



Progression through the cascade of care for latent tuberculosis infection:

Perspectives from patients, providers, and staff at a community health center in Massachusetts

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Background

- Treatment of latent TB infection (LTBI) is a critical step towards eliminating TB in the United States.
- In 2016, the Massachusetts Department of Public Health (MDPH) received funding from the Centers for Disease Control and Prevention for a demonstration project to **scale up testing and treatment of latent TB infection** among non-US born individuals in Lynn, Massachusetts.

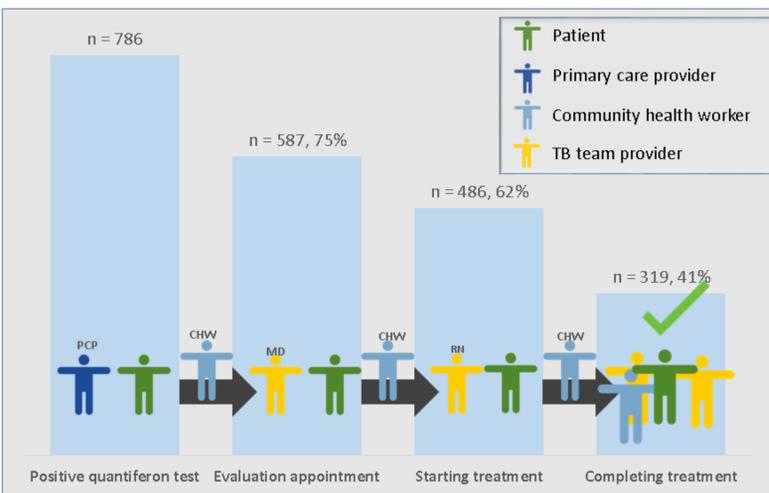
- Partners:**
 - Demonstration project site: Lynn Community Health Center (LCHC):
 - External evaluator: Institute for Community Health (ICH):



- A key objective for the demonstration project is to **identify and sustain best practices** for latent TB infection testing and treatment.

Methods

- Guiding framework: latent TB cascade of care



- ICH conducted **qualitative interviews** with:
 - 11 patients receiving LTBI treatment at LCHC
 - 5 primary care providers at LCHC
 - 7 other individuals at LCHC, including administrators, TB providers, and community health workers

Results

PATIENT PERSPECTIVES

MOTIVATIONS for starting treatment

- Trust in doctors and deference to recommendation
- Desire to heal from infection and protect health
- Desire to prevent family members getting sick
- Legal or employment reasons

“Personally I want to know what is the next step to get cured” -LCHC patient

BARRIERS to treatment adherence

- Weekly appointments are a burden; missing work
- Family / friends say treatment is not necessary
- Difficulty taking pills
- Side effects from medication
- Misconceptions or confusion about LTBI:
 - Positive blood test is from BCG vaccine
 - How could I get LTBI after being vaccinated?
 - Why will my test remain positive after I am cured? Does this treatment actually work?

“Do you mind if I run other routine tests so you don’t have to come in another time?”

- LCHC primary care provider describing how they talk about LTBI testing

- Widespread **training and education** for primary care providers, nurses, and medical assistants on LTBI, risk factors, and QuantiFERON test vs. PPD
- Clear and efficient **workflows** for referring patients to TB evaluation and treatment if needed

“You can’t go against what the doctor says, right?”

-LCHC patient

FACILITATORS to treatment

- LCHC providers and staff are attentive and helpful
- LCHC is flexible and accommodating with scheduling

“I don’t like to take pills ... I don’t even take Motrin”

-LCHC patient

PROVIDER AND STAFF PERSPECTIVES

Facilitators of LTBI testing scaleup in primary care

- Strategies to engage patients
 - Frame LTBI testing as part of **routine bloodwork**
 - Use **clear and simple language** to describe LTBI:
 - Avoid technical terms like “latent”; use layman’s terms like “sleeping virus”
 - Describe QuantiFERON as “more intelligent test”
 - Emphasize that medicine can prevent patient getting sick in the future and prevent infecting loved ones

Facilitators of LTBI treatment scaleup

- Internal TB team → patients get needed follow-up without overburdening primary care
- Prompt and persistent outreach and reminder calls from bilingual community health workers (CHWs)
- Accommodating patients’ schedules; full-day walk-in availability for directly observed therapy (DOT)
- Rearranging clinic schedules to maximize efficiency
 - dedicated slots for TB patients
 - clustering appointments by treatment type
- Relationship- and trust-building with patients
- Dividing responsibilities among team members:
 - CHWs do TB education → frees up providers
 - TB nurse handles DOT and follow-ups
- Electronic health record tools to streamline documentation

“The knowledge that [the LCHC TB team] exists and there’s an option for treatment changed the way I screen and refer, because I don’t think I feel very comfortable treating LTBI myself.”

-LCHC primary care provider

Conclusions

- Patient perspectives highlighted factors that help patients navigate the steps involved in LTBI diagnosis and treatment, as well as barriers that might hinder treatment initiation or completion.
- Provider and staff perspectives highlighted patient engagement and communication strategies, staffing structures, and scheduling tips that enabled successful scaleup in this setting.