

The care cascade for latent tuberculosis infection in children at a federally qualified health center in Northern California

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BACKGROUND It is critical to screen, diagnose and treat children with latent tuberculosis infection (LTBI), as they are at risk of severe tuberculosis (TB) disease and are a reservoir for future TB transmission. We analyzed six years of well-child visits to characterize the pediatric LTBI care cascade.

DESIGN/METHODS We extracted electronic medical record (EMR) data for well-child visits in children 1-18 years old between 2014 and 2020 at a pediatric federally qualified health center in Oakland, California. Per American Academy of Pediatrics (AAP) guidelines, children should be annually screened for TB risk factors at well-child visits, and this clinic uses an EMR note template to prompt providers to complete this screen. Of those with risk factors, we determined the proportion of children with subsequent LTBI testing, chest radiography and treatment initiation.

RESULTS We assessed 14,794 encounters with 48% of children under 5 years old. Screening was completed in 99% (14,575/14,794) of visits. However, of 715 children with risk factors, only 162 (23%) had documented testing ordered (83% with an interferon-gamma release assay). If a test was ordered, 89% (144/162) of patients completed testing and 3.5% (5/144) were positive. Of the five, 2 were previously treated, and the remaining had negative chest radiographs and were started on 4 months of daily rifampin.

CONCLUSION While EMR note templates promoted high rates of TB risk factor screening in children, there was a gap in ordering a diagnostic test. Further work is needed to explore provider and patient barriers to testing to inform interventions to improve LTBI care for children.

Figure 1. LTBI risk factors

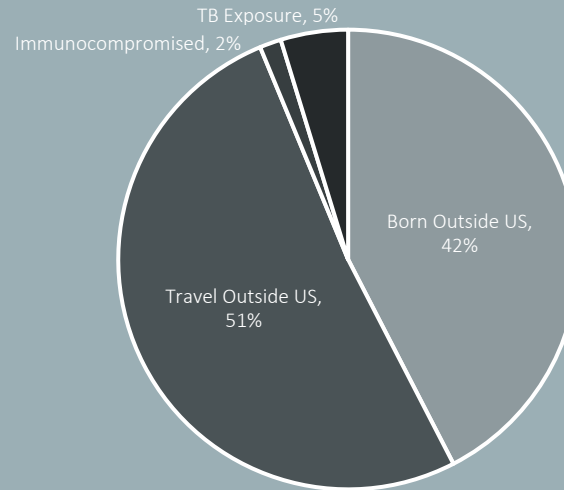


Table 1. Sociodemographic characteristics

(n = 14,794)	Age	Total	Percent
	Under 2 Years Old	2,379	16%
	Toddler/Preschool	4,733	32%
	School Age	4,990	34%
	Adolescent	2,439	16%
	Young Adult	253	2%
Sex			
	Male	7,405	50%
	Female	7,389	50%
Race			
	Asian / Pacific Islander	838	6%
	Black	6,007	41%
	Native American	22	0%
	White	645	4%
	Other	5,898	40%
	Unknown	1,384	9%

Figure 2. LTBI care cascade metrics by step

