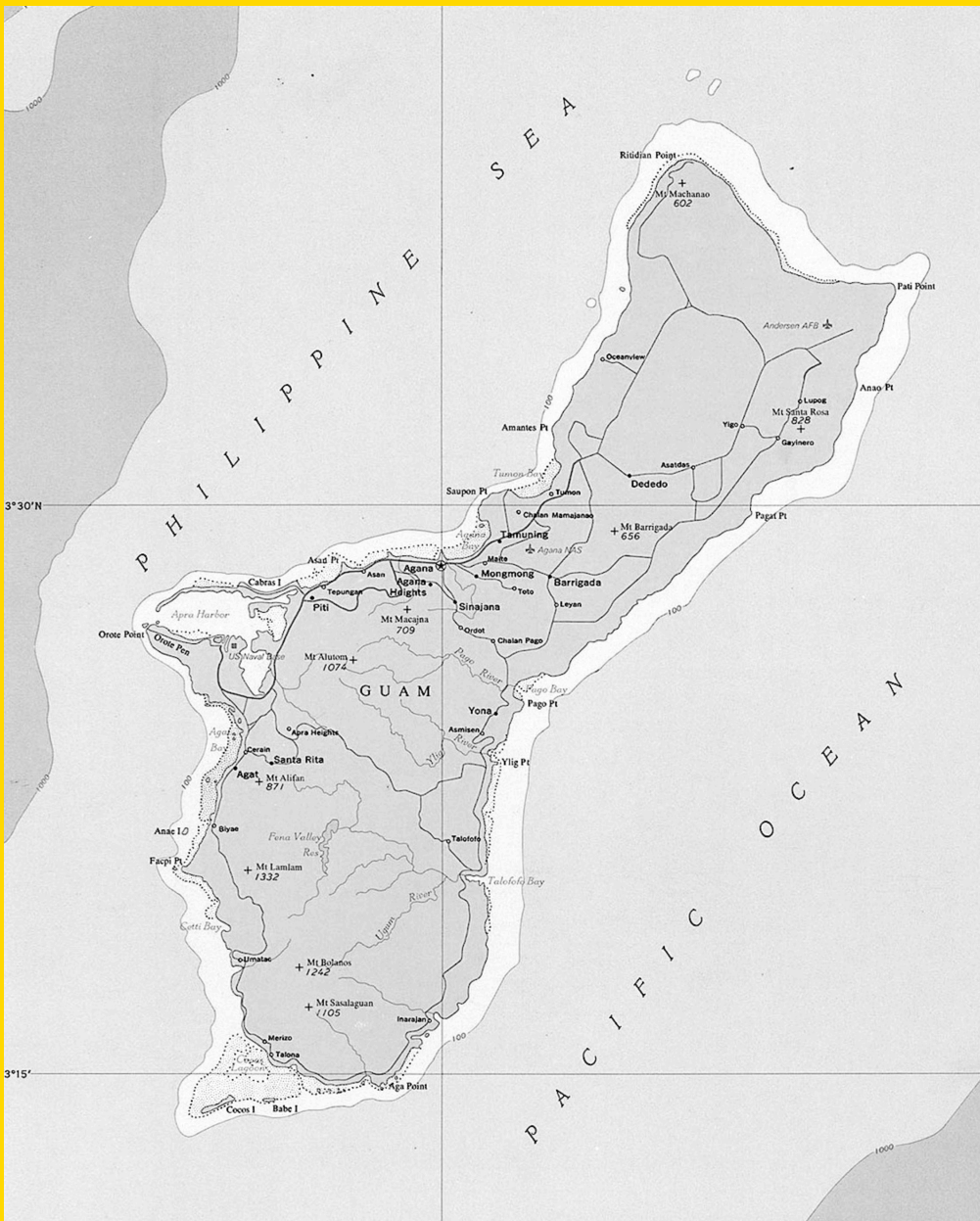


Guam Public Health Scales Video Directly Observed Therapy Showing Major Cost Savings

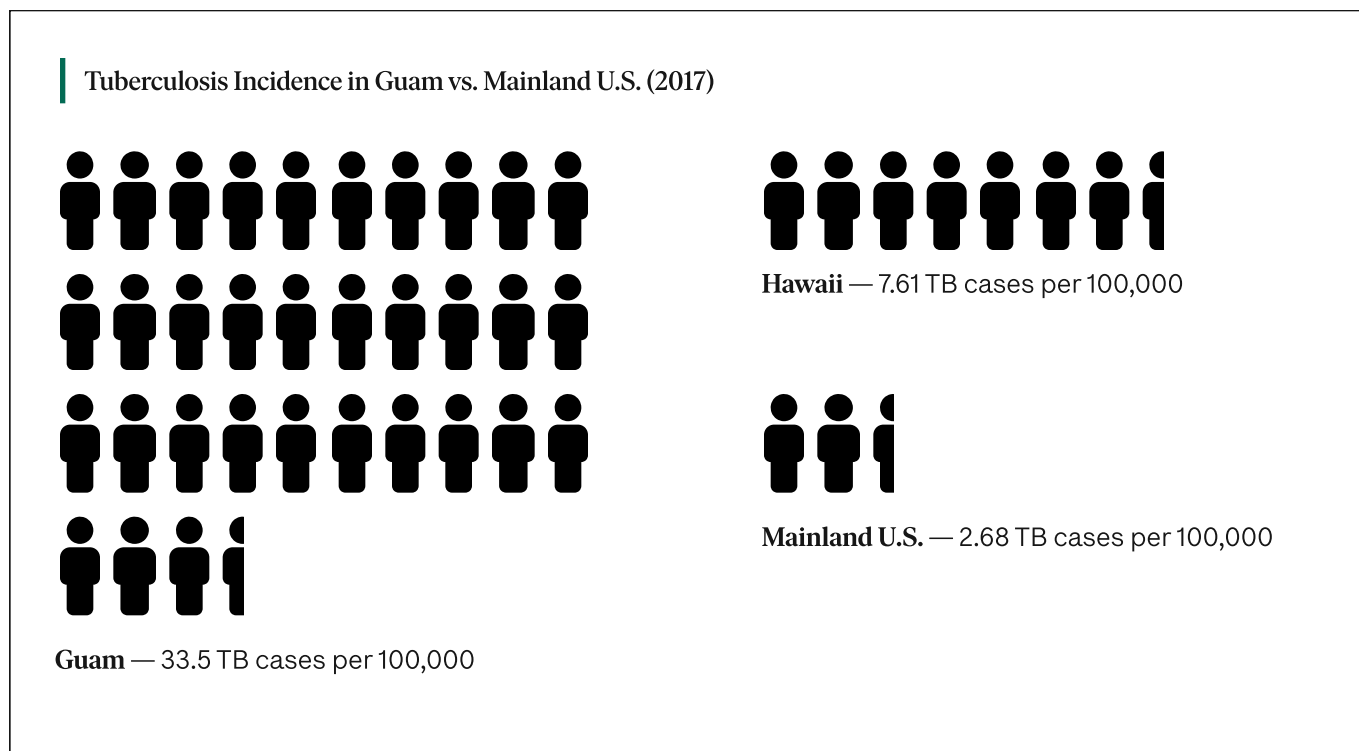
In an attempt to reduce high tuberculosis case rates, Guam became the first program in the U.S. Affiliated Pacific Islands to adopt the use of asynchronous video DOT, and provide scalable and patient-centered care to its population.



The Problem

Tuberculosis (TB) control in geographically isolated and resource-limited settings, such as Guam, presents significant challenges due to limited transportation infrastructure and high fuel costs. The logistical and financial demands of in-person Directly Observed Therapy (DOT) are considerable. Daily travel requirements for healthcare workers and patients hinder adherence to treatment and increase program costs.

Between 2020 and 2025, Guam reported an average tuberculosis (TB) case rate of 33.5 per 100,000 residents, compared with 7.61 per 100,000 in Hawaii and 2.68 per 100,000 in the mainland United States. In 2018, the Guam TB program became the first in the US-affiliated Pacific Islands to implement asynchronous video Directly Observed Therapy (vDOT), with the goal of providing more scalable, patient-centered, and cost-effective care. vDOT offers patient-level economic benefits, including reduced travel expenses and less time away from work or family responsibilities.



The Solution

A review of patients enrolled in Scene Health (formerly emocha) between February 2, 2020, and December 31, 2025 was conducted, with confirmed doses determined by the number of accepted videos during the study period. Staff time, fuel, and total cumulative amount of driving time savings were estimated using local rates and average distances to patient homes to evaluate the program's cost savings associated with video DOT.

The Results

Since the initial implementation of Scene Health vDOT in 2018, the Guam TB program fostered a series of successes. Between February 2, 2020, and December 31, 2025, vDOT proved to be a cost-effective, scalable, and patient-centered strategy for TB treatment in Guam. By improving adherence, reducing operational costs, and addressing geographic and logistical barriers, vDOT continues to strengthen the Guam TB control program and support long-term sustainability in resource-limited settings.



66,185
medication doses approved



\$161,491
in fuel savings²



\$1,199,934
in staff time savings¹



33,093 hours
of driving time saved³

Source:

Cuenca, Alice; Mbakwem, Chima; Santiago, Juan; Braganza, Matthew; Elmi, Morad. (2026, May). Technology Innovation in the US Pacific Islands: Guam's Cost Savings from 2020–2025 Using Asynchronous Video Directly Observed Therapy for Tuberculosis. Abstract submitted to the National Tuberculosis Conference, Palm Springs, CA.

¹ Staff time savings based on \$18 per hour

² Fuel savings based on \$4.89/gallon

³ Based on two DOT visits per hour



Since 2014, our MedEngagement solution has been implemented with over 800 customers to support patients with chronic and infectious conditions, including asthma, diabetes, hypertension, HIV, hepatitis C, tuberculosis, solid organ transplant, and COVID-19. We work with some of the world's most innovative health organizations and actively pursue new opportunities to collaborate with those working to implement our adherence solution at scale.