AMY CHRISTENSEN, DAVE NELSON, KEITH PASSWATER

Session 3B: Could a Unicorn Bend the Trend?

June 8, 2020
Active participation in the Society of Actuaries is an important aspect of membership. While the positive contributions of professional societies and associations are well-recognized and encouraged, association activities are vulnerable to close antitrust scrutiny. By their very nature, associations bring together industry competitors and other market participants.

The United States antitrust laws aim to protect consumers by preserving the free economy and prohibiting anti-competitive business practices; they promote competition. There are both state and federal antitrust laws, although state antitrust laws closely follow federal law. The Sherman Act, is the primary U.S. antitrust law pertaining to association activities. The Sherman Act prohibits every contract, combination or conspiracy that places an unreasonable restraint on trade. There are, however, some activities that are illegal under all circumstances, such as price fixing, market allocation and collusive bidding.

There is no safe harbor under the antitrust law for professional association activities. Therefore, association meeting participants should refrain from discussing any activity that could potentially be construed as having an anti-competitive effect. Discussions relating to product or service pricing, market allocations, membership restrictions, product standardization or other conditions on trade could arguably be perceived as a restraint on trade and may expose the SOA and its members to antitrust enforcement procedures.

While participating in all SOA in person meetings, webinars, teleconferences or side discussions, you should avoid discussing competitively sensitive information with competitors and follow these guidelines:

- **Do not** discuss prices for services or products or anything else that might affect prices
- **Do not** discuss what you or other entities plan to do in a particular geographic or product markets or with particular customers.
- **Do not** speak on behalf of the SOA or any of its committees unless specifically authorized to do so.
- **Do** leave a meeting where any anticompetitive pricing or market allocation discussion occurs.
- **Do** alert SOA staff and/or legal counsel to any concerning discussions
- **Do** consult with legal counsel before raising any matter or making a statement that may involve competitively sensitive information.

Adherence to these guidelines involves not only avoidance of antitrust violations, but avoidance of behavior which might be so construed. These guidelines only provide an overview of prohibited activities. SOA legal counsel reviews meeting agenda and materials as deemed appropriate and any discussion that departs from the formal agenda should be scrutinized carefully. Antitrust compliance is everyone’s responsibility; however, please seek legal counsel if you have any questions or concerns.
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WHO’S SPEAKING?

Amy Christensen
MBA

Partner at Vistria Group a private investment firm focused on middle-market companies in the healthcare, education, and financial services industries.

achristensen@vistria.com
WHO’S SPEAKING?

Dave Nelson
FSA, MAAA

Senior Adviser at the health strategy and actuarial firm PascoAdvisers

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WHO’S SPEAKING?

Keith Passwater
FSA, MAAA

Managing Director at the health strategy and actuarial firm PascoAdvisers

Keith@PascoAdvisers.com
Agenda

- VC/PE Introduction
- Healthcare Start-up ROI
- Examples
Poll Question:

What's your level of expertise with Venture Capital/Private Equity backed healthcare companies?

None/Low

Moderate:
been involved in some deals

High: could write a book on it
Poll Question:

In how many Venture Capital/Private Equity backed healthcare companies have you invested company and/or personal money in the past three years?

1. None
2. 1-2
3. 3-5
4. 6-20
5. 20+
Venture Capital & Private Equity Introduction
Stages of Investment

Revenue & EBITDA $M

Valuation
Revenue
EBITDA

Revenue & EBITDA $M

Valuation $M

Launch Year 1 Year 2 Year 3 Year 4 Year 5 Year 6 Year 7 Year 8

Angel Investing
Venture Capital
Growth Equity
Private Equity
## Characteristics by Stage of Investment

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Angel/Seed Investing</th>
<th>Venture Capital</th>
<th>Growth Equity</th>
<th>Private Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td>Small minority w/large group of individual investors</td>
<td>Minority with some other institutional investors</td>
<td>Minority/Majority with few other institutional investors</td>
<td>Majority</td>
</tr>
<tr>
<td>Financial Profile</td>
<td>Pre-revenue</td>
<td>Generates revenue, burning cash</td>
<td>Generates revenue, break even cash flow</td>
<td>Generates revenue and EBITDA</td>
</tr>
<tr>
<td>Growth Expectation</td>
<td>Exceptionally high revenue growth</td>
<td>Exceptionally high revenue growth</td>
<td>High revenue growth, single digit EBITDA</td>
<td>Double EBITDA</td>
</tr>
<tr>
<td>Returns Expectation</td>
<td>Varies dramatically</td>
<td>0-10x</td>
<td>4-5x</td>
<td>2-3x</td>
</tr>
<tr>
<td>Time Horizon</td>
<td>Varies</td>
<td>1-2 years</td>
<td>3-5 years</td>
<td>3-5 years</td>
</tr>
<tr>
<td>Investor Involvement</td>
<td>Low</td>
<td>Low-Medium</td>
<td>Medium-High</td>
<td>High</td>
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</table>
### Implications of Those Characteristics

| Ownership | Can have multiple chefs in the kitchen |
| Financial Profile | If you’re burning cash, every dollar of revenue (and every payer contract) is critical and time sensitive |
| Growth Expectation | High pressure environment for management |
| | Depending on stage, may prioritize revenue over profit or vice versa |
| Returns Expectation | For all stages, expect to exceed public market returns |
| | Exit valuations are measured as multiple of revenue/EBITDA |
| | Investors look at the blended risk/return profile of an entire portfolio of companies which affects individual company return expectations |
| Time Horizon | Returns are measured relative to the investment hold period |
| | When the company is looking to exit (and to whom) may be important |
| Investor Involvement | May have more hands-on involvement from investors (e.g., private equity’s use of operating partners and board of directors) |
| | Investor may leverage relationships to try to help company win new business or increase revenue |
| | Investor may be able to leverage synergies across portfolio companies |
Investor Value Add

STRATEGIC ALIGNMENT
» Ensuring clarity of vision, common financial expectations, and aligned incentives
» Collaboratively determining long-term strategy, identifying growth opportunities, setting cultural aspirations, and targeting operational changes and upgrades

REGULATORY INSIGHTS
» Relying on regulatory knowledge, experience, and relationships to advise companies on how to navigate and take advantage of complex and changing landscapes

STRATEGIC RELATIONSHIPS
» Facilitating partnerships that will drive transformational growth
» Bringing Fortune 100 relationships to middle-market companies
» “Connecting the dots” and making door opening introductions to strategic customers and partners

HUMAN CAPITAL OPTIMIZATION
» Ensuring “A Players” are in key roles, through rigorous assessment of management team and recruiting/onboarding to fill gaps
» Tapping network and engaging industry “heavyweights” to Board and Advisory roles

OPERATIONAL IMPROVEMENT
» Bringing Operating Partner expertise to bear across all aspects of the business
» Upgrading commercial (including sales and product marketing) and operational capabilities
» Helping measure performance and use data to make decisions
» Identifying opportunities to better use technology (e.g., data analytics, digital marketing)
2019 Activity – US Healthtech
2019 Activity – US Healthtech
2019 Activity – US Biotech and Pharma

PitchBook-NVCA Venture Monitor
2019 Activity – US Biotech and Pharma

PitchBook-NVCA Venture Monito
Healthcare Start-up ROI
Healthcare Start-up: Value to Payer

Payer ROI\textsubscript{Rough} = \text{Incremental Value of Product/Service} - \text{Incremental Cost}

Or

\text{Incremental Value / Incremental Cost}

Complications:
- Likelihood of success
- Timing
- Incomplete demonstrations of value
- Unknown costs
- Higher risk - sticky accountability
Payer Incremental Value

- Admin savings
- Cost of Care savings
- Revenue increases
- Strategic value

Payer Incremental Cost

- Cash
- Time
- Resources
- Adjacent Project Acceleration
- Surprises
Healthcare Start-up Compensation Structures

- **Types**
  - Fee for Service
  - Pmpm
  - Per patient engagement
  - Case rate
  - Shared savings

- **Complexities**
  - Immature business model
  - Payer system limitations
  - Med cost reimbursement segmentation
  - Shared savings madness
  - Equity decision-making
Healthcare Start-up Likelihood of Success

Considerations/Questions:

• Proven (or, at Least Credible) Concept
• Regulatory Hurdles
• Competitive Distinction & Advantage
• Operational Capability/ Mngmt Prior Success
• Key Relationships
• Funding Stream Adequacy
• Customers/Revenue
• Implementation Feasibility
Healthcare Start-up: Payer Challenges

● Risk/Reward

● Prioritization

● Executive Decision-making

● Impact to Target
  ○ Payer rivals
  ○ Adjacency rivals
  ○ Unfriendly acquisition

● Overwhelming Volume of Opportunities
Poll Question:

How many investor-backed healthcare companies have you evaluated for ROI in the last three years?

1. None
2. 1-2
3. 3-5
4. 6-20
5. 20+
Poll Question:
For those of you who have evaluated some investor-backed healthcare companies for ROI, what percentage had high enough ROI to proceed with a deal to implement?

1. < 10%
2. 10 to 25%
3. 26 to 50%
4. 51 to 75%
5. 76 to 100%
How to Prioritize Opportunities

- Evaluation Process
- Materiality
- Market Demand
- Link to Other Offerings
- Executive Advocacy
- Other
Healthcare Start-up Examples
1 in 3 Americans skips care because of cost.
This nonadherence has sweeping consequences.

Reasons for Nonadherence

- Strategies to manage costs
  - Stop taking medications
  - Split pills
  - Delay refills
  - Skip doses
  - Avoid new prescriptions
  - Seek best price
  - Increase debt
  - Cut back on basic needs

Cost barriers
Health & risk preferences
Other combination of reasons

$300B
Annual cost of nonadherence & suboptimal drug administration

1. Clinical side effects, cost, pharmacy issues, medication on matrix, patient to care


There are billions spent on pharma drug coupons each year. But, they’re not spent well.

$4B
Annual spend on drug coupons

- Lack of payor visibility & control
- One size fits all / little power to incentivize
- Unsophisticated targeting & economics
- Increasing regulatory scrutiny

Source: Business Insider
Sempre Health

Sempre allows payors to leverage manufacturer dollars.
We improve adherence and provide a personalized patient benefit over time, for free.

1. Sempre’s two-sided marketplace matches the supply of brands & budget to demand from payors on the platform.

2. Sempre’s proprietary technology ingests payer data, assigns pricing algorithms, and drives adherence with SMS + dynamic discounts at any pharmacy in the country.

3. Partners experience statistically significant improvements in adherence, engagement & downstream outcomes

Check – your prescription is ready for pick-up. Because you’re on time, you’ll pay just $30! Usually it’s $80. Next month. Fill on time again & pay $10.

Thanked if pick-it-up today.
It’s because our programs work.

Avg. 15% improvement in proportion of adherent members

<table>
<thead>
<tr>
<th></th>
<th>Pre-Sempre</th>
<th>Post-Sempre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrolled</td>
<td>82%</td>
<td>94%</td>
</tr>
<tr>
<td>Not enrolled</td>
<td>74%</td>
<td>76%</td>
</tr>
</tbody>
</table>

** Statistically significant, 95% CI

Source: Business Insider
Sempre Health

We see 8x higher enrollment than typical payor programs.

**ENROLLED**
- **35%**
  - Member submitted phone number & provided explicit consent to enroll

**ACTIVATED**
- **92%**
  - Member has filed at least 1 prescription with Sempre

~80% of members enroll without intervention

<table>
<thead>
<tr>
<th>Enrollment Channel</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMS</td>
<td>60%</td>
</tr>
<tr>
<td>Phone / Email</td>
<td>21%</td>
</tr>
<tr>
<td>Landing Page</td>
<td>19%</td>
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</tbody>
</table>
Our dynamic discounts change behavior.

Chris - it's time to pick up your prescription. You'll pay just $18 if you get it by Nov 14. That's a $7 savings! After, your copay will go up to $23.

Thanks - I'll get it today.

- 86% of fills are on-time (within 3 days of the expected refill date)
- 30% of enrolled members were reactivated (had stopped filling more than 30 days before enrolling)
- 36% of members text 'thanks'

Source: Business Insider
This translates to healthier and happier members.

Judy Miller
Illinois

"I signed up because of the financial payments, but I found that I really liked knowing that somebody out there cared whether I got my medication filled each month... by the end of the study I had lost 25 pounds and my fasting blood sugar dropped from 145 to about 100. So thank you for helping me to make these changes in my health."
Sempre Health Leadership

Anurati Mathur
Cofounder & CEO

Anurati believes that price is the most tangible, yet untapped lever on patient behavior today. She was the founding data scientist at Propeller Health, before which she built data products at Practice Fusion and led clinical analytics & special projects for the CFO at DaVita Healthcare Partners.

Swaraj Banerjee
Cofounder & CTO

Swaraj is building technology to predict and deliver the right price for the right patient at the right time. He was a machine learning engineering director at Expect Labs, before which he was an early engineer on Zynga’s FarmVille 2 team. Swaraj holds a dual B.S., in Electrical Engineering & Computer Science from UC Berkeley.

Dr. Mark Fendrick

Dr. Mark Fendrick researches how consumer engagement initiatives impact access to care, quality of care and healthcare costs. He is the founder of the University of Michigan Center for Value-Based Insurance Design. He also serves on the Medicare Coverage Advisory Committee and remains clinically active in the practice of general internal medicine.

Charlene Frizzera

Charlene Frizzera serves as President and Chief Executive Officer of CF Health Advisors. She is also a Senior Advisor at Leavitt Partners. Charlene was previously Acting Administrator for the Centers for Medicare and Medicaid Services (CMS), where her responsibilities included leading the policy and operational aspects of CMS, while executing the design and implementation plan for the Affordable Care Act. As a well-deserved mark of respect, Charlene received the Presidential Rank Award in 2000 and 2008, an honor for outstanding leadership reserved for the nation’s top one percent of the Senior Executive Service.
Poll Question:

What’s the likelihood this program will deliver on its promises?

1. < 10%
2. 10 to 25%
3. 26 to 50%
4. 51 to 75%
5. 76 to 100%
Panelists’ Questions/Considerations:

• Proven (or, at Least Credible) Concept
• Regulatory Hurdles
• Competitive Distinction & Advantage
• Operational Capability/ Mgmt Prior Success
• Key Relationships
• Funding Stream Adequacy
• Customers/Revenue
• Implementation Feasibility
Cardinal Analytx
Better Care, Sooner
Cardinal Analytx

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

Source: Business Insider
Cardinal Analytx

Predicting Future Risk and Rising Cost

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

- $3.5 Trillion Annual Healthcare Cost
- 5.5% Yearly Cost Growth Rate

- Implement cost effective programs
- Price for and manage new financial risks
- Form the provider network for next year’s risk
- Manage capacity for today and tomorrow

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Source: Business Insider
## 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:**
**STEERING PRECISION**
- Clinical Event Likelihood
- Engagement Likelihood
- Event Timing Likelihood
- Case Selection Optimizer
- Case Summary

**Ave Annual Price Per Customer:** $400k

### Predict Total Cost

**Solution 3:**
**RISK ASSESSMENT**
- Prospective Risk Score & Cost
- Concurrent Risk Score & Cost
- Cost Bloom, Jump, High Cost Claimant Likelihood

**Ave Annual Price Per Customer:** $600k

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Source: Business Insider
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.

Proprietary and Confidential

Source: Business Insider
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
Cardinal Analytx

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 Analytx Clients Expressed Interest in Steerage
Cardinal Analytx is working with solution providers to partner (e.g., Vitals, Relay, MOBE, VIM)

Source: Business Insider
Cardinal Analytx

$100M Through Increased Accuracy

Our proprietary Machine Learning beats the competition

Prospective Risk Accuracy: Health Plan A, 600k Lives

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Cardinal Analytx</th>
<th>DxCG (Verscend)</th>
<th>ERG (Optum)</th>
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<tbody>
<tr>
<td>1-3 Mo Data</td>
<td>17% 10%</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td>4-6 Mo Data</td>
<td>28%</td>
<td>10% 16%</td>
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<tr>
<td>7-9 Mo Data</td>
<td>22%</td>
<td>5% 14%</td>
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<tr>
<td>10-12 Mo Data</td>
<td>30%</td>
<td>10% 19%</td>
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<tr>
<td>12 Mo Data</td>
<td>31%</td>
<td>11% 20%</td>
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</tbody>
</table>

Missed Dollars by Competitors:

- $63M missed dollars
  Under-pricing risk

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

Source: Business Insider
### Strong Competitive Position

<table>
<thead>
<tr>
<th>Strategic Approaches</th>
<th>Competitive Landscape</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Machine Learning Predictions with Drivers and Actions</td>
<td>KenSci (Provider)</td>
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<tr>
<td></td>
<td>Cyft (CM platform)</td>
</tr>
<tr>
<td></td>
<td>Jvion (Provider)</td>
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<tr>
<td></td>
<td>Ayasdi (Provider)</td>
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<tr>
<td>3. Machine Learning Predictions</td>
<td>Lumiata (Risk)</td>
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<td></td>
<td>Cogitativo (Payment)</td>
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<tr>
<td></td>
<td>HBI Solutions (Risk)</td>
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<td>IBM Watson (Truven)</td>
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<tr>
<td>4. Traditional Predictions</td>
<td>Ark. one (Risk)</td>
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<td>Nexthealth (Provider)</td>
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<td>Hindsait (Data Aggregation)</td>
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<td>Optum (Risk)</td>
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<td>Milliman (Risk)</td>
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<td>Cave Consulting (Risk)</td>
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<td>Verscend (Risk)</td>
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<td>Lexis Nexis (Risk)</td>
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<td>Deerwalk (Risk)</td>
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<td>Health Catalyst (Provider)</td>
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<td>Welltok (Member Platform)</td>
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<td>Lightbeam (Provider, Risk)</td>
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<td>HCC (Risk)</td>
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<td>ACG (Risk)</td>
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Cardinal Analytx

Professional Team

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

Niall O’Cathasaigh
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.
- CIMA Qualified. BBS from University College Dublin. BA in History from University College Galway and Universite De Poitiers.

Brian Maples
VP of Data Science
- 15 years in biomedicine R&D and machine learning
- Invented and patented molecular diagnostic tech at Ionian, acquired by Alere to develop CLIA waived rapid flu test; Led Nuna’s data science development of a Network Solutions product; at Stanford, created now leading ancestry inference methodologies
- PhD in Biomedical Informatics from Stanford University, MS in Statistics from Stanford University, BA in Science and Management from Claremont McKenna College

Lu Lu
Head of Product
- 12 years healthcare experience in strategic and clinical transformation initiatives focused on transition to value with over 16 Health Systems, 45 clinical departments, and 450 design participants.
- MPH from Harvard School of Public Health, BA in Psychology from UCLA.

Chris DeRienzo
Chief Medical Officer
- 11 years clinical experience, double-boarded MD
- While serving as Mission Health Chief Quality Officer gained $65M through continuous improvement, pay for value and population health initiatives.
- Spearheaded integration of analytics and data science while reducing harm and scaling clinical pathway development.
- MD/MPP from Duke University, BS in Biology, Biochemistry, and Psychology from Brandeis University

Source: Business Insider
Engaged Founders, Investors & Board

Founders

Nigam Shah
Associate Professor of Medicine, Stanford
- Associate Professor of Medicine, Funded by 5 NIH institutes, FDA and 7 companies; Asst. Director of Center for Biomedical Informatics Research.
- Fellow, American College of Medical Informatics and American Society for Clinical Investigation.
- MD 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 Informatics Research Center; Elected Member Institute of Medicine; Section of National Academy of Sciences; Medical Director at Pacific Business Group on Health; Board Trustee Intermountain Healthcare.
- Founder national health care performance improvement firm and leapfrog Group; former Congressional MedPac Commissioner.

Investors

John Doerr
Family Fund

Premiera

Blue Cross

Florida Blue

Thomas McKinley
Chairman of Cardinal Analytx, Partner at Cardinal Partners

Linda Hand
CEO of Cardinal Analytx

John Doerr
Chairman, Kleiner Perkins

Mark Smith
California Healthcare Foundation, Co-Leads a CMS effort to accelerate value-based payment

Kent Marquardt
Former EVP and CFO at Premiera Blue Cross

Elizabeth Spaulding
Partner at Bain & Company, Global Head of Bain Digital
Cardinal Analytx

Industry Leading Advisors

Science

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 McConnon, MBA
Formerly, Partner, Opnum Ventures, President and CEO, Opnum Analytics

Ray Bradford, MBA
Founder and CEO, Spruce Health

Health Plan

Jeffrey Barcus, MD, MSFHP
Executive VP of Health Care Quality and Affordability
Blue Shield of California

David Fields
President, Dean Health Plan

John Opposition, MD, MPH, MBA
Executive VP of Healthcare Services, Premera Blue Cross

Juan Olagoya
VP Commercial Markets Analytics and Business Performance, Florida Blue

Clinical

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

Raz Paulus, MD
Past President and CEO, Atrina and Atrius Health Systems

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

Lee Lamb, MD
Former CMO, Advocate Aurora Health

Alan Glazeroff, MD
Faith, Stanford University’s Clinical Excellence Research Center

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Source: Business Insider
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Investment Opportunity

- **Series A**
  - $6M
  - Early traction, MVP
  - 2017: 12 FTEs, 2m Lives
  - 0 Clients

- **Series A Bridge**
  - $7M
  - Proof Points, Additional Products
  - 2018: 19 FTEs, 15m Lives
  - 1 Client

- **Series B New Money**
  - $22M
  - Market Fit Across Segments
  - 2019: 46 FTEs, 26m Lives
  - 11 Clients

- **Scale and Partnerships**
  - 2020: 67 FTEs, 40m Lives
  - 25 Clients

- **Channel Partner Optimization**
  - 2021+: 83 FTEs, 50m Lives
  - 53 Clients

Source: Business Insider
Poll Question:

What’s the likelihood this program will deliver on its promises?

1. < 10%
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Panelists’ Questions/Considerations:

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- Competitive Distinction & Advantage
- Operational Capability/ Mngmt Prior Success
- Key Relationships
- Funding Stream Adequacy
- Customers/Revenue
- Implementation Feasibility
Everything Starts Small

Charter Med

Extendicare
Thank you for joining!
Troy Medicare
Troy Medicare removes the fat in the Medicare healthcare program.
Medicare Market

- Medicare is a government program that covers the healthcare of 50 million seniors and continues to expand each year to cover more residents of all ages.

- Medicare Advantage represents the private companies which the US government contracts to administer the Medicare program for 21 million Americans.

- Medicare Advantage is growing at an increasing rate, and will surpass 40 million seniors by 2025 (that's a $800 Billion market size).

Source: Business Insider

Independent Pharmacies

- **21,767** community pharmacies (36% of all pharmacies in the US) are independently owned small businesses, often located in underserved areas where access to care is a challenge.

- Services include: Immunizations, Medication Reconciliation, Home Delivery/Home Visits, Tobacco Cessation Programs, Nutrition Counseling, and Point of Care Testing.

- The average senior visits their community pharmacy **3 times per month** (**36 times per year**) and trust their pharmacist more than their primary care doctor.
Direct Competitors

- **United Healthcare Group** — $240 Billion market cap — closely partnered with Walgreens
- **Humana** — $40 Billion market cap — closely partnered with Walmart
- **Aetna** — purchased by the CVS pharmacy chain for $69 Billion
- **Cigna** — merged with Express Scripts in a deal valued at $67 Billion
- **WellCare** — purchased by Centene for $15 Billion
The Fat

- Advertising/Marketing accounts for 45% of non-medical expenses each year
- Insurance Brokers account for 25% of non-medical expenses each year
- Pharmacy Benefit Managers (PBMs) - 5% of non-medical expenses
  - Bloated transactional system with 0 drug pricing transparency
  - Ineffective at managing drug costs and disconnected from the health costs
- Third Party Administrator (TPA) functions - 20% of non-medical expenses
  - Outdated technology standards make care management impossible
  - Data delays lead to provider and patient dissatisfaction
- Care Management Vendors - 4% of non-medical expenses
  - Many duplicate vendors with no incentives to integrate and share data

Source: Business Insider
Enter Troy Medicare

- Troy Medicare is the only Medicare company that combines modern data science techniques with the patient accessibility and trust of local community pharmacies.

- Unfair competitive advantage:
  - Customer Acquisition Cost is 20 times lower than the competition
  - Close relationships with 21,000+ local community pharmacies in all 50 states
    - Unique care management that is more effective than current models
  - Founded by software engineers with a history of disrupting Medicare
    - Data-driven benefit design proven to attract members
Troy Medicare is Live and Proven

- APR 2019 — Received license from the North Carolina Department of Insurance
- JUL 2019 — Received approval from the Center for Medicare and Medicaid Services
- SEP 2019 — Completed $10.2 million financing round
- SEP 2019 — Contracted a large network of providers (including Duke Health, CHS, South Eastern, and Cape Fear Valley Hospital Systems)
- OCT 2019 — Proved model by enrolling 250 members in Troy Medicare at $0 CAC
- JAN 2020 — surpassed $3 million in Annual Recurring Revenue (ARR)
# Troy Medicare

## Actuarial Financials

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
<th>2024</th>
<th>2025</th>
<th>2026</th>
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<tbody>
<tr>
<td><strong>Capital Contribution</strong></td>
<td>10.2M US$</td>
<td>25M US$</td>
<td>0 US$</td>
<td>0 US$</td>
<td>0 US$</td>
<td>0 US$</td>
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<tr>
<td><strong>Members Enrolled</strong></td>
<td>0</td>
<td>400</td>
<td>2,085</td>
<td>8,030</td>
<td>10,070</td>
<td>13,690</td>
<td>16,640</td>
<td>24,790</td>
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<tr>
<td><strong>Capital Reserves</strong></td>
<td>4.6M US$</td>
<td>23.8M US$</td>
<td>24M US$</td>
<td>27.1 US$</td>
<td>34.1M US$</td>
<td>43.6M US$</td>
<td>56.7M US$</td>
<td>78.4M US$</td>
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</table>
Unfair Distribution

- Troy Medicare has an unfair advantage: a customer acquisition cost that is 1/20th compared to United, Humana, and Aetna.

- By leveraging a free pharmacy distribution channel, Troy Medicare is acquiring customers without being beholden to insurance broker commissions.

- Due to word-of-mouth, Troy Medicare has acquired all members while spending $0 on advertising and marketing.

- Unlike the relationship with an insurance broker, seniors have a trusted, long-term relationship with their pharmacy.
  - This leads to a much higher retention and long-term value (LTV) of each member.
Unique Care Management

- Troy Medicare has a network of trusted, local pharmacies that patients see 36 times per year on average (compared to the 3 times they see their PCP).

- Every Troy Medicare member has a local pharmacy care manager assigned to them.

- Each month, the care manager meets in-person to review health goals, social determinants, complete a care plan, review medications and create an action plan.

- Troy Medicare provides the data and technology tools to each care manager to have complete visibility into each member across their health spectrum.
Data-driven Benefit Design

- A decade of proprietary Medicare data and insights:
  - Transparent drug pricing
    - Troy Medicare is the first Medicare Plan to have 100% transparency for the patient and pharmacy on the cost of each medication
  - $0 Durable Medical Equipment up to $90 in value
  - Key medications covered that are low cost but high value
  - $0 premium
  - $0 deductible
  - $0 primary care visits
Geographic Expansion

- Enabled by signed contracts with 3800+ providers, including Duke Health, Cape Fear Valley, and South Eastern, Troy Medicare will expand to 13 more counties in NC in 2020.

- Detailed expansion plans can be viewed in the Series B data room.

- In early 2020, Troy Medicare leadership is holding meetings with the departments of insurance in South Carolina, Virginia, and Tennessee to discuss expansion plans.

- To better serve our Medicaid population, Troy Medicare will be adding a Dual Eligible Special Needs Plan (D-SNP) in 2021.
Troy Medicare

Troy Medicare Leadership

Flaviu Simhaian
Chief Executive Officer
- Previously CEO of iMedicare, a SaaS platform 6,000+ pharmacies use to help seniors pick Medicare plans
- Facilitated the enrollment of over 1 million seniors in Medicare Advantage plans

Michael Cutroni
Chief Financial Officer
- CFO @ MDWise
- CFO @ Consumers Mutual Insurance of Michigan
- VP of Financial Planning @ Universal American

Elyse Eisenberg
Chief Operating Officer
- Executive Director @ Vantage Cancer Care Network
- Director, Corporate Contracting @ Bravo Health
- Director, Corporate Development @ AmeriHealth

Jeff Scribner
Chief Compliance Officer
- Former Deputy US Marshal and Special Agent
- Chief Compliance Officer and Privacy Officer for publicly traded companies, HMOs, large complex healthcare systems

Source: Business Insider
Troy Medicare Leadership

Josh Young, Pharm D  
Pharmacy Officer

Lateef Jackson  
Chief Information Officer

Amina Abubakar  
Clinical Director

Dr. Bader Almosheli  
Medical Director

Josh is a co-founder of Troy Medicare, as well as a pharmacy owner and works with hundreds of independent pharmacies to build the Troy Medicare playbook for Medicare Advantage.

Lateef has 20+ years of machine learning, data science, and has managed large tech teams, exited 2 startups, and been a leading architect at New Relic.

Amina owns RxClinic pharmacy in NC, was awarded national pharmacist of the year, and is considered one of the most innovative clinical pharmacists in the US.

Dr. Almosheli is a leader in value-based post-acute care delivery, with a focus on physical therapy. He has been in practice for over 10 years.
Troy Medicare Leadership

Susan Esparza, NP
VP Medical Management
Previously with Optum. Susan brings over 20 years experience in health care. She is a Board Certified Nurse Practitioner.

Kim Ryals
Director of Operations
Kim has worked with both national Medicare plans to deliver the highest quality of service within all aspects of Medicare Advantage.

Steve Kaczmarek
Actuary
Steve Kaczmarek is a leading Medicare actuary for Milliman, the firm a majority of health plans use to submit their CMS bids.

Jeff Spight
Chairman of the Board
Jeff Spight was previously President of the ACO business @Universal American and VP of Development @ Bravo Health.
Fundraising and Timeline

- **Funds raised so far:** $10.2 million from pharmacy owners and providers

- Given our capital efficiency, we are currently raising $25m which will enable Troy Medicare to reach $113m in ARR within 18 months
Poll Question:

What’s the likelihood this program will deliver on its promises?

1. < 10%
2. 10 to 25%
3. 26 to 50%
4. 51 to 75%
5. 76 to 100%
Bind
OUR MISSION

Make health care affordable. Empower people to define their own health.
If you plan cities for **cars** and **traffic** – you get **cars** and **traffic**.

If you plan cities for **people** and **places** – you get **people** and **places**.

Fred Kent
If you plan health care for annual plan decisions, doctors, hospitals and drugs – you get health care for annual plans, doctors, hospitals, and drugs.
Bind changes the design of health insurance

- Low Cost
  - High Frequency
  - Less Subsidization

- Toenail Fungus
  - Conditions
  - Decrease Subsidy
  - Low Clinical Quality
    - Low Clinical Evidence

- Clinical Performance
  - More Subsidization
  - Low Frequency
    - High Cost

- Cancer
  - Increase Subsidy
  - High Quality
    - High Efficacy
    - High Efficiency

Source: Business Insider
Designing a health plan from scratch

Core
- Designed to meet ACA requirements
- Copays only – no deductibles or co-insurance
- Bind’s copays are smart!
- Elected during annual enrollment

Add-Ins
- Time to plan for care
- Range of treatment options, providers and settings
- Copays and additional paycheck contributions
- Purchased on-demand at any time throughout the year

Employers save 10%-15%
Rich Core benefit

Source: Business Insider
Bind

Everything has a price tag!
Bind

Same member experience for the pharmacy benefit
When you design around conditions, you can impact all points of the patient journey.
For the first time, coverage and care decisions are combined.
Bind

The value of bundled pricing leveraging FFS.

Source: Business Insider
Results to date
Case study: Employees prefer Bind.

Active enrollment – effective date 1/1/19

<table>
<thead>
<tr>
<th></th>
<th>PPO</th>
<th>ACO 1</th>
<th>ACO 2</th>
<th>bind</th>
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<tr>
<td>Employee</td>
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<td>Family</td>
<td>$481.00</td>
<td>$250.00</td>
<td>$250.00</td>
<td>$244.00</td>
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</table>

Employees selected Bind 65% of the time over their other options.
People register and engage.

54% of the overall population activate their Bind account within the first three months.

83% use the Bind app or website (within our most active client population).

Source: Business Insider
Bind members make better Rx choices.

- OTHER PLANS: 20% Utilization of lower-cost pharmacies

- bind: 64% Utilization of lower-cost pharmacies
People make better use of their pharmacy benefit.

Even with a higher utilization rate, the pharmacy benefit PMPM cost was 46% lower than industry.

$69.83 PMPM Average
29.2% Utilization Rate
National PBM

$37.74 PMPM Average
40.6% Utilization Rate
Bind

Bind Q119 actual data.

Source: Business Insider
Bind members are more satisfied.

Rating on a 1-5 scale where 5 is excellent.

4.5/5
Bind keeps our clients UNDER budget.

Client A: 98% of Bind Plan Budget YTD (Complete Year)
Client B: 70% of Bind Plan Budget YTD (9 months)
Client C: 66% of Bind Plan Budget YTD (5 months)
Client D: 85% of Bind Plan Budget YTD (9 months)
Bind members pay less out of pocket

- 99.8% pay less than their OOP limit
- 91% pay less than $1,000 per year
- 96% pay less than $2,000 per year
- 79% pay less than $500 per year

Data from a fully matured early Bind client.

Source: Business Insider
People make informed treatment choices.

40% more often they select more cost-effective treatments (vs. treatment selection within other plans).

92% chose the most cost-effective option
5% chose a mid-range option
3% chose the least cost-effective option

Source: Business Insider
Bind Leadership

Jodi Hubler is President & Board Director of Bind On-Demand Health Insurance. Jodi previously served on the boards of Lemhi portfolio companies: DNA Direct, Liazon, Carol, DestinationRx, OneHealth Solutions, Shareable Ink, RetraceHealth, PokitDok, PlanSource and Recondo Technology. Over her career, she has held executive positions in a variety of public and private companies, including re-engineering efforts for Cargill; driving systems to support lean manufacturing and process change for a $2B division of Alcoa; and start-up experience with venture-backed Definity Health, where she served as chief people officer. Definity Health was ultimately acquired by United Health Group for more than $300M.
Poll Question:

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