

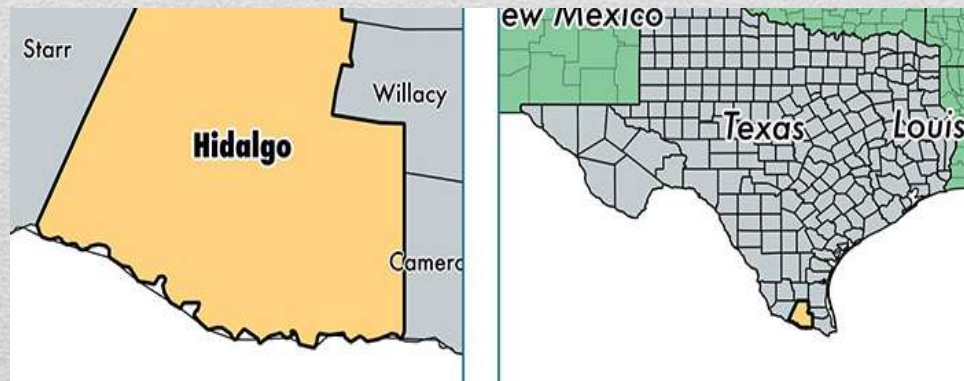


Delayed TB Diagnosis due to COVID-19

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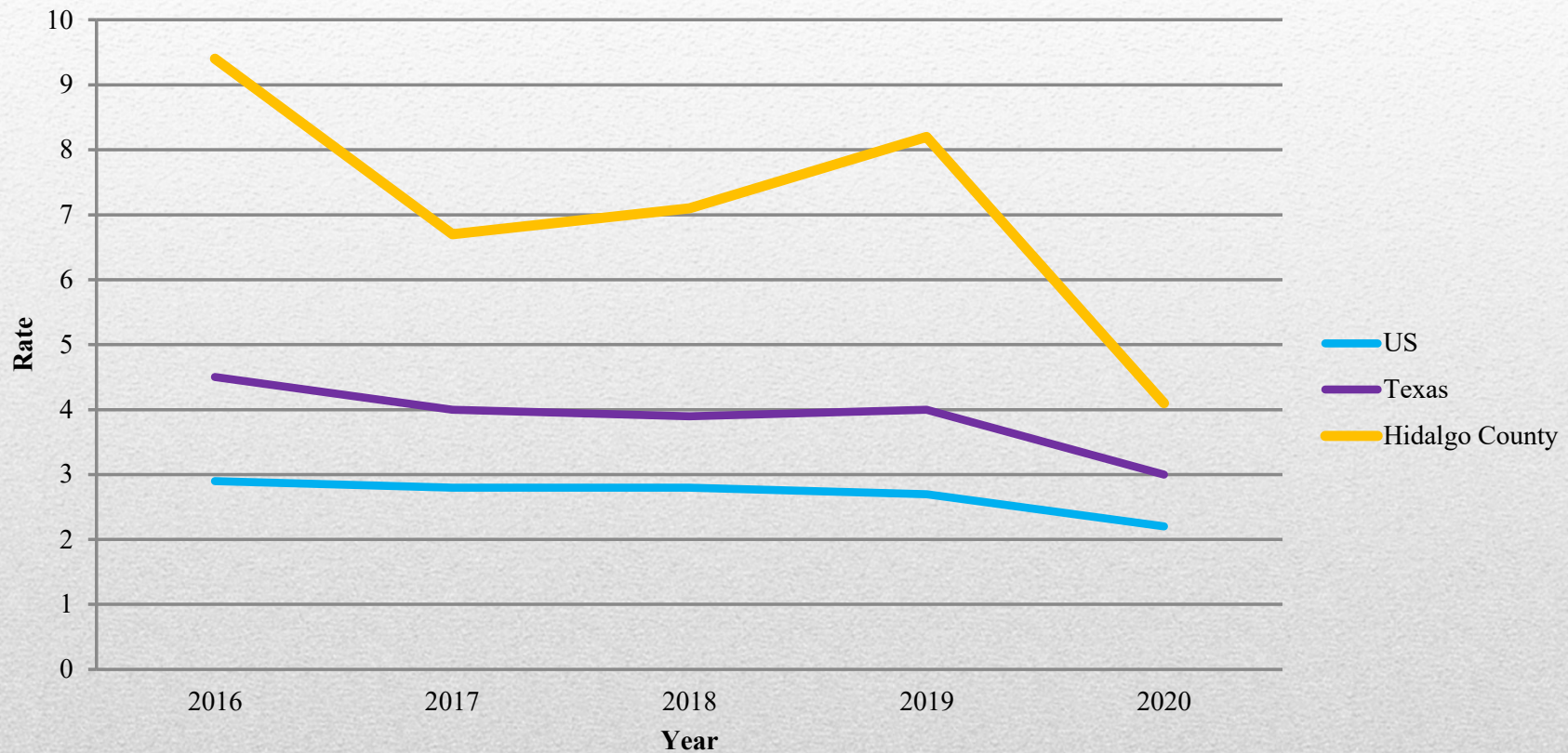
Objectives

- 1. Review a TB case study from Hidalgo County where diagnosis was delayed**
- 2. Review challenges during the patient's TB treatment**
- 3. Explain how we overcame the challenges**
- 4. Share talking points and lessons learned**



TB Case Rate Decline

Figure 1: US, Texas, and Hidalgo County TB Case Rates, 2016-2020



*TB rate is calculated per 100,000 population

Case Study

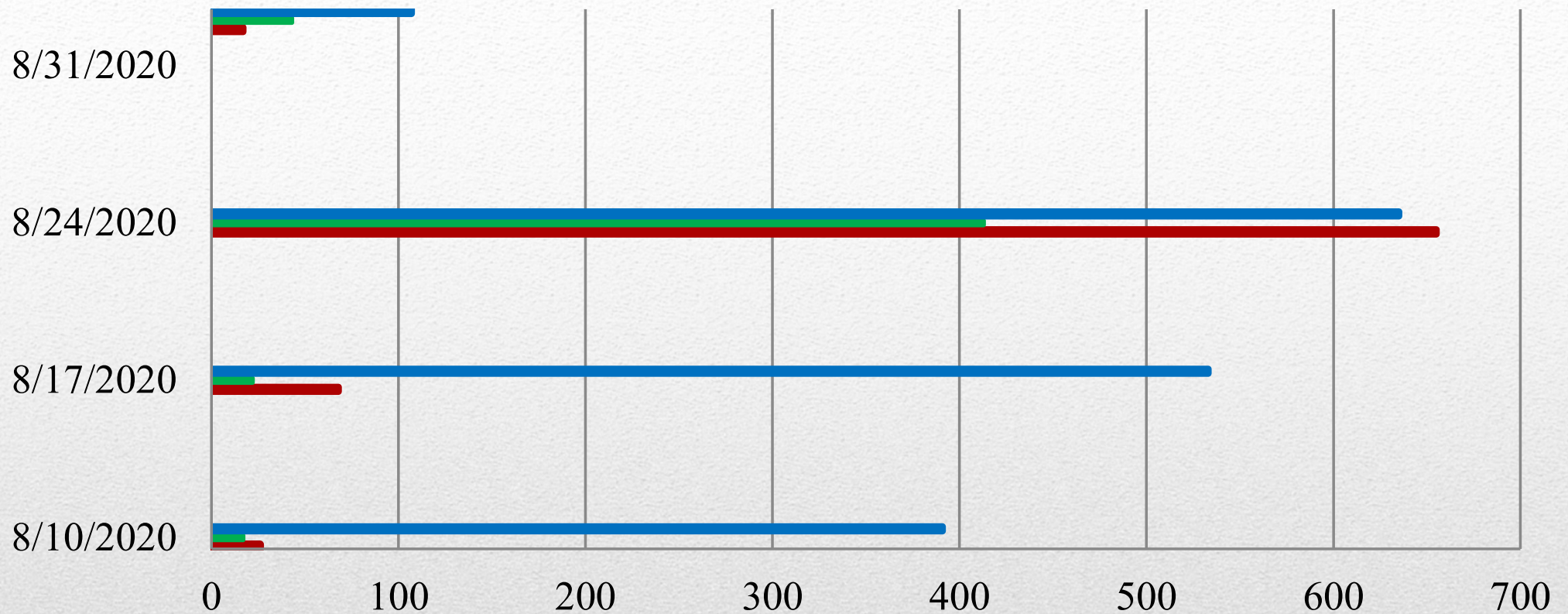
Presentation & Findings

- 24 year old female, born in Mexico
 - Since February 2020 w/ symptoms of cough, night sweats, hemoptysis, decreased appetite, nausea, SOB, fatigue, weight loss, chills, and fever
 - Tachycardia (130's), SOB, & fever of 102.5 on 8/6/2020
 - COVID-19 rapid test negative on 08/06/2020 at health department and KMC; repeated at HD on 09/21/20 post hospitalization
 - QFT indeterminate 8/13/20; TSPOT negative 09/09/20
 - PCR positive 08/09/20
 - CXR: abnormal cavitory; miliary pattern noted on CT 10/23/2020
 - Predominant sites: Pulmonary and miliary
 - AFB sputum smears: >10 per field 08/08, 08/09, 08/10/20
 - RIPE initiated on 08/12/2020
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Health & Social Risk

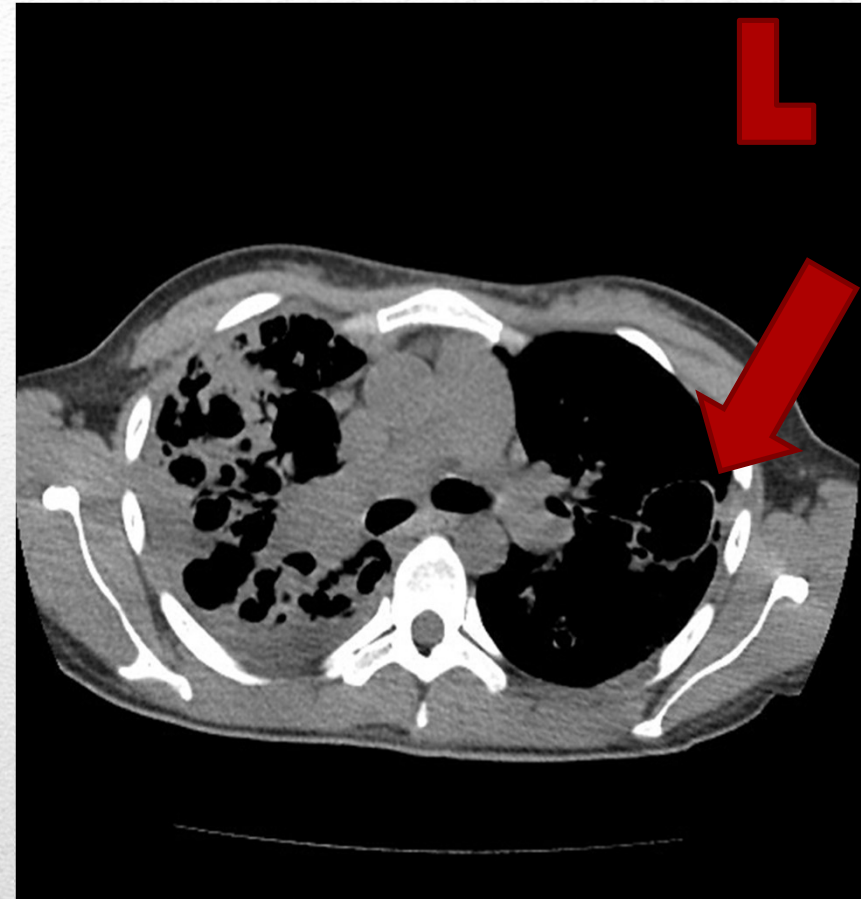
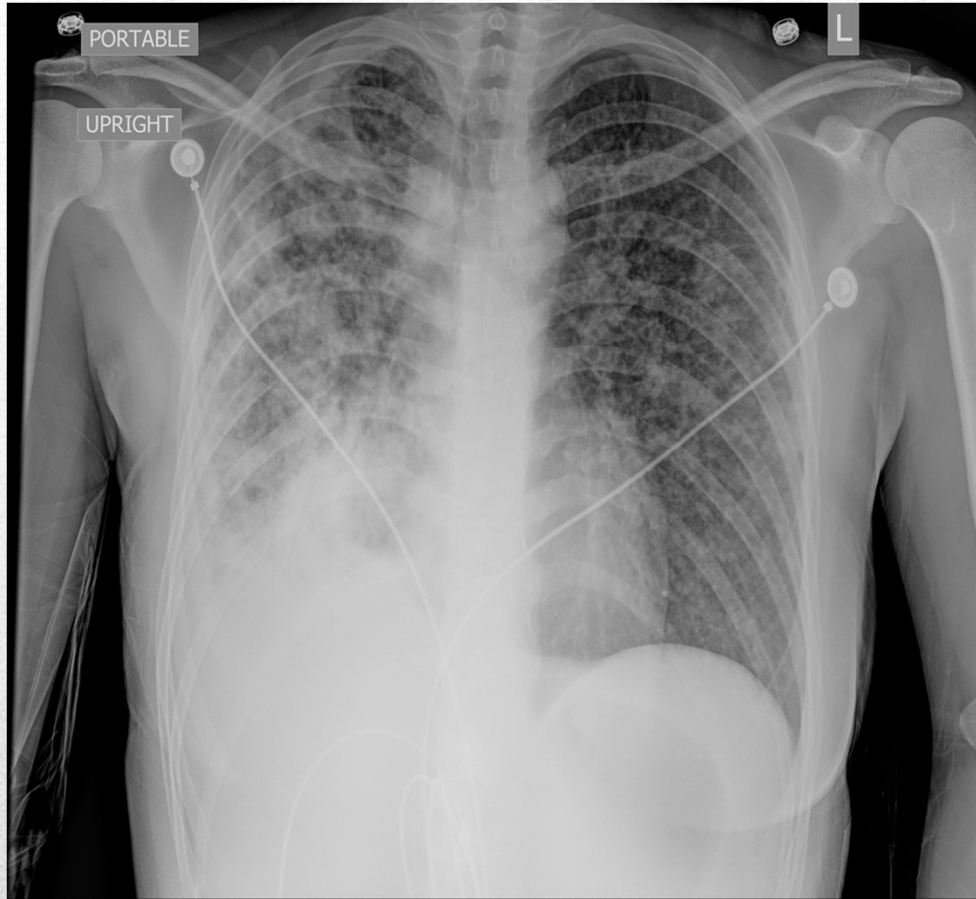
Factors

- 45 pound weight loss
- Born in Mexico and entered U.S. 06/15/2012
- Undocumented
- Low income/ no health insurance
- Homemaker w/ 3 children; youngest child delivered late 2018
- Level of education: Junior High
- Intolerance to TB medication regimen as evidence to drug stop 09/09/2020 and restart 09/23/2020; risk for developing drug resistance
- Increased LFT's shortly after starting RIPE and decreased platelets

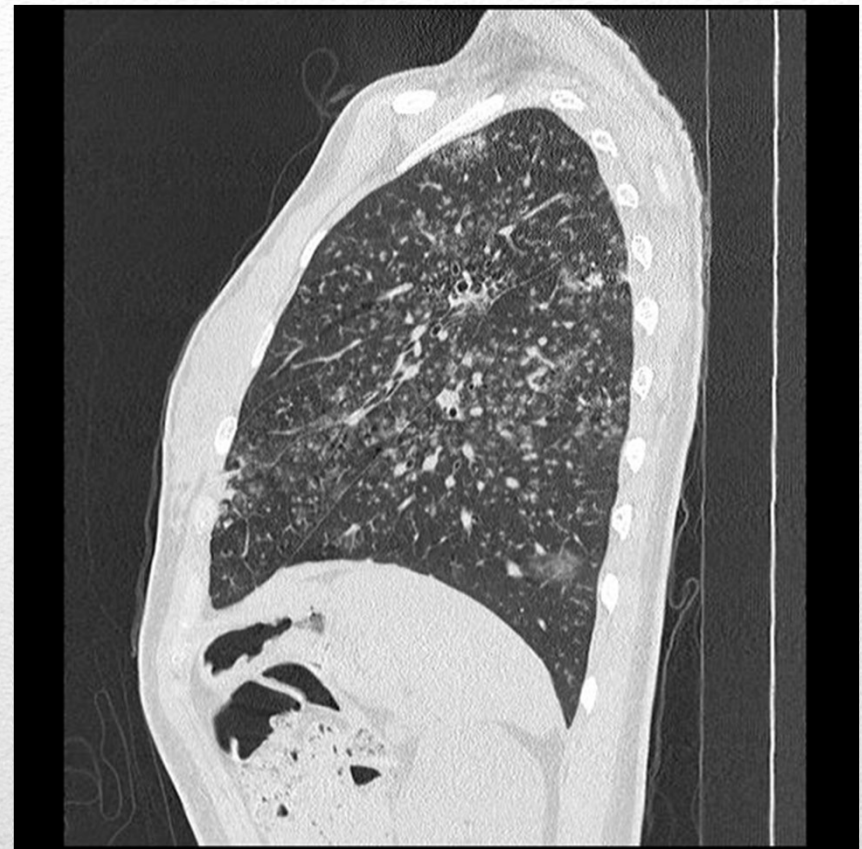
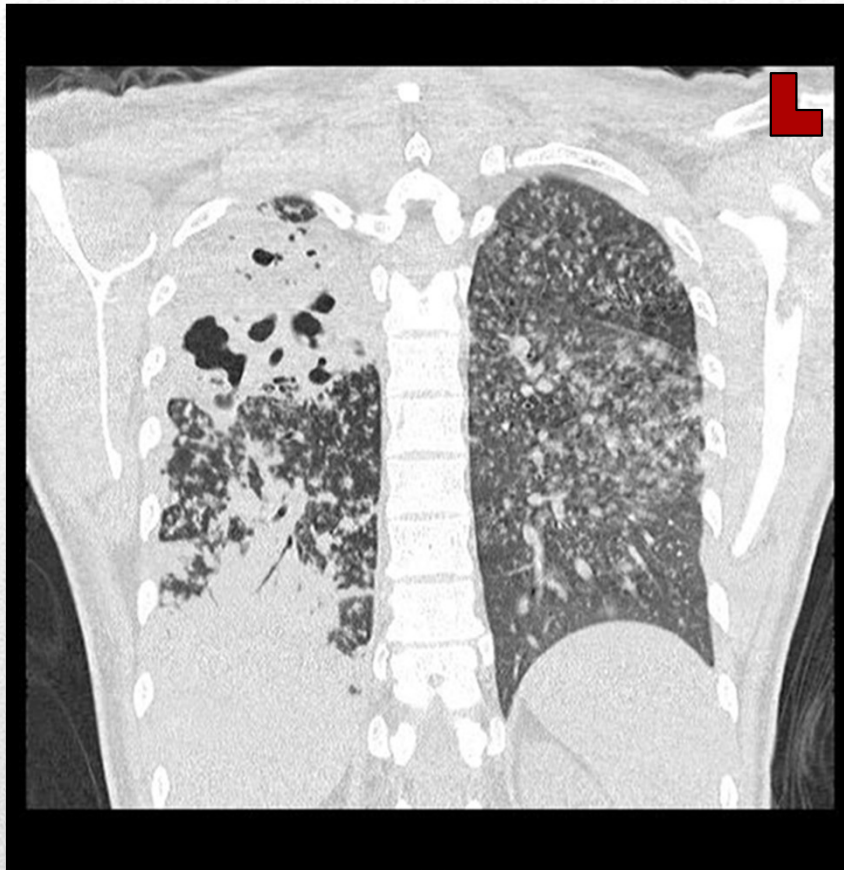


	8/10/2020	8/17/2020	8/24/2020	9/2/2020
■ Platelets	391	533	635	107
■ ALT	17	22	413	43
■ AST	26	68	655	17

LFT and Platelet Trend



Chest X-Ray & CT



CT 10/23/2020

**Onset of
symptoms
02/15/2020**

**Reported
07/31/20
Arrived at
health dept.
08/06/20,**

**EMT pt
transport to
hospital
08/06/20**

**Sputum smear
and culture
collected
08/08, 08/09,
08/10
QFT 08/13/20
Blood culture
08/15/20**

**RIPE initiated
08/12-08/23/20
due to
elevated LFTs
and low
platelets.**

**Texas Center
for Infectious
Disease
Admission
Date: 09/22/20
Restart meds:
09/23/20**

Timeline of Events

Challenge #1

Hospital adamant on COVID-19 diagnosis over Tuberculosis

- On 08/06/20 Patient had a negative COVID-19 result from a rapid test at health department, yet doctor at hospital stated patient had full blown COVID-19. Hospital note stated “*Acute respiratory disease due to COVID-19 virus*”.
 - This resulted on sputa collections not initially done despite the health department’s recommendations for a TB work up.
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Overcoming Challenge #1

- Provide support & guidance to Hospital Infection Control staff to ensure they make informed decisions after looking at the whole picture.
 - Reached out to the network of nurses that has been built throughout the years of working together. Utilizing your contacts that advocate for the patient to receive the appropriate services.
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Challenge # 2

- Patient TB treatment management issues due to complications & liver toxicity
 - Patient fearful of leaving to TCID without family and worried about undocumented status
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Overcoming Challenge #2

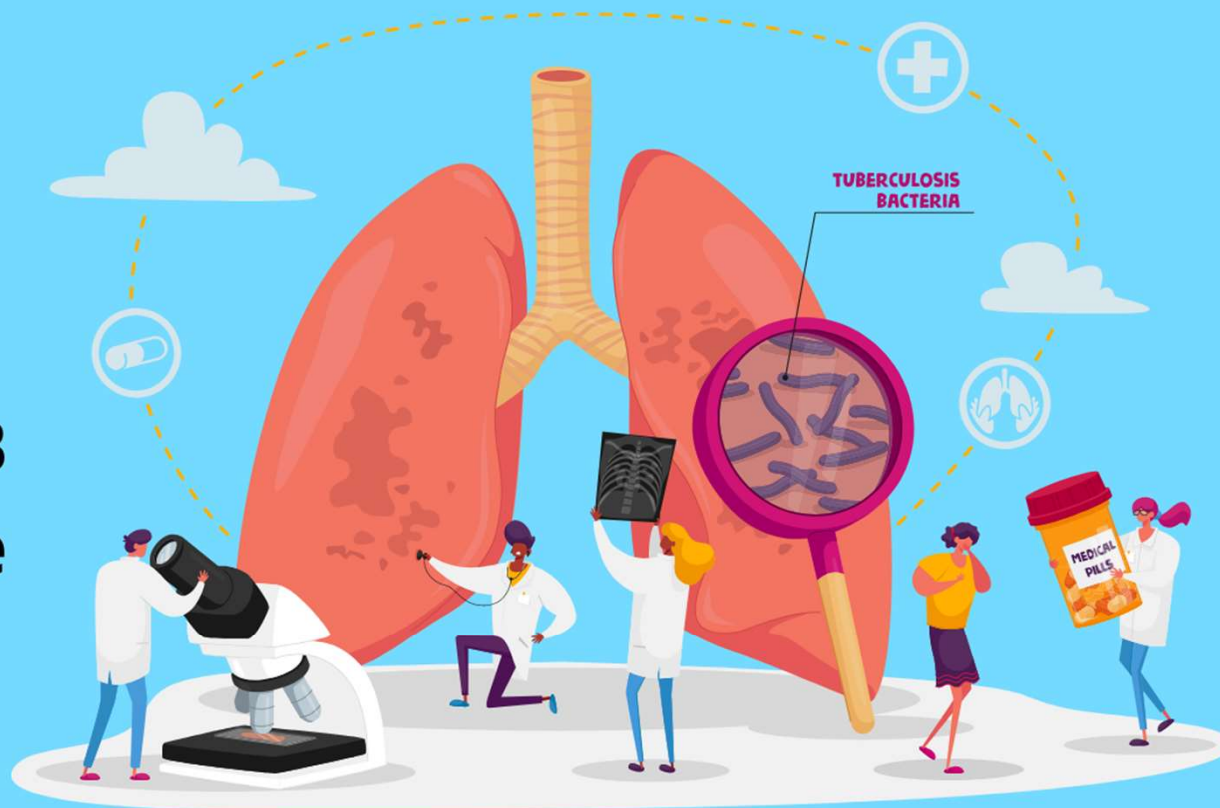
- **Consult with TCID in a timely manner to ensure patient receives the appropriate treatment with minimal interruptions.**
 - **Educate patient on the benefits of being admitted to TCID in order to gain back her health and be reunited with family.**
 - **Ensure the patient is aware of the health departments role to test for, treat, and prevent TB – regardless of citizen status.**
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Talking Points & Lessons Learned

- Education is key to helping patients understand the importance of treatment adherence. Education also builds trust between patient and clinic staff that strengthens rapport & ensures positive outcomes.
- Building a networks among local hospital and clinic staff is helps keep them informed & involved with TB treatment & prevention.



**Find,
Treat,
Cure TB
Disease**



**Test &
Treat for
Latent TB
Infection**

**Special thanks to Heartland, Texas Center for Infectious
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THANK YOU