

# KIDS: Pro

1. Smear not of much value in paucibacillary disease at PHC ; culture not routine/available in most settings
2. Obtaining sputum: motivation with new tool
3. HIV+ children will benefit as much as HIV- (not more EPTB)
4. Rapid detection of DR in children
5. RTT of DR – when culture access limited
6. Reporting and notification of childhood TB to WHO may improve – consequences

# Strategies for operations research and measurement of outcomes?

- Performance of test using clinical algorithms in NTP setting in children: incremental value?
- Operations research on POC vs. centralized labs
- Target populations: child contacts (active), children presenting with symptoms (passive)
- Value in different respiratory samples and methods?
- Health care settings: PHC, hospitals (spectrum disease)
- How many tests should be used in children?
- PTB and EPTB?
- Acceptability of test(s) and readouts to patients and HCW?

- **Practical considerations** for implementation research:
- Training required on TB in children but especially on sputum collection children; recording and reporting
- **Comparison?** Should a reference standard be used (absence paediatric data to inform WHO recommendation)
- **Design: rigorous and relevant - GRADE**
  - Before and after implementation studies
  - Step-wedge design (roll-out not uniform)
  - RCT : culture vs. GenExpert (hospital setting)
  - Clinical studies: spectrum of PTB disease, yield, HIV, MDR: culture as reference
  - HHC tracing and Who screening, fewer barriers

## Outcomes of implementation research?

1. Number child suspects appropriately undergoing sputum investigation for TB at PHC (before/after with training)
2. HH contact strategies and uptake, yield
3. Number of overall children notified in WHO age bands at facility and district level (before/after)
4. Number of children started on TB treatment with bacteriological confirmation at PHC level
5. Comparative studies: # cases confirmed by GeneXpert vs. culture
6. Time to diagnosis and initiation of treatment using GenExpert vs. culture in children
7. Impact of GenExpert diagnosis on clinical case management – uptake by HCW?
8. Xpert: opportunity TB/HIV integration indicators: children

# **Additional points**

- Opportunity for implementation and evaluation of additional dx tests in children