P.L.B Officer | Prioritize final quantities using VEN,ABC analysis | Prioritized by ABC/VEN |  |  |  |  |  | Report |
| P.L.B Officer | Adjust final quantities | Adjusted |  |  |  |  |  | Report |
| P.L.B Officer | Prepare and send purchase request for each categories to procurement sub process in hard copy and feed electronically to the system | Purchase request categorized |  |  |  |  |  | Report |
| P.L.B Officer | Prepare distribution plan for each branch and communicate to distribution sub process and branches | Distribution plan prepared |  |  |  |  |  | Plan document |
| P.L.B Officer | Review the quantification document workshop with branches | Document reviewed |  |  |  |  |  | Report |
| P.L.B Officer | **Pipeline monitoring:**  Get relevant data (SOH from branches and center, transit report and stock on procurement) | Data taken from branches |  |  |  |  |  | Report |
| P.L.B Officer | Prepare stock status report (vital report) every month for RDF pharmaceuticals (medicines, medical supplies, laboratory reagents and medical equipment) | Stock status report updated |  |  |  |  |  | Report |
| P.L.B Officer | Prepare presentation and present the stock status report to relevant sub process | Presented |  |  |  |  |  | Report |
| P.L.B Officer | Communicate the agreed report to relevant sub processes and branches for action | Report communicated |  |  |  |  |  | Report |
| P.L.B Officer | **Program Pharmaceuticals**  Discuss with relevant stakeholders and form quantification team (for each program) | Team formed |  |  |  |  |  | List of team formed |
| P.L.B Officer | Discuss the program, define scope and purpose of quantification with quantification national team | Discussion made |  |  |  |  |  | Report |
| P.L.B Officer | Collect all relevant data (morbidity, regimen data, consumption and service statistics, new initiatives, service area expansion ….ETC) | Data collected |  |  |  |  |  | Actual data with date |
| P.L.B Officer | Organize and analyze data | Data analyzed |  |  |  |  |  | Report |
| P.L.B Officer | Review and summarize relevant documents(consumption trend analysis) | Document summarized |  |  |  |  |  | Date and document |
| P.L.B Officer | Develop draft assumption | Draft assumption developed |  |  |  |  |  | Data and document |
| P.L.B Officer | Conduct consultative quantification workshop and present program and supply chain update, consumption tend, and relevant information to workshop participants on all topics | Workshop conducted |  |  |  |  |  | Report |
| P.L.B Officer | Comment incorporation | Comment incorporated |  |  |  |  |  | Final document and date |
| P.L.B Officer | Calculate total requirement and cost using relevant quantification tool for each program | Total requirement calculated |  |  |  |  |  | Documented and date |
| P.L.B Officer | Calculate the net requirement [gross requirement-(stock available on hand+ scheduled receipt)] | Net requirement calculated |  |  |  |  |  | Date and report |
| P.L.B Officer | Budget the net requirement (including freight, insurance, bank service charge etc.) | Net requirement budgeted |  |  |  |  |  | Date and report |
| P.L.B Officer | Reconcile requirement with available fund | Reconciled |  |  |  |  |  | Date and report |
| P.L.B Officer | Solicit additional fund / budget (if there is any budget gap) | Additional fund solicited |  |  |  |  |  | agreement letter |
| P.L.B Officer | Write up final forecast, present for comment | Final forecasted written |  |  |  |  |  | Report |
| P.L.B Officer | Prepare and send purchase request for each program to procurement sub process in hard copy and feed electronically to the system | Purchase request prepared |  |  |  |  |  | Letter No |
| P.L.B Officer | Prepare for revision of quantification document | Document ready |  |  |  |  |  | Date and document |
| P.L.B Officer | Organize and conduct workshop for quantification document to the relevant stakeholders and branches | Workshop conducted |  |  |  |  |  | Workshop report and date |
|  | **Pipeline monitoring for Health programs** |  |  |  |  |  |  |  |
| P.L.B Officer | Get relevant data (SOH from hubs and center, transit report and stock on procurement) | SOH collected |  |  |  |  |  | SOH report |
| P.L.B Officer | Analysis (Develop stock status report every month for pharmaceuticals for all health programs) | SSA made |  |  |  |  |  | SSA report |
| P.L.B Officer | Present the stock status report monthly to TWG meetings for discussion | SSR to TWG presented |  |  |  |  |  | Presentation update report |
| P.L.B Officer | Communicate agreed report timely to internal and external stakeholder | No of stake holders communicated |  |  |  |  |  | List and date |
|  | **Miscellaneous activities** |  |  |  |  |  |  |  |
|  | **Work flow for emergency request during epidemic & disaster situation** |  |  |  |  |  |  |  |
| P.L.B Officer | Established ad-hoc quantification team from relevant stockholders | Team established |  |  |  |  |  | Letter No |
| P.L.B Officer | Get information on emergency situations(disease burden/coverage) | Information collected |  |  |  |  |  | Report |
| P.L.B Officer | Identified required medicines and related product for the emergency situation | Information identified |  |  |  |  |  | Report |
|  | Forecast emergency supply requirement and get approval from FMOH |  |  |  |  |  |  |  |
| P,L,B officer | Assess the stock status for the needed products, identify gaps | Gap identified |  |  |  |  |  | Report |
| P,L,B officer | Communicate the emergency purchase request with supply plan to procurement sub process for immediate action | Request communicated |  |  |  |  |  | Email |
| P,L,B officer | **Capital medical Instrument specification preparation** |  |  |  |  |  |  |  |
| P,L,B officer | Receive medical instrument request from FMOH, RHB and health facilities | No of request received |  |  |  |  |  | Request letter /emails |
| P,L,B officer | PFSA reviews the specification by its technical expert/ the ad-hoc team of expert using national medical instrument list (prepared by FMHACA) as reference material | No of specification reviewed |  |  |  |  |  | Review report |
| P,L,B officer | The technical expert/ad-hoc team will finalize the specification in close consultation with the end user | Consulted and finalized Sp |  |  |  |  |  | Final report |
| P,L,B officer | Prepare specification for each equipment and per customer and communicate the final list to the customer to get written agreement to procced with the procurement | No of equipment for which specification prepared |  |  |  |  |  | Report |
| P,L,B officer | Communicate the purchase request to procurement sub process | No of request communicated |  |  |  |  |  | Report |
|  | **Laboratory reagents and supplies quantification for health program version** |  |  |  |  |  |  |  |
| P,L,B officer | Form a quantification team from PFSA, EPHI and relevant stakeholders | Team formed |  |  |  |  |  | Letter no of list formation/ email |
| P,L,B officer | Conduct assessment to collect instrument information (maximum through put, utilization rate), facility quality control practice, number of testing sites, number of referral sites, and no of testing days per year at national level | Assessment made |  |  |  |  |  | Report |
| P,L,B officer | Review and summarize relevant documents (instrument functionality rate, control and calibrator utilization rate, consumption trend …etc.) | Documents reviewed |  |  |  |  |  | Report |
| P,L,B officer | Calculate total requirement and cost using relevant quantification tool (Labfor® , QuantTB®) for each program |  |  |  |  |  |  | Report |
| P,L,B officer | Adjust quantities with machine numbers and number of testing sites | Quantity adjusted |  |  |  |  |  | Report |
| P,L,B officer | Federal/regional review meeting | Meeting conducted |  |  |  |  |  | Report |
| P,L,B officer | Stakeholder meeting | Meeting conducted |  |  |  |  |  | Report |
| P,L,B officer | STG Revision with FMHACA | STG revised |  |  |  |  |  | STG |
| P,L,B officer | Joint Supportive supervision with FMOH | Supervision conducted |  |  |  |  |  | Report |
| P,L,B officer | Joint Supportive supervision with regions | Supervision conducted |  |  |  |  |  | Report |
| P,L,B officer | National survey | National survey conducted |  |  |  |  |  | Report |
| P,L,B officer | Plan development, daily performance evaluation | daily performance evaluation developed |  |  |  |  |  | Format |
| P,L,B officer | Plan development, weekly performance evaluation | weekly performance evaluation developed |  |  |  |  |  | Format |
| P,L,B officer | Plan development, monthly performance evaluation | monthly performance evaluation developed |  |  |  |  |  | Format |

### Procurement sub process

### Warehouse and Inventory Management

**Table 19: Daily Summary form for Warehouse Inventory Management**

Description

**Monitoring and evaluation** of the warehouse and inventory management (WIM) is the fundamental portion of the supply management cycle that links planning and target achievements. Good planning, monitoring and evaluation of this function enhance the contribution of a program by learning from the past, intervening at present and planning for future initiatives.

**Monitoring of WIM** is the routine collection and analysis of information to track the progress of warehouse and inventory operations against set plans and check compliance to established standards. It enables to continually review the degree to which the WIM activities are completed and targets are being met. It also helps to identify trends and patterns, adapt strategies and provide information for better improvement.

**Evaluation in WIM** refers to analyzing progress toward meeting established objectives and targets. It provides feedback on whether planshadbeenmetandthereasonsforsuccessorincompleteness.Itshouldalsoprovidedirections for future plans. To conduct monitoring and evaluation, evidence based activities accomplished daily by WIM process should be collected, organized and evaluated.

**Problem:** The agency was not in position to measure the daily accomplishments of units and individuals and difficult to monitor implementation of detail activities, almost impossible to evaluate outcomes and conduct performance appraisal that resulted in dissatisfaction of the public and the government.

**Daily Summary for WIM:** To accomplish monitoring of the daily activities of individual staffs and units, conduct performance appraisal, solve the aforementioned problems, and make the agency performance more transparent and accountable, the daily summary tool has been prepared under the planning, monitoring and evaluation sub process.

Following the lower-level objectives – inputs, by summarizing daily activities and recording routine outputs will help to capture what is achieved on daily basis; that is why this activity is called daily summary. The daily accomplishments should be summarized on monthly, quarterly and yearly basis to produce evidence based corresponding reports.

**Daily Summary form for Warehouse Inventory Management**

| Name of personnel (position) | Detail Activity | Quantified Activities | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 | Reference |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| WIM Officer | Receive advance shipment notification | No. of advance shipment notification received |  |  |  |  |  | Email |
| WHM | Communicate respective warehouses and prepare storage location | No. of warehouses communicated for receiving |  |  |  |  |  | Ser. No of STV |
| WIM officer | Cross-dock consignment to next vehicle | No. of vehicle cross docked |  |  |  |  |  | Vehicle plate |
| WHM | Medical equipment cross docking | No. of medical equipment delivered by cross dock |  |  |  |  |  | Ser. No of STV |
| Dist. Officer | Collect POD ( for medical devices delivered | No of POD collected |  |  |  |  |  | Ser. No of Model 19 |
| WHM | Communicate respective warehouses | No of warehouse communicated |  |  |  |  |  | Email |
| WHM | Receive products (SSL, capital medical device, bed nets, emergency need products). | No. of items received |  |  |  |  |  | Ser. No of STV(from –to--) |
| Dist. Officer | Check shipment documents against shipped consignments | No. of shipment document checked |  |  |  |  |  | Ser. No STV |
| WIM officer | Approve items received for costing | No. of items approved for costing |  |  |  |  |  | System |
| LMIS officer | Prepare issue vouchers | No. of issue voucher prepared |  |  |  |  |  | Ser. No STV |
| LMIS officer | Serve customer order | No. of customer served |  |  |  |  |  | Ser. No voucher from… to |
| WIM officer | warehouse manager inspects arriving vehicle and the way shipment has been packed | No. of vehicle inspected |  |  |  |  |  | Plate No |
| WIM officer | Inspect quality defect | No. of items observed for quality defect |  |  |  |  |  | Ser. No of STV |
| WIM officer | Sorting segregate incoming consignments with ITEM TYPE, batch, expiry etc. | No. of items segregated |  |  |  |  |  | Ser. No of STV |
| WIM officer | Identify for discrepancy by batch | No. of items with discrepancy of Batch |  |  |  |  |  | Ser. No of STV |
| WIM officer | Identify for discrepancy by QTY | No. of items with discrepancy of QTY, |  |  |  |  |  | Ser. No of STV |
| WIM officer | Identify for discrepancy by Expiry | No. of items with discrepancy by Expiry |  |  |  |  |  | Ser. No of STV |
| WIM officer | Conduct unloading | No of items unloaded |  |  |  |  |  | Ser. No of STV |
| WIM officer | Check temperature monitoring device readings for excursions | No of device monitoring checked for temperature |  |  |  |  |  | Check list |
| WIM officer | Identify deviation | No. deviations identified |  |  |  |  |  |  |
| BME | Register a unique ID and serial number of medical devices at receiving and HFs level | No of unique ID ser. No registered for Medical devices |  |  |  |  |  | Ser. No of STV |
| Store clerks | Record goods received on GRNF | No. of item recorded |  |  |  |  |  | Ser. No of STV |
| Store clerks | Record goods received on , BIN card | No. of item recorded |  |  |  |  |  | Bin card |
| Store clerks | Data entry /capturing/ receipt data on HCMIS | No of items entered in the system |  |  |  |  |  | System |
| Store clerks | Review receipt, approve and generate GRNF | No. of GRNF printed/distributed |  |  |  |  |  | Ser. GRNF |
| WHM | Identify of Storage Location (vacant spaces in the rack, in bulk area, pick face etc.) | No of vacant space identified |  |  |  |  |  | System |
| WIM officer | Move products (using forklift transport to the allocated space) | No. of put away done |  |  |  |  |  | System |
| WIM officer | Monitoring of storage conditions: temperature, | No of Temperature recorded |  |  |  |  |  | Record |
| WIM officer | Monitoring store security and safety to ensure that relevant equipment and security procedures are adhered to. | No precaution safety checked |  |  |  |  |  | Checklist |
| WIM officer | Monitoring and updating the stock levels, stock quantities, and safety stocks and generate vital report. | No of vital report generated |  |  |  |  |  | Report letter No |
| WIM officer | Picking products from the correct storage | No of items picked per day |  |  |  |  |  | Picklist |
| WIM officer | Marshalling/staging the picked products | No of order marshalled |  |  |  |  |  | Pick list |
| WIM officer | Identify product and quantity to be replenished | No. of items identified for replenishing |  |  |  |  |  | Pick list |
| WIM officer | Generate pick list for replenishment | No of picklist generated for replenishment |  |  |  |  |  | Pick list |
| WIM officer | Pick and move products to the fine pick/half pallet area | No of products correctly replenished |  |  |  |  |  | System |
| WIM officer | Check dispatched products against shipping vouchers | No of products dispatched checked |  |  |  |  |  | Ser. No STV |
| WIM officer | Pack orders by (destination) into the correct sized box or boxes | No of orders packed |  |  |  |  |  | Ser. No STV |
| WIM officer | Apply right labels containing consignment description and description of receiving destination facility | No of orders labeled |  |  |  |  |  | Ser. No STV |
| Disp. Officer | Assemble the Pharmaceuticals in the Pharmaceutical loading/assembly areas | No of items assembled |  |  |  |  |  | Ser. No STV |
| Disp. Officer | Ensure that the vehicle is safe before loading. | No of vehicles assessed |  |  |  |  |  | Plate no |
| Disp. Officer | Load the vehicle. | No of items loaded |  |  |  |  |  | Ser. No STV |
| Disp. Officer | Fix the security locking system, for example seal(s), with the driver present. | No of vehicle sealed |  |  |  |  |  | Plate No |
| Disp. Officer | Obtain the driver’s signature. | No of drivers signed |  |  |  |  |  | STV Ser. No |
| Disp. Officer | Record the departure of the vehicle | No. of vehicle departed -recorded |  |  |  |  |  | Plate No |
| WIM officer | Identify products to be kitted, for which program and facility | No of products identified for kitting |  |  |  |  |  | Pick list |
| WIM officer | Ensure kitting material readiness (packaging materials, labels) | No of kitting material prepared |  |  |  |  |  | Check list |
| WIM officer | Pick and Kit the product | No of kited |  |  |  |  |  | Pick list |
| WIM officer | Labeling the kit (MRP, the Agency Logo….) | No of kits labeled |  |  |  |  |  | Pick list |
| WIM officer | Dispatch the kit when needed | No kits dispatched |  |  |  |  |  | Pick list |

### Distribution and Fleet Management Sub Process

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Code** | **Name of Position** | **Activities** | **Indicator** | **Day’s activities performed** | | | | | **Reference** |
| **1** | **2** | **3** | **4** | **5** |  |
| E | Distribution  Pharmacist | Receive Issue documents to prepare transportation schedule | Number of issued documents received from WIM and processed accordingly |  |  |  |  |  |  |
| E | Distribution  Pharmacist | Arrange the distribution documents orderly | Number of issued documents arranged and filed correctly |  |  |  |  |  |  |
| E | Distribution  Pharmacist | Registered each distribution documents on registration book | Number of issued documents recorded appropriately |  |  |  |  |  |  |
| E | Distribution  Pharmacist | Hand over the documents to driver/delivery personnel | Number of issued documents hand over to drivers |  |  |  |  |  |  |
| F | Fleet Management  office | Prepare weekly plan for the transport need | Number of on time weekly vehicle plan |  |  |  |  |  |  |
| E | Distribution  Pharmacist | Estimate weight ,volume of the products and determine number of vehicle | Number of Invoices estimated their weight and volume |  |  |  |  |  |  |
| F | Fleet Management  office | Assess own vehicle capacity and the need for outsourcing |  |  |  |  |  |  |  |
| F | Fleet Management  office | Track the where about of vehicles using GPS | Number of vehicles tracked by GPS |  |  |  |  |  |  |
| F | Fleet Management  office | Summarize GPS reports/outputs such as driver behavior, risk management…. | Number of GPS reports prepared |  |  |  |  |  |  |
|  | WIM | Dispatched products are verified against STVs/DNs | ------------ |  |  |  |  |  |  |
|  | WIM | Products received by dispatcher | ------------------- |  |  |  |  |  |  |
|  | WIM | Dispatcher in turn hand over to driver |  |  |  |  |  |  |  |
|  | Distribution  Pharmacist | Post MRP on the items/primary packaging materials/ | Number of MRP posted |  |  |  |  |  |  |
|  | Distribution  Pharmacist | Pack items according to SOP | ----------- |  |  |  |  |  |  |
|  | Distribution  Pharmacist | labeled and sealed cartons with PFSA logo | --------------- |  |  |  |  |  |  |
| D | Document Follow up officer | Organize and keep a copy of all issue transaction documents which are finalized | Number of issued comments filled appropriately |  |  |  |  |  |  |
| D | Document Follow up officer | Verify the validity of transaction documents by looking signatures, dates, etc. | Number of issued document reconciled with POD |  |  |  |  |  |  |
| D | Document Follow up officer | Receive stamped copies of invoices (STVs and delivery notes) and receiving vouchers as a proof of receipt for items delivered | --- |  |  |  |  |  |  |
| D | Document Follow up officer | Verify the quantities, Exp date, Batch Number, Price, Medical device ID and serial Numbered, etc. of receipt documents with the original issue documents | ----- |  |  |  |  |  |  |
| D | Document Follow up officer | Report discrepancies to his /her immediate supervisor | Number of issued documents with discrepancy with POD |  |  |  |  |  |  |
| D | Document Follow up officer | Sort out the reason of discrepancies and put recommendations to relevant bodies | ------ |  |  |  |  |  |  |
|  | Distribution  Pharmacist | Communicate documents and amounts to insurance company when insurance coverage is required. | ------ |  |  |  |  |  |  |
|  |  | **Insurance** |  |  |  |  |  |  |  |
| G | Insurance Officer | Receive dispatched copy invoices | Number of issued documents received from WIM for Insurance processing |  |  |  |  |  |  |
| G | Insurance Officer | Calculate total amount of all invoices | ---------- |  |  |  |  |  |  |
| G | Insurance Officer | Estimate the insurance cost | Percentage of received invoices calculated insurance costs |  |  |  |  |  |  |
| G | Insurance Officer | Submit to Insurance Company | ------------ |  |  |  |  |  |  |
| G | Insurance Officer | Collect Debt note and submit to Fund | Percentage of collected debts from insurance |  |  |  |  |  |  |
|  |  | **Unfit for Use discarding** |  |  |  |  |  |  |  |
| E | Distribution  Pharmacist | List unfit for use products |  |  |  |  |  |  |  |
| E | Distribution  Pharmacist | Sort out unfit for use products |  |  |  |  |  |  |  |
| E | Distribution  Pharmacist | Reason out the cause of unfit for use |  |  |  |  |  |  |  |
| E | Distribution  Pharmacist | Report to Director General for decision |  |  |  |  |  |  |  |
| E | Distribution  Pharmacist | Form disposal committee |  |  |  |  |  |  |  |
| E | Pharmacist  Distribution | Report to FMHACA |  |  |  |  |  |  |  |
| E | Distribution  Pharmacist | Make ready disposal sites |  |  |  |  |  |  |  |
| E | Distribution  Pharmacist | Arrange vehicle and dispose the products |  |  |  |  |  |  |  |
| E | Distribution  Pharmacist | Collect destruction certificate and right off the products from documents |  |  |  |  |  |  |  |
|  |  | **Medical Equipment** |  |  |  |  |  |  |  |
| M | Biomedical Engineer | Follow the special precaution of medical device distribution |  |  |  |  |  |  |  |
| M | Biomedical Engineer | Truck where about the capital medical device |  |  |  |  |  |  |  |
| M | Biomedical Engineer | Follow installation of medical device |  |  |  |  |  |  |  |
| M | Biomedical Engineer | training and commissioning of installed devices |  |  |  |  |  |  |  |
| M | Biomedical Engineer | Follow until the warranty period |  |  |  |  |  |  |  |
| M | Biomedical Engineer | Report to relevant body on installed and commissioned devices |  |  |  |  |  |  |  |

## Balanced Score Card (BSC)

The balanced scorecard (BSC) is a strategy [performance management](https://en.wikipedia.org/wiki/Performance_management) tool – a semi-standard structured [report](https://en.wikipedia.org/wiki/Report), supported by design methods and automation tools that can be used by managers to keep track of the execution of activities by the staff within their control and to monitor the consequences arising from these actions.

Design of a balanced scorecard is about the identification of a small number of financial and non-financial measures and attaching targets to them, so that when they are reviewed it is possible to determine whether current performance 'meets expectations'. By alerting managers to areas where performance deviates from expectations, they can be encouraged to focus their attention on these areas, and hopefully as a result trigger improved performance within the part of the organization they lead

The phrase 'balanced scorecard' is commonly used in two broad forms:

As individual scorecards that contain measures to manage performance, those scorecards may be operational or have a more strategic intent; and

As a Strategic Management System, as originally defined by Kaplan & Norton

The critical characteristics that define a balanced scorecard are

* It focus on the strategic agenda of the organization concerned
* The selection of a small number of data items to monitor
* A mix of financial and non-financial data items.

The characteristics of the balanced scorecard and its derivatives is the presentation of a mixture of financial and non-financial measures each compared to a 'target' value within a single concise report. The report is not meant to be a replacement for traditional financial or operational reports but a succinct summary that captures the information most relevant to those reading it. It is the method by which this 'most relevant' information is determined (i.e., the design processes used to select the content) that most differentiates the various versions of the tool in circulation. The balanced scorecard indirectly also provides a useful insight into an organization’s strategy – by requiring general strategic statements (e.g. mission, vision) to be precipitated into more specific forms

**First generation**

The first generation of balanced scorecard designs used a "4 perspective" approach to identify what measures to use to track the implementation of strategy. `The original four "perspectives" proposed were:

**Financial:** encourages the identification of a few relevant high-level financial measures. In particular, designers were encouraged to choose measures that helped inform the answer to the question "How do we look to shareholders?" Examples: cash flow, sales growth, operating income, return on equity.

**Customer:** encourages the identification of measures that answer the question "How do customers see us?" Examples: percent of sales from new products, on time delivery, share of important customers’ purchases, ranking by important customers.

**Internal business processes**: encourages the identification of measures that answer the question "What must we excel? Examples: cycle time, unit cost, yield, new product introductions.

**Learning and growth:** encourages the identification of measures that answer the question "How can we continue to improve, create value and [innovate](https://en.wikipedia.org/wiki/Innovation)? Examples: time to develop new generation of products, life cycle to product maturity, time to market versus competition.

The idea was that managers used these perspective headings to prompt the selection of a small number of measures that informed on that aspect of the organizations’ strategic performance.

Performance management and measurement of the new design can be summarizes as per the BSC perspectives in the below table.

**Option 1; Table summarize Performance management and measurement of the Agency**

|  |  |  |
| --- | --- | --- |
| **Types of measure** | **Indicators** | **Remark** |
| Community | Achieve customer satisfaction greater than 95 % |  |
| Increase internal customer satisfaction from Current 23 % to more than 90 % |  |
| Expand Direct delivery to 100% |  |
| Increase availability of pharmaceuticals to 100 % at all Health care levels |  |
| Reduce medicine treatment cost from current 1.88 wage days to less than 1 wage day (WHO gold standard ) |  |
| Financial | Ensure transparency of financial position to all stakeholders from very poor to at least to 90% transparent |  |
| Monthly Bank Reconciliations within 10 days of the next month (reduce number of days from over months to 3 days) |  |
| Monthly Balance Sheet and Income Statements of the Head Office accounts within 20 days of the next month (from non-existence to 20 days) |  |
| Quarterly financial statements of the agency to the management within 30 days of the next month (from non-existence to 30) |  |
| Partner reports or SoEs within 3 days of the next month (reduce number of days from 18 to 3) |  |
| Internal Process | Reduce international average procurement lead time from 299 days to 150 days and to less than 90 days for LTA |  |
| Improve transparency of medicines transacted by scale up of APTS implementation from 17% (53 Hospitals) to 100% public hospitals |  |
| Reduce the wastage rate from 3.5% to less than 2% |  |
| Reducing forecasting error for RDF from 42% to less than 25% |  |
| Increase inventory turnover rate for RDF from 1.37 to 2 |  |
| Decrease recruitment process time average 188 days to 60 days. |  |
| Implement performance appraisal twice in a year. |  |
| Reduction of percentage of Attrition rate from existing average 13.7% to 2 % |  |
| Improve vehicle availability of fleet management from the current average 80% to 100%. |  |
| Reduction of Downtime (Maintenance and Servicing) at company from 18% to 5% ; |  |
| Reduce Costing from 22 days to 1 days |  |
| Reduce Office supplies procurement from 207 days to 120 days |  |
| Learning and Growth | Existence of center of Excellency |  |
| Capacitate internal staffs to have the right altitude and serving culture |  |
| Implementation of Integrated system across supply chain |  |
| Expand implementation of HCMIS FE from the existing 632 to 2000 |  |
| Implement state of the art technology to enhance tractability and tractability [Bar-coding, GPS, CCTV...] |  |

# Chapter Seven

# Values and Beliefs

Value and belief is the set of disciplines that the new design requires to achieve desire objectives. It is qualities and characteristics about which the organization strongly works. Values are standards to guide your action, judgments, and attitudes.

Hence those sets of values are derived only if the following core values and beliefs are shared beliefs of the organization staff and leaders.

Benefit of value

* Providing a framework for achieving the vision and increasing the effectiveness of the organization.
* Values give direction and consistency to behavior.
* Values help you know what to and not to make time for.
* Values establish a relationship
* Values can change over a life-time.
* Providing a framework for how to treat customers.

**What values can look like**

This varies from one organization to another. However there should be a few core values only, some reference suggests no more than 5 at the most. They should be symbolized by one word, then have a brief definition of what that means in reasonably global terms, followed by defined behaviors. They support your vision, shape your culture, and reflect what you value.

**Core PFSA values and Beliefs**

1. **Serving our consumers** by constantly challenging ourselves to achieve the highest levels of quality for products and never compromising on their safety standards

* Continuous improvement towards excellence as a way of working and
* Avoiding abrupt, one-time changes

1. **Commitment** to a strong work ethic, integrity and honesty, as well as compliance with applicable laws

* Timeframes are always met unless urgent circumstances mean we have to renegotiate new timeframes with all parties.
* Clients’ needs agreed within budgets are met.
* Ownership of our customers’ needs and being accountable for delivering friendly and professional service.
* We are each fully accountable for our work in gaining any possible repeat business with customers.
* We understand our customers’ business, prepare for all meetings with them
* Being open and honest in all our dealings and maintaining the highest integrity at all times
* All concerns are aired constructively with solutions offered.
* Each person is as skilled in some way as another and is entitled to express their views without interruption.

1. **Teamwork**

* Listening to and respecting each other whilst working together to achieve mutually beneficial results.
* When unsure we check with others as to what they meant.
* Everyone has strengths which we value and will use whenever possible.
* Team meetings will include a progress report from everyone and requests for help when needed.
* Providing support to one another, working co-operatively, respecting one another’s views, and making our work environment fun and enjoyable.
* We help others to achieve their deadlines without having to be asked.
* All projects have identified points which are celebrated by the whole team.
* We work with one another with enthusiasm and appreciation.
* We work with one another without manipulation.
* Conflict is resolved according to agreed guidelines for this team.
* Conflict is brought out into the open and dealt with constructively until all parties are satisfied with the result.

1. **Excellence**

* Always doing what is promised and striving for excellence and quality in everything we do.
* Quality will always delight the client whilst staying within budget limitations.
* Provide as per our word we keep it unless agreed otherwise by all parties.

1. **Recognition**

Recognizing and rewarding each other’s contributions and efforts.

* All individual successes are celebrated within the team.
* Assistance is thanked every time. Customer Service We enjoy their custom and so they deserve our service -timely, responsive, proactive, meeting their needs and aiming to delight.
* At every meeting with our customers we ask them what we could have done better, then implement their suggestions before we meet them again.
* Before any accounts are rendered, we check with our customers that they are sufficiently satisfied to pay the agreed account.
* All agreements are met.

1. **Professionalism**

At all times we act with integrity, providing quality service, being reliable and responsible.

* We do not upset one another intentionally, always endeavoring to present negative feedback constructively.
* We take pride and ownership in all that we do and say.
* We never talk about people behind their backs.
* Coaching and mentoring are common place here; we all coach and mentor one another.
* All opportunities for our own learning are pursued.
* Whenever we undertake a project it is our responsibility to express our training needs and gather the required skills.
* We each take responsibility to gain the required development to meet our customers’ needs.
* We each take responsibility to gain the required development to be learning consultants.

Mechanisms for internalize organizational values includes,

1. **Share values** - Values of the organizations can define the non-negotiable behavior of the employees as a result all staff should be aware of, accept and integrate the organization’s values into their decisions and behaviors. Hence it is important to share all the values by using different communication channels.
2. **Values of individuals** – Since individuals are members of an organization you need to value their individual values and beliefs then later you will find an agreement on common values of organization which consist of these individuals. Hence give credits to the values of the employee.
3. **Good communication** - When defining organizational values by saying that organizational values directly influence the way how people perform their tasks thus a good delivery/communication/ of the values will make the employees to understand and practice the organizational values in remarkable way where as poor efforts at discussing organizational values can result in decreasing performance of employees and organization.
4. **Symbolization** – Prepare the values in pictorial symbols as a sticker and post it in every employee’s desk so that employees can watch and read it daily. So that employees can sort, process, and recalling the information about the organizational values.
5. **Socialization** – Socialization in a company is a process through which the newly employed worker not only learns and adapts to new work positions and new roles but also gets acquainted with the organizational values. These values contribute to internalization of collective identity and development of the sense of belonging. Social cohesion bridges the differences between individual and organization and, therefore, accelerates spreading of shared attitudes, behavior, values, and norms that support peer-to-peer relations and encourage a shared understanding of company objectives. An important agent in the socialization process of newly employed person are individuals who the new employee is in contact with during the introduction period; usually the immediate superiors. That relational identification with immediate superior generalizes into organizational identification. The key condition for organizational identification is the impression of proto typicality of the immediate superior. Even in the case, when the newly employed person perceives the immediate superior as a symbolic figure, a generalization of identification elements from interpersonal relation to relation towards the company happens

# Chapter Eight

# ASIS TO BE Comparison

This section summarizes the main difference between the existing process and proposed process in terms of the supply chain functions. These new development into new supply core process is expected to supply the requested product in the agreed process thereby increase community satisfactions. The next key foot step is embarking on disciplined implementation of the design by creating alignment and harmonization and make sure all are onboard.

*Comparison table*

| **Key Areas** | **Existing ( AS IS)** | **New Design ( TO BE)** |
| --- | --- | --- |
| Forecasting and supply planning | * Lack of predefined list of product do supply * Traceability of products across the supply chain was a big problem * All pharmaceuticals (pharmaceuticals, emergency, laboratory supplies, and medical equipment were entertained together | * Predefined list exists * Committed demand from RHBs and HF * National coding that identify products and make all transacted medicines visible across the supply chain * Emergency pharmaceuticals, and laboratory supplies, and capital medical equipment are all designed to be entertained separately |
| Procurement | * No Prequalified supplier list * Poor contract management * Yearly round procurement modality | * Conduct Supplier prequalification * Long term contract agreement * Contract management * Cross docking for capital items * Clean documentations * Automation of the sub process * Medical device warranty management will be triparty agreement among HF, PFSA and Supplier |
| Relationship with potential suppliers | * Lack of strategy in supplier relation management * Limited joint review meeting and sharing of plans | * Strategic partner-ship * Continuous follow-up of suppliers, continuous performance review , joint consultation meeting and delisting of poor performer * Sharing procurement plans |
| Warehousing and Inventory | * Single door for receiving and issuing * Receipt of goods up on arrival without prior notification * Immature cross docking * Limited kitting practice, less standard packaging and labeling, * No MRP in place. * Unorganized inventory management * Only annual physical inventory was exercised * Absence of integrated electronic MIS. * No daily summary and KPIs | * Warehouse standardization to separate receiving storage and dispatch….) * Early notification of shipment documents for receiving using EDI * Cross docking for SSL, Medical devices, emergency need products * Replenishment in the warehouse racks * Product packaging and kitting, MRP, Agency Logo * Customer service management like back orders * Implementation ERP and stock visibility tools (RFID, Bar-coding..) * Perpetual or cyclic count implementation * Daily summary and KPIs * Enhanced occupational health, safety and security issues * Proposal of shifting for working hours * New professional mix |
| Distribution | * Lack of consignment Volume and weight estimation * No tools to truck where about the vehicles * Maximum retail price on distributed product is not yet practiced * Poor Disposal practice | * Estimate weight ,volume of the products and determine number of vehicle using Volumetric and Weight measurement * Truck the where about of vehicles using GPS and Summarize GPS reports/outputs such as behavior, risk management… * MRP, PFSA logo labeling on packing unit * Disposal facility will be established. This facility can be used to dispose PFSA's and facilities unfit for use products |
| Capacity Building | * Less attention for internal staffs * There was no organized center for capacity building * Operational research on supply chain related challenges is not prioritized * No mechanism to evaluate the training outcome and output | * New capacity building training center is established * Priority is to be given for internal staffs for comprehensive supply chain capacity building and other areas * Training will be for eternal staffs, HF and beyond Ethiopia * Operational research will be conducted to address supply chain related challenges and findings will be used for taking appropriate interventions to attain seamless and agile supply chain * Training output and outcomes will be measured and appropriate measures will be taken |
| Quality Management | Inadequate Quality management practice | * New quality management process established to evaluate and monitor Total Quality Management ( TQM) * Standard operating procedures for all sub process developed |

# Chapter Nine

# Annex

# PFSA interfacing stakeholders

Supply and management of health commodities is a huge task which secures the health care system of the country. The health demand and expansion of health facilities in the country in the past ten years are skyrocketing which needs a corresponding increase in continuous supply of these health products.

Supply of health care products sustainably requires the role and involvement of many stakeholders including Federal Ministry of Health, Regional Health Bureaus, Zones and Woreda Health Offices. In addition banks, Federal Ministry of Finance, Civil Service, Ethiopian Airlines and Custom are the other most important stakeholders with which the agency should align in order to achieve its roles. Even though, collaboration was highly demanding, in the last ten years, the Agency was not operating in such a manner that there were no clear, defined roles, responsibility and collaboration as it has to be. Due to that, there were duplication of effort, and unclear role and responsibilities and also less performance than expected. Therefore, areas in which the Agency has to work with other stakeholders are by now identified to fix these problems and achieve expectation of the community. See below the summary of interfacing stakeholders and the detail stakeholder’s analysis.

Table on summary of interfacing stakeholders

|  |  |  |
| --- | --- | --- |
|  | Processes | Interfacing Stakeholders that PFSA should work with |
|  | Forecasting & Supply Planning | EFMHACA, EPHI, HAPCO, SHI, Board of Directors, Universities, FMoH, RHBs, ZHDs, WoHOs, HFs and Development Partners. |
|  | Procurement | PPA, Board of Directors, FMoH, RHBs, ZHDs, WoHOs, HFs and Development Partners, local and international suppliers, ERCA, Ethiopian airlines, shipping lines, ports, EFMHACA, EPHI, HAPCO, SHI |
|  | (Hubs Branches) | RHBs, ZHDs, WoHOs, HFs, and Development Partners. |
|  | Warehousing and Inventory management and Adama Project | Distribution Firms, Adama Town municipality and community police, FMoH, RHBs, HFs, Development Partners |
|  | Distribution and fleet management | Distribution Firms, Insurance, Maintenance companies (MOENCO, Nyala…), community pharmacies, private health facilities |
|  | Fund Management | Board of Directors, FMoH, RHBs, Universities, HFs (Public, Non Governmental and Privates), Uniformed HFs, Banks, Insurance, Shipping lines & Logistic services, ERCA, EAL, Audit Service Corporation, Local and International Suppliers, MoFED, Public enterprise, |
|  | General Services | PPA, Ministry of Transport, EIC, Police, City, S/City and Woreda Administrations, EPCO, Ethio-telecom, Water and sanitation, Maintenance companies (MOENCO, Nyala…), Private transport companies , Local and International Suppliers, Ethiopian airlines |
|  | Capacity Building and Operational Research | FMoH, RHBs, ZHDs, WoHOs, HFs and Development Partners, EPHI, Universities, EFMHACA, Public enterprise |
|  | Quality Management | EFMHACA, Universities, Standard Authority, FMoH, RHBs, ZHDs, WoHOs, HFs and Development Partners |
|  | Planning & Project Coordination | FMoH, RHBs, ZHDs, WoHOs, HFs and Development Partners |
|  | MIS | ENSA, Universities, Developmental partners, Technology Venders |
|  | Legal | House of peoples representative, Ministry of Justice, Board of Directors, FMOH, |
|  | HRM | Board of Directors, Civil Service, Public enterprise, |
|  | Audit | General Audit, House of peoples representative, |
|  | Public relation | EBC, FMOH, RHBS, AHD, Woredas, HF, Public, |
|  | Good Governance Anticorruption and Reform | FMOH, House of peoples representative, Public enterprise, |
|  | Woman and Youth | Ministry of Woman and Youth |

**Interface of the major activities of quantification (Forecasting and supply planning) and Capacity Building sub process**

Description

To make the supply chain process more efficient and effective, there is a need to develop pre-defined national procurement list by the ministry/EFMHACA. Based on the national procurement list, the agency should also develop its own predefined procurement list in collaboration with FMOH, RHBS, HF and other stake holders and should revise annually. Based on the list, the agency will lead the annual quantification process (three year forecast and a one year supply plan)both for program and RDF items that should be revised annually. Quantification by its very nature requires routine follow-up and update based on changes in the basic assumptions during quantification such as consumption, treatment protocol change, morbidity change, supplier reliability, regimen shifts and new program initiatives. RDF quantification starts from HF whereas health program quantification usually done at central level based on consumption data from health facilities or based on issue data from PFSA branches and program targets. One of the best practices internally benchmarked is the experience of HIV commodities management. With this regard, the experiences of the agency showed that wastage rate of ART drugs is very low and the availability is very high as compared to other program items such as malaria, TB and family planning (with high wastage and low availability); since the quantification for HIV commodities is led by the agency with strict pipeline monitoring for HIV commodities. The OIG global fund and Auditor General recommended that the country need to follow the HIV commodities management model for other program commodities management where forecasting, procurement, supply planning, warehousing and inventory management are handled by PFSA. This model enables the agency to plan procurement properly that the agency should not wait until some other organization quantify for them and give them for procurement. Secondly, the triangular model (see figure below), is costly, time consuming will cause bizarre responsibility and accountability. Whereas, the vertical model will enable health facilities to directly procure from the agency, will reduce time, improve accountability. Cognizant of the above facts, the redesign team strongly recommends that quantification (forecasting and supply planning) activity for both program and RDF items can be handled by the organization that uses the final data for procurement. So, even though the team from FMOH suggested that the quantification activities should be led by FMOH which will result in difficulties for pipeline monitoring, consume more time, lengthen the process, will also blurry accountability and responsibility



The capacity building activities of health facilities for both the pharmaceutical service and supply management had been conducted by the agency for long years and showed great improvement in the area. This was happening since there was no organized pharmacy service unit /department at regional health bureau /FMOH level. However, this time FMOH/RHBs have already established department for pharmacy services. Therefore, the design team has agreed that the leading role of the pharmacy service capacity building activities for health facility professionals including on RDU, AMR, DTC, DIS, APTS and clinical pharmacy should be handled by FMOH/RHBs/. Even though, the agency will have significant role especially on DTC, APTS and RDU capacity building related activities , the lead should be given to FMOH/RHBs and the agency can collaborate focusing on its main roles. However, Supply chain related capacity building activities including IPLS, supply chain management and practical experiences can be coordinated and conducted by the agency (Refer details on the table below).

| Major Activities  **Program Items** | PFSA | FMOH/RHBs/  EFMHACA |
| --- | --- | --- |
| STG development | Collaborate | Lead |
| National procurement list | Collaborate | Lead |
| Agency level predefined procurement list | Lead | Collaborate |
| Quantification (Forecasting and Supply Planning) for agency level predefined procurement listed products | Lead | Collaborate and follow up |
| Pipeline monitoring | Lead | --------------------- |
| RDF |  |  |
| STG development | Collaborate | Lead |
| National procurement list | Collaborate | Lead |
| Agency level predefined procurement list | Lead | Collaborate |
| Quantification (Aggregation, Forecasting and Supply Planning)  For the agency level predefined procurement listed products. (This process will start from health facilities and will be committed for their demand) | Lead | Collaborate/and follow up |
| Pipeline monitoring | Lead | ------------------------- |

|  |  |  |  |
| --- | --- | --- | --- |
| Major activities (training, Mentoring, assessment, material distribution) | PFSA | FMOH/RHB | Comment |
| APTS establishment; scale up; | Collaborate | Lead |  |
| DTC/DIS; | Collaborate | Lead |  |
| Clinical Pharmacy; | -------------- | Lead |  |
| RDU/AMR; | Collaborate | Lead |  |
| Supply chain related capacity building for both internal and external (example: IPLS, i*nventory management, quantification, procurement, warehousing*, distribution and fleet management, comprehensive supply chain management etc.). Management related (HR and Management capacity building internal) using theoretical and practical experiences | Lead | Collaborate | Even though the leading role is for PFSA, this should be done jointly with FMOH/RHBs |

# Summary Recommendation and Precondition

1. **Precondition**
2. Procurement List of medicines, reagents, medical supplies and equipment should be prepared
3. The medical equipment list should be with specification
4. All manuals, SOPs and regulations should be endorsed
5. Warehouse infrastructure should be modified and be minimum standard
6. The proposed organogram should be endorsed
7. The years of audit backlog should be cleared
8. **Recommendation**
9. The agency should be business model (public enterprise) in the near future
10. Implementing ERP (technology)
11. List of pharmaceuticals (medicines, reagents, medical supplies and equipment) should be registered
12. Platform for medical equipment
13. The test menu should be prepared for laboratory reagents
14. The organization need to have a change agent
15. Availability of refrigerator tracks (cold chain vans)
16. Disposal firm should be established

# Chapter Ten

# References

1. Mckinsey (March 2015). Business process Optimization of Pharmaceuticals Fund and Supply Agency (PFSA): delivering on Ethiopia’s supply chain goals..
2. Pharmaceuticals Fund and Supply Agency (PFSA), June 2007 E.C. Annual Performance report
3. PFSA Board of Directors Meeting at Adama, Minute No.13 Tikimt 20-21 2008 E.C and Board of Directors Meeting at Hawassa, Minutes No.14, Hidar 4-5 2008 E.C. In depth evaluation of PFSA performance.
4. Federal Ministry of Health of Ethiopia, FMOH (2008 E.C). The health sector Good governance plan, Priority challenges in health Logistics
5. FMOH (2015). Health sector Transformation Plan (HSTP). 2008 -2012 EFY
6. PFSA (2015). Pharmaceuticals Supply Transformation Plan (PSTP). 2008 -2012 EFY
7. USAID –DELIVER PROJECT and PFSA (2015). National Survey of the Integrated Pharmaceutical Logistics System
8. A Adinew, S.Ololo, F Tesema, Evaluation of the implementation status, outcome.. Auditable Pharmaceutical Transactions and Service; WHO essential medicines portal <http://apps.who.int/medicinedocs/en/m/abstract/Js22267en/>
9. Federal Ministry of Health 16th national annual review meeting report ; <http://www.moh.gov.et/documents/26765/0/Auditable+Pharmaceutical+Transaction+and+Service%28APTS%29/b199e166-155c-4d2b-af48-98001e3425c7?version=1.0>
10. H. Tadeg, E. Ejigu, E. Geremew, A. Adinew. 2014. Auditable Pharmaceutical Transactions and Services (APTS): Findings of the Baseline Assessment at Federal, Addis Ababa, and Teaching Hospitals WHO Essential Medicines Portal; http://apps.who.int/medicinedocs/en/d/Js21704en/
11. UNFPA (2015). National Health Facility Assessment on Reproductive Health Commodities and Services in Ethiopia
12. Management Science for Health, 2102.MDS-3: Managing Access to Medicine and Health Technology. Arlington, VA.: Management Science for Health.
13. The Logistics Handbook: A Practical Guide for the Supply Chain Management of Health Commodities. Arlington, Va.: USAID | DELIVER PROJECT, Task Order 1.
14. WHO, USAID/SIAPS and PFSA (2014). National Assessment on functional Status and Perceived Effectiveness of DTCs at Public Health Facilities in Ethiopia.
15. PFSA (2015). Standard operating procedure manual for the integrated pharmaceutical logistics system in health facilities of Ethiopia,
16. PFSA (2015). Standard Procedure for Storage and Distribution for Central Warehouse in PFSA, 2nd edition, Addis Ababa, Ethiopia