Islamic Republic of Afghanistan
Ministry of Public Health

Competency Framework for Pharmaceutical Services

Prepared by General Directorate of Pharmaceutical Affairs and General Directorate of Human Resources

December 2012

CONTENTS

Foreword iii

Abbreviations ivv

Introduction 1

How This Framework Was Developed 2

How to Use This Framework 3

Assessing Competency Development Needs 3

Guiding the Development of Competency-Based Education and Training 4

Explanatory Notes 5

Area 1. Pharmaceutical Policy and Planning 6

Area 2. Pharmaceutical Laws and Regulations 7

Area 3. Quality Assurance Systems for Pharmaceuticals 8

Area 4. Production/Manufacture of Pharmaceuticals 9

Area 5. Procurement 10

Area 6. Supply Chain Management 11

Area 7. Outpatient Hospital and Private Pharmacy Dispensing 12

Area 8. Hospital Inpatient Dispensing 14

Reference List 15

Annex 1. Glossary 16

Annex 2. Contributors 17

FOREWORD

Competent pharmaceutical human resources with the required knowledge, skills, attitudes, and habits are the backbone of the pharmaceutical sector and are responsible for providing safe, effective, quality, and affordable medicines and ensuring rational medicine use.

The pharmaceutical sector has been adversely affected by its inability to deliver expected services due to various factors, including the lack of competent pharmaceutical human resources, imbalanced geographic distribution of those resources, inadequate investments in capacity development, and finally, lack of accurate data on pharmaceutical human resources and their expertise. This publication sets forth a framework of competencies developed by the Ministry of Public Health and its stakeholders that defines the core tasks in eight key pharmaceutical service areas.

In accordance with its 2011-2015 strategic plan, the Ministry of Public Health, through the General Directorate of Pharmaceutical Affairs and with the technical and financial assistance of the US Agency for International Development (USAID) through the Strengthening Pharmaceutical Systems (SPS) project, utilized this framework in December 2011 as part of a comprehensive pharmaceutical human resources assessment to identify competency gaps. Findings were used to inform the development and finalization of a national framework for pharmaceutical human resources planning, management, and competency development.

The eight key pharmaceutical service areas are pharmaceutical policy and planning, pharmaceutical rules and regulations, quality assurance systems, medicine production, procurement, supply chain, drug distribution in private pharmacies and to hospital outpatients, and hospital inpatient dispensing.

The Ministry of Public Health urges the utilization of this competency framework to guide strategies to assess and build the required proficiencies of pharmaceutical human resources at the pre-service, in-service, and post-graduate levels.

The Ministry of Public Health would like to kindly request that all national and international organizations assist them in achieving these objectives.

Dr. Ahmad Jan "Naim"
Deputy Minister of Policy and Planning

ABBREVIATIONS

EDL	essential drug list
FEFO	first expire, first out
GDPA	General Directorate of Pharmaceutical Affairs
GLP	Good Laboratory Practices
GMP	Good Manufacturing Practices
LDL	licensed drug list
MoPH	Ministry of Public Health
MSH	Management Sciences for Health
QC	quality control
SOP	Standard Operating procedure
SPS	Strengthening Pharmaceutical Systems Program
WHO	World Health Organization
USAID	US Agency for International Development

INTRODUCTION

The strength of the pharmaceutical sector lies in its capability to provide access to affordable and quality medicines that are safe and appropriately used to meet population and client needs. This depends in large part upon having a competent workforce that is equitably distributed to provide pharmaceutical services, with education and training that is targeted towards supporting individuals to attain these competencies (figure 1). Competencies can be defined as a set of knowledge, skills, habits and attitudes required for an individual to perform defined tasks.

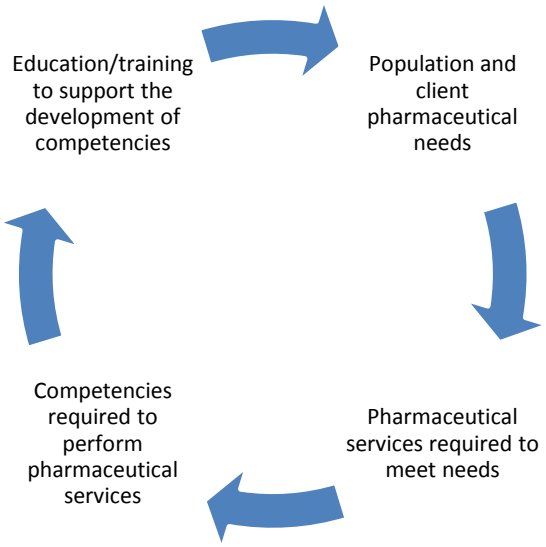

Figure 1. Competency-based education and training that meets needs[1]

The purpose of this document is to define competencies required for eight core pharmaceutical service areas in both the public and private pharmaceutical sectors of Afghanistan. This competency framework is not specialized to a particular cadre, but instead defines the competencies required of any individual who performs specific tasks in the pharmaceutical sector, regardless of whether they are a pharmacist, pharmacy assistant, or any other cadre.

It should be recognized that, in addition to knowledge and skills, professionals also need to adopt certain attitudes, habits, and ways of thinking for job performance to be effective. Defining these competency requirements can be useful to guide the development of competency-based education and training programs that better prepare individuals to perform and to form the basis of assessments to determine competency development needs.

Given that a competency framework for pharmaceutical services had not yet been developed in Afghanistan and that there was demand for an assessment of competency gaps, the USAID-funded Strengthening Pharmaceutical Systems (SPS) program provided technical support to the Ministry of Public Health (MoPH) to facilitate development of a competency framework.

HOW THIS FRAMEWORK WAS DEVELOPED

This competency framework was developed through a rigorous process of development and review over the period of September 2010–July 2011 in consultation with all key stakeholders in the pharmaceutical sector (figure 2). The MoPH Pharmaceutical Human Resources Core Team convened a small group of in-country experts to develop an initial draft which, over the course of seven peer reviews, including a multi-stakeholder consultation and expert panels, was finalized and adopted in July 2011.

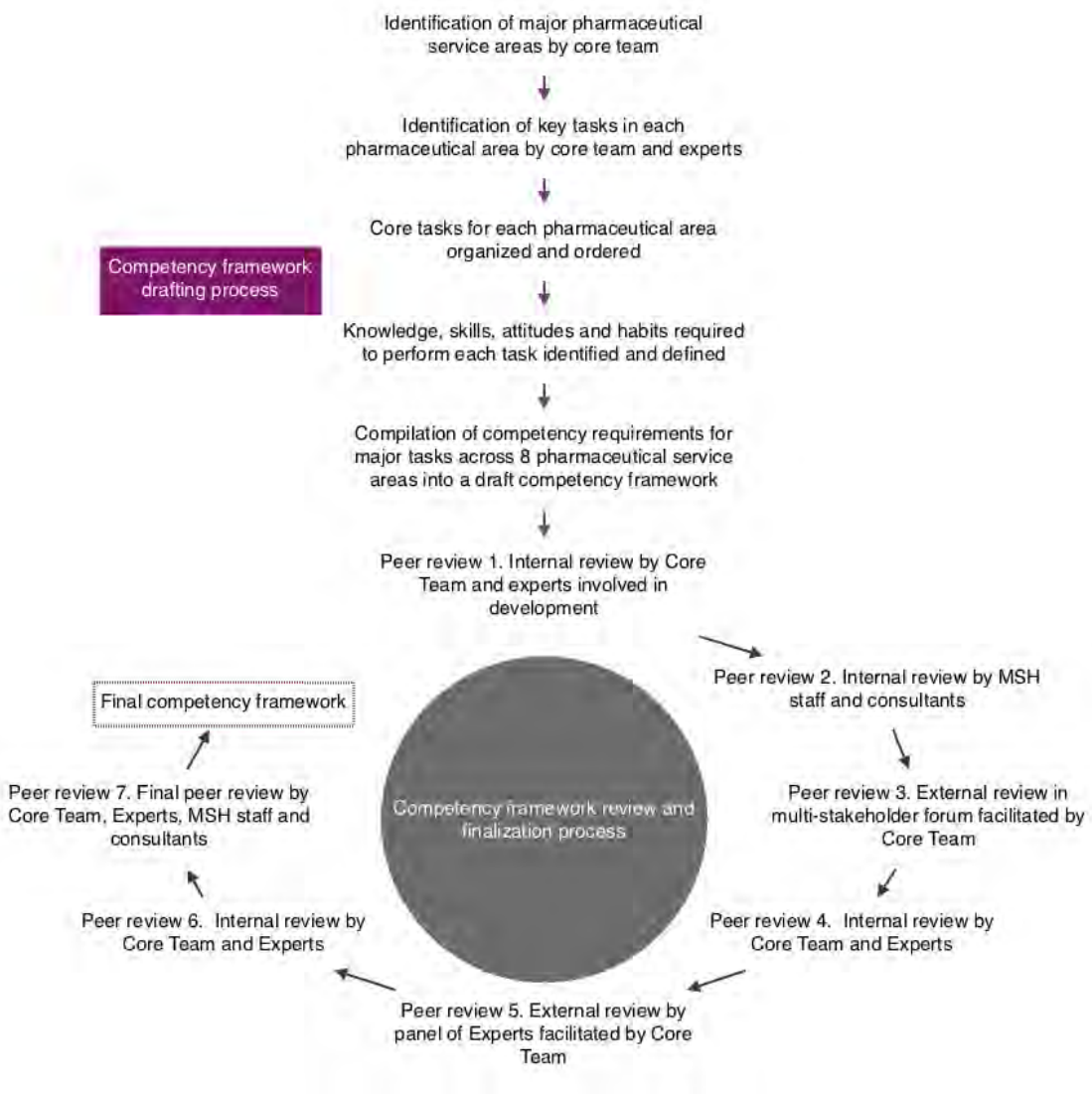

Figure 2. Competency framework development and review process

HOW TO USE THIS FRAMEWORK

The pharmaceutical services competency framework defines competencies for core tasks in each area. Expert practitioners in each of the service areas identified the main tasks. Many of the competencies described in this framework are what could be considered foundational competencies; hence, this framework does not cover some of the more complex and advanced tasks in the pharmaceutical service areas.

This framework does not imply that all those providing pharmaceutical services need to have all the competencies described. This framework should be adapted on a case by case basis so that only tasks that an individual or group are required to perform be selected. This ensures that any use of this framework is directly relevant to the services that the individual or group are required to provide and thus best meets their needs. There are several ways in which competency frameworks can be used to improve competencies of individuals providing pharmaceutical services, and thus contribute towards strengthening the pharmaceutical sector. The methods are not covered in depth, but the descriptions below give some examples to outline how the framework could be potentially used. The MoPH will publish more detailed guidance and tools for the application of this competency framework as it develops and refines these in the near future.

Assessing Competency Development Needs

To identify the competency development needs of an individual or group, it's important to first select the tasks that the individual(s) are required to perform, including those that may not be defined here. Compiling these tasks and their respective competency requirements results in an adapted competency framework that is suited to the needs of the individual(s).

There are several methods that can be used to assess an individual(s) competency development needs against this framework. One is to ask the individual(s) to review the competency requirements for each task and self-assess the extent to which they have those competencies (e.g., low, moderate, high). The needs of the individual(s) can then be prioritized so that areas where competencies are low can be addressed (e. g., through adult learning methods such as interactive training, on-the- job training, self-directed learning, peer-learning, feedback, and supervision). This can be especially useful before conducting any training (as a needs assessment), during the performance appraisal process to help the individual(s) identify their competency development needs, and during the orientation process so that a new staff member can see what is expected of them and where they need support.

MoPH used this method of self-assessment across all eight pharmaceutical service areas in four provinces to determine priority competency development needs in December 2011.

Guiding the Development of Competency-Based Education and Training

A competency-based approach takes into account what competencies the learner will gain and puts this at the heart of the curriculum design. By identifying what the individual will ultimately be required to perform, and thus what competencies need to be developed to help that individual to perform, more targeted and comprehensive learning objectives can be set.

This does not mean that competency-based education or training is less theoretical, rather the theory is linked with practice so that the individual gains the competence and confidence to perform the task.

Institutions providing pre-service, graduate, or in-service education and training programs can use this competency framework to—

- Identify what competencies the programs will focus on developing
- Guide the development of learning objectives
- Select appropriate teaching and learning methodologies for specific competencies
- Select appropriate assessments of the extent to which learning objectives were achieved
- Map the existing curriculum against the competency framework to help guide curriculum revisions

The first step for any of these applications is to first select the tasks the learners will be expected to be able to do by the end of the program. These tasks can be selected from this framework or others may also have to be identified. Compiling the competency requirements for each task into an adapted competency framework is also a key step to ensure relevancy.

MoPH, with the support of SPS, will be facilitating training institutions to map pre-service curricula against key competencies in this framework. The faculty of training institutions will review the content of each module of the curricula to see which competencies need developing. The resultant curriculum map will be reviewed to identify competencies that are inadequately covered, not covered at all, and not well integrated into the curriculum (which makes it difficult for the learner to bring the competency requirements together to perform effectively). This process can also help to identify any redundancies in the curriculum that do not contribute toward the development of core competencies. This mapping process should also engage learners and recent graduates to get feedback on the curriculum and how it contributes toward the development of competencies. This produces information to guide the curriculum development and revision.

EXPLANATORY NOTES

There are many ways in which to organize competency frameworks. The table format used here was determined by the MoPH Pharmaceutical Human Resources Core Team to be the most useful after reviewing an international set of frameworks. Each table is specific to a particular area of pharmaceutical services.

This competency framework is intended to be a living guidance document that is periodically reviewed and revised. While care has been taken to make sure that the tasks are listed in some order, they do not necessarily represent the exact order in which the tasks may be performed in a process. The lists of tasks were not designed to reflect or capture an ideal process, nor should they be interpreted as a standard operating procedure (SOP).

AREA 1. PHARMACEUTICAL POLICY AND PLANNING

Tasks	Competency requirements: knowledge, skills, attitudes, and habits	
1.1 Develop pharmaceutical strategies and policies	1.1.1.	Able to analyze pharmaceutical situation and identify issues
	1.1.2.	Able to collect relevant data on pharmaceutical situation
	1.1.3.	Able to describe relevant national laws, regulations, policies, guidelines, and WHO guidelines and how to access them
	1.1.4.	Able to describe current activities within the pharmaceutical public and private sectors
	1.1.5.	Able to develop policy objectives relevant to identified issues
	1.1.6.	Able to explain strategic planning and policy development process
	1.1.7.	Where appropriate, be able to establish and manage committees for a specific purpose (e.g., essential drug list [EDL], national drug policy, SOPs)
	1.1.8.	Able to manage the pharmaceutical strategy and policy development process
1.2 Develop annual operational plan	1.2.1.	Able to use pharmaceutical sector information, targets, medicines consumption data, etc. from government and partners for operational planning
	1.2.2.	Able to describe current activities within the pharmaceutical public sector and nongovernment sector
	1.2.3.	Able to disseminate operational plan
	1.2.4.	Able to set appropriate budgets based on previous expenditures and available donor support
	1.2.5.	Able to forecast budgetary requirements based on program needs
	1.2.6.	Able to develop appropriate operational plans that take into account the population in each area
	1.2.7.	Able to organize activities in an appropriate order to ensure efficient and logical flow
1.3 Monitor progress of activities in the operational plan	1.3.1.	Able to provide an in-depth explanation of and ability to monitor progress against the operational plan
	1.3.2.	Able to analyze progress reports and summarize them
	1.3.3.	Able to regularly develop and disseminate summarized reports at specified times
1.4 Approve draft regulations and SOPs for implementation	1.4.1.	Able to revise and finalize regulations and SOPs based on review by relevant authorities
	1.4.2.	Able to submit policies and SOPs to MoPH for final approval

AREA 2. PHARMACEUTICAL LAWS AND REGULATIONS

Tasks	Competency requirements: knowledge, skills, attitudes, and habits	
2.1 Develop drug policies, regulations, and laws	2.1.1.	Able to describe the pharmaceutical situation in Afghanistan
	2.1.2.	Able to use basic word processing and spreadsheet programs on a computer
	2.1.3.	Able to actively participate in committee meetings and present ideas
	2.1.4.	Able to describe relevant existing pharmaceutical laws, policies, and regulations and how to access them
	2.1.5.	Able to explain the policy and law development process
	2.1.6.	Able to define gaps in the policies and laws and make appropriate changes
	2.1.7.	Able to develop, revise, and finalize policies, regulations, and laws
	2.1.8.	Able to effectively explain and present regulations and laws for ministerial, parliamentary, and presidential approval where appropriate
2.2 Revise licensed drug list (LDL), EDL, and national formulary	2.2.1.	Able to navigate and access WHO and neighboring country references (e.g., EDLs, formularies)
	2.2.2.	Demonstrate knowledge of pharmacology, epidemiology, and treatment guidelines
2.3 Revise national drug policy	2.3.1.	Able to navigate and access WHO and neighboring country references and guidelines
	2.3.2.	Able to describe relevant laws and regulations and how to access them
	2.3.3.	Demonstrate comprehensive knowledge of the pharmaceutical system
2.4 Register Afghan-trained and foreign-trained pharmacists and pharmacy assistants	2.4.1.	Able to organize committees to develop qualifying exams for pharmacists and pharmacy assistants
	2.4.2.	Able to identify fraudulent pharmacist and pharmacy assistant qualifications
	2.4.3.	Able to maintain an updated register of pharmacists and pharmacy assistants
	2.4.4.	Able to use basic word processing and spreadsheet programs on a computer
	2.4.5.	Able to demonstrate English language proficiency
2.5 Register private pharmacies, production companies, wholesalers, and import companies	2.5.1.	Able to describe relevant medicines laws and regulations and how to access them
	2.5.2.	Able to comprehend and interpret terms and conditions of foreign companies and pharmaceutical product registration
	2.5.3.	Demonstrate familiarity with checklists for registration and licensing and able to ensure complete applications
2.6 Inspect private retail pharmacies	2.6.1.	Able to use relevant inspection checklists
	2.6.2.	Demonstrate knowledge of geographical area and laws and regulations relating to private pharmacy standards
	2.6.3.	Able to appropriately manage private pharmacy breaches of laws and regulations
	2.6.4.	Be honest, transparent, and responsible

AREA 3. QUALITY ASSURANCE SYSTEMS FOR PHARMACEUTICALS

Tasks	Competency requirements: knowledge, skills, attitudes, and habits	
3.1 Control of Good Manufacturing Practices (GMP) in production companies	3.1.1.	Demonstrate knowledge of GMP
	3.1.2.	Able to effectively inspect production companies and identify non-compliance with GMP
3.2 Inspect equipment in production companies	3.2.1.	Demonstrate knowledge of GMP
	3.2.2.	Able to describe different types of production equipment used in production companies
	3.2.3.	Able to interpret documentation and maintenance records on production equipment
3.3 Inspect professional competence of production company staff	3.3.1.	Able to assess professional competence of staff in production companies
	3.3.2.	Be able to demonstrate adequate technical knowledge of pharmaceutical manufacturing
3.4 Inspect of production process	3.4.1.	Demonstrate knowledge of GMP
	3.4.2.	Demonstrate knowledge of the production process
	3.4.3.	Able to inspect the production process
	3.4.4.	Able to use the checklist for supervision and evaluation of national and international production companies
	3.4.5.	Able to interpret documentation and records on the production process
3.5 Inspect raw materials	3.5.1.	Demonstrate knowledge of GMP
	3.5.2.	Able to describe relevant quality assurance tests to inspect imported raw materials
3.6 Inspect provincial customs and warehouses (for importation)	3.6.1.	Able to describe methods for medicines sampling and able to appropriately package samples
	3.6.2.	Demonstrate knowledge of appropriate pharmaceutical stock management
	3.6.3.	Able to describe relevant medicines laws and regulations for importation and how to access them
	3.6.4.	Able to review imported medicines documentation (packing list, invoices, medicines import form)
3.7 Conduct quality control (QC) tests on medicines	3.7.1.	Demonstrate knowledge of GMP and Good Laboratory Practices (GLP)
	3.7.2.	Able to review certificate of analysis
	3.7.3.	Able to establish appropriate testing SOPs
3.8 Conduct QC testing of imported raw materials	3.8.1.	Demonstrate knowledge of analytical chemistry
	3.8.2.	Able to describe different QC aspects such as pharmacological, biological, physical, and chemical
	3.8.3.	Demonstrate knowledge of appropriate reference pharmacopeia and monographs for raw materials
	3.8.4.	Demonstrate knowledge of GMP and GLP

AREA 4. PRODUCTION/MANUFACTURE OF PHARMACEUTICALS

Task	Competency requirements: knowledge, skills, attitudes, and habits	
4.1 Cleaning production equipment	4.1.1.	Demonstrate knowledge of pharmaceutical manufacturing equipment
	4.1.2.	Able to explain cleaning SOPs
	4.1.3.	Able to test for cross contamination
4.2 Preparing raw materials for production	4.2.1.	Demonstrate knowledge of GMP
	4.2.2.	Able to describe raw materials specifications and how to access them
	4.2.3.	Able to select, prepare, extract, and collect active compounds from natural resources(e.g., mineral, animal, and plant) with the appropriate methods
	4.2.4.	Able to accurately weigh raw materials
	4.2.5.	Able to safely handle chemicals and raw materials
	4.2.6.	Able to maintain appropriate records on raw materials
4.3 Production process	4.3.1.	Demonstrate knowledge of GMP
	4.3.2.	Demonstrate knowledge of the production process
4.4 Packaging (finished products)	4.4.1.	Able to appropriately pack different type of medicines
	4.4.2.	Able to manage the packaging line and packaging process
4.5 QC of produced medicines	4.5.1.	Demonstrate knowledge of GMP
	4.5.2.	Demonstrate knowledge of analytical chemistry
	4.5.3.	Able to describe appropriate QC testing and sampling methods across production and post-production processes
	4.5.4.	Able to explain the concepts of market risk, market value, and narrow therapeutic range, which should be taken into consideration when developing sampling SOPs
	4.5.5.	Demonstrate knowledge of hygiene standards and acceptable microorganism levels for different types of products and how to access relevant standards

AREA 5. PROCUREMENT

Task	Competency requirements: knowledge, skills, attitudes, and habits	
5.1 Select medicines	5.1.1.	Able to explain medicines selection methods by priority (e.g., Vital, Essential, Non-essential (VEN) method, etc.)
	5.1.2.	Demonstrate knowledge of EDL, LDL, and standard treatment guidelines
	5.1.3.	Able to forecast requirements in emergency situations such as disease outbreaks, conflict, and other natural disasters
5.2 Quantify medicines required	5.2.1.	Able to understand and analyze drug consumption reports
	5.2.2.	Able to explain different quantification methodologies
	5.2.3.	Able to explain how to gather information on consumption and demographic data to project commodity needs
	5.2.4.	Ability to reflect the commodity requirement per national goals and targets
	5.2.5.	Able to describe the procurement activities of partners, donors, and nongovernmental organizations
	5.2.6.	Able to quantify appropriate security stock and emergency stock requirements
	5.2.7.	Able to appropriately adjust quantified medicines requirements to the available budget
5.3 Select procurement method	5.3.1.	Able to describe procurement laws and guidelines and how these can be accessed
	5.3.2.	Able to explain different procurement methods
	5.3.3.	Able to select appropriate procurement method
5.4 Select suppliers	5.4.1.	Able to assess or pre-qualify suppliers where appropriate
	5.4.2.	Able to describe procurement laws and guidelines and how these can be accessed
	5.4.3.	Able to identify suppliers who can meet emergency procurement needs
	5.4.4.	Able to use appropriate method for the selection of suppliers
5.5 Issue procurement contract	5.5.1.	Able to describe the contracting process
	5.5.2.	Able to describe procurement laws and guidelines and how these can be accessed
	5.5.3.	Able to specify appropriate contract conditions
5.6 Oversee the procurement contracting process	5.6.1.	Able to ensure proper communication with suppliers about the contract
	5.6.2.	Able to effectively monitor the order status
	5.6.3.	Able to submit order and track order status online
5.7 Receive procured pharmaceutical products	5.7.1.	Able to check that received pharmaceutical products are in accordance with the contract
	5.7.2.	Able to monitor and track the procurement process in accordance with the contract
5.8 Make payment on contract	5.8.1.	Able to assess adherence to contract and arrange payment if the received stock meets all relevant criteria
5.9 Obtain drug consumption information	5.9.1.	Able to use different drug consumption collection templates

AREA 6. SUPPLY CHAIN MANAGEMENT

Task	Competency requirements: knowledge, skills, attitudes, and habits	
6.1 Make distribution plans	6.1.1.	Able to use distribution planning tools
	6.1.2.	Able to establish a list of health facilities for distribution
	6.1.3.	Able to explain push and pull supply systems
	6.1.4.	Able to determine quantity of stock to be issued based on available stock and consumption reports
	6.1.5.	Prepare advance route plan and circulate to facilities to ensure timely supply of pharmaceutical products
6.2 Implement the distribution plan	6.2.1.	Demonstrate professional knowledge and experience to implement the distribution plan
	6.2.2.	Able to explain supply chain management principles and SOPs
	6.2.3.	Able to effectively manage the following in relation to distribution— • Transportation • Transportation costs • Human resources • Safety in transportation (not breaking, etc.) • Commodity security (e.g., temperature, security)
	6.2.4.	Demonstrate knowledge of pharmaceutical products
	6.2.5.	Able to describe the principles of stock issue
6.3 Maintain records	6.3.1.	Able to maintain appropriate documentation relating to inventory, stock issue, and distribution reports
	6.3.2.	Arrange periodic physical inventory, resolve discrepancies, and appropriately adjust records
	6.3.3.	Able to evaluate whether the distribution plan has been effectively implemented and to identify and resolve distribution issues
6.4 Store pharmaceutical products appropriately	6.4.1.	Demonstrate knowledge of Good Storage Practice
	6.4.2.	Able to explain the first expire, first out (FEFO) principle
	6.4.3.	Arrange pharmaceutical products in the store based on storage guidelines
6.5 Dispose of expired and damaged stock	6.5.1.	Able to explain and apply basic expired and damaged stock disposal SOPs
	6.5.2.	Able to arrange periodic disposal of expired and damaged stock
6.6 Monitor and evaluate	6.6.1.	Able to effectively monitor stock management and address stock management issues (to ensure supplies are appropriately transported, issued, etc.)
	6.6.2.	Able to provide In-depth explanations of monitoring checklists
	6.6.3.	Conduct regular monitoring visits to warehouses

AREA 7. OUTPATIENT HOSPITAL AND PRIVATE PHARMACY DISPENSING

Task	Competency requirements: knowledge, skills, attitudes, and habits
7.1 Ensure appropriate stock management	7.1.1. Able to correctly maintain stock cards and identify when orders need to be made
	7.1.2. Able to calculate average medicines consumption on a monthly, quarterly, biannual, and annual basis
	7.1.3. Able to describe the stocking procedures, such as receiving, issuing, stocking, and arranging, and the FEFO principle
	7.1.4. Demonstrate knowledge of stocking, distribution, and additional documentation requirements for controlled medicines and other specific items
7.2 Order stock	7.2.1. Able to determine appropriate quantities of medicines for stock orders based on drug consumption and prevalence of certain disease(s), such as the flu, during a specific time period
	7.2.2. Able to order medicines that are consistent with the hospital formulary and/or EDL
	7.2.3. Demonstrate knowledge of the procedures and documentation required for ordering controlled medicines
7.3 Evaluate appropriateness of prescribed medicines	7.3.1. Demonstrate knowledge of hospital formularies and EDL
	7.3.2. Demonstrate knowledge of clinical pharmacology, formulation, pharmacokinetics, pathophysiology, drug interactions, treatment guidelines, toxicology and relevant antidotes for toxicity, contraindications, adverse drug reactions, rational medicines use, and antimicrobial resistance
	7.3.3. Able to evaluate the appropriateness of the prescribed medicines and ensure rational use of medicines based on patients'— • Medical conditions • Past medical history • Other prescribed medicines for possible drug interactions
	7.3.4. Able to identify prescribing errors
	7.3.5. Able to communicate prescribing errors to prescribers and advise on appropriate corrections
	7.3.6. Able to establish a collaborative relationship within the health care team to identify and resolve prescribing errors
7.4 Count and pack medicines according to prescription	7.4.1. Packaging medicines to preserve the integrity of medicines
	7.4.2. Correct labeling of medicine expiration date, after repacking medicine from bulk pack
7.5 Check prescriptions dispensed	7.5.1. Able to identify dispensing errors
	7.5.2. Demonstrate knowledge of good dispensing practices
	7.5.3. Able to identify and ensure correctly dispensed medicine, dosage form, quantity, and dose
7.6 Label dispensed medicines appropriately	7.6.1. Able to interpret doctors' instructions
	7.6.2. Label with instructions on how to take medicines (based on doctors' prescriptions), patient name, medicine name, dose, and duration of treatment (start and end dates)
	7.6.3. Write down special instructions for medicines for patients: e.g. take with food, take with plenty of water
7.7 Counsel patients on appropriate use of medicines	7.7.1 Able to explain how and why medicines should be used in clear and simple language (i.e., without jargon and complex words)
	7.7.2. Demonstrate knowledge of medicine, contraindications, side effects, medicines administration (how medicines should be taken), and dosage forms

Task	Competency requirements: knowledge, skills, attitudes, and habits
	7.7.3. Able to effectively use written information to counsel patients where appropriate
	7.7.4. Effective patient communication skills
	7.7.5. Able to identify and address patient concerns that may serve as a barrier to compliance
	7.7.6. Able to identify and resolve any misunderstandings or concerns on the appropriate use of medicines
	7.7.7. Able to check that patient understood instructions and advice for effective medicines use
	7.7.8. Able to identify when medicines counseling should be repeated to the patient
7.8 Maintain daily and monthly dispensary records (dispensed medicines, quantity, and price)	7.8.1. Able to regularly and correctly document medicines dispensed in dispensary records
	7.8.2. Able to collate records in a monthly report
	7.8.3. Able to maintain well-organized records on approved orders and received stock, stock cards, daily register forms, tally sheets, monthly consumption report forms, and electronic (where available) and manual databases

AREA 8. HOSPITAL INPATIENT DISPENSING

Task	Competency requirements: knowledge, skills, attitudes and habits	
8.1 Write prescriptions based on doctors' orders (e.g., during ward rounds or patient files)	8.1.1.	Able to correctly interpret medicine orders given by doctors
	8.1.2.	Demonstrate knowledge of medicines, contraindications, side effects, medicines administration, and dosage forms
	8.1.3.	Able to advise on alternatives to prescribed medicines if medicines are unavailable
8.2 Evaluate appropriateness of prescribed medicines	8.2.1.	Demonstrate knowledge of hospital formularies and EDL
	8.2.2.	Demonstrate knowledge of clinical pharmacology, formulation, pharmacokinetics, pathophysiology, drug interactions, treatment guidelines, toxicology, contraindications, and adverse drug reactions
	8.2.3.	Able to evaluate the appropriateness of prescribed medicines and ensure rational medicines use based on patients'— • Medical conditions • Past medical history • Other prescribed medicines for possible drug interactions
	8.2.4.	Able to identify prescribing errors
	8.2.5.	Able to communicate prescribing errors to prescribers and advise on appropriate corrections
	8.2.6.	Able to actively participate in health care team patient visits or ward rounds by advising on appropriate medicines use
8.3 Annually forecast required pharmaceuticals budget	8.3.1.	Able to describe hospital budget-setting and approval processes
	8.3.2.	Able to explain relevant forecasting methods
	8.3.3.	Able to set appropriate budgets by interpreting information on consumption, forecasted needs, and gaps in existing budgets
8.4 Maintain records	8.4.1.	Able to maintain well-organized records on approved orders and received stock, stock cards, daily register forms, tally sheets, monthly consumption report forms, and relevant databases
	8.4.2.	Able to store records in a safe and appropriate place

REFERENCE LIST

(1) Figure adapted from International Pharmaceutical Federation (FIP). The 2009 FIP Global Pharmacy Workforce Report. http://www.who.int/medicines/technical_briefing/tbs/2009fipglobalpharmacyworkforcereport.pdf

ANNEX 1. GLOSSARY

Pharmaceutical human resources – any worker that provides pharmaceutical services (including pharmacists, pharmacy technicians, and others)

Competency – a standardized requirement for an individual to properly perform a specific job. It encompasses a combination of knowledge, skills, habits, and attitudes utilized to improve performance. More generally, competence is the state or quality of being adequately or well qualified, having the ability to perform a specific role/function/task. Competencies refer to more than one set of requirements.

Competency framework – a complete collection of competencies that are thought to be essential to performance

Performance – an effective and persistent observable behavior; what an individual actually does as opposed to what they can do

ANNEX 2. CONTRIBUTORS

The publication of the pharmaceutical services competency framework would not have been possible without the facilitation and input of the pharmaceutical human resources core team to develop and revise the framework; the drafting group who drafted the initial version of the framework; and the expert reviewers who undertook multiple in-depth reviews to improve, refine, and finalize the framework.

MoPH also expresses its gratitude to the SPS Associate Award Project for technical support, with the financial assistance of USAID.

Pharmaceutical Human Resources Core Team

Ms. Samira Hakimyar, General Directorate of Human Resources, Database Manager; Mohammad Nazir Haidarzad, General Directorate of Pharmaceutical Affairs (GDPA), Pharmaceutical Affairs Planning Analysis General Manager; Mrs. Shakilla Amarkhail, GDPA, Law and Legislation General Manager; Ms. Nahid Ayoubi, (formerly) SPS Procurement Officer; Ahmad Jawid Ehsan, (formerly) SPS Quality Assurance Officer and HR Assessment Coordinator; Dr. Abdul Khalid Amini, SPS Pharmaceutical Services Advisor; and Dr. Zabihullah Ghawsi, SPS Pharmaceutical Human Resources Officer

Drafting Group

Pharmacist Aisha Noorzai, Acting General Director, GDPA; Sayed Reza Shah, Chief of Pharmaceutical Establishment Department, GDPA; Sabarulhaq Salimi, Sampling Manager, GDPA; Feda Mohammad, Law and Regulation Manager, Legislation Implementation Ensuring Directorate; Mirza Mohammad, Deputy Director, Pharmaceutical Enterprise; Mrs. Fahima Noori, Drug Management Procurement Officer, MSH-Tech Serve; Mohammad Salim, Pharmacist, Indira Gandhi Child Health Institute; Arash Ahmadi, Consultant, Ataturk Children Hospital; Dr. Qais, Pharmacist, Kimiagar Production Company; Prof. Golalai Babak, Lecturer, Faculty of Pharmacy; Prof. Hassan Ferotan, Lecturer, Faculty of Pharmacy; Mohammad Asef Safa, Consultant, MoPH/Central Medical Store; Mohammad Karim, Pharmacist, MoPH; Abdul Sabir, Pharmacist, MoPH; Amena Rustaqi, Head of Medicine Laboratory Section, MoPH/Quality Control Laboratory Department; Siddiqullah Reshteen Khogiani, Head of Policies Dept., MoPH/Policy and Planning General Directorate; Mahmood Sarwarzada, Manager, Chemical Pharma; Mohammad Zafar Omari, SPS; Abdul Tawab Khitab, SPS; Wahidullah Karwar, SPS; Dr. Tana Wuliji, Consultant, SPS; and Alison Wong, Consultant, SPS

Reviewers

Khan Aqa Karim Ghazi, General Manager-Pharmaceutical Establishment, GDPA; Mohammad Arif, Production and Importer Companies Establishment Section Manager, GDPA; Ms. Noria, Cosmetics and Hygienic Section Manager, GDPA; Ms. Anisa, Manager of Coordination and Communication Department, GDPA; Abdullah, Staff of Registration and License Issuing Department, GDPA; Mohammad Aslam, Staff of Registration and License Issuing Dept., GDPA; Abdul Hakim, Administration Manager, GDPA; Abdul Khalil Khakzad, Chief of Planning Department., GDPA; Nasir Ahmad, Staff of Monitoring Department, GDPA; Abdul Hafiz Quraishi, Chief of Drug Information Center, GDPA; Mohammad Farooq Baburi, Chief of Registration and License Issuing Department, GDPA; Sayed Reza Shah, Chief of Pharmaceutical Establishment Dept., GDPA; Sabr-ul-haq Salimi, Sampling Manager, GDPA; Sayed Sharif, Pharmacist, GDPA; Ezatullah, Staff-Sampling Section, GDPA; Azizullah Bahrami, General Manager of Narcotic Medicines Dept., GDPA; Nangyalay, Staff of Coordination and Communication Section, GDPA; Zabihullah, Staff of Price Estimation Section, GDPA; Ms. Maria, Manager of Donation Office, GDPA; Ms. Marzia, Medicine Classification Manager, GDPA/Avicenna Pharmacy Institute; Ms. Lailema, Staff of Formulary Section, GDPA/Avicenna Pharmacy Institute; Nematullah Nawrozian, Staff of Drug Information Center, GDPA/Avicenna Pharmacy Institute; Ms. Karima, Staff of Drug Publication Department, GDPA/Avicenna Pharmacy Institute; Nazir Ahmad Ahmadzad, Acting Director, GDPA/Avicenna Pharmacy Institute; Mohammad Asef Safa, Consultant, MoPH/Central Medical Store; Abdul Jamil, Staff, MoPH/Central Medical Store; Mohammad Basir, Pharmacist, Care of Afghan Families; Ms. Simin, Staff, Ibn-e-Sina Hospital; Dr. Hamayon, Representative, Khalid Irshad Production Company; Dr. Majid Siddiqui, Head of Mission, Healthnet Transcultural Psychosocial Organization; Ms. Najia Dehzad, Monitoring and Evaluation Focal Point, Health Net Transcultural Psychosocial Organization; Merza Mohammad Ayobi, Deputy Director, Pharmaceutical Enterprise; Silvia, Staff, MSH/Tech-Serve; Abdullah Massoud, Drug Management Unit Manager, MSH/Tech Serve; Dr. Paul Ickx, Advisor, MSH/Tech-Serve; Dr. Ahmad Shah Pardis, National Essential Medicines Officer, World Health Organization; Dr. Ashraf Ashrafy, Staff, World Health Organization; Dr. Zibunessa Alam, Program Officer, UNFPA; Nasira Anwari, Pharmacist, Rabia Balkhi Hospital; Fazal Mohammad Zamir, Project Officer, European Union; Prof. Qamarudin Saifi, Lecturer, Faculty of Pharmacy; Prof. Aqa Mohammad Zhakfar, Lecturer, Faculty of Pharmacy; Mohammad Shafiq Mashal, Lecturer, Faculty of Pharmacy; Dr. Alim Atarud, Director, Health Partners International of Canada; Treshewa Rostami, Secretary to Minister, MoPH; Dr. Abdul Rab Wahedi, Director, MoPH/ Central Medical Stores Directorate; Gabrid Kroes, HR Consultant, MoPH; Mohammad Haroon, Pharmacist, MoPH/Quality Control Laboratory Department; Dr. Burhanudin Safi, Monitoring and Evaluation Officer, MoPH; Waheed Adeeb, Training Manager, Afghan Social Marketing Organization; Dr. Ebrahim Haidar, Director, Afghan Social Marketing Organization; Dr. Shirshah Ahmadi, Deputy of Health Directorate of Afghan National Army, Ministry of Defense; Dr. Ajmal Yadgari, Drug Manager, National TB Program; Mohammad Naim, Staff, Legislation Implementation Ensuring Directorate; and Parnyan, Lecturer, Ghazanfar Institute of Health Sciences