Minerva

Improving patient outcomes through effective
patient engagement and care coordination.

mph**R**x

mphRx
BREAKING BARRIERS IN HEALTHCARE

Minerva

A scalable and modular platform that allows healthcare providers to deliver superior care coordination, patient engagement, and healthcare analytics in a cost effective manner.

Challenge

The healthcare industry is steadily moving towards more patient-centric care delivery models. As a result, issues like patient engagement, care coordination, and patient satisfaction are now major focus areas for healthcare leaders.

However, lack of interoperability among health IT systems and limited access to comprehensive patient records are considered as major road blocks for this move. Additionally, the healthcare industry lacks secure and intuitive communication and collaboration tools. Generally, the clinical staff is overwhelmed by technology rather than focusing on what's important — patient care.

Another major contributing factor to this problem is that all these capabilities come at tremendous capital and time investment. These are further slowing down the pace of this change.
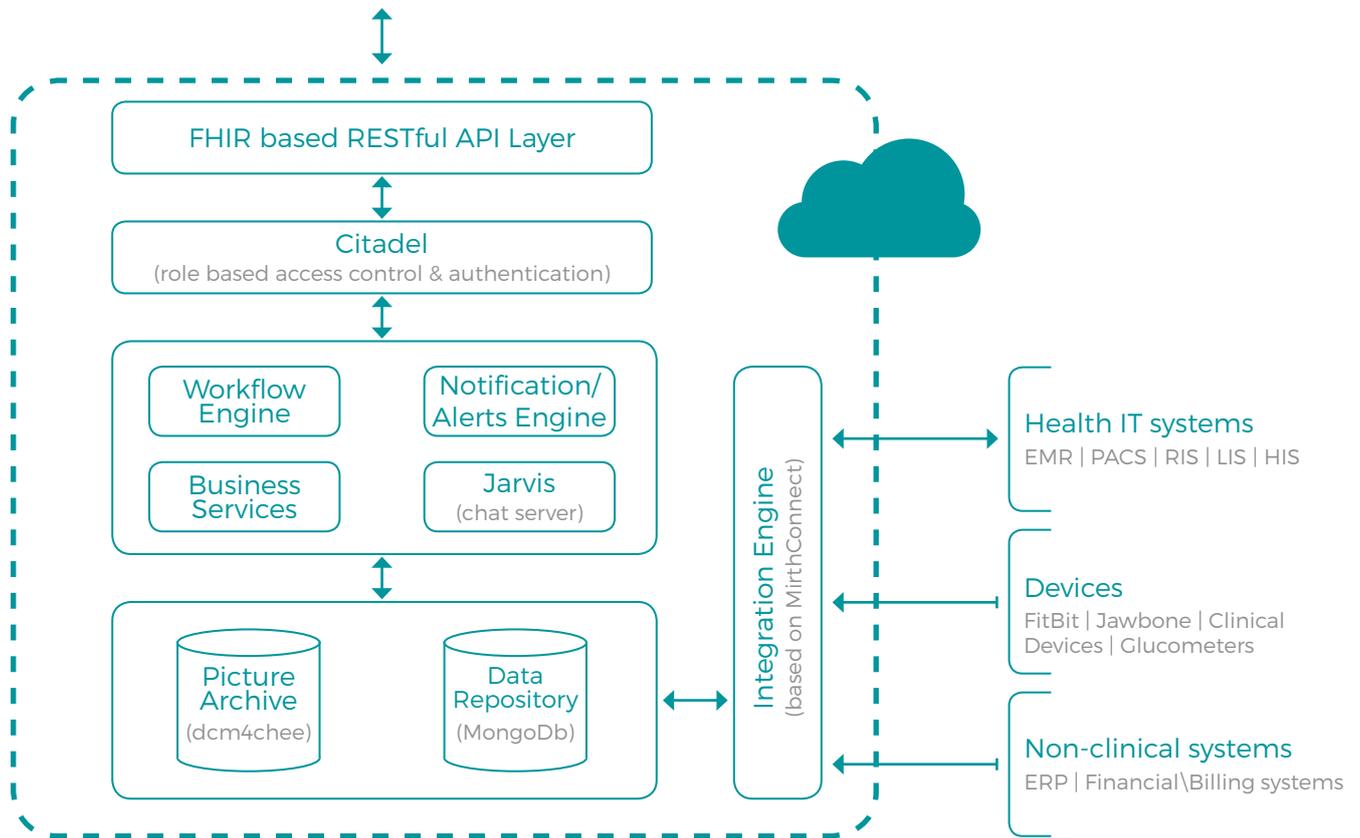
What is Minerva?

Minerva is a secure, HIPAA compliant cloud-based platform that focuses on interoperability, patient engagement, and care provider's productivity.
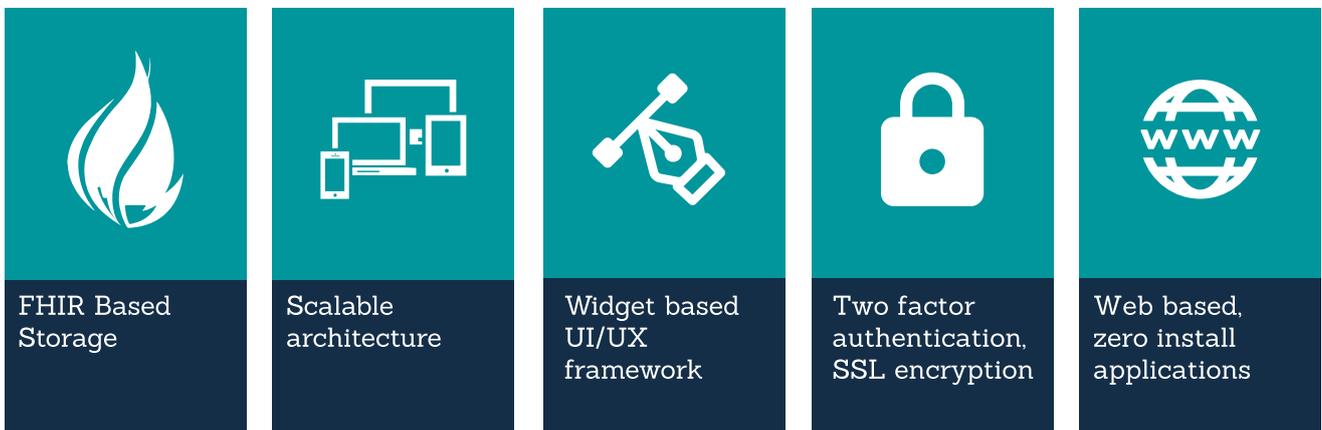
Key Features

* Designed to rapidly integrate and store real-time information from disparate health IT systems, modalities, and non-clinical systems. The consolidated patient information is stored in a FHIR based data repository.

* Built-in support for implementing work-flows, configuring relevant notifications and alerts, and enabling secure patient consent management.

* Secure chat server to enable instant messaging capabilities among care teams, providers, and patients.

* Role based access to ensure relevant data access to right stakeholders.

* Ability to abstract all the complex integrations and data plumbing from different sources. The platform exposes its functionality through a secure FHIR based RESTful API layer. This allows third-party developers and provider IT teams to develop applications that address specific use cases.

* A unique widget based UI architecture allows these applications to be embedded within the patient/physician portal or even within a care provider's EMR, thereby enabling a single UI/UX experience for users.

Minerva Platform Architecture

Patient Engage · Physician Engage · BizEye (Analytics Suite) · Zero Install Diagnostic Image Viewer · Third Party Apps

FHIR based RESTful API Layer

Citadel
(role based access control & authentication)

- Workflow Engine
- Notification/Alerts Engine
- Business Services
- Jarvis (chat server)

Picture Archive (dcm4chee) · Data Repository (MongoDb)

Integration Engine (based on MirthConnect)

Health IT systems
EMR | PACS | RIS | LIS | HIS

Devices
FitBit | Jawbone | Clinical Devices | Glucometers

Non-clinical systems
ERP | Financial\Billing systems

Key Features

| FHIR Based Storage | Scalable architecture | Widget based UI/UX framework | Two factor authentication, SSL encryption | Web based, zero install applications |

Minerva Applications

The Minerva platform comes with four applications which are available out of the box.

Forward

Enables referring physicians and patients to share diagnostic information from any desktop or mobile device. This information can be shared with hospitals, where it can be automatically ingested into any EMR/PACS/RIS.

* Customizable
* Interoperable
* Secure
* Intuitive

Patient Engage

Simplifies health record management and keeps patients connected with their physicians and care teams through secure and intuitive web and mobile tools.

* Access all patient records
* Smart alerts & reminders
* Instant messaging
* Medication & care pathway compliance tools

Physician Engage

Provides physicians with a comprehensive and unified view of patient records, consolidated from EMR, Lab, and Radiology information systems. Also, it equips them with patient communication tools to provide accurate and timely care.

* Care collaboration
* Unified clinical records
* Embedded analytics
* Patient engagement

BizEye

Provides actionable, real time, and visually powerful analytics to improve delivery of care, boost staff efficiency, and increase business performance.

* Clinical analytics
* Financial analytics
* Business intelligence
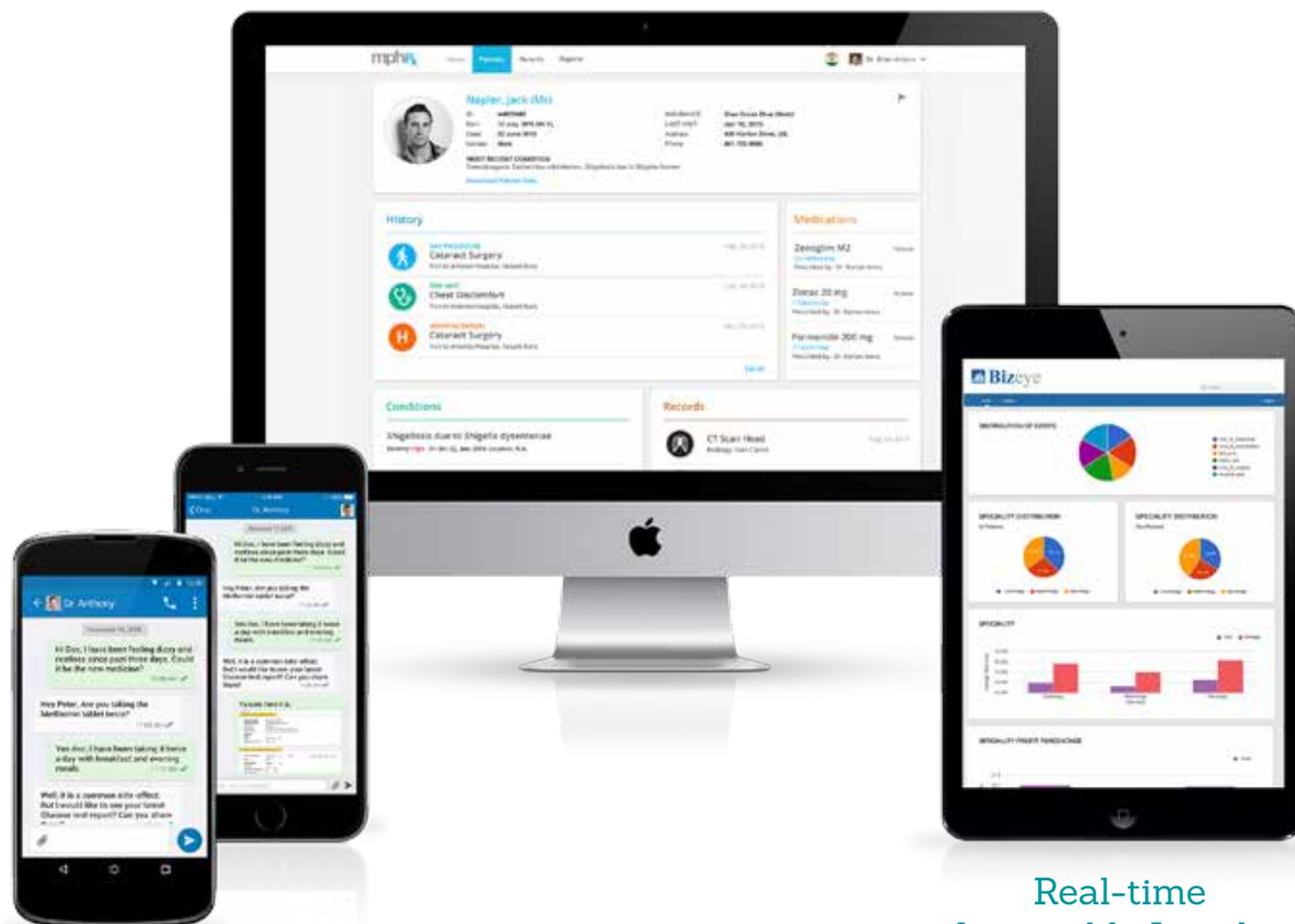* Operational analytics

Benefits

Improved care coordination and staff productivity	Integrates clinical and patient information across the care continuum on a single platform.
Lower total cost of ownership	SaaS based modular platform, zero install user applications, and no requirement for replacing existing systems.
Security and access control	Provides data encryption both at rest and in transmission.
Superior patient experience	Several out of the box features like secure instant messenger, medication alerts, provider notifications, and digital sharing of records across providers and GPs.

Technical Specifications

Communication standards	HL7, DICOM, Custom APIs (SOAP & RESTful), XDS, and XDS-I
Clinical document standards	CDA, CCDA, CSV, and DICOMs
Medical image viewing	Zero install image viewer, FDA approved for reference and diagnostic viewing
Authentication methods	Supports LDAP, SAML, OAuth2. Mobile/Email based two factor authentication
Browser support	IE 9 (and above), Google Chrome, Safari, and Firefox.
Mobile OS support	iOS and Android
Deployment server architecture and OS	Recommended: VMWare ESXI Update 5 and Enterprise Oracle Linux 6
Device integrations	FitBit®, JawBone®, Withings, and selected home monitors
Instant messaging	In-built instant messenger and group based chat
API interface	FHIR based RESTful APIs layer for third-party development

Minerva: Care Coordination Platform

Improved Patient Outcomes
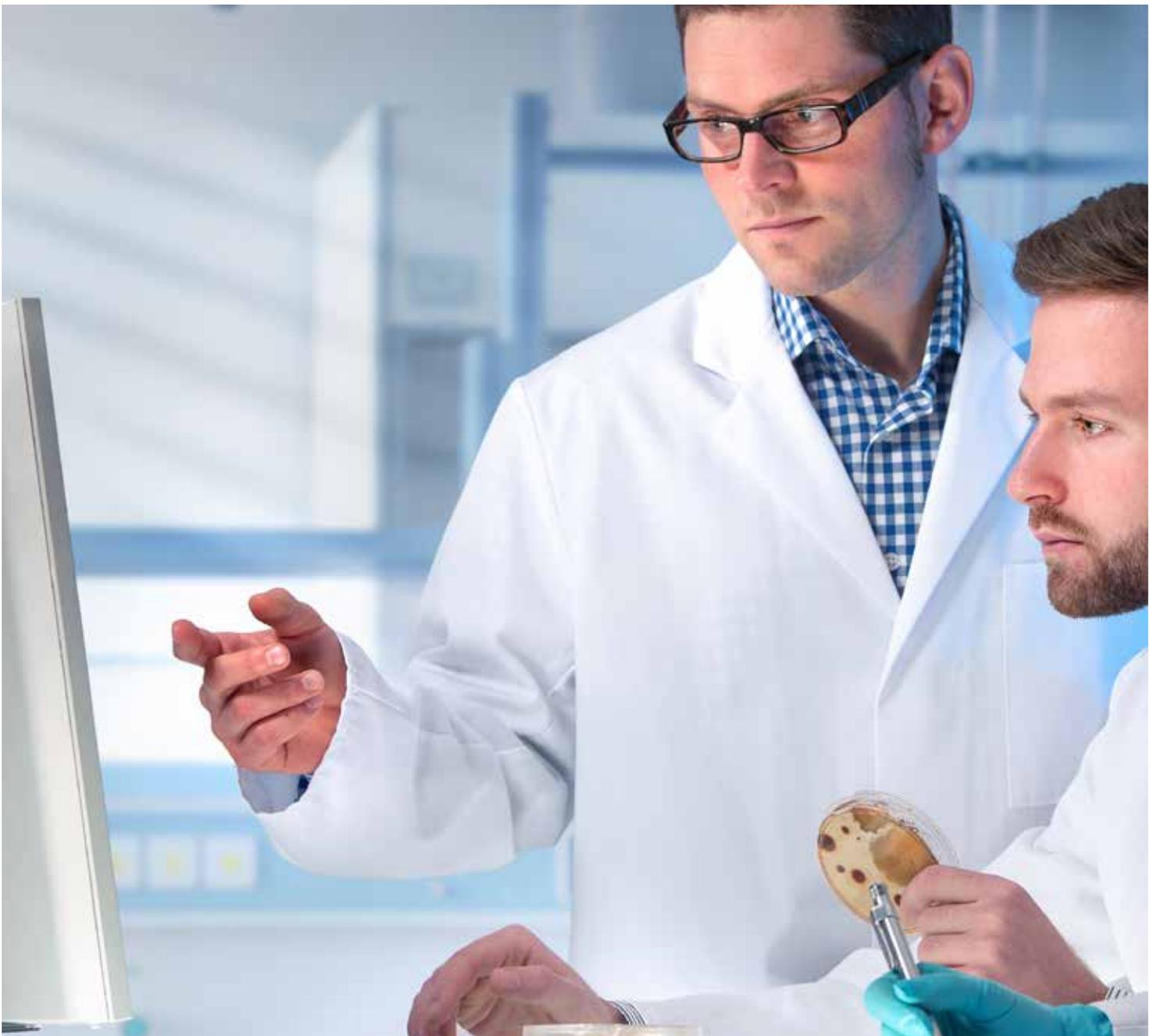
Real-time
Actionable Insights

Patient Engagement

Patient Engage

Physician Engage

Forward

About MphRx

MphRx Inc. is a healthcare technology company headquartered in New York, with R&D, support and implementation teams based out of New Delhi. MphRx was founded with the aim of building a scalable, cost-effective, and highly inter-operable platform to aggregate disparate sources of healthcare data. Our vision is to improve patient engagement and care collaboration. MphRx today develops products and solutions that are implemented in more than 26 locations worldwide, used by hundreds of clinicians, and help facilitate care for tens of millions of patients.

MphRx is an EN ISO 13485:2012, ISO 9001:2008, and HIPAA certified organization.