THE STATE OF DIGITAL TRANSFORMATION IN HEALTH CARE AND THE ROLE OF VIRTUAL HEALTH
Presenters

Matt Wolf
Senior Analyst, Director
Leader of RSM’s health care valuation practice; supports the national health care practice as a senior industry analyst

Rick Kes
Senior Analyst, Partner
13 years of experience auditing and consulting with health care organizations.

Chris Saxman
Strategic Initiatives, CirrusMD
With CirrusMD from the beginning and was the company’s first CFO

Elizabeth Moore
Director of Marketing, CirrusMD
15 years of experience driving engagement for consumer packaged goods, outdoor lifestyle, SaaS and health care innovators
Objectives

• Understand the current state of digital transformation in the broad economy and within the U.S. health care ecosystem

• Examine how emphasizing human engagement is critical to adoption of digital technologies
## Agenda

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DEFINITIONS AND LEVEL SETTING
Digital transformation – Hype or hyperbole?

Source – hpcwire.com
Evolution of digital (1 of 2)

1950er
Development
Electronic
Computer

1969
Arpanet

1970s

1971
Intel 4004:
First microprocessor
produced in series

1975
Microsoft

1976
Apple

1977
Oracle

1980s

1984
Cisco

1985
Windows 1.0

1990
Commercial
Internet

1994
Amazon

1997
Salesforce

1998
Google

2000s

2001
Expedia

2003
Skype

2004
Facebook

2006
Amazon
Web Services

2007
Netflix
(on Demand)

2008
Spotify

2009
Uber
(est.)

2010
WhatsApp

2011
HelloFresh

2016
Uber
(Cloud)

Cloud impact

About 40 Years

Source: arago GmbH, 2017
Evolution of digital (2 of 2)

- MIND
- PRODUCT
- CORE

U.S. 2014 – Present
- MACHINE
- PLATFORM
- CROWD
What does Digital Transformation mean to you?
Digital transformation is not only about doing things differently, but doing different things – from gathering and analyzing data for smarter decision-making to engaging clients, customers and suppliers in new ways.
Categories of transformation and disruption

**Robotic Process Automation**
Behaves like a person
- Structured data
- Business rules
- No change process/systems
- ‘Democratize’ automation

**Cognitive**
Thinks like a person
- Extends RPA scope
- Unstructured data
- Computer vision
- Self learning

**Analytics**
Analyzes like a person
- Easily tag data elements during bot creation
- Real-time data flow across disparate systems
- Business intelligence

**Digital Core**
- ERP/CRM
- PAS
- CPM
- Claims
- HRIS

**Digital Foundation**
Emerging technologies

- **Robotic Process Automation**
  - Cost of robot a fraction of FTE, work up to 5x faster 24/7
  - Reduction of human error rates → enhanced compliance and security
  - Robots can easily replicate and scale activities to meet peak or atypical workloads

- **Close Automation**
  - Automated account reconciliation & task management → 75% reduction in close cycle time, 50% in time spent
  - Strong audit trail & ease of information exchange with auditors

- **Artificial Intelligence**
  - Advanced process automation
  - Strengthened analytical capabilities
  - Learns, adjusts, and improves

- **Insights & Analytics**
  - Analysis of business transactions and data for actionable insights
  - Forecasting capability of key metrics to increase efficiency

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1. Value Proposition
2. Business Processes
3. Transactions
2019 RSM DIGITAL TRANSFORMATION SURVEY RESULTS
RSM’s 2019 Digital Transformation Survey

5 industries

500 RESPONDENTS

PRIMARILY CEOs, CFOS, AND CIOs

ORGANIZATIONS WITH REVENUES FROM $50M - $4B

LEAD BY 3 PARTY RESEARCH TEAM
### Key findings for health care

#### COST AND CHANGE MANAGEMENT
Predicting costs and managing learning curves/adoPTION are huge organizational challenges.

#### IMPROVED CARE
Technology provides improved communications, access.

#### VALUE ASSESSMENT
Initiative’s perceived value dictates prioritization, with signoff needed from executives (formal).

#### METRICS
Patient care performance (visits, re-admittance, etc.) determines success, while ROI is not easily defined.

#### TECHNOLOGY
Buy-in for new technology leads to improved safety outcomes. Health care respondents noted that digital transformation had improved safety outcomes by expanding services and enabling digital thinking.
What we’re hearing

**Digital enables health care to scale, improve process and connect the organization.**
Scalability, process efficiency and transparency are top 3 benefits for health care.

**5G, AI, analytics and data technologies are most important for health care.**
5G, AI, BI and cybersecurity were rated as most important by 42% or more; mobile was in the top 5.

**Aligning legacy systems to maximize value and meet future needs are top 5 challenging prioritization considerations.**
Compliance is also top 2 priorities among legacy system alignment, value assessment and meeting future needs/scalability.

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**KEY VERBATIMS FROM QUALITATIVE INTERVIEWS**

- “Making our care offerings available to the wider rural areas around our market is a key focus.” – HC CFO
- “We want to create a front door by which people can access us. Once we get them inside digital housing, we can provide them different features or solutions.” – HC CIO
- “We are looking for a more robust, comprehensive system where we can do data analytics on population health and integrate it into budgeting, forecasting and capital needs.” – HC CFO
- “We are leveraging Epic tools for business analytics, which applies to business, especially when it comes to care coordination and value-based care.” – HC CIO
- “It’s hard to look into a crystal ball to know what the future looks like.” – HC CFO
Change management

**Customer**
How you leverage technology to engage your customers and external stakeholders.

**Operations**
Using the right technologies and systems to transform how you operate, creating higher levels of efficiency and accuracy in day-to-day activities.

**People**
Giving your teams the tools and capabilities to be more effective and increase value contribution on a regular basis.

**Data & Integration**
Capturing and using data to create better insights, deliver more personalized experiences, and improve decision making.

**Technology**
All the people, processes and systems necessary to maintain the systems and infrastructure.
Digitizing operations

1. Adopting technology for digital operations

2. Optimize operations while managing risk

3. Do more with less

“Robotic process automation (RPA) has become a key tool to help organizations drive business automation and increase operational efficiency. We’re seeing wide adoption of RPA applications for both finance & accounting and human resource functions.”

Elizabeth Sponsel, RSM Specialty Tax Leader

Operations
- No consistent or regular approach to completing operational tasks
- Defined and repeatable processes exist but are very reactive to changes
- Major processes are automated with continuous improvement activities initiated
- Processes are continuously improved to enhance business capabilities

Technology
- Limited use of tools and technology are available to enable successful results
- Basic tools and technologies exist but lack ability to positively affect major changes
- Business applications effectively support all major organizational functions
- Core business functions leverage leading technologies and are integrated across platforms

<table>
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<tr>
<th>Undeveloped</th>
<th>Informal</th>
<th>Established</th>
<th>Managed</th>
<th>Optimized</th>
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<tr>
<td>1%</td>
<td>10%</td>
<td>39%</td>
<td>42%</td>
<td>9%</td>
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A collaborative approach to helping you establish a digital strategy

RSM’s Approach
- Deep knowledge into emerging technologies
- Collaborative approach, working with our clients to match business needs
- Evaluation process is conducted jointly with client core team and RSM team
- Knowledge and experience working with business services organizations
- A consistent focus on key success factors while tailoring solutions to each client’s needs and objectives

Discovery
During the initial phase, our team of advisors spends the time to learn about your organization and technology.

Analysis
The second phase of our engagement will be to aggregate and assess the information collected to determine viable opportunities and solutions to meet specific needs.

Strategy
The third stage of process is a collaborative effort between you and the RSM team to review the list of viable opportunities and build the future-state of the organization based on the results.

Roadmap
The final stage of the process is focused on building an actionable roadmap and execution plan to guide your efforts into realizing the defined strategy.
IMPLICATIONS FOR THE HEALTH CARE ECOSYSTEM
Where is health care heading?
Why is it evolving?

Consumer Preferences

Technology

Data
Growth of health data will significantly outpace industry revenue

Source: EMC and IDC, 2014
Note: One exabyte = 1 billion gigabytes

Bloomberg
Phygital

Digital + Physical = Phygital
So what’s stopping us?
2019 digital health investing declined
CIRRUSMD CASE STUDY
Creating Success with Virtual Care
CirrusMD Makes It Easy To Access Extraordinary Care

![Sign In Screen]

Dr. Donna Baldwin

Beth 11:00 am
Hi, I am pregnant and have some questions about taking supplements and if they are safe in pregnancy.

Dr. Donna Baldwin 11:01 am
Hi, Beth, this is Dr. Baldwin. I'm very happy to help you. Can you tell me a little bit more about your concerns?

Beth 11:02 am
Wow, that was fast! Hi Dr. Baldwin! I am in my first trimester of pregnancy with my 2nd child, and I have some questions about which supplements are safe but I can't get into my OB until next week.

Dr. Donna Baldwin 11:04 am
I think it would be helpful for you to chat with our pharmacist who can go over all of these with you and then you and I can reconnect afterwards.

Dr. Donna Baldwin

TRANSFERRED
Dr. Donna Baldwin
August 29, 2019 @ 11:05 am  Edit (Edited)
Dr. Donna Baldwin transferred Beth to the Pharmacist.
OUR SOLUTION  | Overview

WE HELP
Health Systems | Employers | IDNs | Payers

WE ARE
Text-First | Instant Access | Human Conversation

WE DELIVER
Utilization | Guidance | Loyalty | Quality

5MM eligible members | 5MM+ secure texts sent | 365k encounters to date | 50 state Provider Network licensure | 24/7/365 staffing
TODAY’S LANDSCAPE | What Challenges Do We Face?

51% Telehealth users who say there were barriers that made using telehealth difficult*

17% Consumers aware that their healthcare or insurance provider offers virtual health services as an alternative form of care**

9.6% Healthcare consumers who have reported using virtual care*

*2019 J.D. Power Telehealth Satisfaction Survey  
**2018 J.D. Power Telehealth Survey
WHAT IS SUCCESS? | For the Emerging Value-Based Landscape, We Need New Solutions

Engagement & Loyalty For Lasting Returns

reduce — BALLOONING COSTS

improve — PRODUCTIVITY

protect — CLINICAL QUALITY
Utilization rates of 10%+, **the median copay was $15** for telemedicine†

Utilization rates < 6%, **the median copay was $30** for telemedicine†

SOLUTION 2  |  Let Customers Set the Pace

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AVERAGE CARE DURATION

- **20mins**
  - Doctor's office visit*

- **20mins**
  - Traditional telehealth visit**

- **33mins**
  - CirrusMD encounter+

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* Reuters "The doctor will see you now - but often not for long" Nov, 2017. **eVisc "20 Stats: How Do Patients Feel About Telehealth?" • Based on CirrusMD’s member data.
SOLUTION 3 | Take an Omni-channel Approach to Access

Increasing avenues to access directly impacts utilization

*2018 IDN Single Partner Cross-Channel Encounter Volume based on May-launch Deep Link access integration
“My favorite part of this system is that an hour after I consulted with the Dr. I went back into the app to ask a question and it put me back into contact with the same dr. This was my first time using an online Dr. and it was great.”
BARRIER CHALLENGE

Experience
ADVANTAGES OF TEXT

Only 20% of people answer calls they aren’t expecting*

Within 5 sec texts read once received*

68% millennials say they “text a lot” daily**
SOLUTION 2  | Take a Human-First Approach

78% of millennials don’t trust healthcare delivered by A.I.*

90% of seniors don’t trust healthcare delivered by A.I.*

SOLUTION 2  | Take a Human-First Approach

Understand **user fears**

Lead with **empathy**

Be **available**

Respect the **human voice**
SOLUTION 2 | Take a Human-First Approach

Rigorous QA & Peer Review

Committed physician teams

Responsible venue management

Dedication to listening

*Pediatrics "Antibiotic Prescribing During Pediatric Direct-to-Consumer Telemedicine Visits" May, 2019
SOLUTION 2 | Take a Human-First Approach

Appropriate Venue Management

- Right Patient
- Right Provider
- Right Time

*Based on 2019 Integrated Delivery Network partner encounter resolution data
“I suffer from anxiety, depression and panic attacks and when I am faced with a stressful situation, such as this, I tend to stop being compliant with my doctors. The CHAT doctor was so patient and understanding with my issue, I felt he was really "trying to solve a puzzle" and determined to arrive at the best possible answer/advice for me. He helped motivate me to keep trying and work at seeking medical advice. If I had not "chatted" with the doctor yesterday, my plan was to stop and just see what happens without further treatment.”
BARRIER CHALLENGE

Awareness
SOLUTION 1  |  Consider the Message

• Look at the big picture
• Respect the audience
• Time the messaging
SOLUTION 2 | Explore New Channels

Based on 2019 dual-market Medicaid partner text outreach data. N= 130,000

5x
Higher encounters in text relaunch months

23x
Increase in platform registrations in text relaunch months

46%
Post-encounter survey respondents who first heard about the program via text
Patient Funnel-Referral Source*

*Based on 2019 1-region Medicaid partner post-encounter survey data (WA)
Case Studies
CASE STUDY | Decrease Unnecessary ER Recidivism

SAFE, IN-NETWORK POST
ACUTE GUIDANCE

MORE THAN
8,000
PATIENTS HAVE ACCESSED
ON-DEMAND POST-
DISCHARGE PHYSICIAN
SUPPORT SINCE PROGRAM
LAUNCH

86%
OF ALL ENCOUNTERS
SAFELY RESOLVED ON-
PLATFORM

MEASUREABLE LEAKAGE
PREVENTION

100%
OF FOLLOW-UPS
REQUIRING ADDITIONAL
CARE WERE REFERRED TO
AN IN-NETWORK
RESOURCE
“This is a great service! I was able to get my husband the meds he needed in a very short period of time. So much easier than returning to the ER when you have an issue to follow up on. I wish all hospitals offered this service!”
In 2017, we partnered with one of the nation’s largest IDNs to deliver instant chat access to Colorado region members. Here’s what has happened since.

- **700**: Average Daily Encounters for a population of 640k members
- **$5.5M**: Savings reported to date since 2017 Colorado market launch
- **15%**: Decreased likelihood of terming in chat-engaged population vs non-engaged population

Based on 2019 dual-market Medicaid partner text outreach data. N=130,000
“We have [IDN] and used the chat service, we got an immediate response. I took pictures of the issue and they were able to make a diagnosis and had a prescription waiting for us in the morning. We have to buy our own insurance. We have had [other insurers] and [IDN]. We will be going with [IDN] next year.”
CASE STUDY | Employer Success

SATISFACTION & USAGE

80 Net Promoter Score

93% member satisfaction

18.5% total program utilization

40% monthly utilization high for engaged employee groups

EFFICENCY & SAVINGS

26% antibiotic RX rate

81% encounters resolved in platform

94.2% of all in-person follow ups happened outside of the ER

$398 claims-based savings/encounter

Based on 2018 Commercial partner results.
“This service makes my heart GLOW. Not only does it do a lot to solve many problems but I have huge anxiety and it was so easy for me to ask for help over text. You are for sure changing lives with this add on service.”
The channel makes a difference.

So does the care expert staffing that channel.
Summary
Prioritize human conversation

Get creative with communication channels

Be aggressive about access

CHALLENGE YOUR ASSUMPTIONS
Thank You!

getstarted@cirrusmd.com | cirrusmd.com
THANK YOU FOR YOUR TIME AND ATTENTION