Early DETECTion and integrated management of Tuberculosis in Europe: E-DETECT TB

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Outline

1. Background and context
2. Objectives
3. Proposed methods
4. Expected outcomes
5. Tools planned
6. Partnership
1. Background: TB Rates in the EU

- High burden of TB in the EU: the 30 EU/EEA countries reported 64844 cases of tuberculosis (TB) in 2013, a rate of 12.7 per 100,000
- 4.1% was multidrug resistant (MDR) TB
- In many settings, TB disproportionately affects the vulnerable groups
2. Objectives

1. To ensure early diagnosis in vulnerable populations—defined as homeless individuals, Roma, those with a history of drug use within the community, and prisoners—in two high incidence European countries (Romania and Bulgaria).

2. To strengthen care integration using an outreach strategy within the same vulnerable populations in Romania.
2. Objectives

3. To evaluate approaches for **migrant TB detection** and improve European **cross-border management** by:
   - **early detection and care integration** in individuals arriving via the Mediterranean sea in Italy using innovative molecular testing at immigration reception centres and novel latent TB tests.
   - collating, analysing and evaluating multi country data on TB in **migrants** to low incidence countries to inform effective strategies for **early diagnosis** of active and latent TB in low incidence EU countries.
   - ensuring **cross-border** transfer of information and referral of patients

4. To support the development of action plans in member states by adapting best practice approaches to support the use of these measures across other EU member states
3. Methods: Work Packages

- WP 1: Coordination
- WP 2: Dissemination
- WP 3: Evaluation
- WP 4: Outreach
- WP 5: Migrants
- WP 6: Learning from database integration
- WP 7: Strengthening national programmes
3. Proposed Methods: Outreach (WP4)

Early diagnosis: screening at one-stop “shop”
• Mobile X-Ray Unit
• Teleradiology + CAD
• GeneXpert Omni

Integrated care:
• Accompanied referral, social support to vulnerable groups, peer support
• Free Treatment by the national TB programme for cases including MDR-TB
• Monitoring outcomes of treatment
• Assessment of effectiveness and cost effectiveness
3. Proposed Methods: Migrants in Italy (WP 5)

- New migrants arriving in Sicily: Active TB Screening – combining symptoms and Xpert
- Migrants settling in Italy: latent TB test with 4\textsuperscript{th} generation Quantiferon test
- All recruited individuals to complete demographic questionnaire and clinical data collected
- Assessment of effectiveness and cost effective of screening
3. Proposed Methods: Latent TB (WP 6)

- Establish latent TB data pooling protocol and agreement
- Develop latent TB database
- Pool data from Netherlands, Italy, UK and Sweden
- Invite others to join
- Analysis of yield and predictive value of latent TB testing
- Analysis by sub-group e.g. HIV
3. Methods: WP 7

TB strategy prioritisation & support plan

- Consensus and recommendations
- Expert meeting
  - Survey
  - Policy review
3. Methods: WP7 Survey

- Survey of national TB strategies and action plans
- Addressed to programme leads across EU/EEA
- Building on available information
- Facility to upload policy documents for review
- Aim is to get good overview of plans, including objectives, content, coverage, recommendations and implementation, including any barriers
- To overview of policies and recommendations, barriers to implementation and allow gap analysis across Europe
- Results of the survey to fed back to programme leads and discussed at the expert meeting
3. Methods: WP 7 Policy review/expert meeting

**Systematic review**
- Systematic review of relevant policies and recommendations
- Summarising current policies and “best practice” for recommendations and strategy components and potential gaps
- Results of the policy review to be fed back to programme leads and discussed at the expert meeting

**Expert Meeting**
- Invitation to national programme leads and other TB experts
- Views will be sought and consensus built iteratively on key questions posed to experts (Delphi methodology)
3 Methods: WP7 TB strategy prioritisation, action and support plan

- Using information from the survey, policy review and expert meeting
- A practical step by step document based on expert recommendations
- Suggesting/recommending for TB strategies and policies
  - Who needs to be involved?
  - What should be the content?
  - What is best practice?
  - What are the implementation steps?
  - How to overcome common barriers?
- Stakeholder presentation
- Road testing
4. Expected outcomes

- **Outreach activity in Romania and Bulgaria is expected to lead to the early detection of active TB.**
  - Detection of active TB using MXU in Romania and Bulgaria:
  - Treatment of detected patients in Romania and Bulgaria

- **Implement and evaluate migrant TB detection in Italy and early diagnosis of active and latent TB in migrants in low incidence countries.**
  - Number of latent and active TB cases detected among temporary migrants in Italy
  - Linkage to care among detected migrants in Italy

- **Creating a database listing active and latent TB cases, in migrants from low incidence countries.**
  - Multi country data platforms for latent TB established

- **Strengthening national TB programmes**
  - Improved understanding of differences and commonalities of TB strategies and action plans across the EU/EEA
  - A TB strategy prioritisation, action and support plan for countries to develop and implement evidence based TB action plans and strategies.
5. Tools planned

• Questionnaires:
  – WP 4: mobile screening data collection, supported referral and clinical outcome data collection
  – WP 5: Data collection tools for latent and active TB

• Databases:
  – WP 4: digital x-ray, screening data, clinical data, microbiology results, outcome data
  – WP 5: Latent TB database, Active TB screening database
  – WP 6: Latent TB database

• Trainings:
  – WP4: MXU training, WP 5: screening training, WP 2: overall dissemination training package

• Reports and Survey
  – Interim and final reports, evaluation report, country specific reports, peer reviewed papers from each WP
  – Survey in WP 7
6. Partnerships

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<td>KNCV Tuberculosis Foundation (KNCV)</td>
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<td>Ospedale San Raffaele (OSR)</td>
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<td>National de Pneumoftiziologie Prof. Dr. Marius Nasta-National TB Programme (NTPR)</td>
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<td>Health Strategies Programme Centre-National TB Programme (HSPC)</td>
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6. Partnerships: Countries
Acknowledgement