



# ***PLAN AN INTEGRATED DIAGNOSTIC APPROACH***

Facilitator Guide (FG8)

## SUMMARY OF MODULE AT A GLANCE

Purpose of module:	To provide participants with an overview of key considerations for planning an integrated diagnostic approach	
Total time of module	2 hours 15 minutes	
CONTENT OUTLINE		
Power point: Plan an integrated diagnostic approach	Aim: provide an overview of key considerations for planning an integrated diagnostic approach  Learning objectives: <ul style="list-style-type: none"><li>▪ Define a multi-disease integrated diagnostic approach</li><li>▪ List the benefits of adopting a multi-disease integrated diagnostic approach</li><li>▪ Provide examples of an integrated diagnostic approach</li><li>▪ Understand and be able to apply ten key considerations for planning and implementing an integrated approach</li></ul>	1 hour
Discussion Questions	<ol style="list-style-type: none"><li>1. What is an integrated diagnostic approach?</li><li>2. Give one example of an integrated diagnostic approach?</li><li>3. List three considerations for selecting and placing multi-disease testing devices?</li><li>4. List five key competencies for users of multi-disease testing devices?</li><li>5. Give two benefits of integrating forecasting and procurement for multi-disease testing devices?</li></ol>	15 minutes
Exercise: Plan an integrated diagnostic approach	<ul style="list-style-type: none"><li>▪ Aim: To plan an integrated multi-disease testing device laboratory network</li></ul>	1 hour
Additional resources or references:	<ul style="list-style-type: none"><li>▪ WHO Global TB Programme and HIV Department information note: Considerations for adoption and use of multi-disease testing devices in integrated laboratory networks <a href="http://www.who.int/publications/guidelines/tuberculosis/en/">http://www.who.int/publications/guidelines/tuberculosis/en/</a></li></ul>	

## MODULE NOTES

**Slides 4** Two examples of multi-disease testing devices are given. Ask course participants if there are any other devices that are used in their settings

**Slide 5** This training module is based on guidance provided in the *WHO Global TB Programme and HIV Department information note: Considerations for adoption and use of multi-disease testing devices in integrated laboratory networks*. Additional information on planning and implementing multi-disease devices is available from the resource

**Slide 7** The remainder of the module provides some detail on ten key considerations for a multi-disease integrated diagnostic approach. Course participants are also referred to other modules that discuss the concepts in more detail (viz. PM4, PM5 & PM6)

## EXERCISE: QA ACTIVITIES

Purpose of exercise:	To plan an integrated multi-disease testing device laboratory network
Preparation:	<ul style="list-style-type: none"> <li>▪ Divide into 4 groups. Discuss and document the following:</li> <li>▪ What opportunities exist for establishing a multi-disease testing device laboratory network in your country?</li> <li>▪ What are the key concerns for collaborations between different programmes? How may these be addressed?</li> <li>▪ What challenges to collaboration exist, and how may these be overcome?</li> <li>▪ Share your findings with the group</li> </ul>
Materials required:	Full list of materials participant's need <ul style="list-style-type: none"> <li>▪ Pens</li> <li>▪ Flipcharts</li> <li>▪ Worksheets W1:PM8</li> </ul>
Total time of exercise:	60 minutes
Feedback expected:	Groups to share their findings

## CONDUCTING THE EXERCISE

Read out instructions (shown above in “preparation”)	2 minutes
Break into groups, give paper/marker to each group, and then groups should allot roles of note taker and presenter for end of exercise	2 minutes
Discussion in small groups	30 minutes
Report back to full group using flip charts	10 minutes
Group discussion	20 minutes

## MODULE ANSWERS

### 1. What is an integrated diagnostic approach?

An integrated diagnostic approach is the testing for different clinical conditions using disease-specific tests on the same platform

### 2. Give one example of an integrated diagnostic approach?

- The GeneXpert instrument can be used to detect TB and determine rifampicin resistance (Xpert MTB/RIF assay), as well as for early infant diagnosis of HIV, or to quantitatively measure HIV and hepatitis C viral load
- Microscopy is used to detect the presence of acid-fast bacilli in a sputum smear to diagnose TB and to detect parasites in a blood film to diagnose malaria

### 3. List three considerations for selecting and placing multi-disease testing devices?

Any three of the following:

- a) The infrastructure needs (space, electricity, temperature, etc.)
- b) Specimen referral systems
- c) Availability of patient access to treatment for each disease being tested
- d) Equipment, cartridge or reagent disposal requirements
- e) Biosafety requirements for handling of specimens for all planned test types
- f) Maintenance requirements
- g) Human resources requirements needed to ensure supplemental equipment and infrastructure are in place

### 4. List five key competencies for users of multi-disease testing devices?

Any five of the following:

- a) Preparation of specimens
  - b) Handling of specimens (including biosafety precautions)
  - c) Patient management and test counselling (e.g. HIV viral load)
  - d) Conducting testing
  - e) Following the national testing algorithm
  - f) Interpretation and reporting of results
  - g) Servicing & maintenance of the instrument
  - h) Waste disposal specific to each assay's reagents and cartridges
5. Give two benefits of integrating forecasting and procurement for multi-disease testing devices?

Any two of the following:

- a) Cost savings from increased volumes and price negotiation with manufacturers
- b) Savings on shipping, storage and transport of reagents
- c) Integrated systems to monitor stocks and expiry dates of reagents
- d) Ability to track consumption and wastage