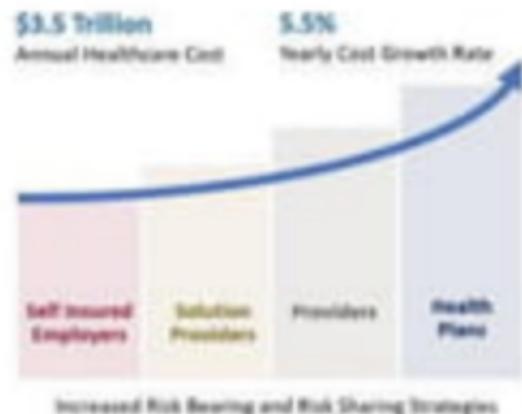


# Predicting Future Risk and Rising Cost

6% of today's population will account for 1/3 of next year's new high cost



*Implement cost effective programs*

*Price for and manage new financial risks*

*Form the provider network for next year's risk*

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# Predict the What, Why and When of Tomorrow's Cost

## Mitigate Rising Risk

### Solution 1: COST BLOOM INTERVENTION

- Cost Bloom, Jump, High Cost Claimant Likelihood
- Engagement Likelihood
- Clinical Impactability Score
- Case Selection Optimizer
- Action Plan Recommendation

Ave Annual Price Per  
Customer: **\$850k**

## Steer High Cost Events

### Solution 2: STORAGE PRECISION

- Clinical Event Likelihood
- Engagement Likelihood
- Event Timing Likelihood
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Ave Annual Price Per  
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## Predict Total Cost

### Solution 3: RISK ASSESSMENT

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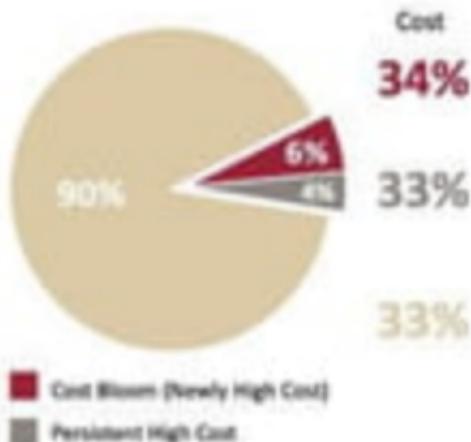
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# 8x ROI on Highest Impact Cost Blooms

*"I felt like it was meant to be for me to reach this member, it was the perfect moment in time"*  
— Care Manager

Patient Outcome: 57 year old male with heart conditions, back pain, and opioid dependence was steered to a higher quality lower cost spinal fusion center, a savings of over \$20k.

Health Plan A Population



Health Plan A



## 6x ROI on Ortho Joint Surgery Steerage



**1/3**

Of cost blooms were ortho joint surgeries



**\$3.6M savings, 6x ROI**

Projected Ortho Joint savings at Health Plan A

## Steerage Precision Addressing a Market Gap



**Over \$5M per year in Total Savings**

Even larger market beyond Ortho Joint: Bariatric, High Risk OB, Hysterectomy, etc.



**50% of Cardinal Analytix Clients Expressed Interest in Steerage**

Cardinal Analytix is working with solution providers to partner (e.g., Vitals, Relay, MOBE, VIM)

# \$100M Through Increased Accuracy

Our proprietary Machine Learning beats the competition

Prospective Risk Accuracy: Health Plan A, 600k Lives



## Missed Dollars by Competitors:

\$63M missed dollars  
Under-pricing risk

\$37M missed dollars  
Over-pricing / retention risk

# Strong Competitive Position

Strategic Approaches	Competitive Landscape	
1. Machine Learning Predictions with Drivers and Actions	 KerSCI (Provider) Cyft (DM platform)	
2. Machine Learning Predictions + Model Correlations	Base Health (Med Adv. Risk Adj) Ivion (Provider) Ayadi (Provider)	
3. Machine Learning Predictions	Lumina (Risk) Cogitativo (Payment) HBI Solutions (Risk) IBM Watson (Truven)	Ark.one (Risk) NextHealth (Provider) Hindust (Data Aggregation)
4. Traditional Predictions	Optum (Risk) Milliman (Risk) Cave Consulting (Risk) Versend (Risk) Lexis Nexis (Risk) Deerwalk (Risk)	Health Catalyst (Provider) Welltek (Member Platform) Lightbeam (Provider, Risk) HCC (Risk) ACG (Risk)

# Professional Team



**Linda Hand**  
COO

- 25 years in organizational leadership, product development, solutions delivery and go to market strategies
- Successful exit of DecisionView to NHS Health, Clinical Tech core of IQVIA / Quintiles merger
- BA in Computer Science, UC Berkeley, Haas School of Business Executive Program



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Chief Financial Officer

- 20 years of startup experience across 15 venture backed startups, 4 healthcare companies. 7 years as founder and fund manager. 3 years at Apple
- OBEA Qualified. DBS from University College Dublin. BA in History from University College Galway and University De Pontena.



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VP of Data Science

- 15 years in biomedical R&D and machine learning
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- MD/MPP from Duke University, BS in Biology, Biochemistry, and Psychology from Brandon University

# Engaged Founders, Investors & Board

## Founders



**Nigam Shah**

Associate Professor of Medicine,  
Stanford

- Associate Professor of Medicine. Funded by 3 NIH Institutes, 10 and 7 companies, Key Director of Center for Biomedical Informatics Research
- Fellow, American College of Medical Informatics and American Society for Clinical Investigation
- MD and MS Stanford College Schools, Johns Hopkins, New York, Rochester, Medical Informatics, Stanford

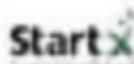
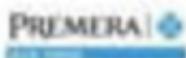


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# Industry Leading Advisors

## Science



**Susan Blinn, PhD**  
Professor of Technology  
Professor, Stanford  
Graduate School of Business



**Trevor Heath**  
The John A. Diederich  
Professor of Mathematical  
Sciences, Stanford University



**GSI Cummings, MPA**  
Director, Corporate Data  
& Analytics



**Margaret Johnson, PhD**  
Formerly, National Opinion  
Research, President and  
CEO Opinion Analytics



**Tom Shallock, MHA**  
Founder and CEO,  
Opine Health

## Health Plan



**Jeffrey Rubin, MD, MPP**  
Executive VP of Health Care  
Quality and Effectivity  
Blue Shield of California



**David Healy**  
President  
Blue Health Plan



**John Fogarty, MD,  
MPH, MBA**  
Executive VP of HealthCare  
Services, Premier Blue Cross



**Alan Chalko**  
VP Commercial Workforce  
Analytics and Business  
Performance, Florida Blue

## Clinical



**Kevin A. Johnson, MD, MBA**  
Professor of Medicine,  
Acute Care, Bio-Info & Genetics,  
Stanford School of Medicine



**Ben Poulos, MD**  
Past President and CEO,  
WVA and WVA Health Systems



**Ronald S. Parker, MD**  
President and CEO,  
Missouri Health



**Leo Laska, MD**  
Former CEO, Advocate  
Santitas Health



**Alan Glassford, MD**  
Faculty, Stanford  
University's Clinical  
Researched Research Center

# Investment Opportunity





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**Better Care, Sooner**



# Predict Future Risk and Rising Cost

Significant Healthcare AI Spin-out from Stanford Start-X

 **4 Years**  
R&D

 **21 Million**  
Lives

 **2.5x**  
Accuracy

 **3**  
Products

 **21**  
Advisors and Board

 **28**  
Employees

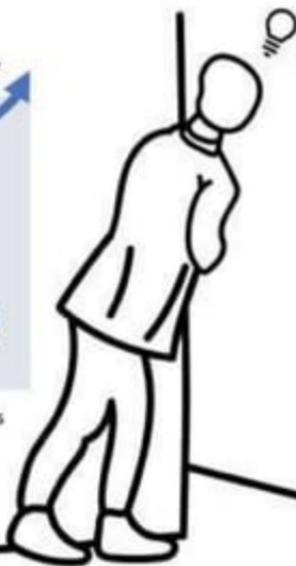
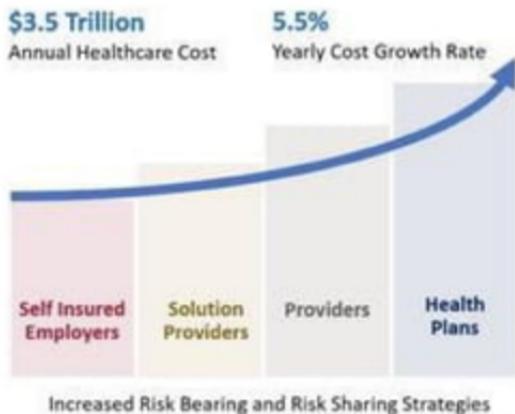
 **2**  
Customers Paid

 **8**  
Customers MSAs

 **20**  
Pipeline Customers

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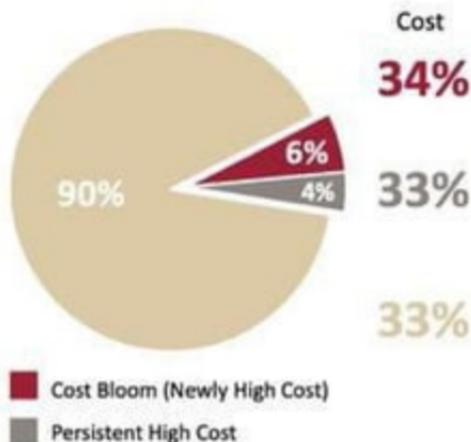
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## Cost Bloom Adoption at a Blues Plan



**40% engagement rate** (one call with Cost Bloom member)



**26% active engagement rate** (multiple calls with member)



**75% successful intervention rate** for actively engaged

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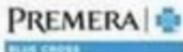
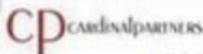


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**Susan Athey, PhD**  
Economics of Technology  
Professor, Stanford  
Graduate School of Business



**Trevor Hastie**  
The John A. Overdeck  
Professor of Mathematical  
Sciences, Stanford University



**Colt Courtright, MPA**  
Director, Corporate Data  
& Analytics

## Industry



**Virginia Mofeman, MBA**  
Formerly, Partner, Optum  
Ventures, President and  
CEO, Optum Analytics



**Ray Bradford, MBA**  
Founder and CEO,  
Spruce Health

## Health Plan



**Jeffrey Baillet, MD, MSPH**  
Executive VP of Health Care  
Quality and Affordability  
Blue Shield of California



**David Fields**  
President  
Dean Health Plan



**John Espinola, MD,  
MPH, MBA**  
Executive VP of Healthcare  
Services, Premier Blue Cross



**Juan Chalaja**  
VP Commercial Markets  
Analytics and Business  
Performance, Florida Blue

## Clinical



**Kevin A. Schulman, MD, MBA**  
Professor of Medicine,  
Assoc Chair, Bus Dev & Strategy,  
Stanford School of Medicine



**Ken Paulus, MA**  
Past President and CEO,  
Alina and Atrius Health Systems



**Ronald A. Paulus, MD**  
President and CEO,  
Mission Health



**Lee Sacks, MD**  
Former CMO, Advocate  
Aurora Health



**Alan Glaseroff, MD**  
Faculty, Stanford  
University's Clinical  
Excellence Research Center

# Investment Opportunity

