

# The U.S. Pacific Islands spearheads innovation with asynchronous video Directly Observed Therapy for tuberculosis treatment.

In an attempt to reduce high tuberculosis (TB) 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

In 2017, the case rate of tuberculosis (TB) in Guam was 50.2 per 100,000 residents, compared to the mainland U.S. rate of 2.8 per 100,000 residents. While in-person directly observed therapy (DOT) has proven highly effective in reducing TB, concerns of both staff safety and stigma have previously limited success in this region.



*the*

# SOLUTION

Patients were enrolled in emocha using a list of comprehensive criteria, ranging from two weeks of previously completed in-person DOT to an understanding of the need for TB treatment. Confirmed doses were calculated based on the number of accepted videos during this period; staff time, gas, and total

cumulative amount of driving time saved were additionally calculated. Between February and March 2019, patient satisfaction surveys were conducted in a cross-section of 20 patients contacted by the Guam care team via both phone and email.

# *the* RESULTS

Between August 2018 and January 2019, the program fostered a series of successes. The implementation of asynchronous video DOT not only increased staff capacity to perform DOT under constraints while maintaining high medication adherence and patient satisfaction, but also generated significant cost savings. The program has served as a model for other initiatives in the region, and demonstrated how emocha can potentially help with other conditions on the island, such as diabetes.



1,417 confirmed medication doses from 35 unique patients



\$21,255 in staff time savings



\$3,457 in savings from gasoline



700 hours of saved driving time

SOURCE: O'Mallan, Josephine; Mbakwem, Chima; Florig, Jenette; Camacho, Larissa. (2019, April). Mobile Technology Innovation in the US Pacific Islands: Guam's Use of Asynchronous Video Directly Observed Therapy for Tuberculosis. Poster session presented at the National Tuberculosis Conference, Atlanta, Ga.

## *about* EMOCHA MOBILE HEALTH

emocha uses mobile technology to secure medication adherence through Directly Observed Therapy—the practice of watching patients take every dose—and is proven to secure 94 percent average adherence rates. The platform is being used by public health departments, clinical trials, hospitals, and managed care organizations to achieve high adherence rates and retain patients in care.

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