NIRVANA LABS: EXECUTIVE SUMMARY

Hospitals and Clinics → authorization request → Artificial Intelligence · Nirvana Labs · Patient · Pharmaceuticals · Laboratories → authorization response → Insurance Companies
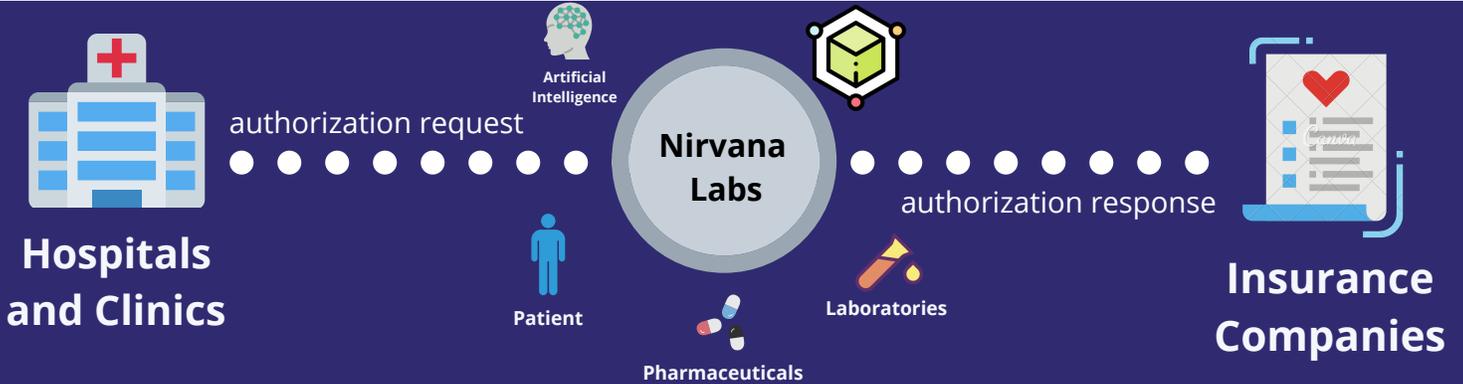
PROBLEM

$935B is wasted in U.S healthcare annually. $30B of this is due to manual administrative tasks around insurance authorizations.

SOLUTION

We provide intelligent central interfaces and data pipelines that streamline and automate the manual and disconnected processes around prior authorizations.

VISION

We will use blockchains to broker the trust gap and align incentives b/w hospitals, insurance companies and patients. The first application of blockchain tech will be selective application of prior authorizations.
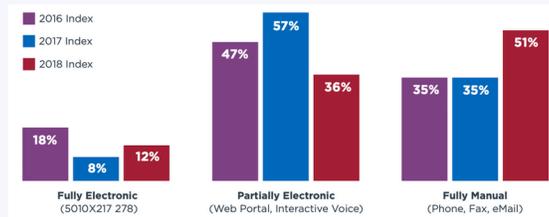
TRACTION

- On going pilot research study with Stanford Healthcare.
- Accepted into Columbia University Blockchain Accelerator and starting a relationship with Columbia University Irving Medical Center

BACKGROUND

Prior Authorization (PA) is a utilization management process used by health insurance companies to determine if they will cover a prescribed procedure, service, or medication. It is one of the most infuriating challenges for medical professionals and patients in the US healthcare system.

PROBLEM HIGHLIGHTS

Legend: 2016 Index, 2017 Index, 2018 Index

	Fully Electronic (5010X217 278)	Partially Electronic (Web Portal, Interactive Voice)	Fully Manual (Phone, Fax, eMail)
2016 Index	18%	47%	35%
2017 Index	8%	57%	35%
2018 Index	12%	36%	51%

Adoption of electronic PA transactions for medical services

- PAs cost the industry $30B
- It is a leading cause of physician burnout.
- 1 in 4 patients suffer from adverse effects due to PA
- Health information is exchanged over phone, fax, emails or outdated portals
- Hospitals and clinics spend on inefficient manual work.

INVESTOR OPPORTUNITY

We believe that the root cause of administrative waste in the US healthcare system is a lack of trust amongst providers and payers. As a result there is an arms race b/w them. Payers create barriers to payment and providers invest resources to overcome those barriers.

Prior authorization is at the nexus of this arms race. We intend to sell AI & automation technology to providers and clinics to reduce burden and get paid faster. We then intend to sell blockchain solutions payers to broker trust with providers and apply prior authorization selectively.

CoverMyMeds automated PAs for medications and exited for $1.1B. We want to target medical services starting with advanced radiology imaging. More than 50% of the authorization requests for a typical clinic are medical services.

Recent patient privacy laws, upcoming health data regulations, national attention to prior authorization issues and recent advances in machine learning and blockchain technology make the timing right.

We are a strong team supported by a cutting edge open source health information technology project - HIE of One.

Stanford HEALTH CARE · COLUMBIA UNIVERSITY | IBM CENTER · Columbia-IBM Center for Blockchain and Data Transparency

TEAM AT A GLANCE

KARN VERMA

Karn is an entrepreneur with over 6 years of experience working at cutting-edge healthcare startups in the US and South Korea. He was an early employee, principal architect and head of the developer platform at HealthTap where he worked with Digital Health pioneers and Silicon Valley luminaries from companies like WebMD, Healtheon, Google, and Facebook. His work helped HealthTap develop a multinational presence and become a World Economic Forum Technology Pioneer. He developed deep technical knowhow of systems engineering at Cisco where he worked at infrastructure components of their IOS-XR operating system. He started DelveLogic a successful cloud-based company while in undergrad in Delhi and helped incubate the popular Brazilian startup, Ingresse while in graduate school in the Silicon Valley. He earned an MS in Management Science & Engineering from Stanford University and a BS in Information Technology from NSIT, University of Delhi. In his free time he dances and teaches Argentine Tango. Karn's personal mission is to help people maximize their happiness and believes good health is the most important requirement for a happy life.

DEBORAH NAVARRO

Deborah is an entrepreneur and technologist specializing in taking cutting edge tech from the research lab to the market. She started her journey leading a team to build the world's first air-levitated Hyperloop vehicle for Elon Musk's Hyperloop Competition. She also founded AirLev, an innovative, sustainable transportation startup, composed of engineers from University of Texas and Massachusetts Institute of Technology. At IBM she led cross functional teams to build AI powered chat bots that enabled IBM Cloud users to build applications without customer support. She's been a speaker at TEDx, Bloomberg and SXSW. She went to the University of Texas at Austin gaining a BS in Biology, an MS in Technology Commercialization and a Business Foundations Certificate in Healthcare exploring the triple aim of cost, quality and access. Deborah is a dreamer from a small border town in Texas, who overcame long odds to get to where she is today. She is passionate about entrepreneurship and the potential of new technologies to reshape how societies organize and connect.

ADRIAN GROPPER

Adrian is an entrepreneur, physician, and a health information technology veteran. A career medical device entrepreneur, he founded AMICAS as the first Web-based Radiology PACS and the first to provide image links in electronic health records and two other medical diagnostics businesses. AMICAS went public as NASD: AMCS and was acquired in 2010 for $248 million. He is a leading advocate and developer of patient-centered health records technology for over a decade and is currently serving as a volunteer CTO of the Patient Privacy Rights Foundation. Adrian helped create Blue Button, Direct Project, and OpenID Health Relationship Trust (HEART) and speaks frequently on privacy engineering in healthcare at companies and institutions around the world. He has been advising the government of India on their health IT infrastructure since 2016 and is an expert and advisor to the Department of Health and Human services in the US. He is also an influential contributor to emerging identity standards such as W3C DID and Kantara UMA. He holds a BS in Mechanical Engineering from Massachusetts Institute of Technology and an MD from Harvard Medical School. Adrian currently lives with his family in Boston.

HIE OF ONE

Health Information Exchange of One (HIE of One) is an open source, decentralized, patient owned and controlled health records project supporting Nirvana Labs. It is run by a group of 15 industry experts and physicians with a collective experience of over 300 years in the US healthcare industry. Website: www.hieofone.com

**Co-founder,
Chief Executive Officer**

**Co-founder,
Chief Operating Officer**

**Project Lead,
HIE of One**