



Healthcare Innovation Trends:
What's Happening, Why, and
What you Should be Doing About It

Steve Barsh steveb@dreamit.com +1.215.888.2101 @dreamit @sbarsh



9+

Years in Business ~300

Companies Accelerated

Week Intensive De-risking Program

Weeks of Curated Customer & Investor Roadshows

~50%

Raise within 6 Months

### **Vertical Focus**







~3% acceptance rate

# Healthcare Portfolio Standouts

With over 90 digital health and med device companies Dreamit has one of the largest and most innovative healthcare portfolios



### Biomeme

Unlocking onsite real-time DNA detection



Eliminating prescription errors and saving lives in real time via big data.



Personalized radiation oncology based on long-term outcomes



Integrated Biology Platform to Design, Build, Image and Analyze Living Things



Artificial pancreas counterbalancing treatment of insulin and glucose



TowerView Health

Device that helps patients manage complex medication schedules with ease



Revolutionizing wound care through machine vision and machine learning

# **REDOX^**

Helps health systems manage their connections to cloud-based applications and scaling

# CYLERA

Cybersecurity appliance for network-connected medical devices

# **Attracting Companies Globally**

We understand the worldwide startup and innovation ecosystem



Dreamit receives applications from 40+ countries

Acceptance rate < 3%

# Program Pillars

The Premier Global Growth-Focused Health Tech Accelerator









# DreamH Corporate Partners

- Provide deep industry expertise and feedback to startups
- Gain exposure to new technologies and business models
- Want "DNA transfer" of startup thinking to help change their culture

# Independence 👨























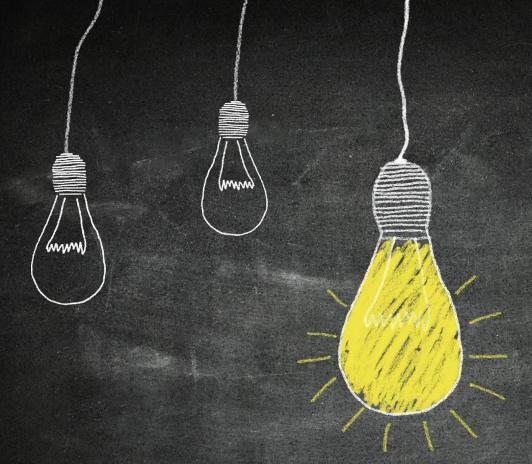


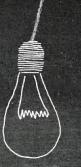














# A great idea?





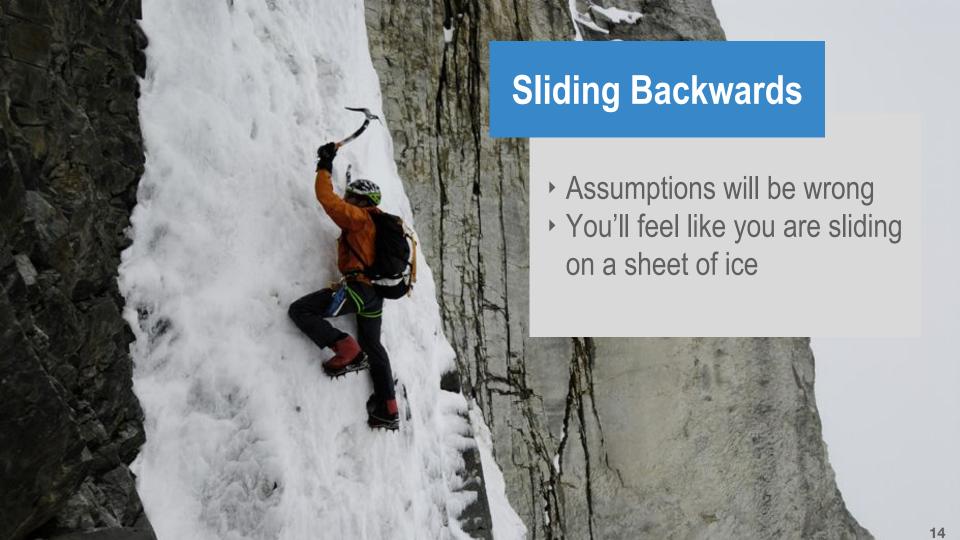






Pressure Test Assumptions





# Market Trends

- Top categories
  - Digital health
  - Medical devices
- Leveraging enablers
  - Open source software and powerful tools enabling ability to rapidly prototype, experiment, and iterate at low cost
  - EHR integration
  - Big data
  - Al / machine learning
  - Low cost off-the-shelf microcomputing and sensor packages
  - New business models
- Value-based care, bundled payments

# **Dreamit Digital Health Co's**

Company	Solution	Leverages
Oncoro M E D I C A L	Fully personalized radiation oncology based on long-term outcomes	Big data, EHR integration
((~)) MedAware	Stops prescription errors in hospitals	Big data, EHR integration
*KERITON	NICU breast milk management	Rapid prototyping, smartphone as a platform, EHR integration
REDOX^	EHR integration for the healthcare enterprise	EHR integration
TINE	Prevent medical errors and increase billing via point-of-care guidance	Rapid prototyping, smartphone as a platform



# Smart Medical Devices Connected + Integrated



### Software and sensor combinations

- Deliver core clinical functionality
- Move data to / from the cloud / EHR or other systems
- Utilize AI / big data / machine learning
- Provide dashboarding & alerting
- Create opportunities to connect traditional medical devices
- Eliminate multiple displays and standalone units
- Better integrate and correlate data from multiple devices



# Where Commonly Used



# **Multiple Care Settings**

- Inpatient
  - OR / ER / ICU
  - Patient floor / room
- Outpatient
  - ☐ Clinician's office / exam room
  - Labs
  - □ Home / Rehab / Long Term Care

# **Multiple Care Delivery Modalities**

- Clinician tools
- Wearables
- Implantables



# What We Are Seeing

# Sensing, more intelligence, reacting... smaller, faster, cheaper



















### **Smart medical devices that**

- ☐ Capture data, react in real time, and flow into larger systems
- Provide smart, connected early warning
- ☐ Allow for **automation of care** previously delivered manually
- Provide new modalities making the invisible visible
- ☐ Illuminate dark spots between patient visits
- ☐ Have **no / low upfront cost** + subscription



# Why Now? External Forces

### **Providers**

- Driving care to lower cost settings and closer to patient
- ☐ Focusing on better / faster patient outcomes
- Asking clinicians to do more with / for less
- Bearing more risk due to readmission warranties

#### **Patients**

- Asked to take more responsibility
- Forced to accept higher deductible insurance plans (in US)

### **Payers**

- Increasing fixed "value-based" payments and episode of care capitation
- Driving risk sharing of costs with providers
- ☐ Focusing on quality measures
- Asking for cost savings via better care versus more

### **Entrepreneurs**

- Solving own problems
- Doing more with less
- Responding to pervasive entrepreneurial thinking, knowledge and assistance

20



# Why Now? Enabling Trends - 1

# Ability to prototype, experiment, vet, and iterate quickly and at low cost

### **Hardware**

- Low cost off-the-shelf microcomputing and sensor packages
- Leveragable existing platforms (e.g., smartphones)
- 3D printing / low cost prototyping
- Inexpensive on-demand cloud computing / storage





### **Software**

- Open source software
- On-demand "functionality as a service" for Al / machine learning
- Robust APIs and integration points to ingest and send rich data
- Access to and ability to store massive data sets







# Why Now? Enabling Trends - 2

## Ability to de-risk, achieve major milestones, and exit on less capital

- Stronger business models
  - New revenue models
  - New go-to-market strategies
  - Leveraging devices across markets
- Well understood regulatory approval path
- Venture capital willing to invest

### Example

Go To Market

#### Hardware B to C

#### Channels:

Online marketing, device distributors, earned media, & paid influencers

CAC: \$30-\$60

LTV: \$290

TAM: \$200M

#### Clinical Telemedicine Software

B to B

#### Channels:

Activating hardware customers

CAC: \$150-\$300

LTV: \$3000

TAM: \$800M

#### Remote CHF Monitoring Platform

B to B

#### Channels:

Activating telemed and hardware customers

LTV: \$300K - \$3M

TAM: \$10B



# Putting it Together & The Future

### **External Forces**

- Payers, providers, patients, and entrepreneurs
- □ Exerting more pressure to drive adoption of smart medical devices with compelling ROI

# **Enabling Trends**

- Hardware, software, business models, regulatory path, and venture capital
- Making things better, faster, cheaper, and easier

The Future? Accelerating non linear growth in smarter medical devices coming to market

# What you should be doing about it

- ☐ Define and challenge why, success & KPI's
- □ Ask critical questions around key assumptions
- Work with high quality startups
- Run trials and pilots
- Look for easy and clever ways to get started and prove value ASAP
- ☐ Spin up / out ideas de-risking approach





Healthcare Innovation Trends:
What's Happening, Why, and
What you Should be Doing About It

Steve Barsh steveb@dreamit.com +1.215.888.2101 @dreamit @sbarsh