Nontuberculous Mycobacterial Lung Disease Prevalence: A Large-Linked Database Approach at Four Integrated Healthcare Delivery Systems

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## **Online supplement**

## Methods:

Search for ICD9 codes

To identify underlying chronic conditions as well as associated comorbid conditions we used two methods for identifying relevant ICD9 codes: 1) searching through all available datasets for the study period, to identify codes ever assigned during that time for a particular conditions, and 2) searching for a defined time period before and after the specimen collection date (3 months before and 6 months after). The rationale for these strategies was that a patient may have a chronic condition, but if that condition is not managed at a particular visit, then the relevant code may not be assigned. To ensure the most comprehensive search for both underlying chronic conditions as well as comorbid conditions at the time of specimen collection we used both these approaches.

## ICD9 Codes to search for NTM and comorbidities

- 011.5 Tuberculous bronchiectasis
- 011 Pulmonary tuberculosis
- 012 Other respiratory tuberculosis
- 031.0 Pulmonary NTM
- 031.1 Cutaneous NTM
- 031.2 Disseminated NTM
- 031.8 Other specified mycobacterial diseases
- 031.9 Unspecified diseases due to mycobacteria
- 042 Human immunodeficiency virus [HIV] disease
- 114. Coccidiomycosis
- 115 Histoplasmosis

- 117.3 Aspergillosis
- 135 Sarcoidosis
- 140-239 (excluding 173.) Other Malignancies
- 162 Malignant neoplasm of trachea, bronchus, and lung
- 277.0 Cystic fibrosis
- 279 Disorders involving the immune mechanism
- 424.0 Mitral valve disorders<sup>1</sup>
- 490. Bronchitis not specified
- 491.0 Simple chronic bronchitis
- 491.2 Obstructive chronic bronchitis
- 491.20 Chronic bronchitis without exacerbation
- 491.9 unspecified chronic bronchitis
- 492.0 Emphysema
- 492.8 Asthma, unspecified
- 493.0 Asthma
- 493.1 Intrinsic asthma (late onset asthma)
- 493.2 Chronic obstructive asthma
- 493.8 Asthma, other forms
- 493.82 Cough variant asthma
- 493.9 Asthma, unspecified
- 494 Bronchiectasis
- 495.9 Hypersensitivity pneumonia
- 496 Chronic airway obstruction, not elsewhere classified
- 516.3 Idiopathic pulmonary fibrosis
- 518.6 Allergic bronchopulmonary aspergillosis

530.0 Achalasia

530.11 Reflux esophagitis

530.81 Gastroesophageal reflux

737.3 Kyphoscoliosis and scoliosis<sup>1</sup>

737.4 Curvature of spine associated with other conditions<sup>1</sup>

738.3 Acquired deformity of chest and rib<sup>1</sup>

748.61 Congenital bronchiectasis

754.2 Congenital musculoskeletal deformity of  ${\sf spine}^1$ 

754.81 Pectus excavatum<sup>1</sup>

759.3 Situs inversus (marker for primary ciliary dyskinesia)

<sup>&</sup>lt;sup>1</sup>Search for this conducted KPCO only