Main Themes

1) Trends in Healthcare Delivery

2) Diagnostics & Treatments Accessed Directly by Patients

3) Technologies Replacing & Augmenting Healthcare Professionals
Personal Life Goal

Impact 100 MILLION Patients Worldwide
Nobody said, “Technology is Hope.”
TECHNOLOGY IS HOPE.
Market Size - Global Telemedicine

Source: Statista
Goal: Connector Technology for hospitals, employers, insurers, and consumer-facing tech
Healthcare Delivery Shifts

Private Payers

Pharmacy Chains

Healthcare Orgs
Diagnostics on Demand

Point of Care Diagnostics
At-home Urinalysis & Blood Labs
Help On Demand.
Digital Therapeutics:

Prescription Required

Addiction

Insomnia
Hacking Healthcare
at Home

Direct to consumer
IV hydration

IV & injected
meds

At-home
hospitalizations

Primary care
Blood draws
Exams
Controlling Chronic Pain

- Behavior
  - Diet
  - Sleep
  - Music
  - Hydration
  - Exercise
- Healthcare Practitioners
  - Chiro
  - PT
  - Massage
  - Behavioral
- Mindset
  - Goal setting
  - Productivity
  - Positivity
  - Humor
- Environment
  - Sun
  - Temperature
  - Social Support
  - Calm & quiet
  - Fresh air
Virtual Clinical Trials

Science37
Reimagining Clinical Research

MARKEN
a UPS Company

Part of the Patient Healthcare Journey
Drones registered with the FAA: 900,000*

Commercial drones: 100,000

* Dec 2018 FAA report
Flying Defibrillator Ambulance Drone

350k/yr out-of-hospital cardiac arrests
First drone delivery of a donated kidney ends with successful transplant

University of Maryland School of Medicine & Medical Center
Living Legacy Foundation of Maryland
March 2019
The first FAA-approved commercial drone delivery
4.4 lbs payload
12.5 miles range
1,500 patient blood samples delivered
100 km/hr
80 km radius
1.8 kg payload

13K+ Life Saving Deliveries
$1.2B Valuation
Google Wing approved by the FAA as an airline
EHANG 184
Autonomous Aerial Vehicle (AAV)

230 kg payload
130 km/hr
15 km range
The Perfect Storm: Tech Advances Enable the Era of the Patient

- Medical Science
  - Genomics
  - Proteomics
  - Diagnostics

- Software
  - Predictive
  - Big Data
  - MRx

- Hardware
  - Sensors
  - Battery life
  - Drones
  - Cameras
  - Devices/CPUs
  - 3D Printers

- Infrastructure
  - Wireless
  - Broadband
  - Power
  - Telecom
Sensors creating An Internet of You

Paradigm Shift: Everything Going Digital
Technology makes things seamless.
Leading the Industry with Remote Patient Monitoring Codes
Biometric Monitoring
gone mainstream

Personalized Digital Interventions
TODAY
Individual Watches

NEAR FUTURE
Converge Into One Device
Diabetes Monitoring
Simplified

Pain-free continuous monitoring
Seamless Integration through advancing technologies

Epidermal Electronics
Sensor Technology

going clinical

>70% of foot ulcers are preventable thru temp monitoring

Acute Events in real-time ICU quality
ECG - heart rate
respiration - temp
Ingestibles
Patient Experience

What Gets Measured Gets Monitored

Provide Data Points for Action

Avoid Hospitalizations & Clinic Visits
The Perfect Storm: Tech Advances Enable the Era of the Patient
Artificial Intelligence

“Life Begins at a Billion Data Points”
Market Size Revenue of AI in Healthcare

2014: $633 Million

2021: $6.6 Billion

Source - Frost & Sullivan
AI ERROR RATE FOR RECOGNIZING SPOKEN ENGLISH

1995  2015  2016  2017

43%  8%  6.3%  4.9%

*IBM, Google, Microsoft
2020: 50% of search will be voice activated

- Hearing & Speech Difficulty
- Vocal Biomarkers
- Aging in Place
- Patient-Provider Communication
- Patient Engagement
- Physician Notes
Dialogue Based AI

25% of U.S. homes own a smart speaker. Projected 55% by 2022.

100M Alexa-enabled devices

1Billion Google Assistant Devices - 30 languages -
PERSONAL ROBOTS: DIALOGUE BASED AI

SMART SPEAKERS
AI Voice Assistants
FDA Approved AI software

- MRI
- CT Scan
- Echo
- Mammogram
- X-Rays
1st FDA Approved AI Algorithm Diagnostic

Diabetic Retinopathy
FDA Approved Cognitive Assessment & Care Management

1/3 of Dementia is Preventable
AI applied to data with surprising insights

Predictive Health Analytics using Consumer Data
Virtual Reality in Medicine

VR fools our senses to think the experience is real

PTSD, Anxiety & Pain Control
Stroke & Paralysis Rehab
Raising the Bar on Interaction
Health and Life Coach

Feedback Loops

Research Solutions

Metricizing

Transportation

Apps

Tracking

Education

Time Management

To help incorporate, execute & maintain comprehensive health management solutions
Thank you!

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