Video DOT in the Field: Translating Research to Practice
Katrina Rios, Director of Strategic Partnerships
emocha radically improves medication adherence with video DOT

Average adherence 50%

Average adherence with emocha 90-95%
Directly Observed Therapy works

DOT is the gold standard for medication adherence

Leverages human observation (Hawthorne effect)

Strengthens the patient-provider relationship

emocha allows DOT to become a scalable, tech-enabled service
How it Works

Patient App

Provider Web Portal
Created to address high priority health challenges

- HIV/PrEP
- Tuberculosis
- Opioid Addiction
- Hepatitis C
- Heart Failure
- Asthma
- Hypertension
- High Cholesterol
- Diabetes
- Kidney disease
TB prevalence in Maryland

Montgomery County (6.0 / 100,000 cases)
Prince George’s County (5.2 / 100,000 cases)
Baltimore City (4.1 / 100,000 cases)
Baltimore County (3.4 / 100,000 cases)
Anne Arundel / Howard Counties (2.4 / 100,000 cases)
All other counties (1.3 / 100,000 cases)
NIH clinical research | Study design

STUDY DESIGN | Pragmatic, pilot prospective implementation study from April 2016-June 2017

INCLUSION CRITERIA | Adult TB patients in Montgomery Co., Baltimore City, or Anne Arundel Co. at the discretion of local providers
  + Intensive or continuation phase
  + No prior adherence requirement
  + Selected at the discretion of local providers based on individual considerations

PRIMARY OUTCOMES
Qualitative data: Staff and patients attitudes and impressions, before and after implementation of video DOT
Quantitative data:
  + Adherence: defined as the percentage of ‘expected’ doses that are verified by video observation per person during video DOT implementation (compared to before Video DOT implementation)
  + Percentage of ‘observable doses’ observed: defined as total doses prescribed during phase (DOT doses + self-admin) that are observed before and after Video DOT implementation

COST & IMPLEMENTATION OUTCOMES | Used an ‘ingredients’ approach in which we multiply quantity of consumables / labor utilized by their unit costs
  + Conducted time motion studies at each site, and obtained local costing information from clinics/clinic managers
  + Divide costs into Labor, Consumables (e.g. supplies), Equipment (e.g. vehicles, computers, etc)
  + Conducted ‘sensitivity analysis’ to examine different methods of implementation and different program structures
Patients on emocha maintained high, comparable levels of adherence.

Patients & staff felt emocha was less burdensome & more private than in-person DOT.

Emocha led to cost savings that varied by program structure.
Open Forum Infectious Diseases

To be released April 26, 2018

hivma
HIV Medicine Association

IDSA
Infectious Diseases Society of America
emocha experience in Maryland

12,407 sq miles

3 health departments
Anne Arundel County
Baltimore City
Montgomery County
emocha experience in Maryland

28 patients enrolled in study

55 patients have used or are using emocha post-study
emocha experience in Maryland

7,500+
Videos submitted since April 2016
National traction & global experience
emocha implementation & success beyond Maryland

Puerto Rico

**Notes from the Field: Use of Asynchronous Video Directly Observed Therapy for Treatment of Tuberculosis and Latent Tuberculosis Infection in a Long-Term Care Facility — Puerto Rico, 2016–2017**


Henry Oiano-Soler, MPH,1,2,3, Dana Thomas, MD,2,3,4, Olga Jaglar, MPH,5,6, Katrina Rios,6,7, Milton Torres-Rodriguez, MPH,3,7, Gredwel Duran-Guzman, MD,6, Terence Chorba, MD2 (View author affiliations)

To treat a cluster of tuberculosis (TB) transmission cases in a long-term care facility for cognitively impaired adults located in Puerto Rico (facility A), the Puerto Rico TB Control Program used a novel video directly observed therapy (VDOT) application. In 2016, active TB disease was diagnosed in 11 residents and latent TB infection (LTB) was diagnosed in

---

Hurricane Harvey | Texas

**Notes from the Field: Tuberculosis Control Activities After Hurricane Harvey — Texas, 2017**


Sandra Morris1; Mark Minear2; Tomas Rodriguez1,2; Richard Stanci1; Dana Wiitler-Beckham1; Terence Chorba2 (View author affiliations)

On September 14, 2017, the Texas Department of State Health Services (DSHS) reported that Hurricane Harvey had caused 82 deaths in Texas during August 25–August 30, 2017 (1), with property damage that could total $180 billion (2). Houston alone received 45 inches of rain from August 24 to September 1, 2017, and some parts of Texas received 60 inches or more. Dozens of inches of rain also fell on the cities of Port Arthur and Beaumont. Several local health departments experienced closures during the week of
UNITE TO END TB
Thank you!
Katrina Rios, Director of Strategic Partnerships