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THE TB SAMPLE REFERRAL SYSTEM (TSRS) TRAINING

Module 1

Introduction to the TB Sample Referral System
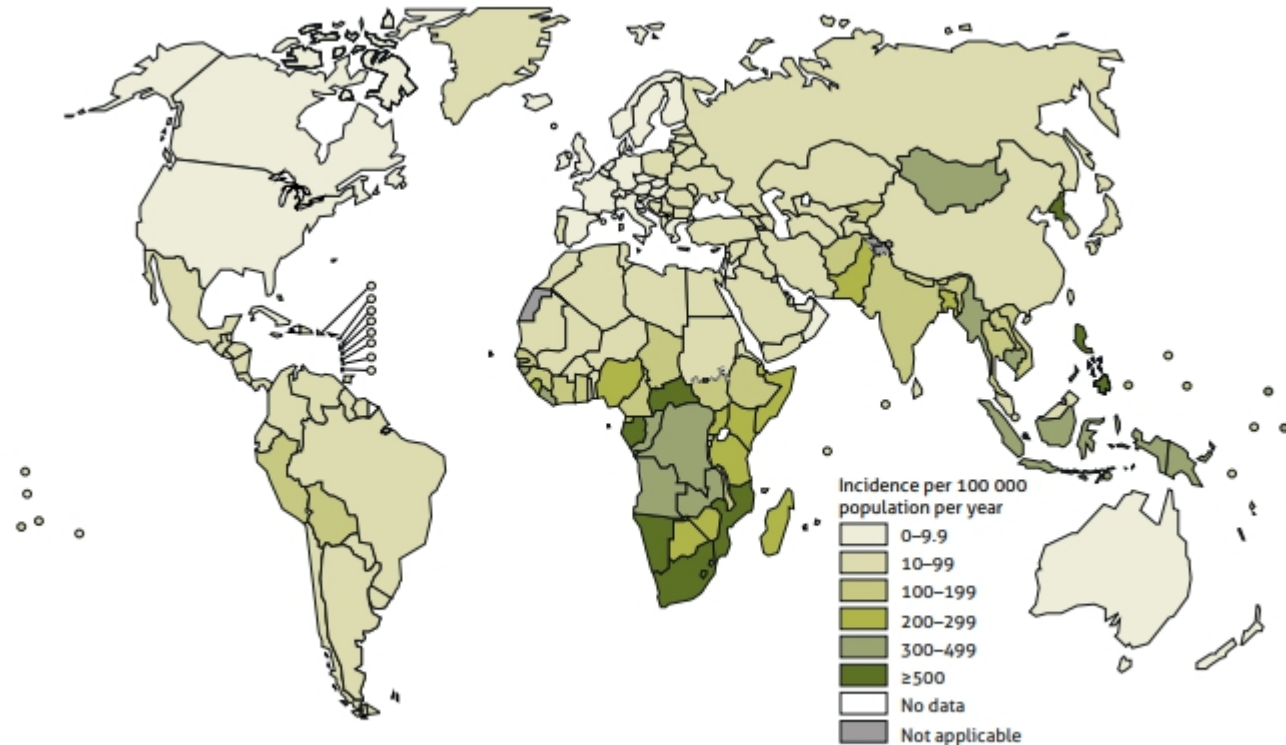
xX^th -xX^th MONTH YEAR

NAME OF PRESENTER

OUTLINE

- Overview of the global TB burden

- Introduction to TB sample referral system

- Objectives of the TB specimen reerral system

- Benefits of a specimen referral System

- Key components of a good specimen referral system

- Planning for specimen referral system

Overview of the Global TB Burden

- Tuberculosis (TB) is a communicable disease that is a major cause of ill health, one of the top 10 causes of death worldwide and the leading cause of death from a single infectious agent (ranking above HIV/AIDS).

- It is caused by the bacillus Mycobacterium tuberculosis, which is spread when people who are sick with TB expel bacteria into the air; for example, by coughing.

- About a quarter of the world's population is infected with M. tuberculosis and thus at risk of developing TB disease
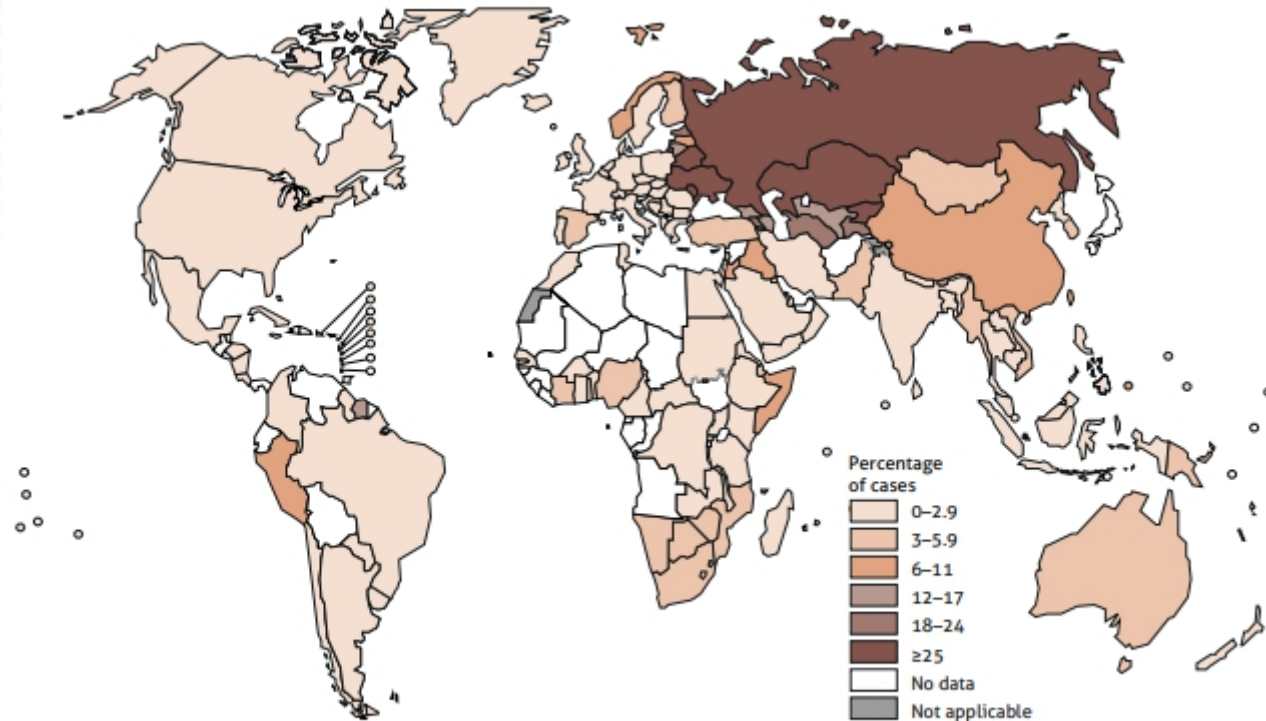
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Overview of the Global TB Burden… cont

Estimated TB incidence rates, 2018

Incidence per 100 000 population per year
- 0–9.9
- 10–99
- 100–199
- 200–299
- 300–499
- ≥500
- No data
- Not applicable

Source: Global TB report 2019

Overview of the Global TB Burden...cont

Percentage of new TB cases with MDR/RR-TB[a]

Percentage of cases
- 0–2.9
- 3–5.9
- 6–11
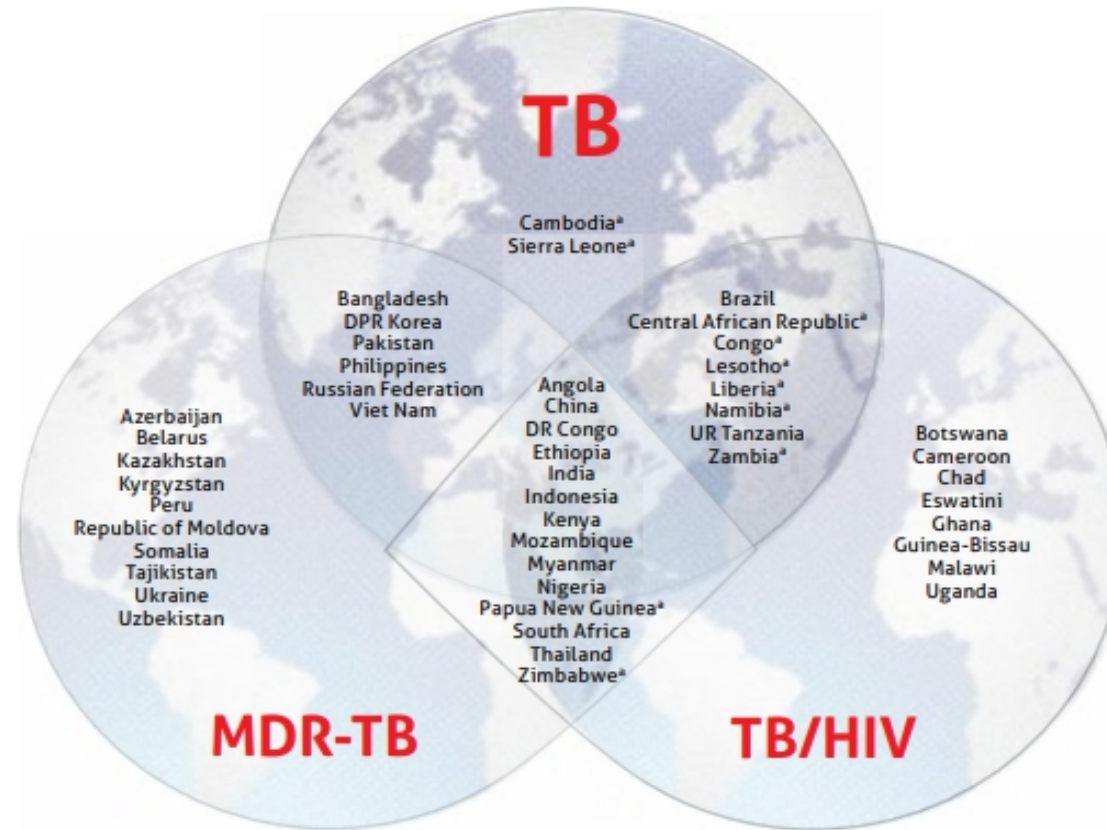- 12–17
- 18–24
- ≥25
- No data
- Not applicable

[a] Percentages are based on the most recent data point for countries with representative data from 2004 to 2019. Model-based estimates for countries with data before 2004 are not shown. MDR-TB is a subset of RR-TB.

Source: Global TB report 2019

Overview of the Global TB Burden ...cont

The three high-burden country lists for TB, TB/HIV and MDR-TB defined by WHO for the period 2016–2020, and their areas of overlap

Source: Global TB report 2019

Overview of the global TB burden..cont

- As of 2018, Drug-resistant TB continues to be a public health threat.

- Diagnosis of MDR TB and prompt initiation of effective treatment relies on access to rapid DST and reliable testing.

- Regional or central level /intermediate laboratories offer more advanced testing methods.

- Efficient specimen referral system contribut to timely access to TB diagnostic services.

Exercise

- Basing on your understanding of the term "sample referral system" What activates do you think takes place in a TB sample referral system and integrated network (list your thoughts).

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Introduction to the TB Specimen Referral System

- The WHO End TB Strategy calls for the early diagnosis of TB and universal drug-susceptibility testing (DST)

- whose targets can only be achieved when all patients have access to modern diagnostics at or near the POC as well as access to more advanced testing available at regional or central levels.

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Introduction to the TB Specimen Referral System…cont

- However most health systems in sub Saharan Africa lack the capacity to perform DST

- There is therefore need to bridge the gap in access to reliable TB diagnostic services at lower health facility levels.

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Introduction to the TB Specimen Referral System…cont

- Specimen referral systems play a critical role in ensuring access to laboratory services

- It allows patients to receive care and treatment at one location, while their specimens are transferred to various levels of a tiered laboratory system for testing.

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Introduction to the TB Specimen Referral System…cont

- Referral systems can efficiently increase access to diagnostics in areas where testing is not available

- It Prevents the need and associated costs for patients to travel, and lead to equity in access to health care

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General Objectives of a Specimen Referral System

The main objectives of a specimen referral system are:

• To increase access to diagnostic testing

• To improve the timeliness of diagnostic test results (shorten TAT)

• To improve the quality of diagnostic testing by improving the quality of the specimens being tested.

General Objectives of a Specimen Referral System…cont

- Reduce the cost of diagnostic testing by improving the cost-effectiveness of specimen referral

- Timely initiation of patients on care.

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Benefits of the TB specimen referral System

- Provides basis for continuous TB surveillance in the country

- Provides access to more advanced testing available at regional or central levels.

- Mechanism for delivery of lab supplies, PT/EQA materials and feedback reports

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Benefits of the TB specimen referral System…cont

- Patients get both high quality diagnostic and treatment services at one location

- Prevents needs and costs associated with patient travel

- More cost effective than establishing labs at every lower levels.

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Components of a well Designed Sample Referral System

- Management commitment from both government and various stake holders for funding, supervision and monitoring

- Adequate laboratory testing capacity to match the increasing sample volume (personnel, equipment, consumables waste management)

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Components of a well Designed Sample Referral System (cont..)

- Confidentiality of patient information to be maintained at all levels and all stages (lab staff, nurses, clinicians, currier staff) through training and documented SOPs.

- At its core, a specimen referral system is a logistics system. It must be decided if system operates as fixed schedule or on-demand, mapped pathway for each specimen type and at each relevant level, testing algorithm in place.

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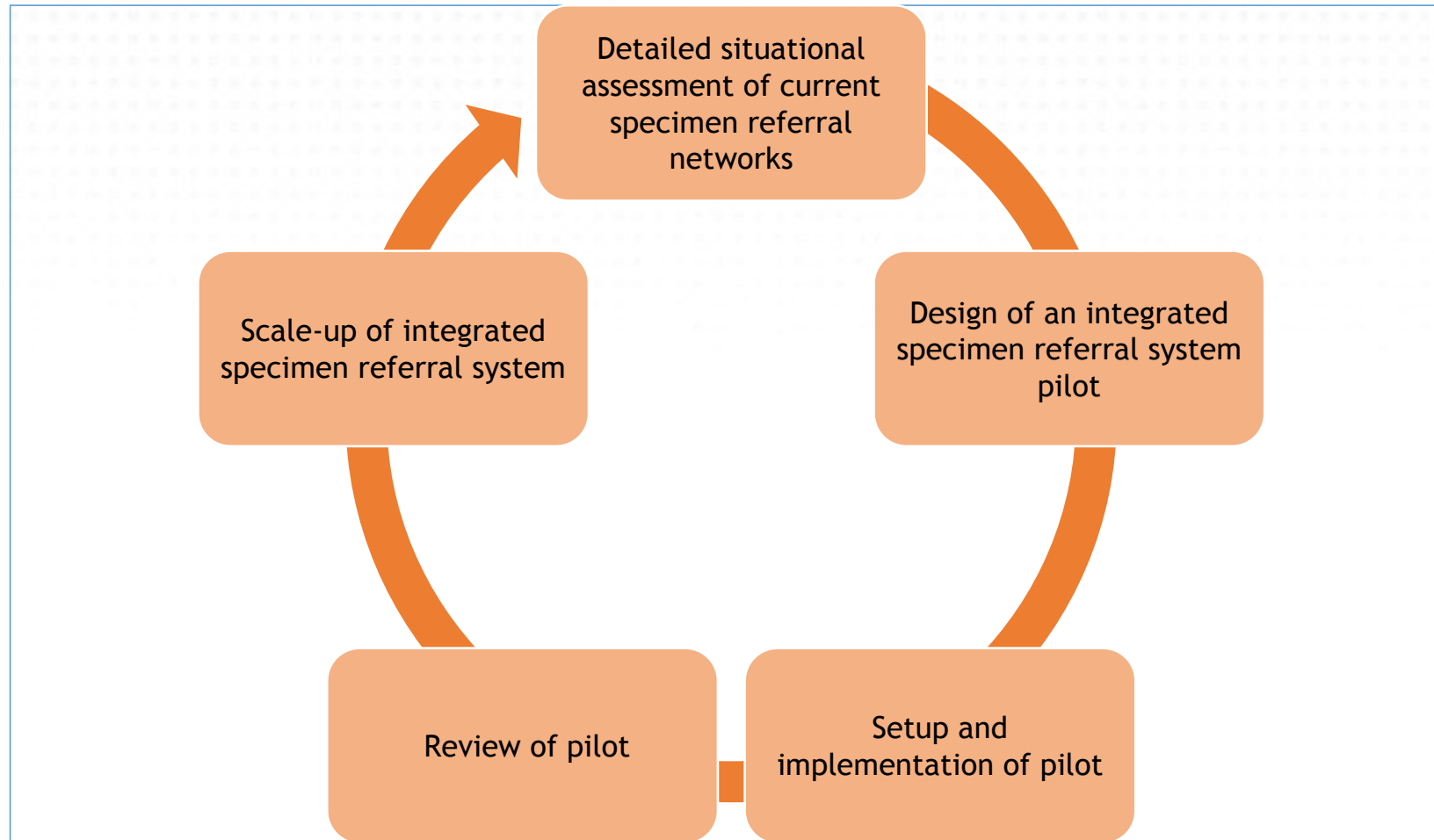*Timely Accurate Diagonostics for a TB-Free Africa*

Components of a well Designed Sample Referral System (cont..)

- Transportation options dependent on available resources, location, distance and terrain of health facility.

- Documentation and SOPs based on national guidelines.

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Components of a well Designed Sample Referral System (cont..)

- Result return: paper based results use the same system or electronic options by email, SMS/SMS printers.

- Training and sensitization of stake all holders(staff, IPs, currier)

- Communication strategies and hierarchy

- Monitoring and Evaluation of the system (TAT, No of samples)

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Steps in Planning for a Specimen Referral System

The cycle shows the following steps:
- Detailed situational assessment of current specimen referral networks
- Design of an integrated specimen referral system pilot
- Setup and implementation of pilot
- Review of pilot
- Scale-up of integrated specimen referral system

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Assessment

1. What is a TB sample referral system?

2. Outline the objectives of the TB specimen reerral system?

3. Outline the benefits of a specimen referral System?

4. How does one plan the establishment for specimen referral system?

5. What are the Key components of a good specimen referral system?

Summary

- Access to advanced testing methods found in central level /intermediate laboratories remains a challenge

- Efficient specimen referral system can bridge the gap between the periphear facilities and central level /intermediate laboratories in terms of laboratory testing, logistics and knowledge sharing

The specimen referral system must be in a cycle of continuous assessment and improvement in order ensure efficiency

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Acknowledgments