

Global Health eLearning Center

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Pharmaceutical Systems Strengthening 101

Course Learning Objectives

Participants who complete the course should be able to:

- Identify what a country pharmaceutical system is, how it relates to the supply chain system, and how it impacts the broader health system (in terms of service quality, coverage equity, and financial protection/resource optimization) as well as improved health outcomes.
- Demonstrate how the Pharmaceutical Systems Strengthening approach can lead to more sustainable improvements in medicines access and use and contribute to achieve expected health outcomes.
- Explain how the process of analysis of a problem can be better understood by looking at the underlying factors contributing to the problem, and how those factors may be linked to one or more pharmaceutical system and/or health system function.
- Compare alternative strategies for interventions among those that have been proven to be effective to counter problems of the pharmaceutical systems in similar contexts, taking into account the local situation, political and regulatory considerations, feasibility of implementation, and the resources available.
- Identify methods and tools for evaluating pharmaceutical systems to ensure that the expected outcomes have been achieved.
- Identify specific pharmaceutical system weaknesses in USAID-supported countries that have an impact on USAID's health goals.

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How the Course Works

This course consists of ten modules. All of the modules have a similar structure: pre-test, interactive content, and post-test.

As a first step in each module, please take the pre-test in order to determine your baseline knowledge of the subject. The pre-test will take no more than five minutes, and there is no pass or fail mark. The pre-test does not affect your ability to complete the rest of the course. It is non-punitive in nature.

Once you take the pre-test for each module, you can access the content for that module.

Upon completing the content, you will take a post-test. You will need a 75% on each module's post-test as well as completion of the final exam at the very end of the course for a completion certificate.

The modules are:

- Module 1 - Improving Access to and Appropriate Use of Quality-Assured, Safe and Effective Medical Products and Pharmaceutical Services
- Module 2 - How to Achieve the Goal? Overview of Pharmaceutical Systems Strengthening
- Module 3 - Bolstering Governance in Pharmaceutical Systems
- Module 4 - Strengthening Pharmaceutical Financing Systems
- Module 5 - COMING SOON - Data for Decision Making
- Module 6 - Why Pharmaceutical Regulatory Systems are Crucial to Health Systems Strengthening
- Module 7 - Supply Chain Management in the Context of UHC and Health Systems Strengthening
- Module 8 - Human Resources and Institutional Capacity Building for the Delivery of Quality-Assured Medical Products and Pharmaceutical Services
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Accessibility Statement

The Web Content Accessibility Guidelines (WCAG) defines requirements for improved accessibility for people with disabilities.

We are working on improving accessibility. Currently, this course is partially conformant with WCAG 2.1 guidelines. Partially conformant means that while most parts of the course meet accessibility standards, some parts may not.

Known limitations for this course include:

- some interactive content, such as drag-and-drop activities
- images or animations timed to audio
- complex diagrams and charts

Please let us know if you encounter accessibility barriers, so that we can work with you to provide alternate ways to access the course information:

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MODULE 1: Improving Access To and Appropriate Use of Quality-Assured, Safe and

Effective Medical Products and Pharmaceutical Services

This first module will introduce key concepts such as access to medicines, appropriate use, pharmaceutical services, medicines safety, efficacy/effectiveness, quality, and affordability.

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Module 1 Objectives

After completing this module, you will learn:

- why medical products are of the utmost importance in low- and middle-income countries (LMICs), and why access to medical products and the services that ensure their appropriate use is challenging in these settings.
- why access to medical products and related services is crucial to attaining universal health coverage (UHC) and solving current global health challenges including antimicrobial resistance, HIV, tuberculosis, malaria, maternal and child health, family planning, neglected tropical diseases, and non-communicable diseases.
- about key concepts related to access to and appropriate use of medical products.

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MODULE 2: Overview of Pharm Systems and Pharm Systems Strengthening

Module 2 defines the pharmaceutical systems strengthening approach and how it is a systematic, analytical, and evidence based process that assists countries in achieving sustainable improvements in access to and appropriate use of safe, effective, and quality-assured medical products and services.

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Module 2 Objectives

After completing this module, you'll be able to:

- define pharmaceutical systems in the context of health systems
- describe the pharmaceutical systems strengthening approach
- apply systems thinking to identify major factors and barriers to access, and appropriate use of medicines and related services, and design interventions to sustainably address them
- learn about the use of multiple interventions at different levels of health and pharmaceutical systems to address the complex factors that pose barriers to improving access to, and use of quality medical products and services

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MODULE 3: Bolstering Governance in Pharmaceutical Systems

This module defines governance and explains how good governance in the pharmaceutical system can promote robust decision making, enhance accountability, reduce opportunities for corruption, and mitigate inefficiencies to enable better access to and use of quality-assured medicines.

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Module 3 Objectives

In this module, you will:

- develop an understanding of governance and how good governance helps to strengthen the overall pharmaceutical system
- identify problems that can occur in pharmaceutical functions as a result of poor governance and outline strategies to mitigate governance weaknesses
- examine entry points and approaches for addressing identified governance weaknesses

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MODULE 4: Improving Health Outcomes Through Adequate Financing of Medical Products

The fourth module describes the core components of pharmaceutical financing, illustrates the significance of medicines expenditures, and identifies potential pharmaceutical financing gaps and strategies to address them.

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Module 4 Objectives

After completing this module, you will be able to:

- define health financing core concepts and how they apply to the financing of pharmaceuticals
- understand how financing of pharmaceuticals contributes to achieve Universal Health Coverage (UHC) objectives—equity in access to health services, quality of health services, and protection against financial risk
- identify strategies for leveraging additional resources for medical products, optimizing existing resources and reducing waste

Module 4 Objectives

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MODULE 5: Data for Decision Making

The fifth module describes the key elements of pharmaceutical management information systems (PMIS) and identifies how PMIS information is used for decision making for sustainable improvements in AMR/IPC, HIV and AIDS, malaria, and mother and child health.

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Module 5 Objectives

After completing this module you will be able to:

- define Pharmaceutical Management Information Systems (PMIS), including Logistics Management Information Systems (LMIS)
- explain how PMIS are critical for decision making
- describe PMIS processes starting from data generation to decision making and/or action
- describe key elements of PMIS, including technical standards and required specifications
- define 'Big Data' and possibilities in pharmaceutical systems

Module 5 Objectives

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MODULE 6: Why Pharmaceutical Regulatory Systems are Crucial

Module 6 describes key components of pharmaceutical regulatory systems as part of health system strengthening, including how regulatory stakeholders ensure safe, effective, and quality-assured medicines within the context of expanded access and universal health coverage.

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Module 6 Objectives

After completing this module, you'll be able to:

- describe pharmaceutical regulatory systems and the role of National Medicines Regulatory Authorities (NMRAs) and other key regulatory system stakeholders (including the private sector) in ensuring safe, effective and quality-assured medical products
- learn about current trends, such as harmonization and reliance, and how they support efficient and effective pharmaceutical regulatory systems

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MODULE 7: Supply Chain Management in the Context of UHC and Health Systems Strengthening

This module outlines key components of the pharmaceutical supply chain management cycle and explains why the holistic systems approach has greater value for preventing child and maternal deaths, controlling the HIV/AIDS epidemic, and combating infectious diseases.

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Module 7 Objectives

After completing this module, you will be able to:

- define supply chain management (SCM)
- identify SCM within the broader pharmaceutical system
- describe its key functions and sub functions
- understand why it is important to take a holistic systems approach when strengthening supply chain management, and how a “pharmaceutical system strengthening approach” can identify and address root

causes within the system impeding supply chain performance

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MODULE 8: Ensuring Pharmaceutical Systems Strengthening Through HR Capacity Building

The last module identifies the key human resources challenges for pharmaceutical management in LMICs, including innovative and proven approaches used to strengthen capacities of local governments/institutions to deliver quality-assured medical products and pharmaceutical services.

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Module 8 Objectives

After completing this module you will be able to:

- identify key human resources challenges for pharmaceutical systems in low- and middle-income countries, or LMICs
- describe key elements for building human resources capacity
- discuss evidence-based approaches that local governments and private sectors can use to strengthen human resources capacity and ensure access to, and appropriate use of quality-assured medical products and pharmaceutical services
- look at interventions to improve human resources capacity that involve at least one other component of the health system

Module 8 Objectives

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MODULE 9: Medical Products Quality Assurance at the Global and Country Levels

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Module 9 Objectives

After completion of this module participants will be able to understand:

- the importance of quality-assured essential medical products for country health systems and global health objectives
- quality assurance systems and international quality standards
- how USAID has achieved improvements in medical product quality assurance
- future directions in strengthening medical product quality assurance systems

Module 9 Objectives

After completion of this module participants will be able to understand:

- the importance of quality-assured essential medical products for country health systems and global health objectives
- quality assurance systems and international quality standards
- how USAID has achieved improvements in medical product quality assurance
- future directions in strengthening medical product quality assurance systems

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Module 10: Review - Why is a strong pharmaceutical system important for maternal, newborn, and child health?

In this final Module of this course the video provides a summary of the pharmaceutical system components as presented in this course, and uses Maternal Neonatal and Child Health products to demonstrate why a strong pharmaceutical system is necessary to ensure improved health outcomes.

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Module 10 Objectives

At the end of this summary video participants will be able to:

- Describe the USAID Pharmaceutical Systems Approach
- Explain how the approach can be applied to achieve sustainable improvements in country pharmaceutical systems

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Module 10: External Content

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Module 10 Ending

We hope you have enjoyed this course and we would challenge you to consider how you can apply what you have learnt to improve Pharmaceutical Systems where you work.

You are now ready to take the final exam.

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