

Emerging Technology Tecnología Emergente

Used by Healthcare Insurers

Utilizado por las aseguradoras de
atención médica

Patrick Keran

Vice President, Innovation
Research & Development



28
CONVENCIÓN DE
ASEGURADORES
AMIS

Mission



We help people live healthier lives and help make the health system work better for everyone.

Business Model



HEALTH BENEFITS

←
Complementary but
Distinct Business
Platforms
→



HEALTH SERVICES

FOUNDATIONAL COMPETENCIES

Clinical Insight

Technology

Data & Information

Who we serve



+190K

Plan Sponsors



+139M

Consumers



1M

Physicians & Other
Health Care
Professionals

supported by:

260,000

Workforce (40% Millennials)

30,000

Physicians and Nurses

24,000

IT Professionals

Focus is on...

Consumer



Employer & Individual



Clinical



Evolving Consumer...Between 2020-2025



75%

Millennials + Gen Z make up the workforce

80%

Will own a smartphone

117,000,000

Caregivers

Emerging Technology



Artificial Intelligence

Produce better outcomes

Increase satisfaction



Internet of Things (IoT)

Lower costs

Enhance personalization



Blockchain

Increase predictability

Improve access to care

Focus on preventative



Genomics

Maintain Security

What is Artificial Intelligence

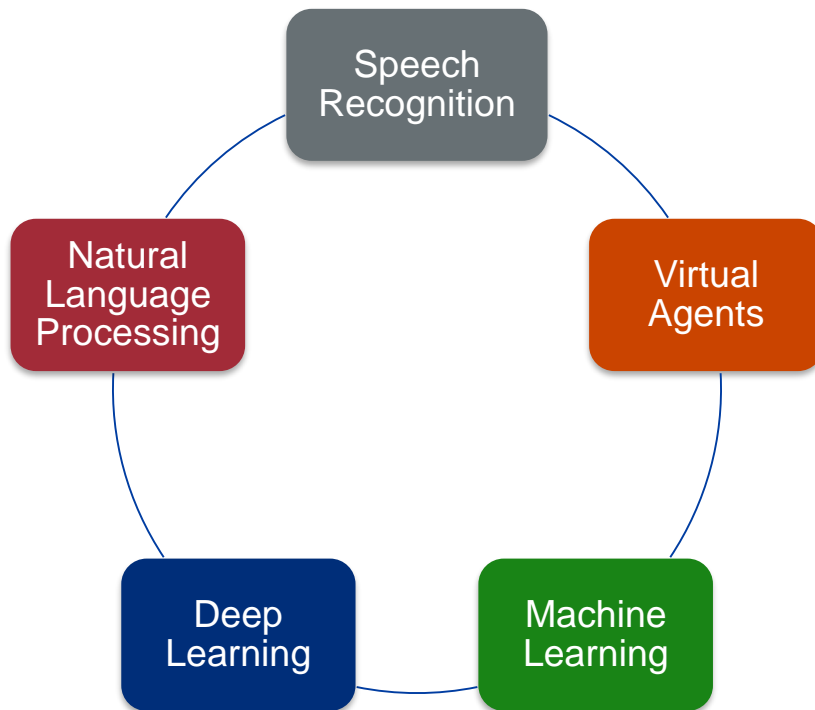
Artificial Intelligence

Creating **intelligent computer systems** that are able to *perform tasks without receiving instructions* directly from humans

Machine Learning

Development of **algorithms** that drive a computer's “**thoughts**” by providing a conceptual framework for processing input and making decisions that can change when exposed to new data

Artificial Intelligence...Components of AI



Where is AI?



Applying AI...Big Data

Disease Prediction & Management

Input

Machine Learning Model

82% Accuracy in Predicting Opioid Dependency

Improved **prediction** and identification of diabetes from 75% to **87%**

Patient
Demographic
Pharmacy
Medical/Behavior
Physician
Social



Applying AI...Improving Efficiency

Improving Efficiency



- Simplify and personalize member interactions. Quicker answers
- Intelligent next best actions and recommendations
- Guided navigation in health care delivery

Applying AI...Improving Efficiency

Creating Better Experiences

The workflow is divided into five stages:

- Locate:** A screen titled "Select a patient" showing a map with exam rooms and a list of patients: Madison Ohal (01:45PM), Allison Olson (02:00PM), Paul Kelly (02:15PM), and Carol Sparks (02:30PM).
- Review/Update:** A screen for "Madison Ohal" showing vital signs (Height: 5ft 11in, Weight: 125 lbs, Blood Pressure: 118/75, Heart Rate: 70 bpm), Current Medications (Lisinopril 20mg), and Current Symptoms.
- Dictate:** A screen showing a text entry area with the text: "Patient arrived with head trauma back pain and a headache she has no signs of chest pain or bleeding I'm ordering an MRI and prescribing 30 mg of codeine".
- AutoCode:** A screen for "Madison Ohal" showing "Notes" with auto-generated codes: Lab visits (Magnetic Resonance Imaging, 76498), Diagnoses (Traumatic injury, T14.9), and Medication (Codeine, 30mg, 2670).
- Submit:** A screen for "Madison Ohal" showing a summary of the note with fields for Name, Strength, RxCode, Symptoms, and ICD 10 Code, and a prominent yellow "Submit to EMR" button.

Blockchain

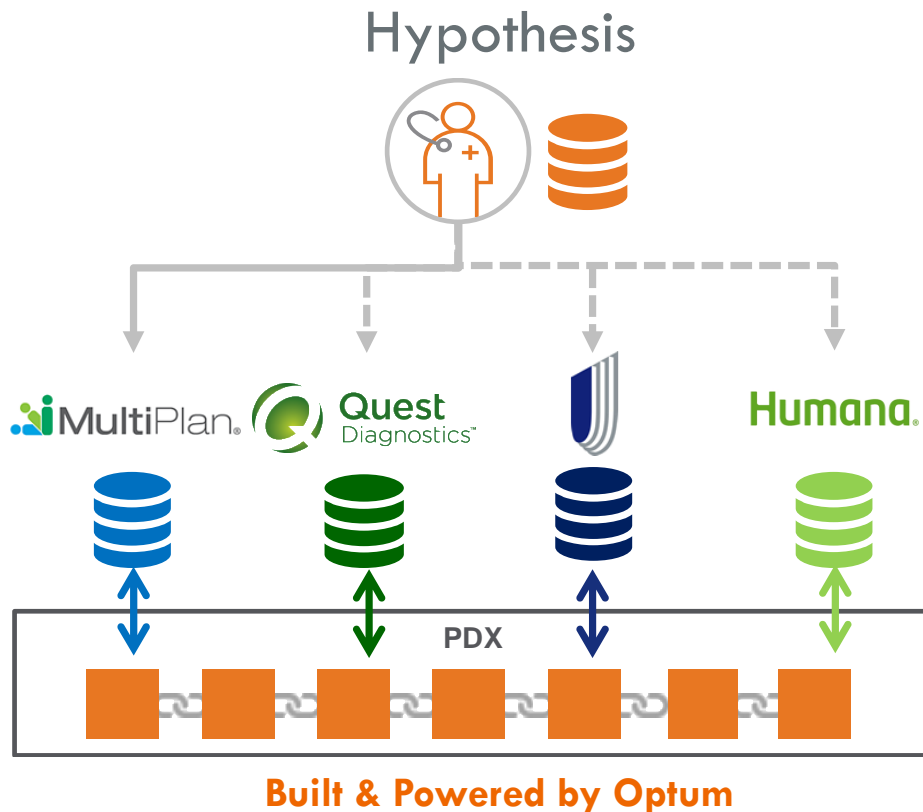
Blockchain is most useful when **loosely coupled** organizations want to **confidently share and audit** information and **automate mutually beneficial processes**.

Blockchain Use Case

Mex\$38.5 billion/year collectively spent to improve provider data accuracy.

Provider groups update their information at **separate payer portals creating** islands of **potentially inconsistent** data.

PDX offers a way to **share attestations** and updates across the industry through a **synchronized, single source of truth.**

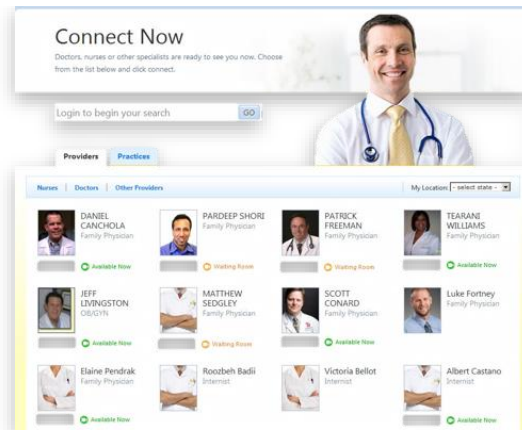


Internet of Things (IoT)

Wellness

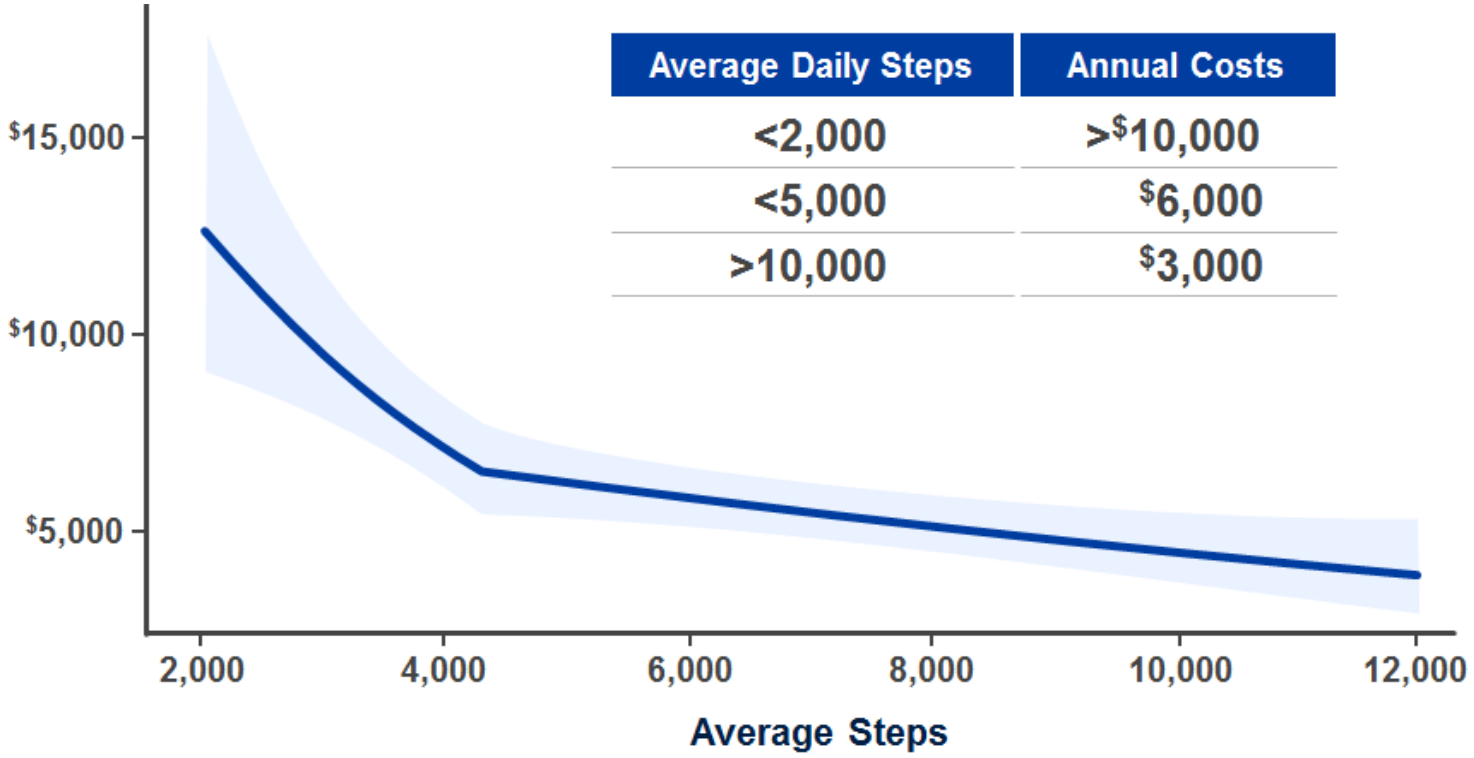


Acute



Wellness Program

Predicted Annual Health Care Use



Wellness Program



What happens

- Introduction of motion benefit via email / direct mail
- Registration
- Information for potential members or employers



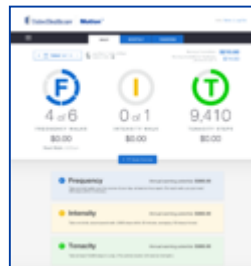
What happens

- Registration credit awarded
- Selection of activity tracker
 - BYOD from approved list
 - Purchase new; D2C shipping



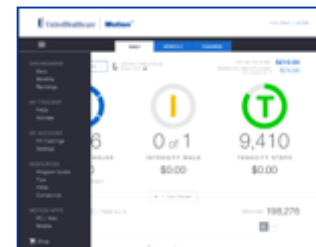
What happens

- Progress reports, dashboards, rankings, and earnings to date
- Participation challenges and badges
- Earnings deposited quarterly



What happens

- Member self-service
- Promotion of new features and enhancements
- Activity tracker info



Acute Care





Connect Now
Doctors, nurses or other specialists are ready to see you now. Choose from the list below and click connect.

Login to begin your search

Providers Practices

Nurses | Doctors | Other Providers My Location: select state

 DANIEL CANCHOLA Family Physician Available Now	 PARDEEP SHORE Family Physician Waiting Room	 PATRICK FREEMAN Family Physician Waiting Room	 TEARANI WILLIAMS Family Physician Available Now
 JEFF LIVINGSTON OB/GYN Available Now	 MATTHEW SEDGLEY Family Physician Waiting Room	 SCOTT CONARD Family Physician Available Now	 Luke Fortney Family Physician
 Elaine Pendrak Family Physician Available Now	 Roozbeh Badli Internist	 Victoria Bellot Internist	 Albert Castano Internist Available Now

Acute Care Needs

- Medical
- Behavioral

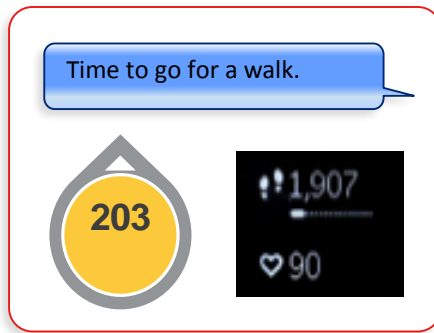
Chronic Care Program

Type II Diabetes



Sensors

+

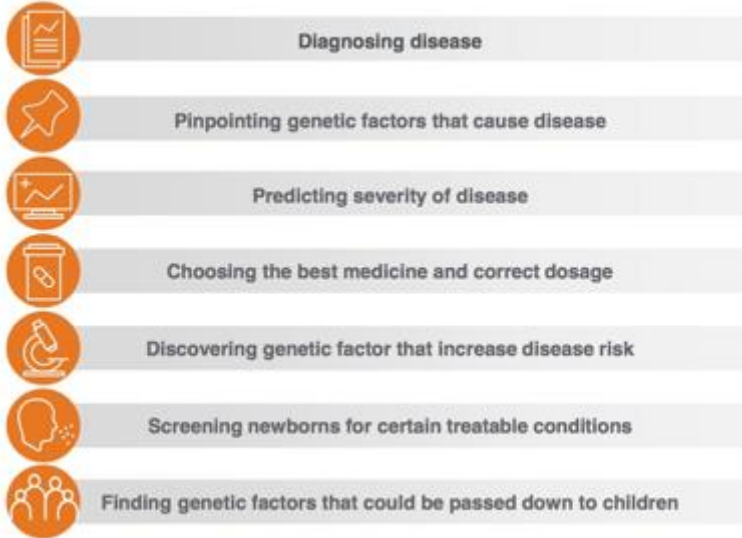


Feedback

+



Skills



Precision Medicine

Possible Use Cases

Year	Event
2002	Lukas Wartman about to graduate from WashU Medical School
2003	Dr. Lukas Wartman, diagnosed with Leukemia
2004	Chemotherapy, cancer in remission
2008	Relapsed, treated with chemotherapy and stem cell transplant, in remission
2011	Relapsed again, chemotherapy didn't work
2011	WashU doctors started genomic medicine effort – whole genome, exome, RNA <ul style="list-style-type: none">Sept: RNA sequencing revealed overactive FLT3 gene in cancer cellOctober: Student was administrated and Leukemia in remission

GRACIAS

