

## Definitions

### A TB diagnosis and medications

**TB case:** An individual having 1) TB-related diagnosis codes (ICD-9-CM: 010-018) and 2) more than two anti-TB drugs prescribed for longer than 28 days or two consecutive 14 days prescriptions.

**Regular treatment:** An individual having 1) TB-related diagnosis codes (ICD-9-CM: 010-018) and 2) more than two anti-TB drugs prescribed for longer than 28 days (or two consecutive 14 days prescriptions).

**First-line TB treatment:** An individual having regular with a mixture of more than two first-line drugs: Isoniazid, Rifampicin, Pyrazinamide, Ethambutol, and Streptomycin.

**Second-line TB treatment:** An individual having regular with a more than two types of anti-TB drugs apart from above first-line drugs. To be noted that, a mixture of two first-line drugs and one second-line drug is a first-line TB treatment be the definition.

**Treatment completion:** An individual having taken regular treatments for more than 180 days.

**Treatment initialisation, or empirical treatment:** An individual having prescriptions of more than any two anti-TB drugs for shorter than 14 days.

**Evaluation probably for TB:** An individual having diagnostic or screening procedures that are specific to TB. The procedures are:

- Sputum culture test (Include Crystal, Parasite)
- Acid-fast culture
- Tuberculosis culture test
- Tuberculin Skin Test
- Chest X ray
- Chest computered tomography

**Evaluation possibly for TB:** An individual having medical procedures that can be highly relevant to TB suspicions. The procedures are:

- Bronchoscopy
- Mycoplasma pneumonia antigen test
- Streptococcus pneumonia antigen-latex agglutination
- Chlamydia pneumoniae antigen
- Pneumococcus antigen (urine)
- Legionella pneumophila antigen (urine)
- Cryptococcus antigen
- Aspergillus antigen
- Influenza A cystic fibrosis Antibody
- Influenza B cystic fibrosis Antibody
- Pleural fluid analysis

## B TB-related illness:

**Chronic lung disease, CLD:** An individual having 1) respiratory diagnosis codes (ICD-9-CM: 460-510) and 2) drugs for respiratory syndrome prescribed for longer than 28 days.

**Acute respiratory disease, ARD:** An individual having 1) respiratory diagnosis codes (ICD-9-CM: 460-510) and 2) all drugs for respiratory syndrome prescribed shorter than 28 days.

**Nontuberculous mycobacteria, NTM:** An individual having NTM diagnosis codes (ICD-9-CM: 031)

## C Comorbidities

**Chronic lung disease, CLD:** An individual having 1) respiratory diagnosis codes (ICD-9-CM: 460-510) and 2) drugs for respiratory syndrome prescribed for longer than 28 days.

**Diabetes Mellitus, DM:** An individual having 1) DM diagnosis codes (ICD-9-CM: 250, A181) and 2) DM control drugs prescribed for longer than 28 days. We cannot differentiate type 1 and type 2 diabetes in the National Health Insurance Research Database, NHIRD.

**Human immunodeficiency virus, HIV:** An individual having HIV related diagnosis codes (ICD-9-CM: 042, V08). We cannot differentiate HIV infection and acquired immune deficiency syndrome from the NHIRD.