

Laboratory Supply Chain Management

COURSE PROGRAMME

Online course (ENLAB006) - November 2019

Introduction

Laboratory services are essential for successful management many diseases. The management of diseases requires availability of quality laboratory services that meet the need for diagnosis, monitoring and evaluation of treatment efficacy. To achieve this, a reliable and sustainable supply of essential laboratory supplies is required. The aim of the course is to apply the principles of supply chain management to the management of laboratory commodities in low and middle income countries.

Course objectives

After having successfully completed the module, participants will be able to:

- Recognise the major components of functional health systems and how these apply to laboratory service needs;
- Critically assess a supply chain and suggest logistical improvements;
- Develop detailed specifications for equipment, durables, consumables, reagents and devices;
- Produce a forecast for equipment and supplies;
- Understand the procurement process, evaluate and pre-approve suppliers;
- Comprehend aspects of inventory management that apply to laboratory commodities;
- Recommend the appropriate storage conditions for laboratory commodities;
- Apply appropriate and measurable indicators to assess the quality and efficacy of laboratory commodity supply chains.

Target participant group

The course is designed for all health personnel, business administrators and managers involved in the health sector, development cooperation, healthcare programmes and projects in developing countries. No prior knowledge is required, although practical involvement in the health sector is an advantage.

Teaching and learning strategy

The course is taught online on i+academy, a Moodle e-learning platform, accessible from anywhere at any time. The interactive course materials are presented sequentially under the guidance of expert facilitators from i+solutions who assist the participants during their learning progress, answer questions and stimulate interactions. Lessons are complemented and enlivened by online activities such as discussion forums, quizzes, and assignments.

Assessment and grading

Participants will be graded based on their online participation and their performance. A certificate of completion and an e-badge will be awarded to all those who complete a minimum of 75% of all online activities (lessons, quizzes, discussion forums) AND attain a grade of at least 7/10 on the end-of-course quiz. The percentage of completion will be measured automatically online as the participant goes through the course. The grade of the end-of-course quiz will also be determined automatically, there are an unlimited number of attempts allowed. In addition, there are several non-graded activities such as short assignments and short quizzes to guide the learning process of the participants.

Course duration

6 weeks



Start date: Monday, 4 November 2019 13:00 (UTC)

End date: Monday, 16 December 2019 13:00 (UTC)

Level of effort: 4 hours per week

Course schedule

Week 1 4/11/19	The basic building blocks of a health system Introduction to the supply chain cycle of medicines Laboratory services network as part of the health system
Week 2 11/11/19	The concept of laboratory commodity security Selection of laboratory commodities
Week 3 18/11/19	Quantification of laboratory commodities Procurement of laboratory commodities
Week 4 25/11/19	Warehousing and distribution of laboratory commodities LMIS and inventory management
Week 5 2/12/19	Standardisation of laboratory equipment Rational use of laboratory commodities
Week 6 9/12/19	Quality assurance of laboratory commodities Monitoring and evaluation of the laboratory supply chain Course completion