A Perfect Storm: Increasing At-Risk Contract Lives & Decreasing Nursing Availability

Building a Scalable Model for VBC

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Best Outcomes

- Identify the clinical & financial impact of rising-risk management
- Explore models for true at-scale care management & remote monitoring operationalization
- Investigate the real-world challenges, opportunities, & impacts of this paradigm shift across provider types

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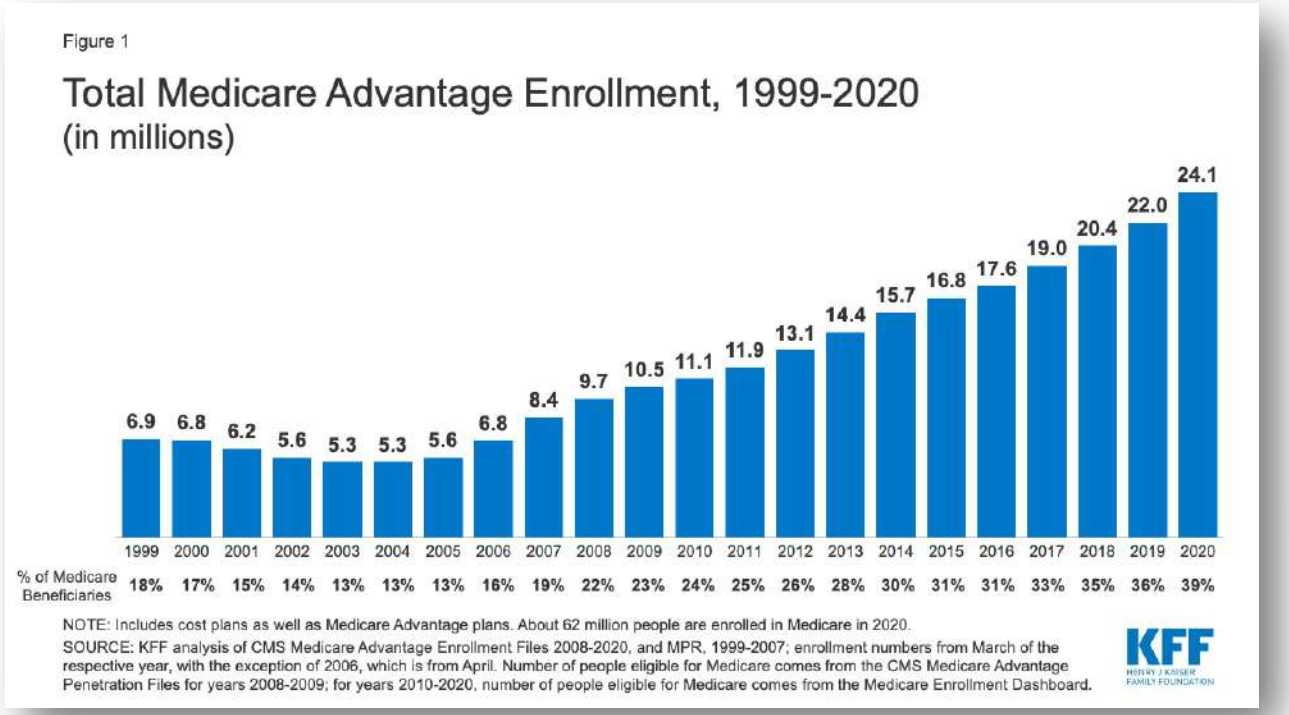
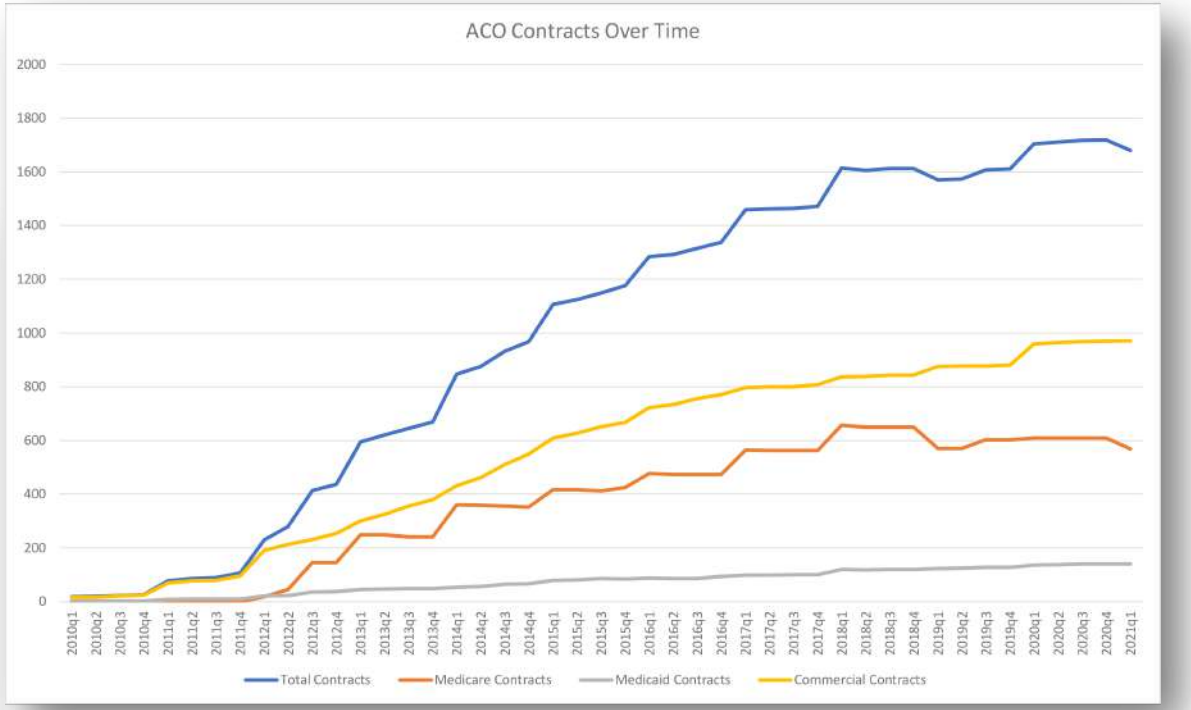
Understand why *now is the time* to lead your organization through VBC enablement

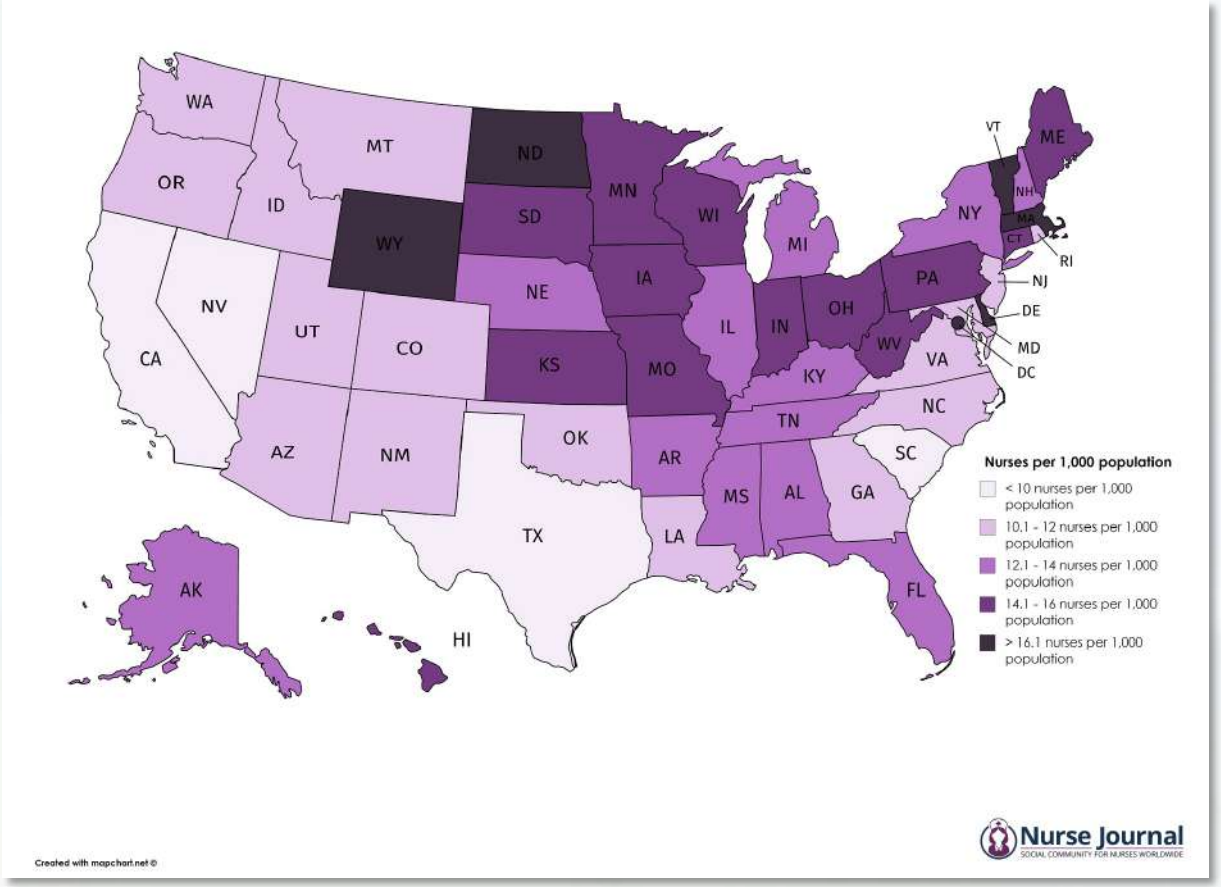
Increasing Lives in At-Risk Contracts





https://www.healthaffairs.org/do/10.1377/forefront.20210609.824799/

Decreasing Nursing Availability



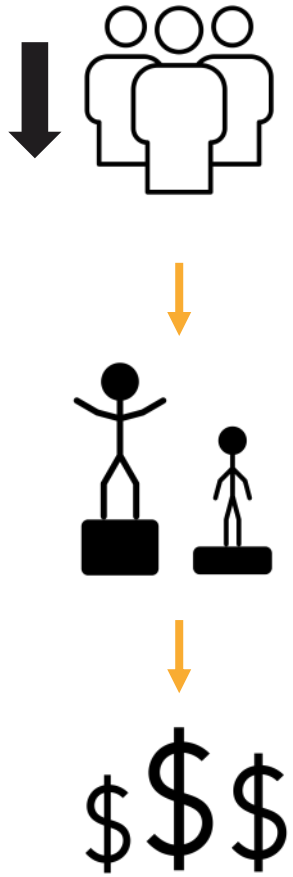
https://nursejournal.org/articles/the-us-nursing-shortage-state-by-state-breakdown/

Nursing Shortages Inhibit Health Equity

Racial Disparities in Stroke Readmissions Reduced in Hospitals With Better Nurse Staffing

February, 2022

Carthon, J. Margo Brooks; Brom, Heather; McHugh, Matthew; Daus, Marguerite; French, Rachel; Sloane, Douglas M.; Berg, Robert; Merchant, Raina; Aiken, Linda H.



Readmission risk changed from **not significant** to **27% higher than white patients** when nurse staffing ratios became worse.

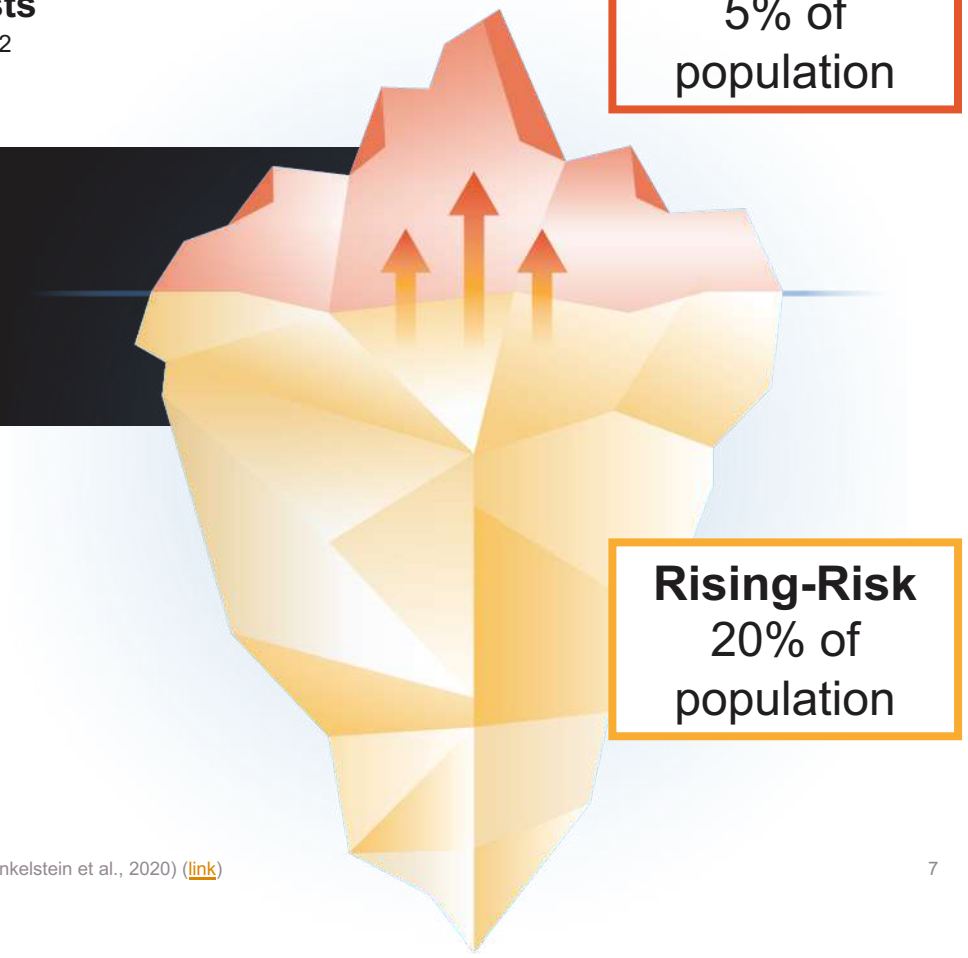
Bending cost curve requires proactive management of high- and rising-risk patients

The NEW ENGLAND JOURNAL of MEDICINE

"Our findings may also reflect fundamental challenges with the strategy of targeting superutilizers: **many patients whose medical costs are high today will not be as high in the future**."[2]

Each year, 1 in 5 rising-risk patients become expensive, high-risk patients.[1]

Adding more staff is not sustainable



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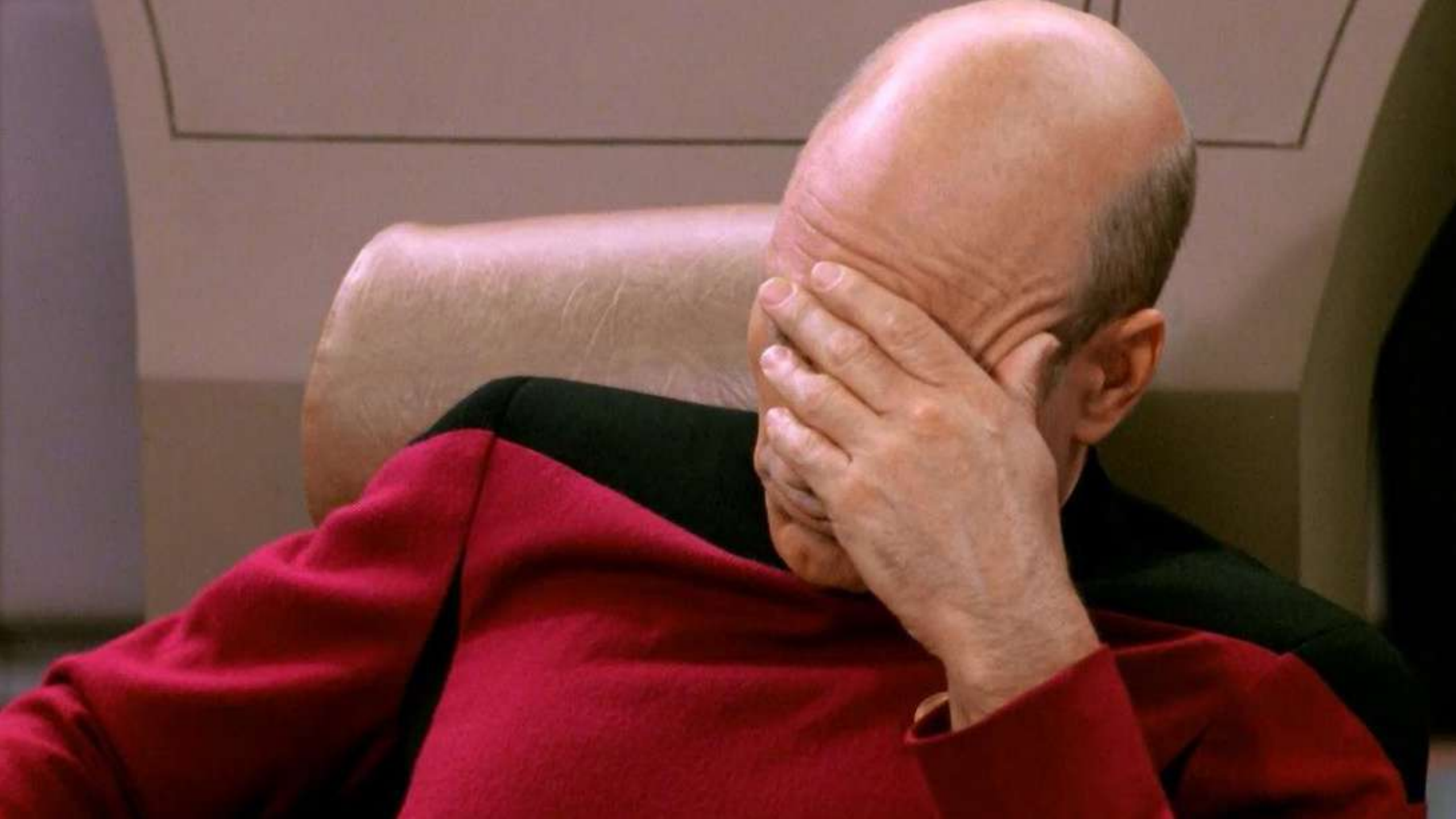
 [1] Advisory Board Report (link) · [2] Hotspotting Study (A. Finkelstein et al., 2020) (link)

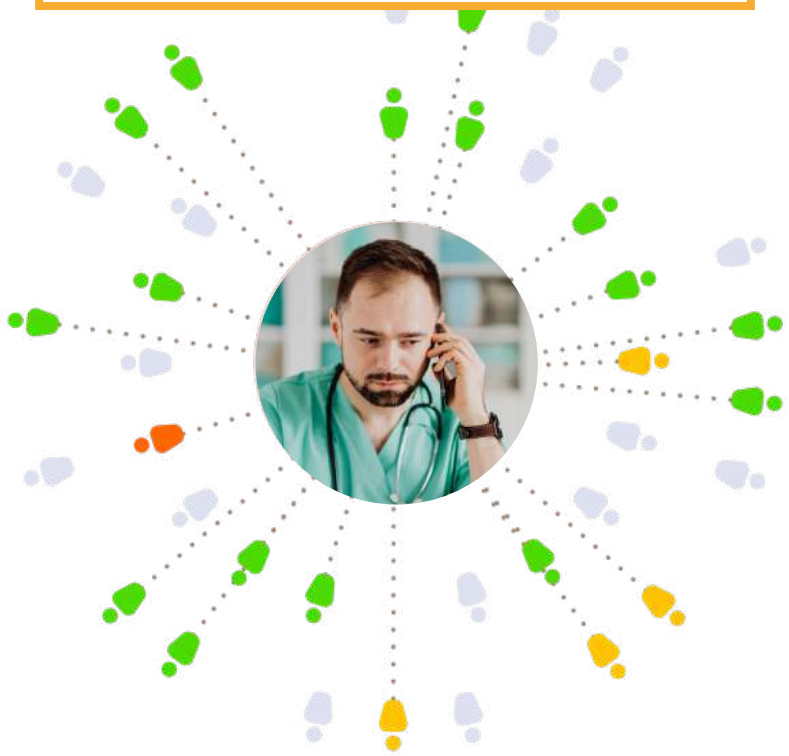
Let's Recap...

1. Embrace risk-based care models or perish!
2. While clinical staff are more expensive than ever…
3. …but absolutely vital for health equity and financial sustainability
4. And do it all while supporting 5-10x more patients than ever before.



Care Management for Rising Risk: a Paradigm Shift

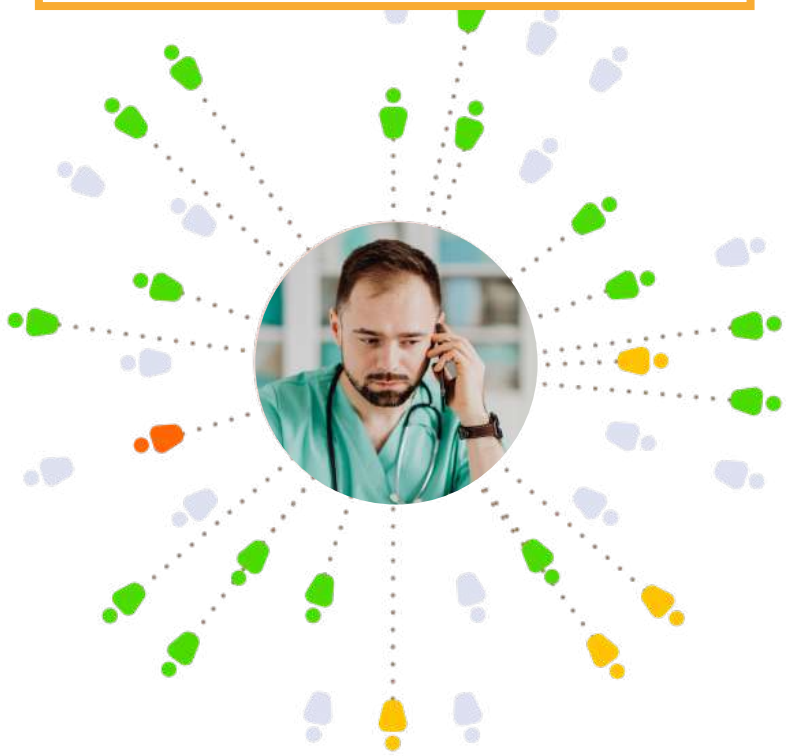
Before CareSignal
Manual outbound outreach



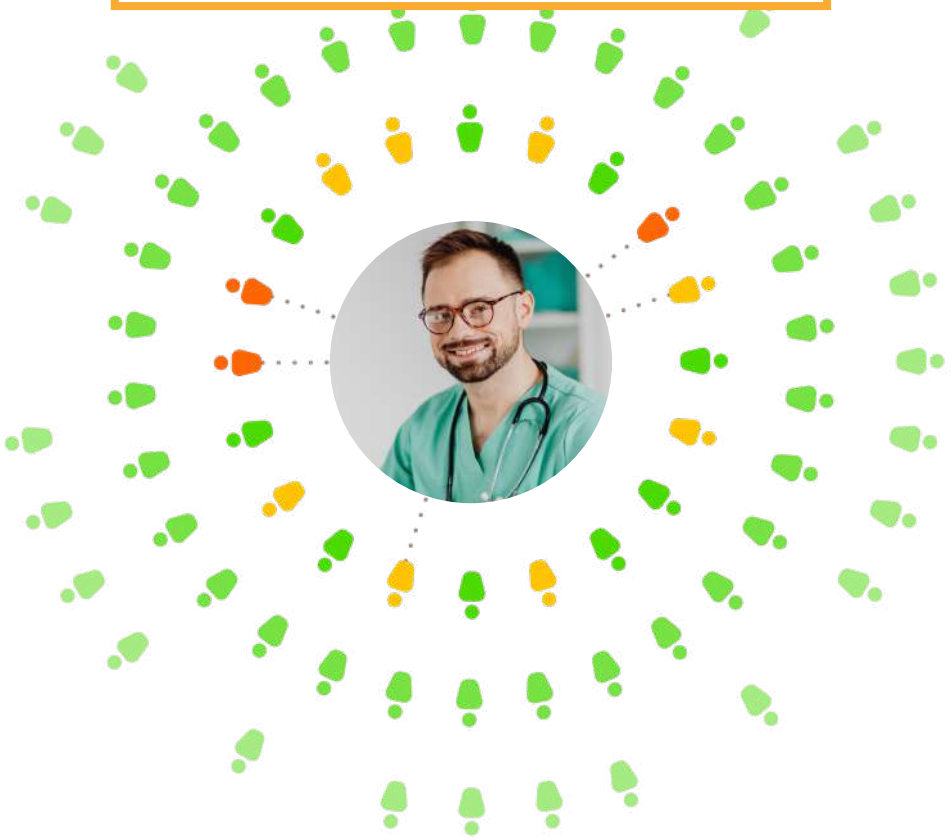
Care Management for Rising Risk: a Paradigm Shift

Do more with less by automating routine outreach & providing top-of-license care

Before CareSignal
Manual outbound outreach



After CareSignal
Automated inbound insights



CareSignal® a Lightbeam Company

Deviceless Remote Patient Monitoring

Affordable | Accessible | Scalable

- **No new devices required**
  No apps, downloads, or passwords
- **Accessible for all patients**
  Promote & elevate health equity
- **Clinically validated**
  13+ Peer reviewed publications
- **30 Programs | One Portfolio**
  Pre-built & evidence-based
- **Engagement powered by AI**
  Predict & prevent drop-off
- **At-risk pricing**
  No upfront cost & guaranteed ROI

CareSignal® a Lightbeam Company

CareSignal Portfolio & Results

30+ Evidence-Based Programs | One Portfolio

Chronic Conditions
- Heart Failure
- COPD
- Diabetes
- Hypertension
- Asthma

Behavioral Health
- Depression
- Anxiety
- Substance Use
- Opioid Management
- Caregiver Support

Specialty Support
- SDoH
- Maternal Health
- Dialysis
- Surgery
- HIV/AIDS

Post Discharge
- Post Discharge
- General Medical
- Vital Signs
- Pneumonia

Care Coordination
- Screening Reminders
- Appointment Reminders
- Referral

General Programs
- COVID Suite
- Influenza
- Fall Risk
- Wellness
- Medication Adherence

13 Publications
in Peer-Reviewed Medical Journals

62% decrease in hospitalizations for patients with COPD

46% decrease in CHF ED visits

1.15% drop in HbA1c over 4 months

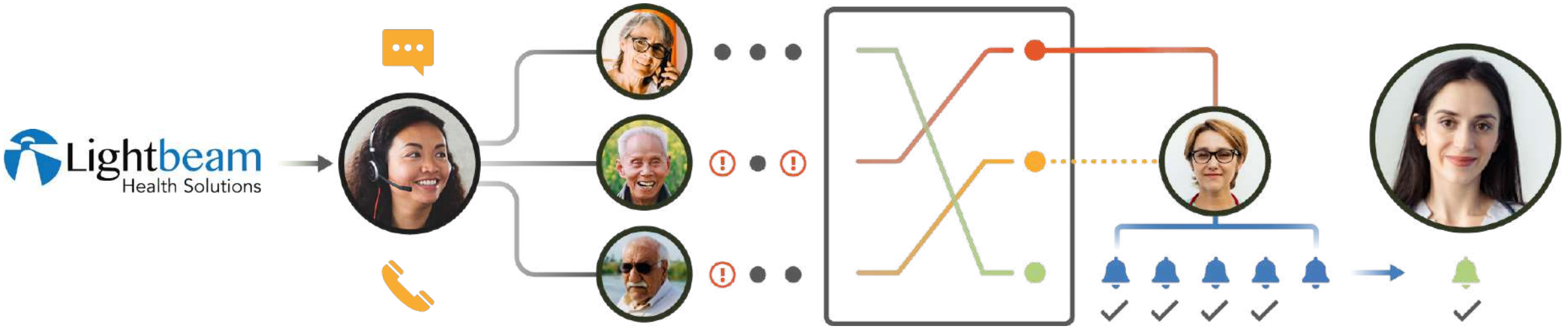
50% improvement in blood pressure control over 12 weeks

28% drop in PHQ-9 for patients with depression

>2.1x increase in follow-up appointment adherence

CareSignal® a Lightbeam Company

Patient Journey with CareSignal & Lightbeam



Lightbeam
Identifies cohort of target patients for CareSignal

CareSignal
Enrolls patients via text, email, mailers, and direct phone calls

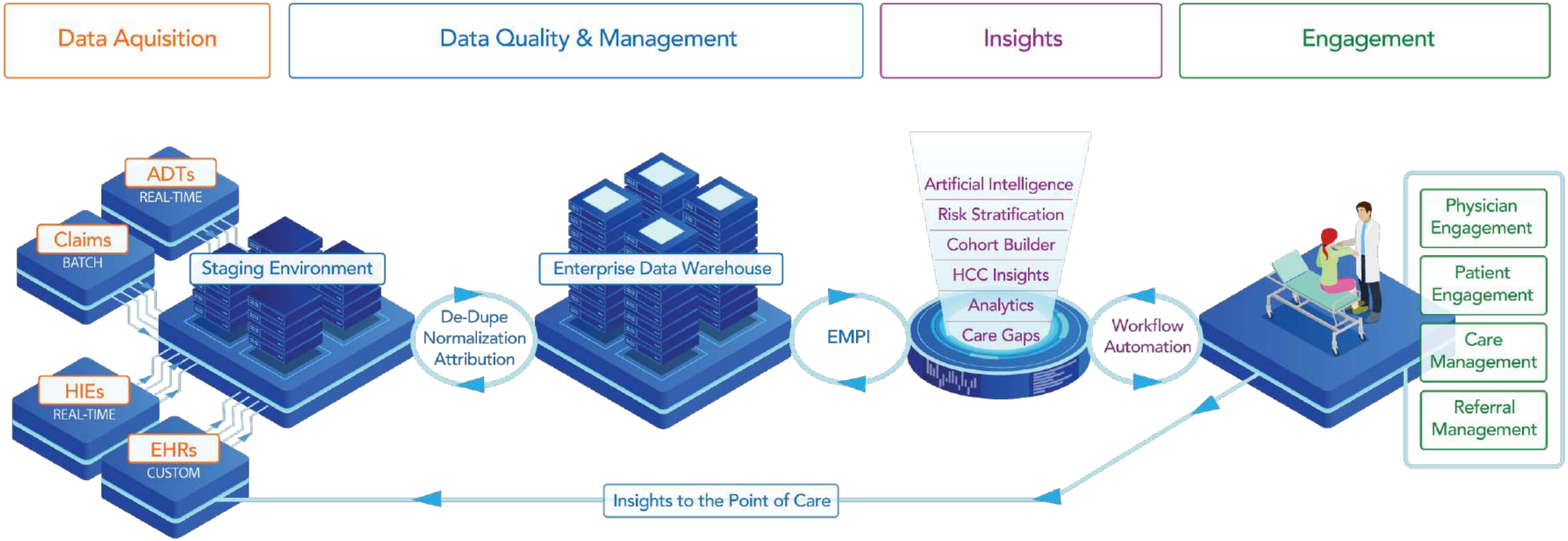
Patients
Answer automated SMS and phone call prompts, sending in clinically-relevant data

CareSignal
Categorizes at-risk patients and triggers alerts in real-time

Client or LCS
Care Managers monitor dashboard and follow standard operating procedures

Providers
receive escalations, only as needed

Everything you need to manage outcomes and improve population health right at your fingertips.

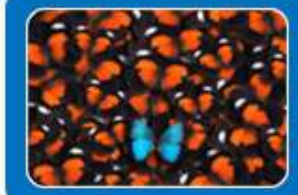


Lightbeam Health Solutions Overview

PROVEN	PATIENT-CENTERED	PURSUING EXCELLENCE	TRUSTWORTHY	PREDICTIVE
We serve over 17,000 physicians and 42 Million patients. Our clients have achieved over $1.5 Billion in gross savings with an average quality score of 98%.	We take pride in knowing we are facilitating world-class care to someone's most important person. Our integrated, interdisciplinary system is designed with holistic care of the patient in mind.	We are committed to continuous process improvement and partnering with you to meet your goals. You will have direct access to Lightbeam's executive team to discuss results and expectations.	We do the right thing, every time. We earned the prestigious HITRUST CSF® Certification, delivering on our commitment to security, privacy, and protection.	Our Searchlight risk stratification engine identifies patients who have predictable, avoidable high-cost events and identifies opportunities, keeping you one step ahead.

A Targeted Approach to Population Health Management

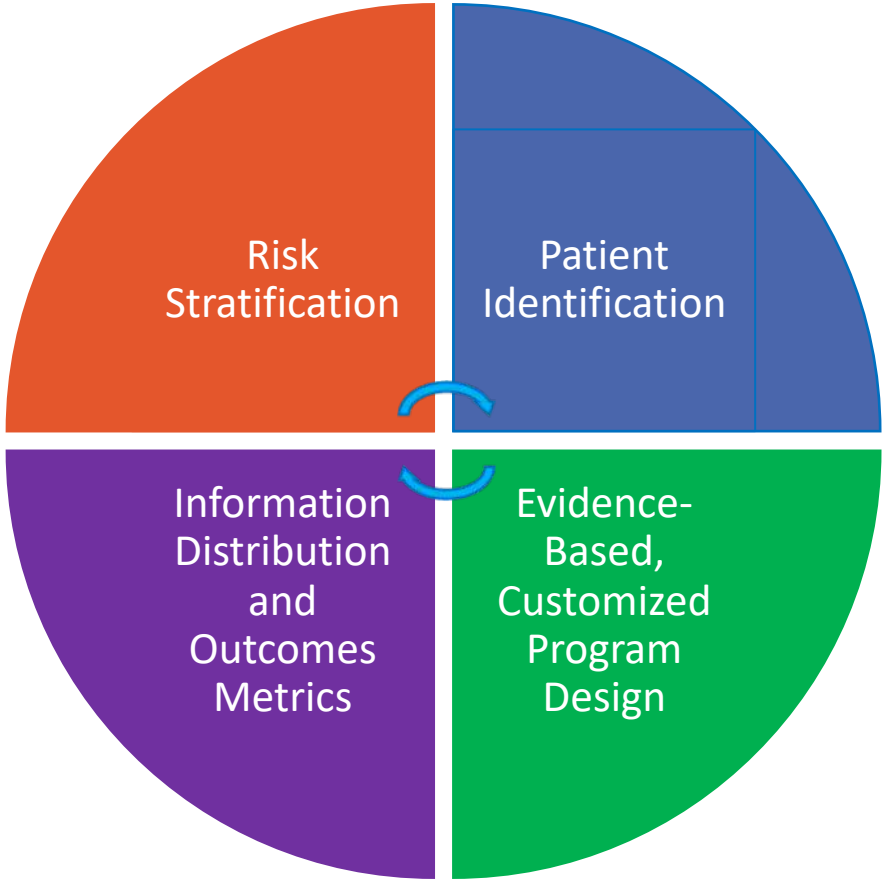
Lightbeam's innovative risk stratification measures include Johns Hopkins ACG Model, a Proprietary Ability to Impact Score, Charlson Comorbidity Index, and NYU Emergency Medical Services Algorithm for avoidable ED utilization



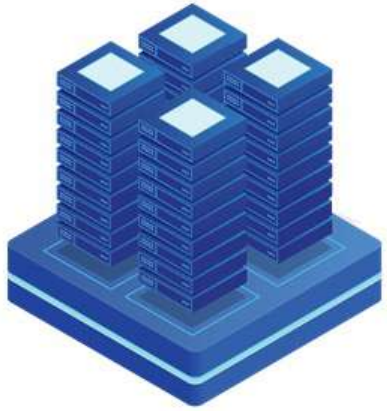
Lightbeam's powerful and precise Cohort Builder segments patients to quickly identify opportunities based on your VBC goals and to positively impact the patient population

We partner with you to design and build a care management and quality program that meets your goals. We advise on best practices for staffing models, workflows, care plans, assessments, and documentation to allow teams to work at top-of-licensure and improve care

Lightbeam measures results, compares them against benchmarks, and gives you the tools needed to accurately and appropriately deploy resources. Patient Data Export provides the ability to use information for organizational reporting



The Success Bottleneck



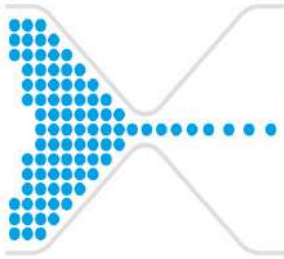
Lightbeam Analytics

Advisory Services
or Client Analysis

VBC PLAYBOOK

INITIATIVES	OPPORTUNITY
Quality Measures	$29,000,000
ACG High Risk	$4,560,000
High Risk CHF Patients	$2,302,000
High Risk COPD Patients	$2,998,922
Frequent ER Utilizers	$2,387,003
Frequent IP Admissions	$3,403,203
Advanced Care Planning	$645,000
Annual Wellness Visits	$2,308,000
Behavioral Health Integration	$92,000
Cognitive Impairment Assessment	$723,000
Chronic Care Management	$1,200,000
Depression Screening	$560,000
Diabetic Screening	$423,000
Flu Shot	$47,837
Mammogram Screening	$872,000
Obesity Screening	$230,000
Pelvic Exam	$120,000
ESRD Management Program	$3,234,083
TCM	$322,000
HCC Coding	$12,923,000
Total	**$68,351,080**

Total Opportunity



Resource
Capacity

Your PHM Operation

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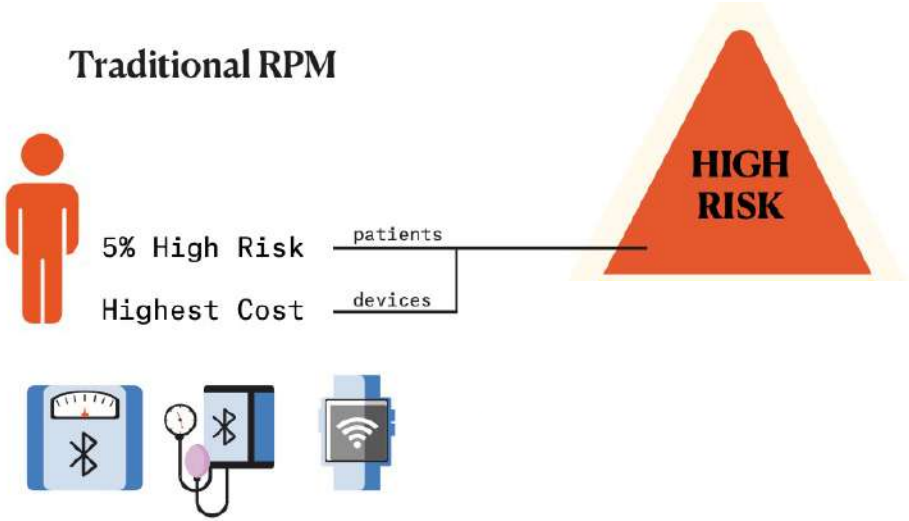
Active Programs

Missed
Opportunities

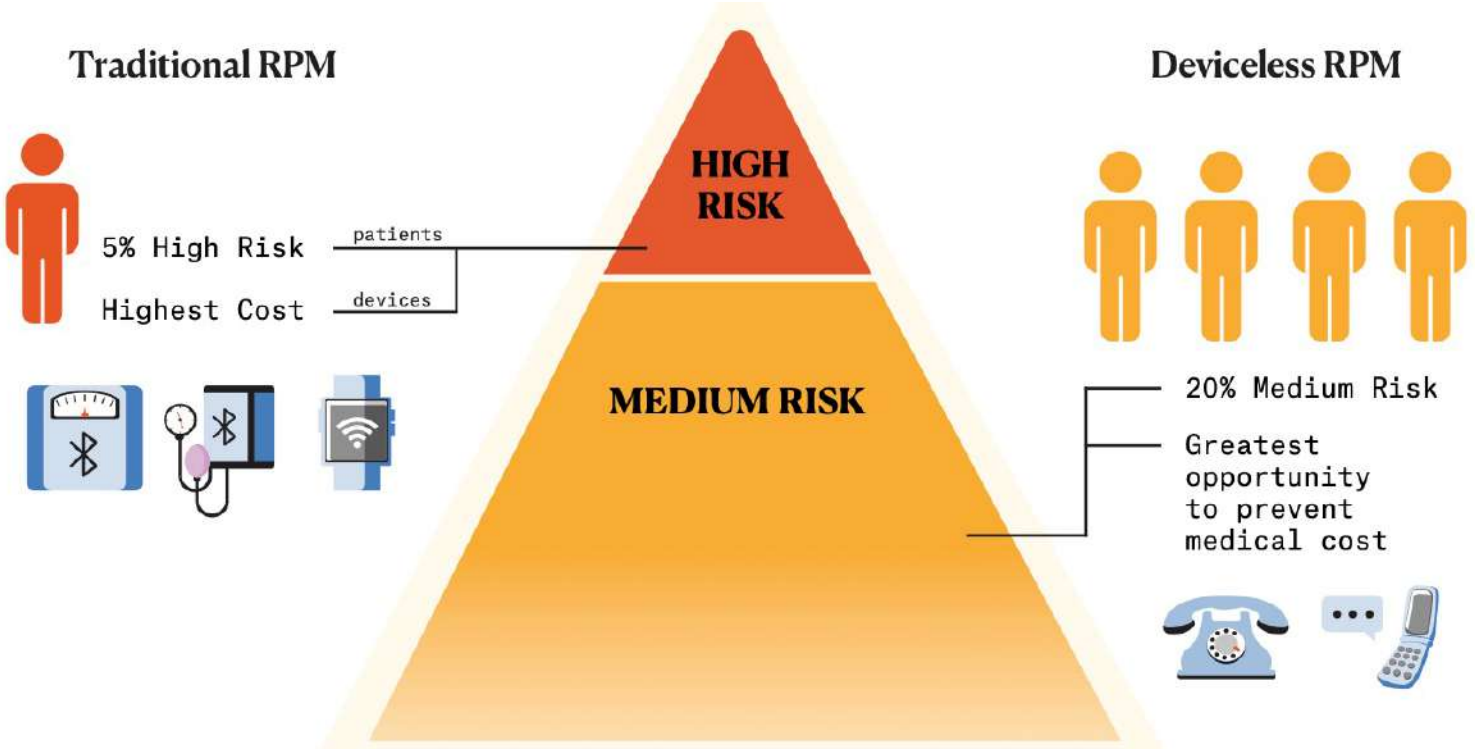
Program Support

CareSignal® a Lightbeam Company

Case Study



Case Study



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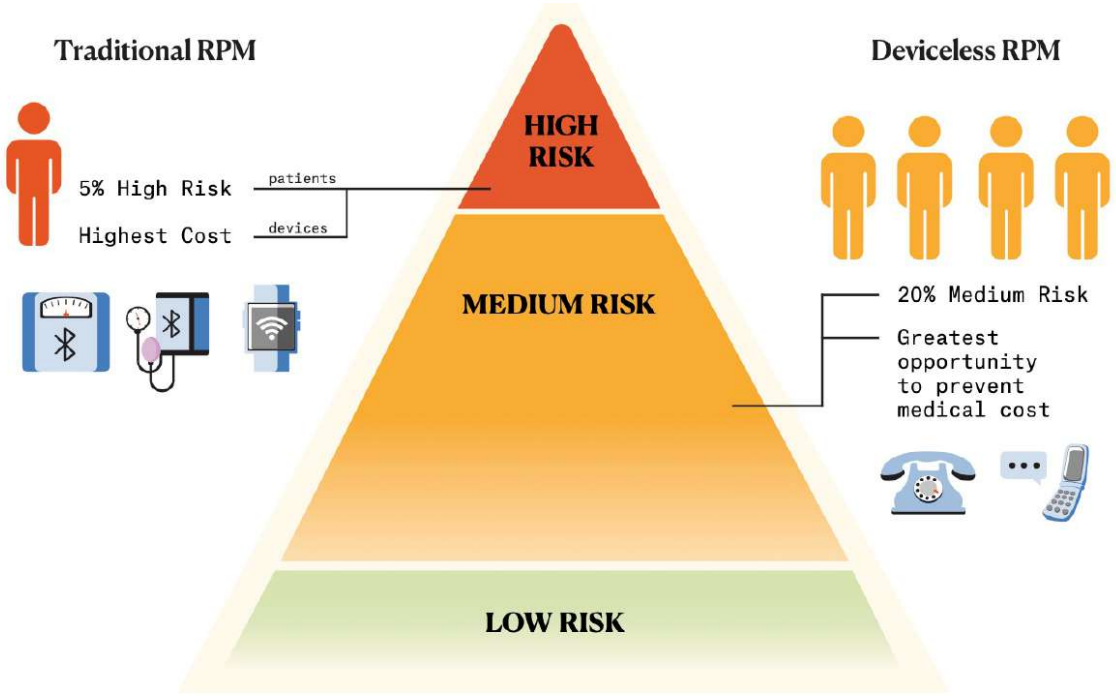

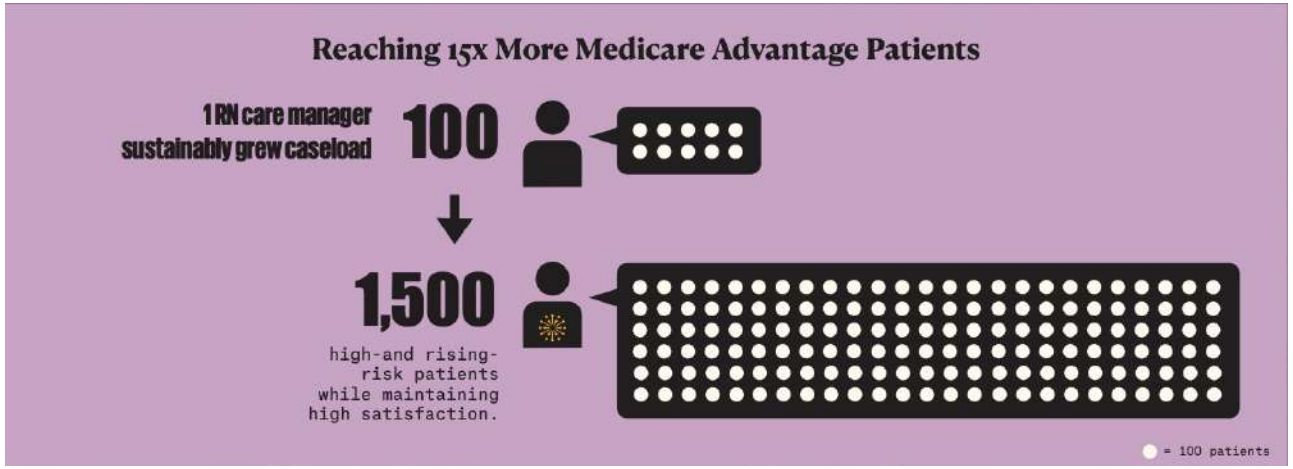

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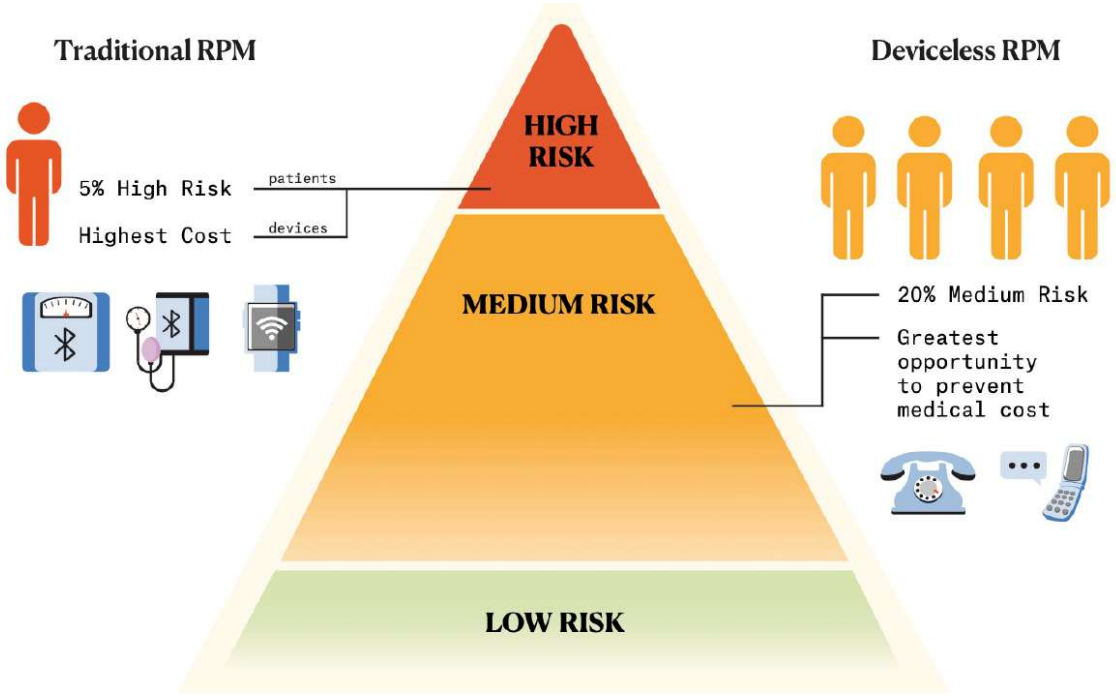
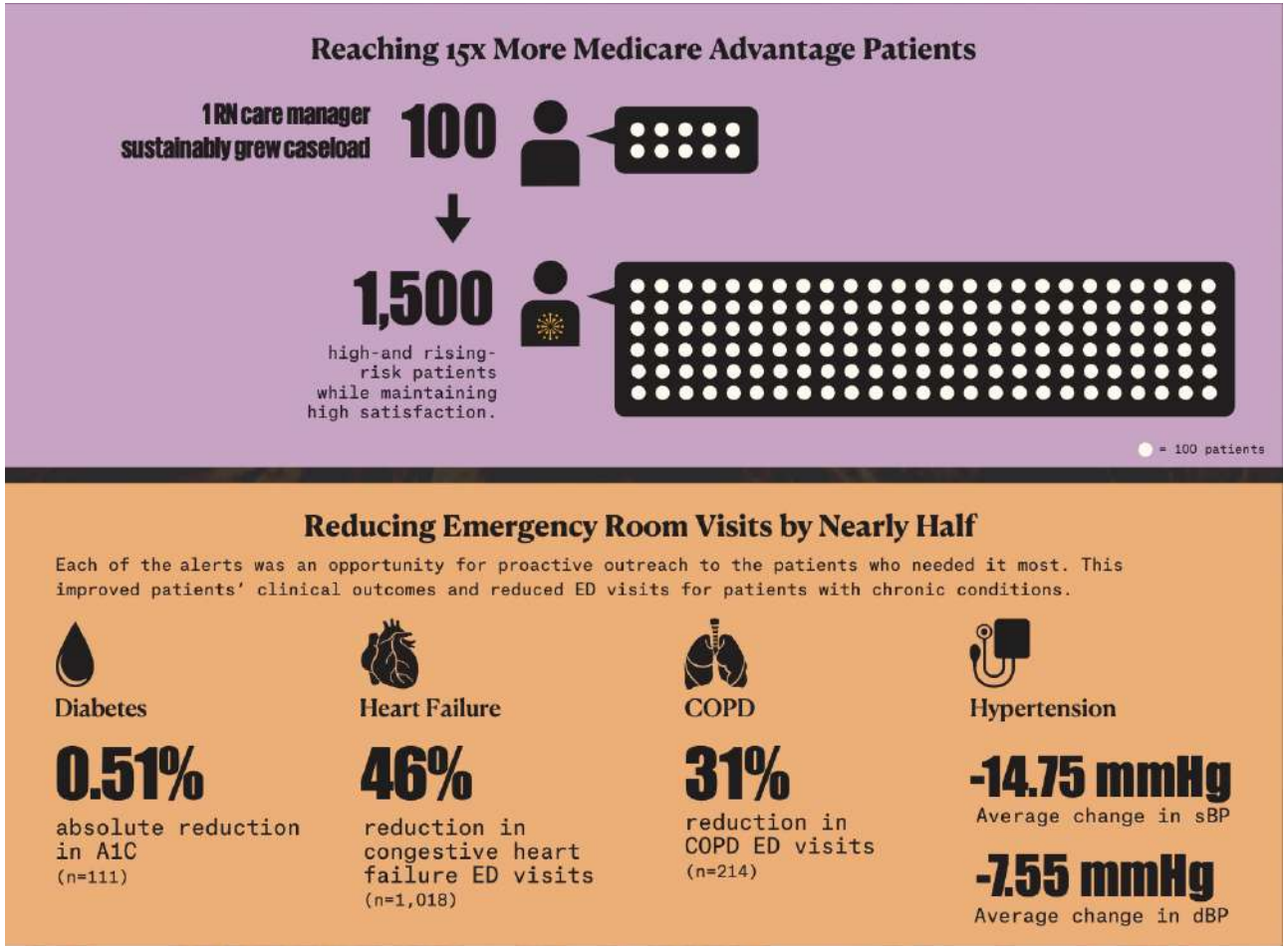
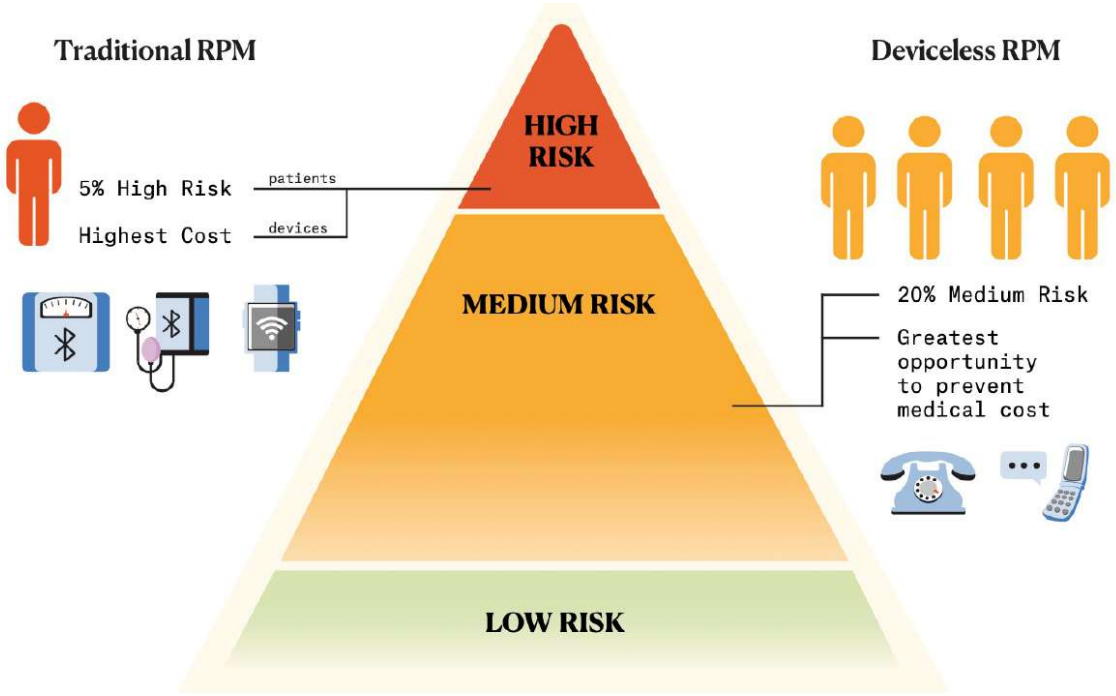




Case Study



Reaching 15x More Medicare Advantage Patients

1 RN care manager sustainably grew caseload **100**

1,500 high-and rising-risk patients while maintaining high satisfaction.

● = 100 patients

Reducing Emergency Room Visits by Nearly Half

Each of the alerts was an opportunity for proactive outreach to the patients who needed it most. This improved patients' clinical outcomes and reduced ED visits for patients with chronic conditions.

Diabetes
0.51%
absolute reduction in A1C (n=111)

Heart Failure
46%
reduction in congestive heart failure ED visits (n=1,018)

COPD
31%
reduction in COPD ED visits (n=214)

Hypertension
-14.75 mmHg
Average change in sBP
-7.55 mmHg
Average change in dBP

Esse Lowered PMPM Costs by More Than $120, Sustained for 18 Months

Improved clinical outcomes led to over three million dollars in savings.

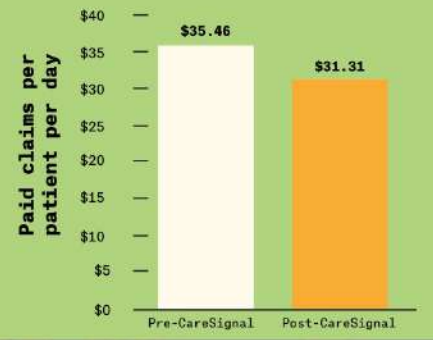
All Claims Analysis: Financial Savings ($p = 0.017$)

$3.6M
total savings

8x
ROI

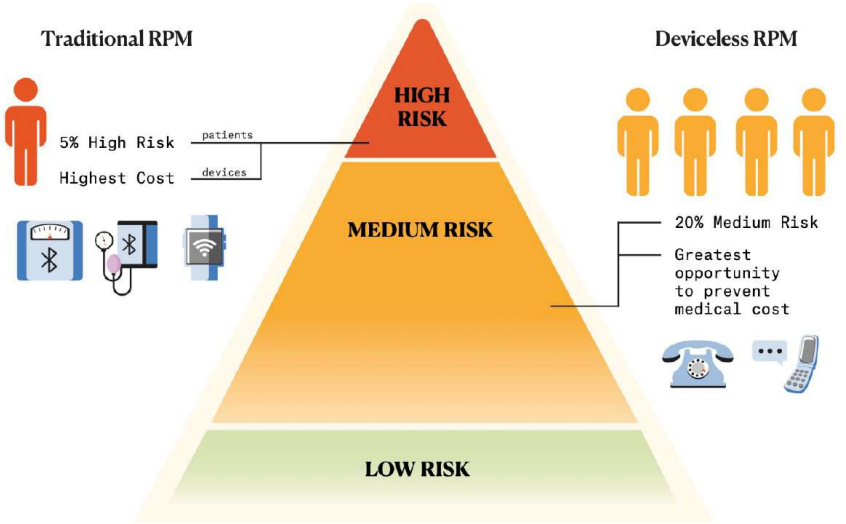
$124
savings PMPM

11%
reduction in total paid medical claim costs



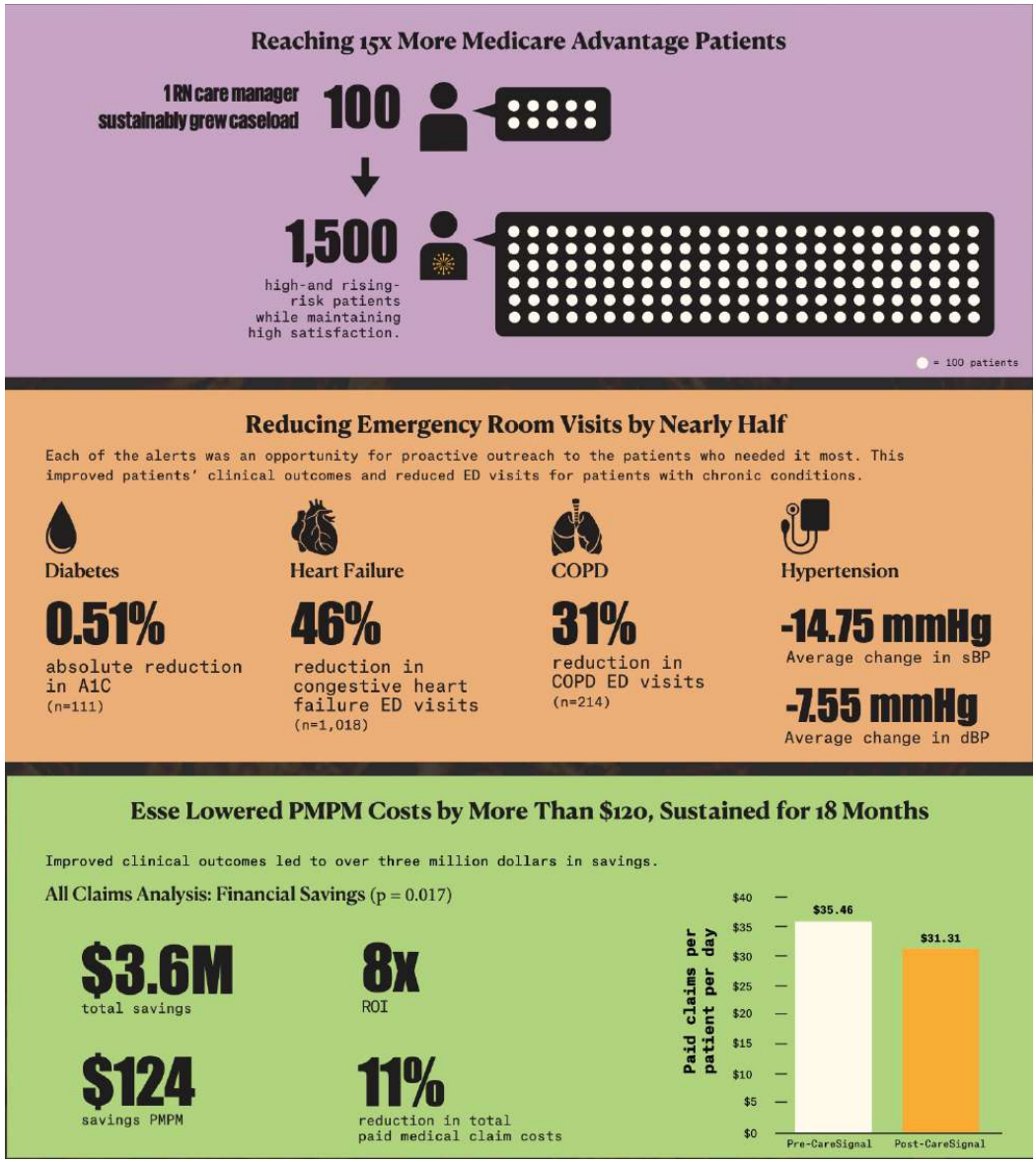
CareSignal® a Lightbeam Company

Case Study



"Now we've been able to wrap our hands around a whole group of people who otherwise might not have gotten all those touches that they received with the platform. We've been able to scale the outreach dramatically without an increase in staff, and that's really important. High-risk care management is inherently a reactive model. By extending care management into the rising-risk patients, we are becoming more proactive. Now we can say, 'Hey, there might be a problem developing. Let's reach out to the patient instead of waiting until he goes to the ED.' It's helped us manage rising-risk patients who might not have perceived a need for a care management team before."

– Carla Beckerle
Vice President of Clinical Programs at Esse Health



CareSignal® a Lightbeam Company

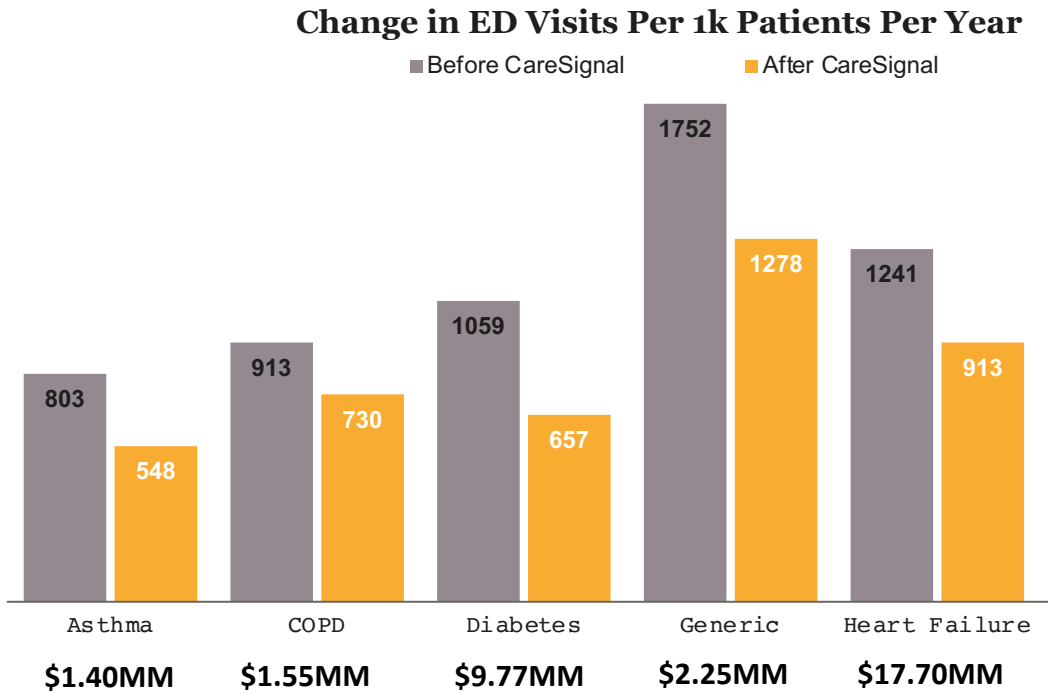
Four-year, 30K patient claims study

>30,000 Patients Enrolled
16 Programs
2.9 Million Proactive Touchpoints
80k PRO Alerts

CareSignal® a Lightbeam Company

Universally Decreases Avoidable Utilization

- >30,000 Patients Enrolled
- 16 Programs
- 2.9 Million Proactive Touchpoints
- 80k PRO Alerts
- 292 ED Visits Avoided per 1k Patients Annually
- $143 Reduction PMPM with CareSignal
- -14.25% Overall Rate of Cost Reduction



CareSignal® a Lightbeam Company

Total Cost Reduction: $32.7 Million

- >30,000 Patients Enrolled
- 16 Programs
- 2.9 Million Proactive Touchpoints
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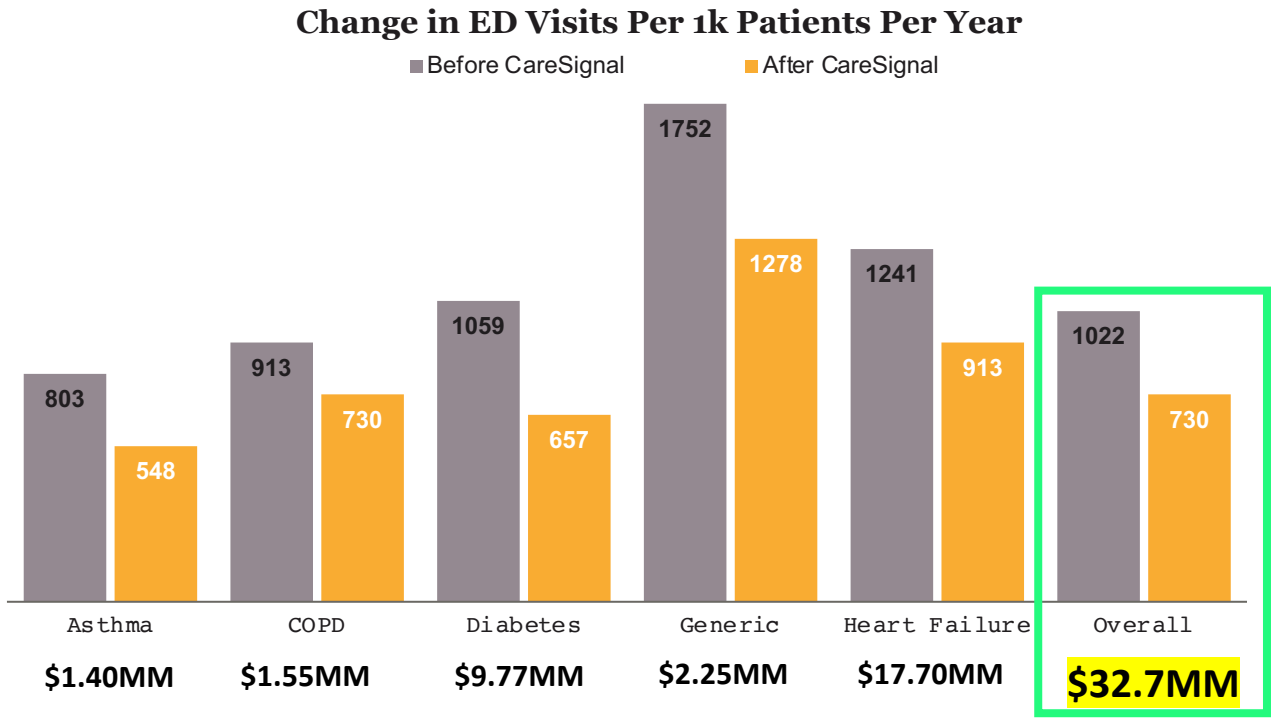


CareSignal® a Lightbeam Company

Case Study

OSF HealthCare

> "The strategic payer benefit that OSF HealthCare brings is being the trusted healthcare provider, partnering with companies such as CareSignal that bring technology that is easy to use, and combined with our clinical expertise, we can achieve really great outcomes. Digital health is progressing and we are pivoting constantly, and having partners pivoting with you is essential."

Abby Lotz MSN, RN
VP, Digital Care
CNO, Digital Health
OSF OnCall

OSF HealthCare's Outcomes with Deviceless Remote Patient Monitoring®

Use Cases Implemented	Patients Enrolled
Nine	8,000+
Outreaches Automated	**Alerts Triggered**
2,307,630	13,877

OSF HealthCare used 9 of 30+ CareSignal programs

- Hypertension
- Diabetes Mellitus
- COPD
- CHF
- Vital Signs
- Asthma
- Medication-Tracking
- COVID Staff Support
- COVID Companion

OSF HealthCare's Results

Improved Chronic Disease Outcomes

CHF	COPD	Diabetes	Hypertension
74%	83%	2.04%	14.07 mmHg
of High-Risk Patients Improved Condition	of High-Risk Patients Improved Condition	Average Reduction in A1c for Diabetes	Average Decrease in SBP for Baselines >150mmHg

CareSignal a Lightbeam Company

OSF Healthcare presented outcomes at 2021 Xtelligent Webinar

STRIDE COMMUNITY HEALTH CENTER

formerly known as MCPN

Case Study

STRIDE Care Manager
sends CareSignal's enrollment team a list of eligible patients.

CareSignal Enrollment Team
manually reaches out to educate and enroll patients into the program.

Patients
answer prompts on the phone, sending in clinically relevant data.

CareSignal
categorizes at-risk individuals and triggers alerts to STRIDE Care Manager.

STRIDE Care Manager
responds with phone call or follow-up appointment.

"CareSignal helps us engage hard-to-reach patients and see which patients are alerting, and sometimes, we find that they haven't been refilling their meds or haven't been to the clinic for over a year, and their blood pressure or blood sugar is out of control. CareSignal gives us way more visibility into our patient populations and allows us to reach out to patients and help."

- **Stephanie Campbell**, RN, director of nursing at STRIDE Community Health

Hypertension engagement:

~50% at 3 months

45% at 6 months

Diabetes engagement:

60% at 3 months

45% at 6 months

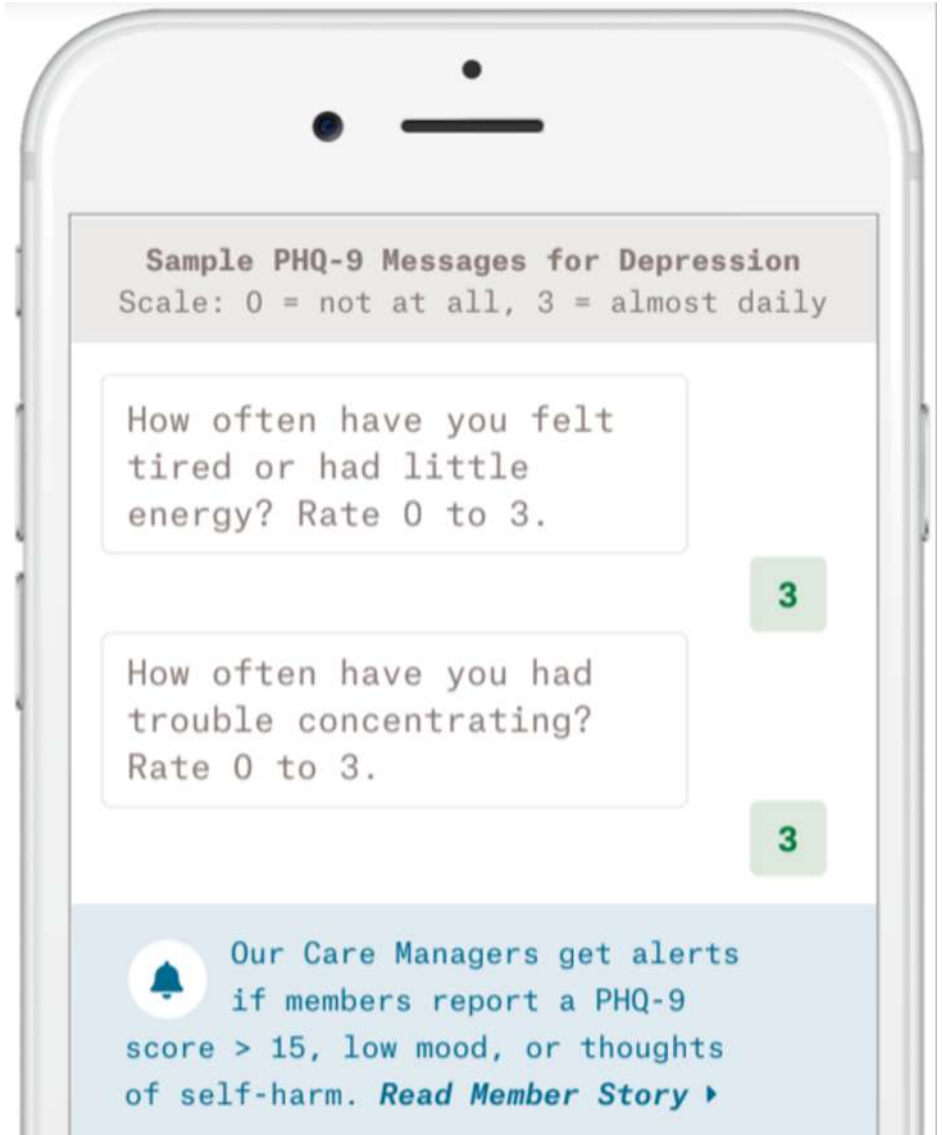
"**I have more control with my diabetes**, and it helps me remember to take my blood sugar every day."

"It **brings closeness between STRIDE and its patients.**"

CareSignal® a Lightbeam Company

WEA trust

Case Study



"CareSignal enables us to interact with our members remotely and intelligently. **With the CareSignal dashboard, we know which members are managing their health well and who is struggling.** Our Care Managers reach out promptly to those members in need, allowing us to improve health outcomes and efficiently use the expertise of our clinicians."

Jeff Carter
Manager of Utilization Review, WEA Trust

WEA Trust and CareSignal engage members and improve outcomes

Industry-Leading Engagement

75%

of members engage with and respond to CareSignal for at least 6 months

Depression

2 in 3

members reported improved mental health

Hypertension

10.52 mmHg

average drop in sBP for members with baseline 140-160 mmHg sBP

COPD

100%

of respondents reported improved communication with WEA Trust

Community*care* PLAN
the health plan with a heart

Case Study

RPM Platform Programs and Dashboard

Figure 1
Proactive Monitoring

How is your breathing today compared to a normal day?
1: Better
2: Breathing is the same
3: Worse

Reply 1, 2, or 3.

3

Figure 2
Risk Stratification

CCP Care Team

Figure 3
Triaged Outreach

Real-time Alerts
Immediate Outreach

High-Risk
Weekly Outreach

Rising-Risk
Active Monitoring

Low-Risk
Passive Monitoring

End-to-End Enrollment Tailored to CCP Members Covered by Medicaid

Awareness — **Enrollment** — **Post-Enrollment**

Provider Materials

Mailer Campaigns

Text Message Blasts

Hi Chloe! It's CCP. Do you know about our free Community CareSignal program...

Self-Enrollment Portal

Enrollment Calls

Program Materials

Follow Chloe's member journey on next page.

Partnership At-a-Glance

ED Visits Averted for Engaged Asthma Members
-22%

Average Decrease in HbA1c for Engaged Diabetes Members
1.35

Engaged Hypertension Members Maintained or Brought to Control
< 140 sBP / < 90 dBP
82%

Use Cases Implemented
Asthma, Diabetes, Hypertension

Members Engaged
401

Outreaches Automated
37,117

Actionable Alerts Triggered
566

Andrews Center

With CareSignal, the Andrews Center is able to monitor more consumers remotely than it would be able to do with staff alone. "CareSignal helps extend the capabilities of our staff," said Mangum, "to have a staff member engage 300 consumers would be more than one FTE."

CareSignal Enables Timely Response to Urgent Needs

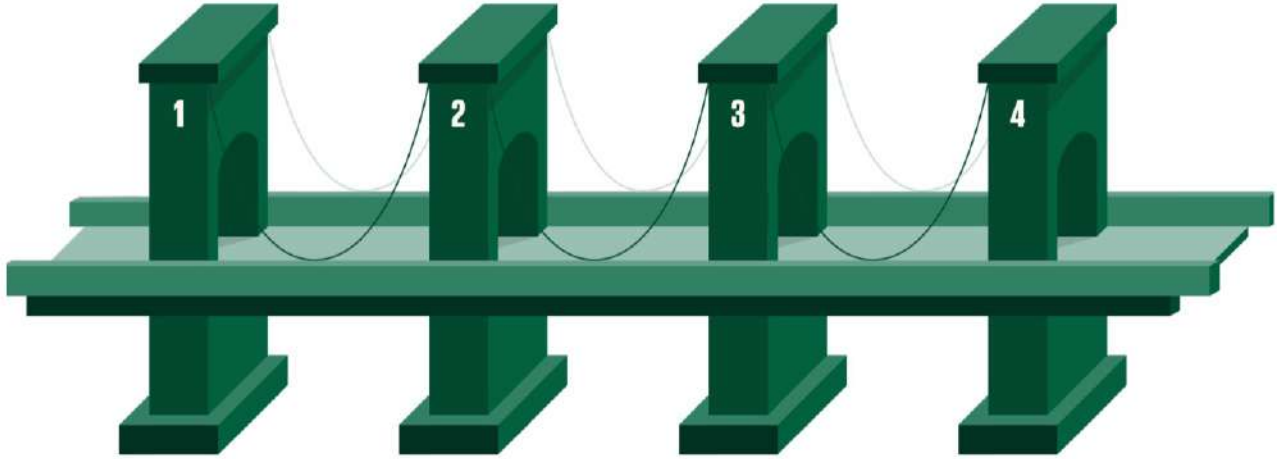
"There have now been several occasions where a CareSignal alert has been particularly timely. Our nurse recently responded to an alert to find that the *consumer was indeed at high risk due to active suicidality.* By working together, the consumer and nurse were able to make arrangements for treatment, and made a plan to stay safe in the interim".

Lindy Whitlow, RN, BSN
Director of Nursing and Care Coordination Supervisor, Andrews Center

> The regular outreaches, even just a text message, **helps keep consumers engaged - they perceive a more caring environment** where they're not just a number. And it's impossible to do this kind of outreach with staff alone."

Becki Mangum
Practice Director
Andrews Center

Bridging the Digital Divide



Low Cost
Free for consumers. No data, text, or minute plans needed.

Low Complexity
No websites to visit or passwords to remember. Instead, automated text messages or calls come to the consumer on their current phone.

Minimal Tech-Literacy Needed
No Bluetooth or WiFi to sync, no setup required.

Minimal Health-Literacy Needed
Messages are short and content is written at a 4th grade reading level.

Alerts for Mental Health Challenges

231

instances of high PHQ-9 scores or suicidal ideation identified

Improvement in Medication Compliance at 6 Months

10%

(56-66%) CMS Antidepressant Medication Management quality measure

Depression Remission (PHQ-9 < 5) at 12 Months

54%

of depression consumers reduced their PHQ-9 score by 4.6 pts on average

This is Jamie.

We help care managers like Jamie improve patient care *while* reducing workload.

Experience how automated, evidence-based SMS and IVR interventions enable Jamie to improve outcomes for any of her patients:

Chloe
Depression

Start Journey

Sharon
Heart Failure

Start Journey

Antonio
Diabetes

Start Journey

Adam
Asthma

Start Journey

Visit

try.caresignal.health

Q&A

Stop by our VBCExhibitHall.com Virtual Booth

Visit the CareJourney exhibit booth

Contact Us

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A Perfect Storm: Increasing At-Risk Contract Lives & Decreasing Nursing Availability

Building a Scalable Model for VBC

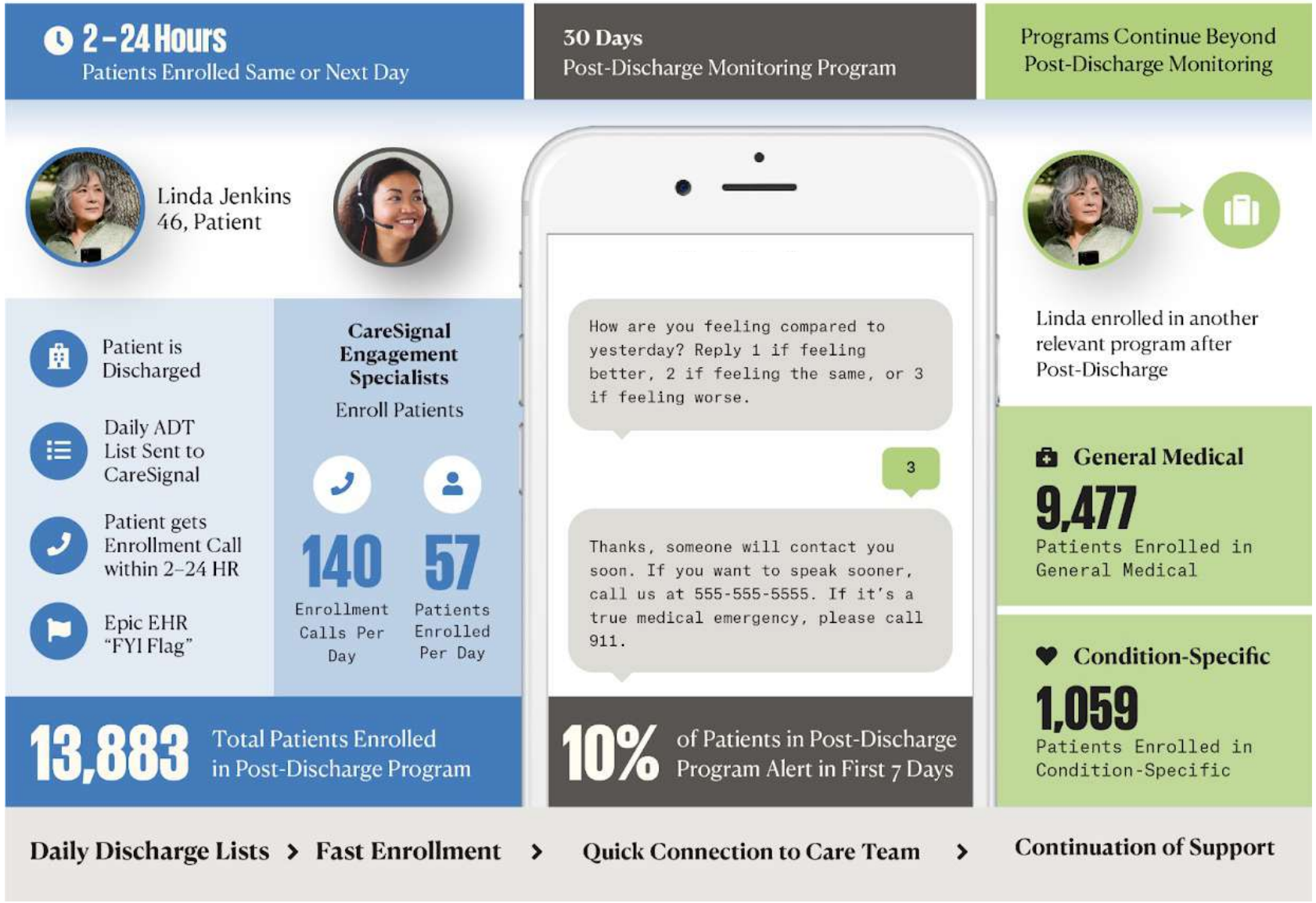
Blake Marggraff | CEO, CareSignal – a Lightbeam Company | blake@caresignal.health

Shelley Davis | VP Clinical Strategy, Lightbeam Health Solutions | sdavis@lightbeamhealth.com

One-third of 30-day readmissions occur in the first 7 days post-discharge

Patients need support to start the day they are discharged

Automated Post-Discharge Outreach Helps Prevent Readmissions



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