

IBI, March 12, 2018 Amit Kaushal, MD, PhD



- Founded by two Stanford professors
- Work started at Stanford in 2014, officially founded Jan 2017
- Located in Palo Alto, CA
- 20 employees

### **Team**



NIGAM SHAH Associate Professor of Medicine, Stanford

- Associate Professor of Medicine, Funded by 5 NIH institutes, FDA and 7 companies
- Fellow, American College of Medical Informatics and American Society for Clinical Investigation
- MS and MD Baroda College (Baroda, India), PhD, Penn State, Postdoctoral, Medical Informatics, Stanford



**ARNOLD MILSTEIN**Professor of Medicine,
Stanford

- Professor of Medicine and Director, Stanford Clinical Excellence Research Center
- Elected Member Institute of Medicine Section of National Academy of Sciences
- Founder national health care performance improvement firm and Leapfrog Group; former Congressional MedPac Commissioner
- BA, Harvard; MD, Tufts; MPH, U.C. Berkeley



THOMAS McKINLEY
Interim CEO

- Partner at Cardinal Partners with 30+ years of investment experience
- Previously Co-Founder and Co-Managing Partner of Partech International
- Board Member for Teladoc and Vitals
- BA in Economics from Harvard University, MS in Accounting from NYU, MBA from Stanford GSB



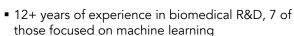
AFSANA AKHTER
Chief Commercial
Officer

- 20 years of experience across Digital Health, High Tech, Strategic Sales to large Health Plans
- Previously at Livongo Health, Medullan, Mazu Networks, and Cisco Systems
- B.S. and M.Eng. in E.E.C.S from M.I.T.



BRIAN MAPLES

VP of Data Science



- Previously Data Scientist at Nuna Health, and Lead Inventor at Ionian Technologies
- PhD in Biomedical Informatics from Stanford University, MS in Statistics from Stanford University, BA in Science and Management from Claremont McKenna College



AMIT KAUSHAL Associate Chief Medical Officer

- 15+ years of experience in informatics research
- Board-certified and clinically active in internal medicine, Board-certified in Clinical Informatics
- Clinical Instructor (affiliated) at Stanford School of Medicine
- BS, MD, PhD (Biomedical Informatics), and Internal Medicine residency training all from Stanford University.

We can predict next year's high cost members



6 out of 10 people in next year's top decile will be newly high cost.

We call these cost blooms.

## Why Focus on Blooms?

	Blooms	Persistent
How many?	60% of top decile	40% of top decile
Trajectory	Before rise in cost	After rise in cost
Cost savings	Potentially large	
Member Health	Higher quality of life	

Our algorithm predicts cost blooms.

Our clinicians give recommendations on how to address the bloom.



#### **Cardinal Analytx Solutions**

#### INDIVIDUAL INTERVENTION PLAN

#### MEMBER INFORMATION

MEMBER ID	XXXXXXXXXX	LINE OF BUSINESS	
AGE	58	BENEFIT PLAN	
GENDER	male	ATTRIBUTED TO ACO	
MEMBER LOCATION	XXXXX	MEMBER IN PCMH	

#### **DATA SUMMARY**

PROBABILITY OF COST BLOOM IN 2017	80.5%
LAST YEAR'S COST (2016-04-01 - 2017-03-31)	\$16,939.26
ASSESSMENT	58 year old male with history of bipolar disorder, COPD, and severe CHF with implanted defibrillator, who for several months enjoyed a period of good health, but whose recent course has been notable for three ED visits in a two month span near the end of the past year, all for respiratory issues.
PROPOSED INTERVENTIONS (SUMMARY)	<ul> <li>PCMH/Health Coach/Care coordinator</li> <li>Share ED visit data with primary care team</li> <li>Consider advanced care planning</li> <li>Refer to Quartet for mental health support</li> </ul>
PROPOSED INTERVENTIONS BY PROBLEM	Problem 1: Respiratory decompensation The etiology appears to be multifactorial, related to both decompensated heart failure as well as COPD exacerbation. He has been prescribed three courses of prednisone over a two month period.  With regards to CHF, he appears to be on an appropriate medical regimen which includes carvedilol, lisinopril, spironalactone, and furosemide. He takes atorvastatin. He takes Spiriva for COPD.  Appropriate care coordination and patient engagement will help manage multiple conditions and limit ED visits.  Recommended interventions - PCMH/Health Coach/Care coordinator - Share ED visit data with primary care team - Consider advanced care planning  Problem 2: Bipolar disorder  Untreated or undertreated mental health can magnify risks associated with progression of chronic disease. He is on escitalopram for depression. Does not appear to have rx for mood stabilization. Mental health is monitored by PCP only, and not at regular intervals.  Recommended interventions

We support customers in engaging these members and intervening effectively.

# We measure outcomes, so we can do more of what works.





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- 3. Our algorithm predicts cost blooms. Our clinicians give recommendations on how to address the bloom.
- 4. We support you in engaging these members and intervening effectively.
- 5. We measure outcomes, so we can do more of what works.