

## Preventive Health and Health Services Block Grant

# SUCCESS STORY 2019

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TB Free California

## *Partnering to Eliminate TB in Orange County*

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**Public Health Issue:** Every other day, someone dies from tuberculosis (TB) in California. For years, California has reported the most TB cases in the United States. The TB Free California project works with local partners to reduce TB disease throughout the state.

In 2018, Orange County, California reported a TB case rate of 5.7 per 100,000 population, more than double the national rate. Of the 182 TB cases, 163 (90%) were among persons born outside of the United States; of these, nearly half were born in Vietnam<sup>1</sup>. A key strategy to eliminate TB is to increase testing and treatment of latent TB infection (LTBI), the asymptomatic stage that precedes TB disease. The availability of effective, first-line drug regimens for LTBI has increased the feasibility of providing treatment in community clinics. By increasing LTBI treatment, our aim is to prevent suffering and death from TB disease among Californians.

**Intervention:** To address the high burden of TB in Orange County, TB Free California collaborated with Nhan Hoa Health Center, a Federally Qualified Health Center serving the Vietnamese community<sup>2</sup>. Supported by the Preventive Health and Health Services Block Grant, TB Free California collaborated with Drs. Duc Nguyen (Nhan Hoa), Fayette Truax (Loma Linda University), Julie Low, and Mr. Mike Carson (Orange County Health Care Agency) to initiate a quality improvement project in October 2018.

To scale up LTBI care, the team:

- Conducted baseline assessment of clinic practices to identify barriers and opportunities to improve LTBI care, including a provider survey and medical chart data abstraction,
- Provided training to clinic staff about LTBI testing and treatment practices recommended by Orange County and California State Health Departments, including: 1) use of TB blood test, rather than skin test, and 2) treatment with first-line drug regimens, rather than older and less effective regimens,
- Developed and distributed digital and print LTBI educational materials in English and Vietnamese to encourage patients to get tested for TB, and evaluated the materials,

- Conducted chart abstraction after one-year of project implementation, to track the impact.

**Impact:** The baseline assessment showed that patients at risk for TB were not routinely tested, and TB blood tests and recommended treatment regimens were not used.

In the first year of the project:

- The TB risk assessment clinical tool was standardized, so intake staff could identify patients who needed testing and relay that information to the doctor,
- The electronic medical record was modified to easily track patients who had been tested and treated for TB,
- Use of the recommended TB blood test was standardized, so the clinic could provide convenient, in-house testing, instead of referring patients elsewhere.

As a result of this project:

- More than 70% of patients indicated that they wanted to speak to their doctor about LTBI and/or that they knew who was at risk after viewing the educational materials,<sup>1</sup>
- Clinic providers ordered the recommended TB blood test for 74% of patients with an identified risk factor, compared to 16% at baseline,<sup>3</sup>
- Providers prescribed first-line preventive treatment for 82% of patients diagnosed with LTBI, compared to none at baseline.<sup>4</sup>

TB Free California continues collaboration with Nhan Hoa, providing expert consultation and technical assistance as the clinic increases LTBI treatment and prevents TB disease in some of the highest-risk patients in Orange County, California.

**Footnotes:**

1. CDC. Outbreak of Lung Injury Associated with the Use of E-Cigarette, or Vaping, Products [website]. Updated Nov 20, 2019. Available at [https://www.cdc.gov/tobacco/basic\\_information/e-cigarettes/severe-lung-disease.html](https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html)
2. CDPH Center for Healthy Communities. EVALI Weekly Public Report [website]. Updated Nov 26, 2019. Available at <https://www.cdph.ca.gov/Programs/CCDPHP/Pages/EVALI-Weekly-Public-Report.aspx>
3. Of those surveyed (n=34)
4. Based on a subset of charts abstracted (n=381)