

Student-Run Tuberculosis Screening Program & Referrals to Wetmore TB Clinic: Closing the Loop on Patient Adherence

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Introduction

- Homeless shelters and rehabilitation facilities in New Orleans require all patrons to have a documented tuberculosis (TB) test in order to maintain residence.
- The Tulane School of Medicine Student-Run TB Program encompasses six clinics and a partnership with Wetmore TB Clinic (a state-funded facility).
- The program provides TB testing via a tuberculin skin test (TST), vaccination, including influenza and Hepatitis A and B, and referrals to Wetmore Clinic.
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- At Wetmore Clinic, patients undergo a step-wise evaluation, consisting of a thorough history, an interferon gamma release assay (TSPOT) test, and a chest x-ray, if indicated, followed by any necessary treatment.
- A closed-loop referral and follow-up system is used to track referrals and patient adherence.

To date, follow-up rates for patients referred to Wetmore Clinic have not been evaluated.

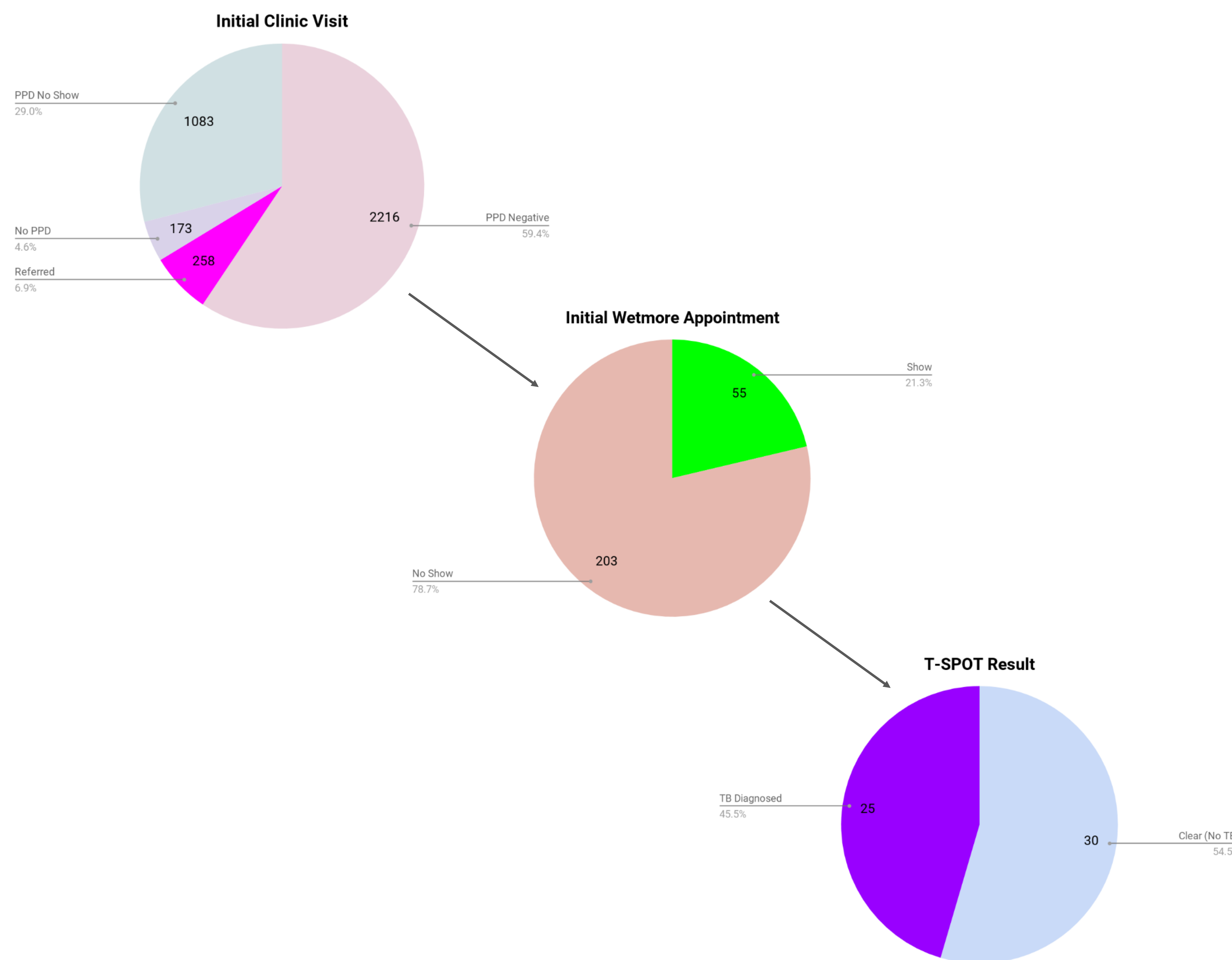
Methods

Medical records for all patients seen from January 2017 through December 2018 were abstracted into Research Electronic Data Capture (REDCap), a secure web-based data management system.

Primary measure outcomes included referral rate to Wetmore Clinic and patient follow-up rate for their initial appointment at Wetmore Clinic. Secondary outcomes included rate of clearance after initial Wetmore appointment.

Results

Preliminary results indicate that over the 24 month period analyzed, 3,730 patients were seen. Of those, 258 (6.92%) had a medical history necessitating a referral to Wetmore. These patients included anyone who had a new positive TST, a past positive TST, received the Bacille Calmette-Guerin (BCG) vaccine or received treatment for TB. Of those referred to Wetmore Clinic, 55 (21.32%) attended their initial appointment. Of those, 30 (54.55%) were cleared of TB via a TSPOT test and/or thorough medical history and required no further follow-up.



The cost of a single case of active TB being lost to follow-up can be more than \$20,000. As such, it is crucial to implement strategies to ensure that loss to follow-up is minimized, particularly in patients with a positive TST.

Discussion

- There is significant loss to follow-up at higher care, despite the current closed-loop referral system.
- Potential deterrents to patient follow-up include:
 - Limited patient education
 - Trust in and adherence to medical advice
 - Lack of transportation
 - Protracted time between testing and results

Limitations

- The current database design restricts patient information to initial follow-up only.
- A new database with number of follow-up appointments needed, TB status, and attendance is in development.

Future Directions

- Targeted improvement strategies to increase patient follow-up, including clinic-specific adjustments.
- Analysis of potential risk factors associated with loss to follow-up at higher care.
- Remove barriers to follow-up.
- Provide patient education in patient-friendly terms, (including pamphlets, maps to Wetmore, etc.).

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