MAYO CLINIC

Center for Tuberculosis

Navigating TB with Uninsured Patients

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Accomplish Health

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- 1.00 IPCE

Disclosure:

No relevant financial disclosures to report and no mention of off-label use of any medications or products

Learning Objectives

- Identify barriers for uninsured patients
- List public health resources available
- Explain outreach strategies for care
- Identify investigative tools

Polling Question

How many of your patients are uninsured?

A. 50% or more
B. 25%
C. Less than 10%
D. I don’t know

NATIONAL CENTER FOR HEALTH STATISTICS

National Health Interview Survey Early Release Program

Health Insurance Coverage: Early Release of Estimates From the National Health Interview Survey, 2024

by Robin A. Cohen, Ph.D., Elizabeth M. Briones, Ph.D., and Inderbir Sohi, M.S.P.H.
Division of Health Interview Statistics, National Center for Health Statistics

2024: 27.2 million (8.2%) uninsured Americans
- Majority of uninsured individuals are under the age of 65

Barriers and Resources

Overlapping Risk: TB and uninsured status

Individuals born outside the US

- 5-year waiting period for many government funded programs
- Work visa requirements for employment/access to employer-based insurance plans

Populations with social determinants of health

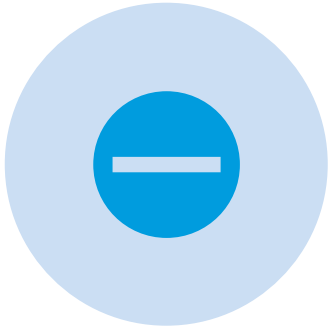
- Unhoused individuals
- Individuals with substance use disorders
- Food insecurities

Why is obtaining insurance so difficult?

Expensive

Various barriers to employment/employer funded health care

Generally English applications for state or government funded programs



May be suspended for various reasons

Uninsured status affects the spectrum of TB

Lack of coverage affects LTBI

- Cost of LTBI testing
- Cost of chest x-rays
- Cost of LTBI treatment
- Cost of monitoring treatment

Lack of coverage affects active TB disease

- Delays in presentation to care
- Sub-optimal management of chronic conditions
- Inability to get imaging, pathology, advanced labs
- Uniquely difficult to identify EP TB

Public Health Resources

Active TB

- Cost of medication
- Sputum collection and testing
- Depending on funding/location public health be able to provide:
  - induced sputum sample collection
  - State funded testing of certain samples (i.e. urine, CSF)
    - Dependent on both funding and lab validation
- Some states may cover the cost of certain tests if they lead to a positive TB diagnosis
  - I.e. pathology on tissue that required TB specific labs
- Some states may have imaging and treatment available in TB or Chest Clinics which often have unique funding sources which allow them to care for patients free of charge or at a reduced rate
- Some states may make special exceptions for Medicaid coverage

LTBI

- Contact assessment screening likely covered
- Coverage for medications varies state to state

Other resources

- FQHCs
  - treatment for uninsured individuals at a very reduced rate
  - may have labs and/or imaging available
- Free Clinics
- Hospital payment programs “charity care” for individuals who qualify
- Self-payment for imaging
- COEs
- Identify a local “TB Champion”
- Inpatient admission

Patient Case: Inpatient Admission

- 31-year-old male presents to establish care with new PCP
  - Migrated within the last 6 months from Nicaragua
  - No insurance
  - Denies known TB exposure
  - Subtly toxic appearing
  - Pulse 124 respiratory rate 32
  - Mildly asymmetric chest rise and fall, prominent abdominal breathing, short of breath with prolonged talking
  - Frail appearing, loss of buccal fat

- Reports a cough x 2 months
  - Intermittent headaches with some questionable neck rigidity on exam
  - Reports weight loss of uncertain quantity
  - Intermittent abdominal pain and diarrhea, mild diffuse abdominal tenderness on exam
  - Generalized back pain, tenderness with palpation of cervical spine
  - Cervical lymphadenopathy

- Immediately available testing
  - Chest x-ray
  - Sed Rate
  - CBC

- CBC
  - WBC 13
    - Lymphocyte predominant
  - Hgb 11
- ESR 152
- Chest x-ray: abnormal

Disseminated or Not Disseminated: That is the question

- Clinical uncertainty in this situation was not an option
  - Appears unwell, requires rapid workup
  - Based on CXR, likely long-standing disease
- Possible GI involvement
  - Drug absorption
  - Symptomatology through treatment course
- Possible CNS disease
  - Drugs requiring CNS penetration
  - Steroid use
  - Extended treatment duration
- Inpatient workup required to determine extent of disease

Shifting Diagnostic Mindset

Shifting Diagnostic Mindset

- Plan A, B, and C are not available
- Must get comfortable with uncertainty
- Probability and pattern recognition
- Working with what you have
- Rule out everything you *can* rule out

Gathering clues

- History
  - Past records
    - ED, urgent care, imaging, labs
  - Immigration health screening information
- Inflammatory markers (sed rate, CRP)
  - Not proof of disease, but elevation may increase suspicion
- Evaluate family if feasible
  - Especially in the context of pediatric patients

When you have exhausted all options: Clinical Diagnosis

- What is the worst that could happen?
  - If I treat
  - If I don’t treat
  - Is this patient at risk for MDR?
- What is the probability of the worst happening?
- Which unideal scenario is the most ideal?

Patient Case: an Impossible Situation

20-year-old male with unilateral lymphadenopathy

- Painless
- Normal overlying skin
- Gradual onset 3 months ago, same size for the last month
- 2-3 cm in size
- Firm, smooth, oblong, uniform shape
- Fevers for a couple weeks when symptoms started
- Night sweats
- No respiratory symptoms
- No weight loss

New to the US from Mexico

No known TB exposure, no chronic medical conditions

No insurance

Wide range of differentials

Normal labs – CBC, CMP, sed rate, CRP, LDH, HIV, treponemal antibody, hepatitis panel

IGRA positive

Negative chest x-ray

Advanced imaging unavailable through private clinic or public health, biopsy unavailable

- Treat with a 10-day course of Augmentin, trial of NSAIDs
  - No improvement
- Patient elects to self-pay for an ultrasound at a local freestanding imaging center
  - Localized and isolated 2.6 cm lymph node
  - Hyperechoic center
  - Possible sinus tract formation
- Somewhat more fluctuant on exam 3 months later
  - Now a total of 6 months

- What is the worst that could happen if I treat?
  - No pathology – MDR, but overall low risk
  - Misdiagnosis
    - Other differentials can't be worked up either
  - Drug side effects
- What is the worst that could happen if I don't treat?
  - Lost to follow up – can't continue to monitor
  - Disseminates
  - Develops pulmonary TB, making transmission a possibility
- If the diagnosis isn't active disease, then he still has LTBI

- Mutual decision making
  - HRZE, utilize all drugs through entirety of treatment
- 4 weeks into treatment - significant improvement
- Near complete resolution at 8 weeks into treatment

What does good TB care look like when “the right care” isn’t available?

- Gathering all available clues
- Communicating and working as a team
- Using pre-test probability
- Weighing public health significance and individual patient considerations simultaneously
- Even more uncertainty than usual – building a relationship is essential

Things to keep in mind

- TSTs/PPDs are still very good tests when done correctly
- A negative chest x-ray within the last 3 months is generally considered adequate for LTBI treatment in an asymptomatic patient
- If in a non-public health setting, pull in public health sooner than feels comfortable

In Summary

- TB is often difficult, TB without insurance is always difficult
- Private clinicians and public health must work together, each utilizing what is available to them
- Utilize all available tools and add as many pieces to the puzzle as possible
- Collaborative clinical review
- TB is a team sport

Questions and Answers

Thank you