



**emocha Mobile Health Inc. (emocha)
Sole Source Justification**

Sole Supplier of Software: emocha's technology is proprietary and emocha owns exclusive rights to all intellectual property associated with the video Directly Observed Therapy software. This includes patents, trademarks, and know-how licensed exclusively from Johns Hopkins University. No other entity can resell, provide licenses to, or maintain and support the emocha software.

Utilization in Texas

emocha works with over ten local health departments in Texas as well as an active state-wide contract with the Texas Department of Health and Human Services regions for tuberculosis (TB) management. As part of the state-wide contract, Hidalgo County currently has TB patients on the emocha platform. Continuing the partnership will result in uninterrupted care for those patients, as well as limited retraining needed for Hidalgo county staff. No other asynchronous video DOT provider currently manages TB patients for Hidalgo county.

emocha vs Other Asynchronous technology

In comparison to other asynchronous technologies, emocha offers a much broader range of features and applications. The application is available on Android, iOS, and tablet devices and the entire application, inclusive of side effects, is available in 22 languages to cater to foreign-born populations. Providers can also customize the list of side effects they want to capture and set up SMS and/or email alerts for critical events. emocha's customizable notifications can also send daily medication reminders and provider reports. The platform is disease-agnostic and has been used to monitor HIV, HIV prevention, HCV, MDR-TB, LTBI, opioid use disorder, maternal health, diabetes, and symptoms of highly-infectious diseases such as Ebola. emocha also offers a comprehensive Communications Module, which allows HIPAA-compliant messaging in various formats between health departments and patients.

emocha vs Live Stream Video

emocha's platform includes a native mobile application that functions using "store and forward" methodology. This is different from a live-stream video connection. The platform consists of a patient-facing mobile application, provider-facing web portal, and provider-facing mobile application. emocha is asynchronous, which means patients and providers complete their parts of DOT on their own schedule. The patient can take their medication at any time of day, outside of regular business hours if needed, or on weekends, and the provider can review the video anytime thereafter. This allows patients to sleep off common, negative side effects such as nausea if they prefer to take their medication at night or cannot meet in-person DOT scheduling requirements. Unlike live video, a strong internet connection and/or cellular data is not needed for asynchronous video DOT. With asynchronous video DOT, the patient can record videos while offline and securely upload them once connected to data or WiFi. Videos are date and time stamped for when patients actually record videos, even if they don't access connectivity for



several days or are in different geographic areas from the health department. This functionality is crucial for rural settings that usually have limited connectivity options, and it also allows patients to continue their regimen while traveling. For these reasons, emocha offers advantages to live stream services, many of which are not HIPAA-secure.

Ability to add other emocha Applications for Outbreak monitoring and Linkage to Care

emocha facilitates more than video DOT: it is a population management solution that allows providers to analyze data and trends on a patient and population-levels. Furthermore, video DOT is just one application on the emocha platform with other applications, such as Outbreak Symptoms Monitoring (OSM) and Linkage to Care modules, are able to be deployed rapidly. The outbreak symptoms monitoring application has been used to monitor members of the public and healthcare workers who have been exposed to highly infectious diseases such as Measles, MERS, Avian Flu, COVID-19, and Ebola. Existing emocha customers have extended their video DOT monitoring to include Measles, diabetes, and COVID-19 symptoms monitoring in addition to TB.

Unique Provider-Facing Modules

Care Team Application: a one-of-a-kind companion mobile application to enhance in-person DOT and harmonize data captured across various DOT modalities, such as in the field, in the clinic, or over livestream video. This healthcare worker-facing app allows users to view patient information (like medication regimen, adherence, and date of birth), asynchronously log DOT visits, call or message patients, and get directions to their home address or wherever the DOT takes place. This information is also available to view in real-time on the emocha web portal as work happens in the field. The application can be used in the field without any web or data connectivity.

Medication-Specific Adherence: care team can confirm adherence of each dose of medication on a patient's submission and see analytics at the medication level. Each medication is assessed separately so that adherence rates are medication specific. At the same time, emocha allows a dose counter to calculate number of doses administered, independent of the medication-specific counter.

Recording Dosing History: a history of the patient's medication regimens and dosing is available on the interface and patients are able to see their medication dosing on the mobile application before they submit a video.

Report Generation: ability to create regular, real-time customizable data exports at patient and population levels (.csv and/or .pdf).

Analytics: ability to visualize data at both population and patient-specific levels.



Platform Modularity: additional features, such as HIPAA-secure in app chat, outbreak monitoring, and linkage to care modules are available to be added if needed to the same platform.

Multi-disease Use: proven previous experience with monitoring patients with diseases including but not limited to monitoring for TB, HIV (for ART and PrEP), HCV, MDR-TB.

24-hour Support Portal: providers and patients are able to access a secure online portal to report any technical issues, access information on frequently asked questions, and access step-by-step training videos on each part of the platform.

Pause a Patient: should a patient need to stop taking his/her medication while dosing adjustments are made, emocha has the unique ability to retroactively “pause” a patient during treatment to ensure it does not affect their adherence or progress in treatment.

Medication-by-medication adherence capture: care team users can identify adherence on a medication by medication level per anticipated daily submission.

Two-Way Secure Chat: care team users can securely text with patients from the web interface to the patient application in a secure, HIPAA-compliant, way.

Hold Medications: providers can select to hold an entire medication regimen, or an individual medication, during the course of treatment. The action will be dated, tracked, and changes appear on the patient-facing mobile application.

Regimen Count: providers have easy visibility into the remaining days of a patient’s regimen to allow for proactive adjustments to care plans.

Unique Patient-Facing Application Features

Multi-Language Support: the application language can be changed in seconds to meet the literacy needs of a patient. New languages can be added upon request. Currently 23 languages are implemented and available.

Multi-User Login Per Device: patient data is tied to a patient username, allowing for multiple patients to share a device and keep data securely stored separately.

Multiple Login Methods: patients can access the application using a username and password, 4-digit pin, face ID, or thumbprint, depending on their device.

In-app Progress Calendar: patients can view progress, adherence rate, and video submission status throughout treatment.



Configurable Medication Reminders: patient can adjust the timing and method (SMS and/or in-app notification) in which they receive medication reminders.

In-app Asynchronous Symptoms/Side Effects Reporting: as part of the submission workflow a patient can select the presence of symptoms/side effects from a configurable list. If a Selection is made the care team will receive an alert and can react accordingly. The detailed data is automatically reflected on the web interface and patient record.

Patient Password Reset Workflow: a patient has the ability to request a new security password, at their convenience, without engaging the health department.

Additional emocha Services

Electronic Medical Record Integration: emocha's technology integration team includes four engineers with over 60 years of collective EMR integration experience.

Adherence Coaching: Typically, health departments review videos submitted by patients. At times of unexpected staff shortages, emocha is able to step in and provide the service of video review by a certified health professional. Critical information is triaged back to local health departments. For the State of California, our program is overseen by a Nurse specialized in TB, who was previously employed by the State of California.

Dedicated, In-house Technology and Support Team: emocha's software engineering and support team is based on-shore and employed full time by emocha. emocha does not rely solely on offshore, independently contracted, or part-time support personnel. This allows emocha to offer immediate responses to issues which may arise during US business hours. It also allows emocha to provide long-term sustainability of its platform.