TB Latent Infection Surveillance: Tracking Progress Toward Reducing TB Infection in the United States

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Why Track LTBI?

“Tuberculosis (TB) cannot be eliminated in the United States without increased efforts to test and treat latent TB infection.”

Philip Lobue, MD
Director, DTBE
September 6, 2016
Announcing CDC support for U.S. Preventive Services Task Force (USPSTF) recommendations
Why Track LTBI?

- Most U.S. TB cases diagnosed in foreign-born persons
  - Most cases are the result of reactivation of LTBI
- Modeling shows that increasing detection and treatment of LTBI will substantially hasten U.S. TB elimination
- Systematic surveillance is key to tracking progress in detecting and treating LTBI
Antecedents to LTBI Surveillance

- CDC submitted $40 million budget initiative for LTBI: not enacted
- NTCA survey revealed substantial support for national LTBI reporting if:
  - Reporting was efficient and effective
  - Resources were adequate
- ACET LTBI Reporting Workgroup provided input in 2015
ACET Workgroup Proposed System

- Goal would be reporting of all TST and IGRA test results
- Reason test was ordered
- Demographic information, risk factors for progression, previous treatment history
- Provider and patient contact information
- Treatment acceptance, regimen
- Treatment completion/noncompletion
CDC LTBI Reporting Proposed System

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- Progression to TB disease
Where Are We Now?

- CDC has begun discussions with NTCA/Society for Epi in TB Control
- CDC has begun discussions with states that currently collect electronic LTBI data
- CDC has developed an LTBI case management system for interested clinics
- CDC has drafted a Concept of Operations
- CDC has begun process of listing key data elements and their formats
Data Elements to be Collected

- Date Reported
- Reporting Address
- Patient Referral Information
- Primary Reason Evaluated for LTBI
- Date of Birth
- Sex at Birth
- Race/Ethnicity
- Country of Birth/Immigration Status
- Country of Birth of Parents
- TST/IGRA Results
- Chest Radiograph Result
- HIV Status
- Homeless/Incarcerated
- Substance Abuse
- Primary Occupation
- Additional TB Risk Factors
- LTBI Treatment Information
- Progression to TB Disease
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- Progression to TB Disease
Four Potential LTBI Data Sources

1. TB programs that currently have electronic LTBI reporting systems
2. Obtain data from existing healthcare provider electronic health records
3. Web-based data entry system for TB programs that have data but no system
4. Surveillance for TB Elimination Management System (STEMS); CDC developed clinic-based patient management system
Potential LTBI Data Sources

1. Program without existing LTBI reporting systems
   - Local TBSM S
   - MAVEN
   - ATLAS
   - Other systems
   - Multiple external systems

2. Healthcare Provider Electronic Health Records
   - Epic
   - NextGen
   - Centricity
   - Other systems
   - Multiple external systems

3. Program with LTBI data but no reporting systems
   - National LTBI Case Reporting System
   - CDC web-based system

4. Surveillance for TB Elimination Management System (STEMS)
   - Patient Registration
   - Case Management
   - Appointments
   - ATS Classification
   - Relationships
   - Clinical Documents
   - Alerts/Notifications
   - Contact Management
   - CDC web-based system

CDC web-based system

TB Latent Infection Surveillance System

Descriptive Analytics
Quality Assurance
Reporting
Next Steps

- Seek partner input on Concept of Operations (ConOps) for TB Latent Infection Surveillance System (TBLISS)
- Finalize data elements and data format
- Pilot test STEMS in 14 TBESC clinics
- Obtain data collection, privacy, and ethical clearances
- Establish TBLISS informatics requirements
- Build system and initiate data collection
Thank You

Questions?