

# Treatment decision algorithms

Developing generic study materials

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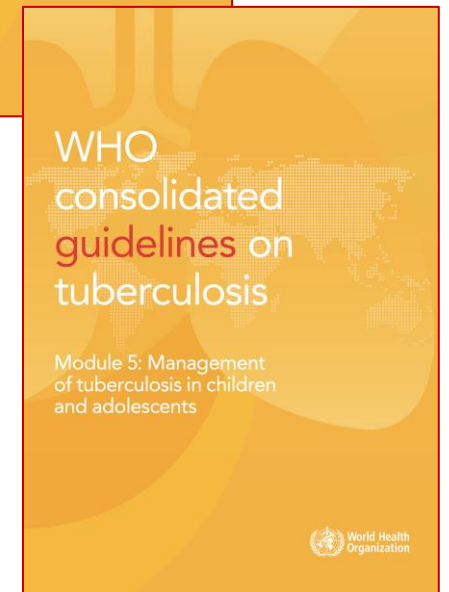
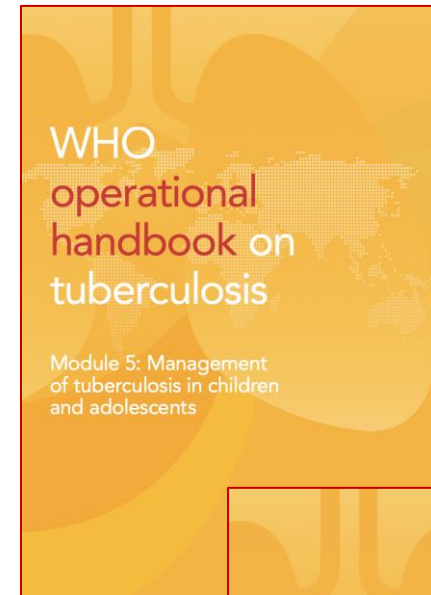
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Scientist  
WHO



# Background

- March 2022: new WHO guidelines published
- Included a recommendation to use an integrated treatment decision algorithm
- Aimed to increase TB detection in children with presumptive pulmonary TB attending health facilities
- Classified as *interim, conditional, very low certainty of evidence*
- Validity period of 24 months – aim to generate evidence during this time to review ongoing recommendation

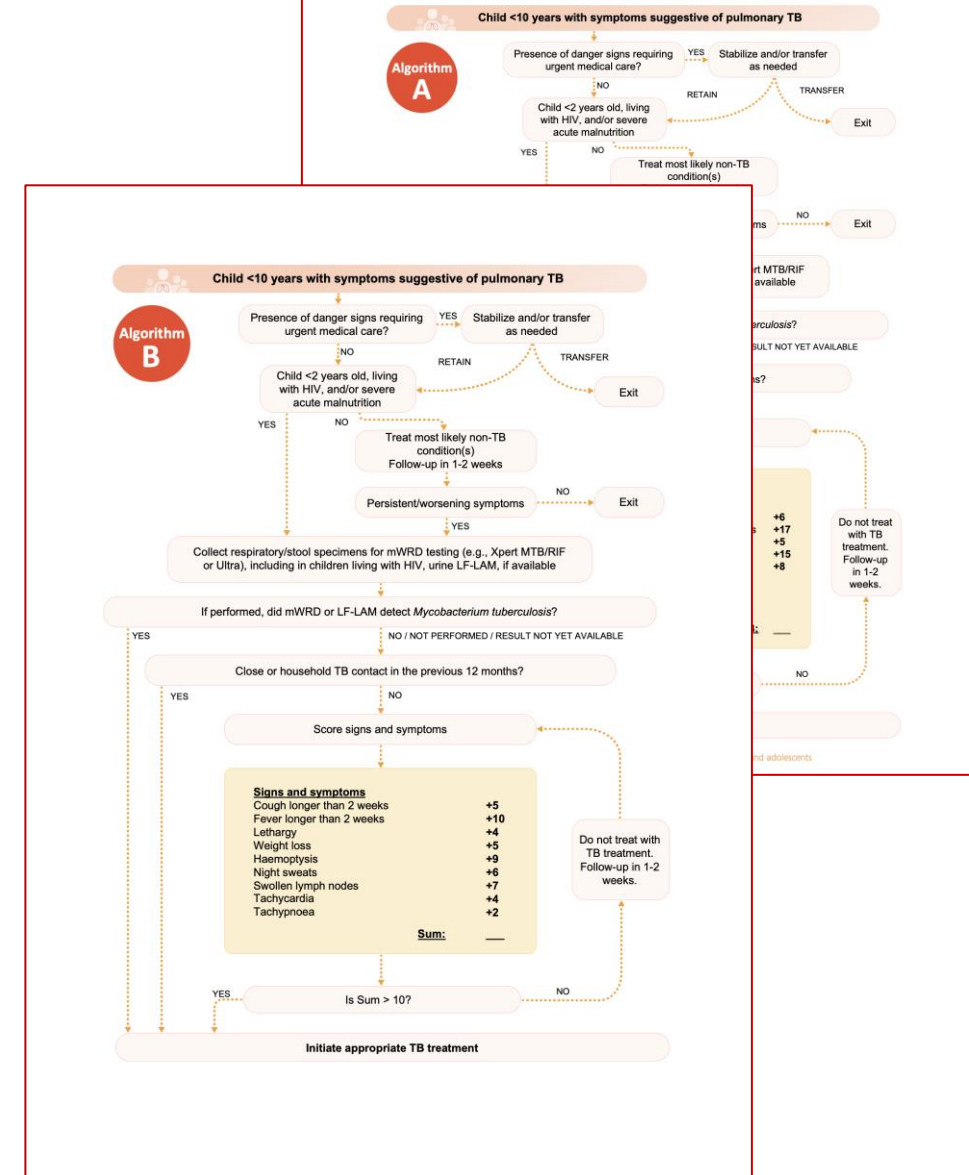


# Algorithms

- Two algorithms developed for children < 10 years
- Internal validation using an IPD of paediatric diagnostic studies
- Algorithms with and without x-ray
- Focus on:
  - Specimen collection & diagnostic testing
  - Contact history
  - X-ray (when available)
  - Scoring symptoms and signs
- Available in WHO Operational Handbook

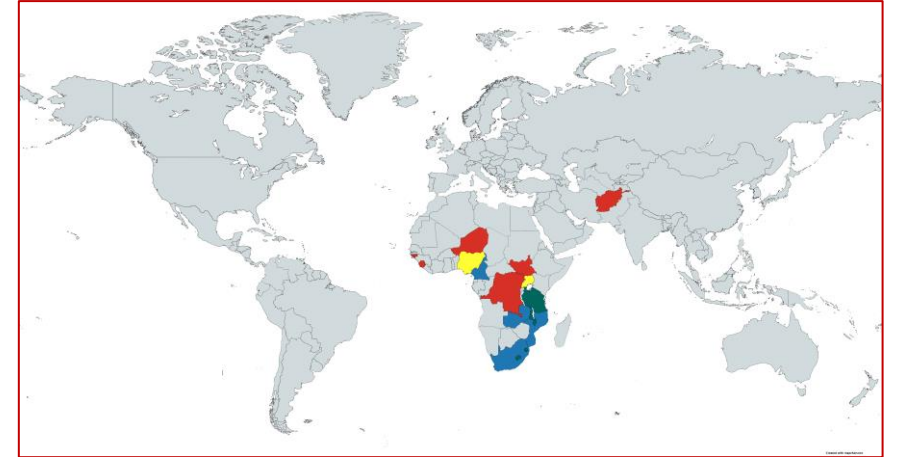
## Treatment decision algorithms and operational guidance

Figure A5.1. Algorithm A (for settings with chest X-ray) and Algorithm B (for settings without chest X-ray)



# Generating evidence

- To assist external validation, WHO GTB with TDR proposed to develop generic materials
  - Research protocol
  - E-data collection tool
- Harmonization of research efforts from NTPs and research groups
- Call for EOI from researchers in June 2022 yielded 4 interested groups
- TDR experience from ShORRT for TB protocol (2019)



# ShORRT timeline



# Objectives

- Performance of the treatment decision algorithms compared to a consensus definition of intra-thoracic TB in children
- Describe various process indicators to measure the feasibility of using the algorithm
- Semi-structured questionnaire to capture HCW acceptability
- Indirect effects on the detection of TB in adults – before/after comparison of notifications rates

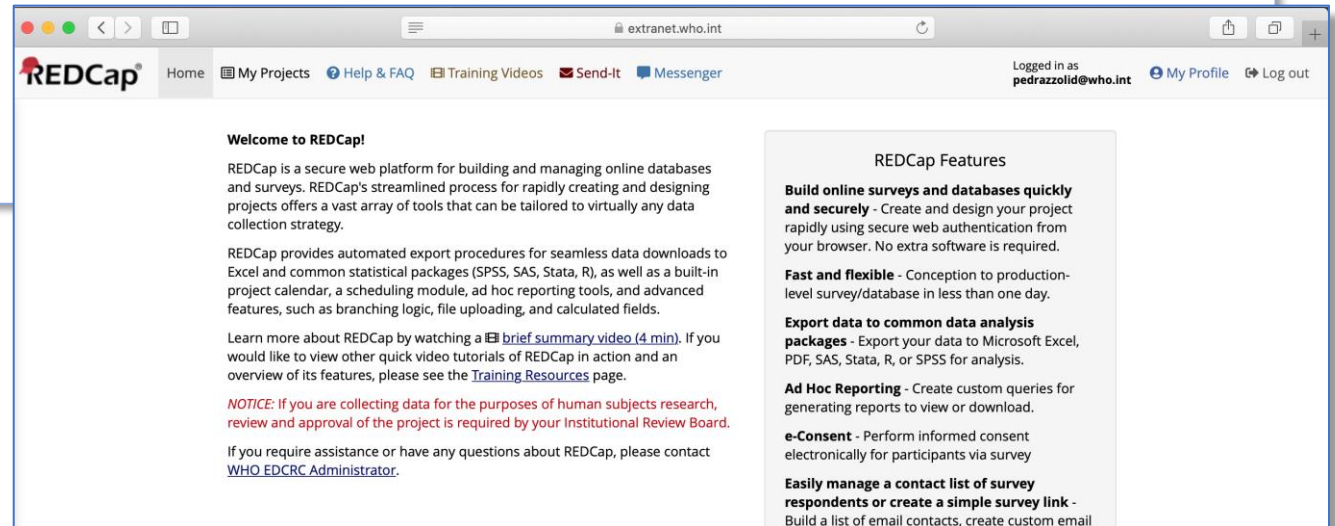
# Data collection



- Generic **paper-based** data collection forms
  - Available upon request



- Electronic data capture using the **REDCap** platform
  - Data dictionary and codebook
  - User manual
  - Training material



# Implementation considerations

- Aim to complete inclusion within 6 to 12 months
- Gold standard evaluation requires re-assessment 2 months after assessment
- Desirable to gather diverse data:
  - Geographical
  - Study population – e.g. children living with HIV, malnutrition, age structure
  - Health care level
  - Access to diagnostic and x-ray evaluation



# Progress

- African Regional Child and Adolescent TB meeting – Lusaka, Zambia - September 2022
- Researchers, NTPs – key questions for discussion
- Protocol drafted – WHO GTB feedback incorporated
- Soon ready for online feedback from interested researchers
- Generally available early January 2023





# Thanks for listening!

Any questions?

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