

Directly Observed Tuberculosis Therapy



Illustration by Ruben DeLuna

Community paramedics collaborate with local public health officials to provide directly observed therapy (DOT) to patients with tuberculosis (TB), a highly contagious disease. The community paramedics dispense medications and observe

patients taking them to ensure that treatment protocols are followed, thus preventing spread of the disease.

Results (as of September 30, 2017)

- ▶ 42 people were enrolled in a pilot project involving DOT at one site in southern California. Because treatment often lasts six to nine months, community paramedics had an average caseload of seven patients per month.
- ▶ Patients with TB who received DOT from community paramedics were more likely to receive all doses of TB medication prescribed by the TB clinic physician than patients who received DOT from the TB clinic's community health workers (CHWs). Properly taking all prescribed doses of TB medications increases the likelihood that a patient will be cured and not spread the disease to others or develop a drug-resistant strain of TB that would be more difficult to treat and to control in the community.

- ▶ Community paramedics dispensed appropriate doses of TB medications. Their patients did not have any greater frequency of side effects than patients who received their medications from CHWs.
- ▶ Community paramedics also helped patients address other medical conditions, such as diabetes, that may create barriers to effective TB treatment.

How It Works

Tuberculosis is a highly contagious disease that is treated with special antibiotic medications. The number of medications and frequency of dosing are determined by a physician with expertise in TB treatment. Patients with TB must take their medications as directed since stopping treatment too soon or missing doses of medication could lead to the development

of a drug-resistant strain of TB, posing a major public health risk to a community. To ensure that patients take their TB medications as directed, TB clinics often provide DOT, in which a health care worker gives a patient the medication, observes them taking it, and monitors them for side effects.

In Ventura County, public health officials asked EMS provider partners to offer DOT because the TB clinic does not have sufficient staff to serve all TB patients in the county. The clinic's CHWs administer DOT, but they only work on weekdays. In addition, the CHWs are based in Oxnard, where the TB clinic is located, and must drive for up to 60 minutes to reach some of its patients. In contrast, the community paramedics are stationed throughout the county and can usually reach patients within 15 minutes.

Partners

LOCAL EMERGENCY MEDICAL SERVICES (EMS) AGENCY	LEAD AGENCY	HEALTH CARE SYSTEM PARTNER	EMS PROVIDER PARTNERS	LOCATION
Ventura County	Ventura County EMS Agency	Ventura County Public Health Department	American Medical Response (AMR) Gold Coast Ambulance LifeLine Ambulance	Ventura County



For more information on community paramedicine programs operating today in California, visit www.emsa.ca.gov/community_paramedicine.