

# INTRODUCTION



### Improve outcomes and reduce costs

Everyone saves when patients take their medication. Hospitals reduce readmissions, health plans save on downstream expenditures, and Directly-Observed-Therapy programs increase efficiency while reducing cost and daily transportation time. Most importantly, patient/participant health improves when medication is taken properly.

We at eRAMx are very focused on increasing the success rates for those individuals in need of Directly-Observed Therapy (DOT) for Medication Adherence, and/or Medicated-Assisted-Treatment (MAT). eRAMx, a patent-pending, innovative, digital telehealth technology advancement, is designed to fit perfectly with treatment objectives as a viable accountability solution interwoven into behavioral health and addiction treatment plans that overlap multiple sectors. Also, our virtual technology may facilitate for faster recognition of behavioral changes with a patient/participant through the frequency of

observations that might not otherwise be detected with traditional and less frequent visits to a medical clinic.

DOT has been the gold standard for medication adherence since the 1950s. Visually verifying every dose in person has been shown to achieve over 90 percent adherence rates respective to diseases such as Tuberculosis, HIV, and Hepatitis C, as has been researched and evaluated. However, it's also expensive and time-consuming for patients and providers when DOT is administered face-to-face. Thanks to eRAMx, those who self-report to take medication that experience transportation and employment conflicts will no longer be of concern. Our remote medication monitoring eliminates such barriers, which has a direct effect on outcomes. By digitizing the process with virtual, live monitoring, supported by video and picture reference back-up, eRAMx has made this practice more accessible, scalable, and cost-efficient.



## Our technology/service solution

- Mobile app fully compatible with both iOS and Android technology platforms
- "Live" interactive visual (2-way) and voice (2-way) engagement between a patient/participant and a trained observer, thus allowing virtual face-to-face communication
- Proprietary HIPAA-compliant mobile app and software platform
- Video playback and storage capability (Maximum 10-minute window per observation)
- Picture capture
- Flexible scheduling

- Interactive hardware features (front and back side mobile phone camera options, light activation, optional alert tones, virtual observation geo-location point (with client permission)
- Pre-observation window alerts to both participant patient and observer
- 24/7 monitoring capability through eRAMx, or remote monitoring capability through client-partner
- Robust client-partner protocol management
- · Medication indexing and referencing
- Flexible reporting features
- Individual Client-Partner protocol management



# eRAMx®, a patent-pending technology

(USPTO Application No. 14/636,570)

A 3rd generation telehealth technology. The technology has recently been further developed and is designed to push the envelope respective to Remote Medication Adherence with critical objectives as follows:

- Enhance the participant/patient engagement experience specific to medication adherence accountability
- Validate medication prescription intake per dose by dose adherence to encompass the full regimen recommended by a licensed physician
- Provide flexible scheduling structure for those individuals medicating multiple times per day with various medications per a medical physician's
- Patients/participants use a HIPAA-compliant mobile application to interact with a medical, or other trained observer, in real-time to demonstrate their adherence to the prescribed prescription medication(s) regimen so ordered by a licensed physician. Video and picture capture of all

- patients/participants taking their medication(s) is available as an optional archive for all eRAMx client-partners. This technology creates accountability and encourages communication with providers when needed. Providers benefit from dose-by-dose adherence data to better serve patient/participant needs.
- We strongly encourage the use of pre-packaged medication(s) in the form of "blister-packs" to achieve the highest rate of accountability and success with each patient/participant. Healthcare companies and pharmacies have the capability and resources to package medication(s) based on daily requirements at little or no cost to the end user. Pre-packaged medication reduces preventable medication errors and eliminates the risk of missed medications or incorrect dosing. The package generally illustrates the participant's name, date and time of day for which the medication is to be taken.



We are focused on establishing our footprint throughout the United States in all segments overlapping with Medication Adherence and (MAT) Medicated-Assisted-Treatment as a component of a holistic behavioral health treatment model. Our targeted market segments include but are not limited to the following: Healthcare Companies, Pharmaceutical Industry, Mental Health Providers, Public Safety (federal/state/local), Veterans Administration, Senior Care Providers, other.

It is worth noting that more than 70% of U.S. employers are feeling the direct impact of prescription drug misuse in their workplaces, according to a recent survey by the National Safety Council. In a nutshell, substance abuse disorders or addictions cost taxpayers more than \$440 billion annually, and businesses are particularly affected as substance use disorders lead to employee absenteeism, increased health care costs and lower productivity.

# BUSINESS & CLIENT PARTNERS



The development for our 3rd generation eRAMx technology has been contracted out to our very capable business partner, Rose-Hulman Ventures, a successful product design, rapid prototyping, and development firm on the south campus of Rose-Hulman Institute of Technology where they develop innovative technology-based solutions that positively impact the business of their client partners.

Rose-Hulman Ventures serve a diverse mix of clients—from entrepreneurial startups to established companies with global operations. Their facility includes professional-level laboratories, equipment, tools, and work suites to develop the best quality product or solution for their client partners.

Rose-Hulman Ventures offer clients access to top-caliber creative thinkers and problem solvers, while giving top academic students real-world experience. Student interns aren't just learning about engineering; they're practicing it under the guidance of full-time engineering staff.

### Check out the Software and Skillset RHV has brought to the development of eRAMx®

#### Software

- Operating Systems/Environments: Microsoft Windows7/8, Linux, iOS, Android, Amazon EC2, HyperV, VirtualBox, IIS, Apache, Lighttpd, nginx
- Frameworks: iOS, .NET, Silverlight, Node.js, Ruby on Rails, Python/Cyclone/Tornado, PHP, jQuery, Crystal Reports, QT, Ajax, Sencha ExtJS
- Languages: C#, Python, C/C++, Ruby, JavaScript, PHP, VisualBasic, HTML, CSS, Objective-C, Java
- Hardware Integration: Serial (RS232), CAN, iOS (via RedPark, BLE, WiFi), Firewire, Ethernet, WiFi, Bluetooth, Bluetooth low energy, USB
- Computer Vision: OpenCV, Object detection measurement, Hough transforms
- Database systems: MS-SQL, MySQL, PostgreSQL, noSQL, MongoDB, CoreData, SQLite
- Tools: Visual Studio, Photoshop, Illustrator, Xcode
- Revision control: Subversion, Git, Mercurial, TFS
- Standards: HL7, J1939, CAN, CSV, JSON, ISO14229, ISO15765, XCP/CCP, ISO
- Mobile: push notifications, Sencha, Corona, Amazon SNS
- Project Management and Bug Tracking: Redmine, Trac, Pivotal, TFS

- Payment engines: Paypal
- Function user interface design/implementation
- Automated testing: Selenium, Jenkins, nUnit
- Continuous Integration: Jenkins, CruiseControl.NET

#### Skills

- Mobile iOS applications UI design, integration with hardware, push notifications, integration with a server backend
- Backend server design Python/Cyclone or C#.NET with JSON/REST interface, database design/implementation
- Desktop windows applications C# with windows forms/WPF, hardware interface, UI design
- Mobile Android applications UI design, integration with hardware, integration with a server backend
- Computer vision object recognition measurement
- Automated testing automated web testing using Selenium, Jenkins, nUnit
- Web-database application development using C#, MS-SQL (Microsoft stack) or Python Cyclone/Tornado, Node.js, JSON communication

# BUSINESS & CLIENT PARTNERS



SITCO Business Solutions, based in Evansville, IN is dedicated to increasing the availability and efficiency of their customer's mission-critical business applications and safeguarding their data. We take pride in partnering with SITCO in delivering to us the peace of mind that comes from connecting our business across a secure, reliable infrastructure, while helping us gain the competitive edge. Sitco has partnered with world-class sales agents, carriers, and vendor partners to deliver the most affordable, flexible, and secure data center solutions for our clients. We carefully select partners who offer the products, services, and solutions that meet the unique requirements of our customers.

#### **Carrier Partners**







**Zayo** Smithville<sup>®</sup>









# **Vendor And Technology Partners**

































#### Location

eRAMx is a privately-owned Indiana based company. The extensive design and development costs have been exclusively funded through private investment.

The state-of-the-art headquarters facility is located in Evansville, IN. Both the operations center and technology plant were well planned to allow for aggressive expansion over the next 3-5 year period without the need to acquire the additional real estate or physical plants.

All facets of the operations center and technology plant are designed to operate per HIPAA regulations and security rules as applicable to data security respective to Administrative Safeguards; Technical Safeguards; and Physical Safeguards.

Contact Information Jeff Milner, Sr. Vice President

Cell: 317.409.2108

Email: jmilner@eramxlive.com

Website: eramxlive.com