

Bridging Two Worlds: Utilizing Remote Patient Monitoring to Succeed in FFS and Position for VBC

Blake Marggraff | CEO, CareSignal – a Lightbeam Company | bmarggraff@lightbeamhealth.com

Best Outcomes

- Discuss optimal patient populations and technologies for which investment will yield FFS and long-term value-driven ROI
- Explore sustainable care management processes & case studies enabled by Deviceless RPM for increased capacity for VBC-based care contracts
- Investigate the real-world challenges, opportunities, & impacts of this paradigm shift across provider types

Current Drivers of Value-based Care

1. State-based initiatives are driving healthcare reform forward
2. Consumers are growing increasingly dissatisfied with existing models of care delivery
3. Influx of outside investors in both the technologies and strategies of value-based care

Key Areas to Leverage Technology for Value-based Care

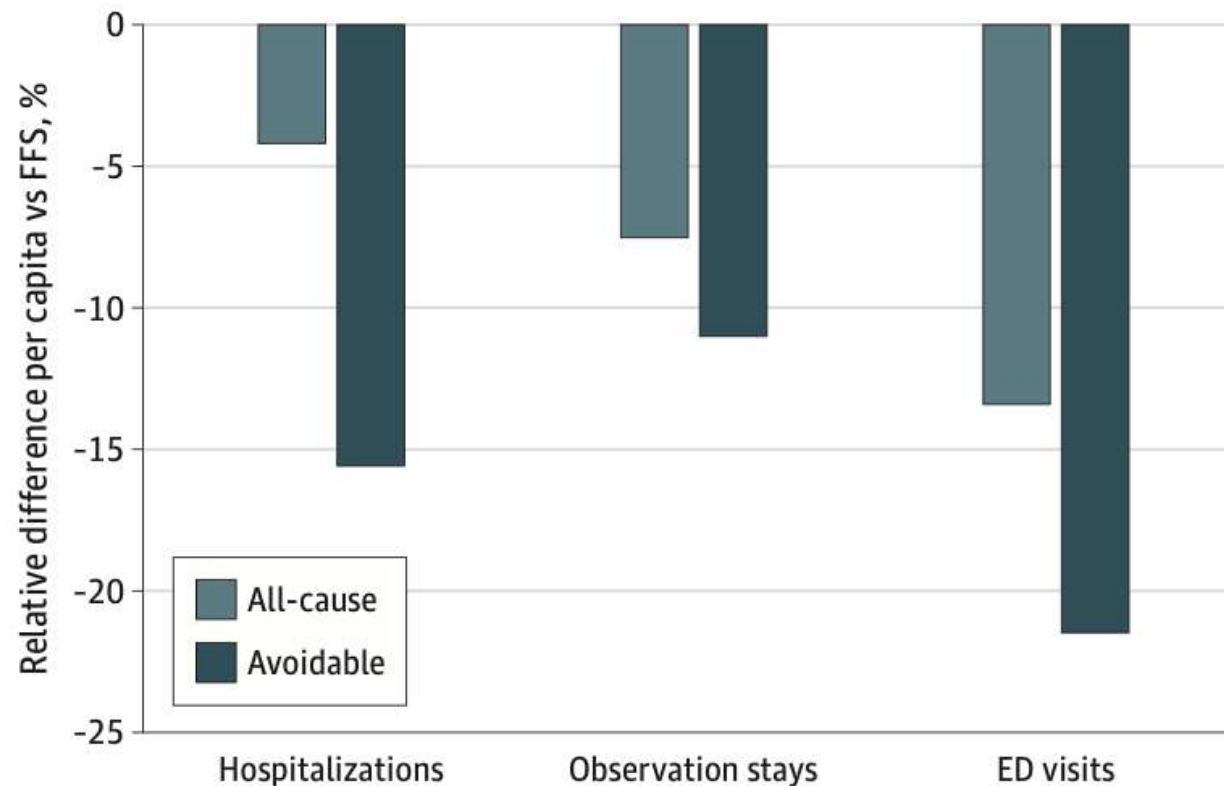
1. Reduce Avoidable Utilization, Especially in High-cost Sites (e.g. ED)
2. Identify the Appropriate Next Site of Care Post-Discharge
3. Optimize Skilled Nursing Facility Length of Stay
4. Continue to Focus on Readmissions

The logo for HealthTech, featuring the word "Health" in white and "Tech" in red, both in a bold, sans-serif font, set against a solid red rectangular background.

"Technology is a key driver behind achieving true value-based care. It has the power to break down silos, connect provider workflows, increase efficiencies and share insights into the patient journey."

The Impact of VBC Is Significant and Sustained

Figure. Percentage Differences in Adjusted All-Cause and Avoidable Acute Care Use for Medicare Advantage Beneficiaries Cared for Under 2-Sided Risk vs Fee-for-Service (FFS) Payment Models



JAMA
Network | **Open**™

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

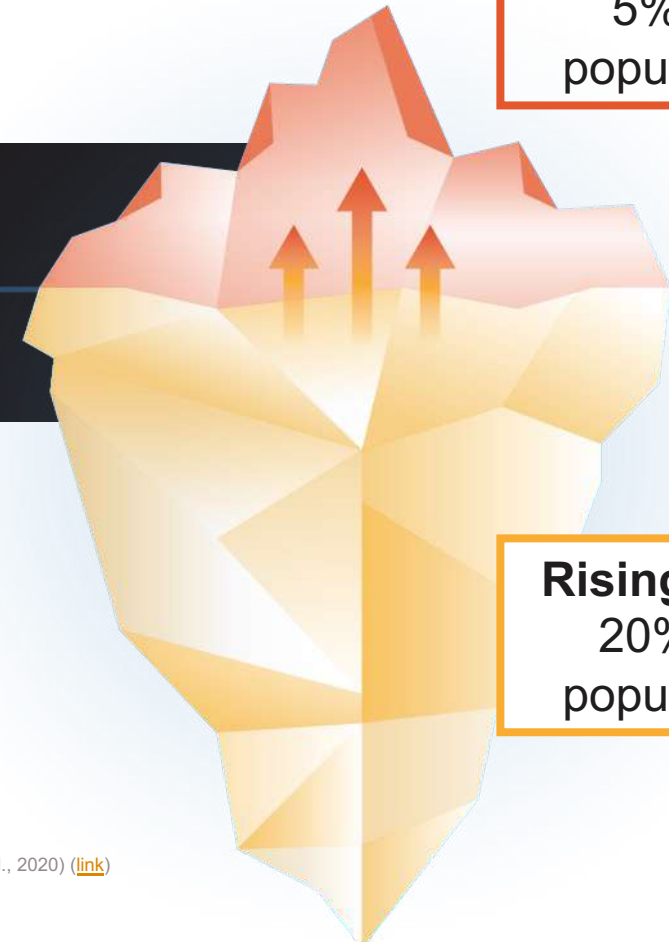


The NEW ENGLAND
JOURNAL of MEDICINE

“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



High-Risk
5% of
population

Rising-Risk
20% of
population

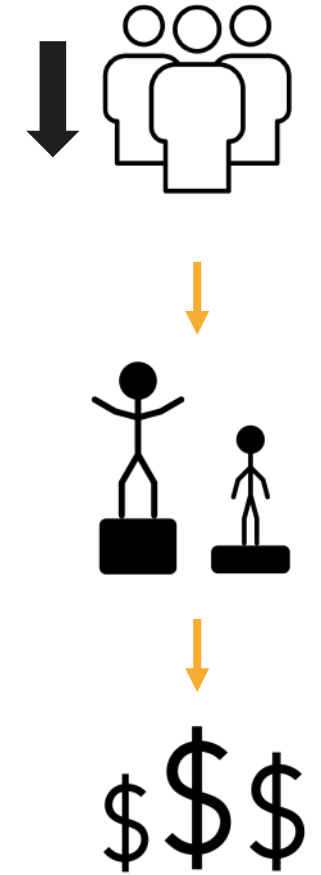
Nursing Shortages Inhibit Health Transformation

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.

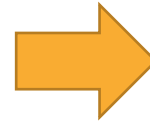
Readmission risk changed from **not significant** to **27% higher than white patients** when nurse staffing ratios became worse.



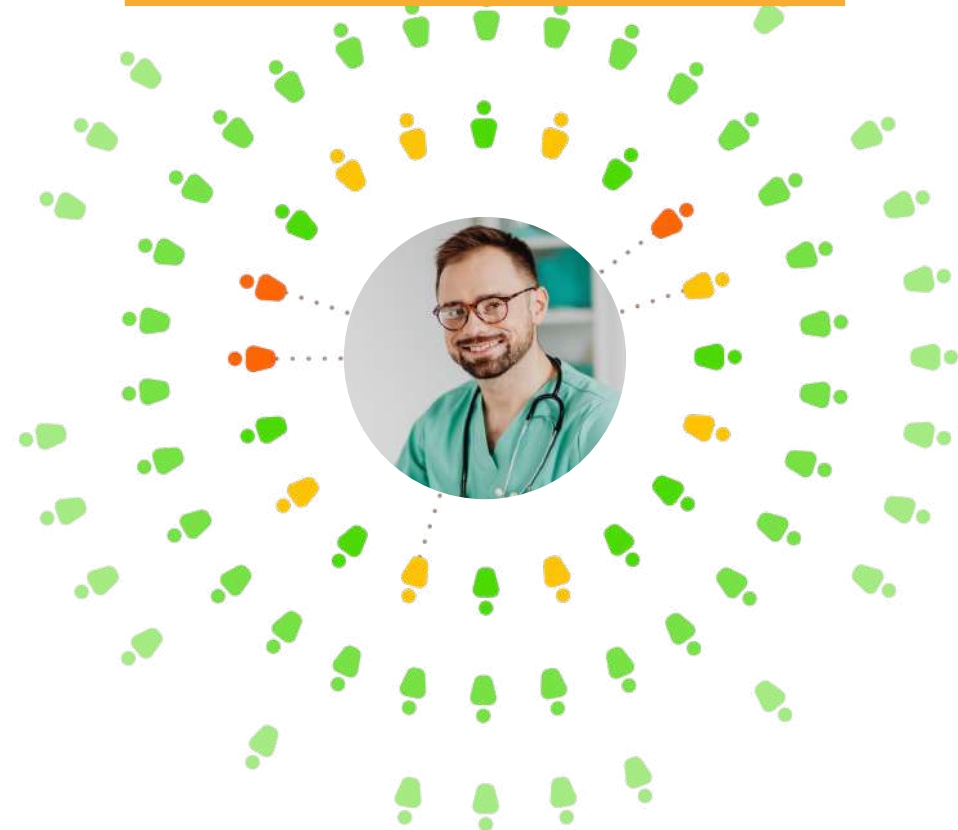
Care Management for Rising Risk: a Paradigm Shift

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

Before CareSignal
Manual outbound outreach



After CareSignal
Automated inbound insights



Deviceless Remote Patient Monitoring

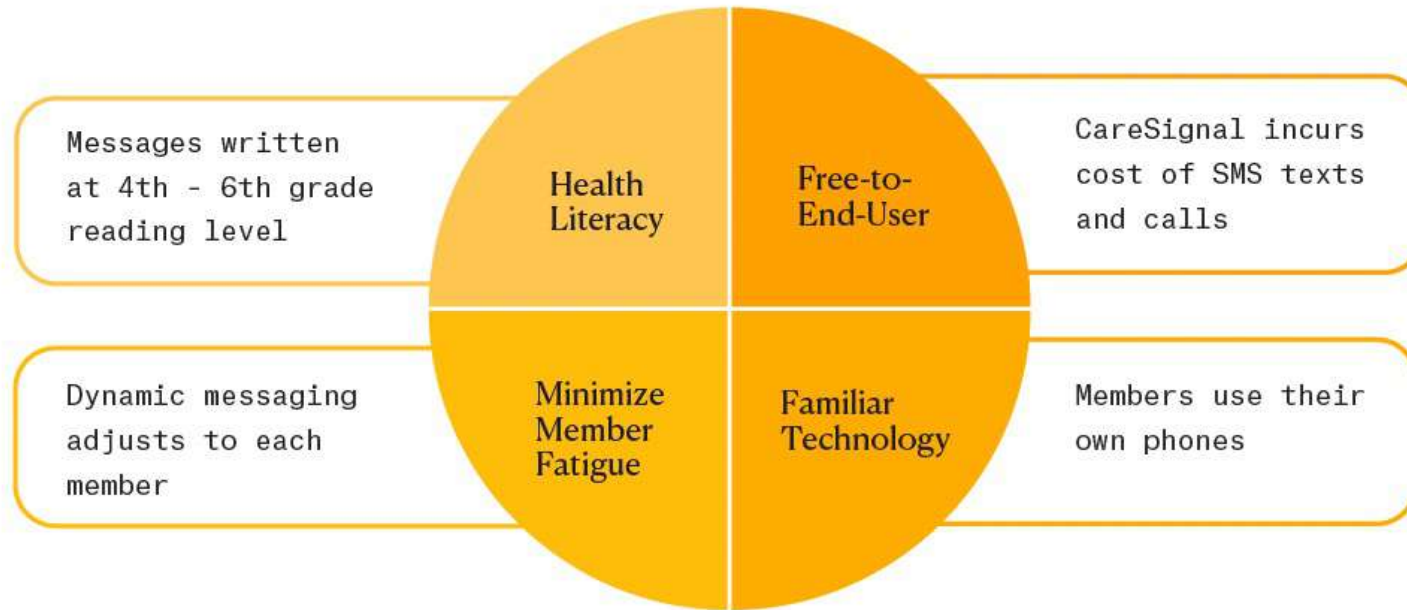
Affordable | Accessible | Scalable

- ✓ **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
- ✓ **White-labeled for patient/member**
High-quality, credible experience



Deviceless Remote Patient Monitoring

Member Accessibility



verizon

T-Mobile

Sprint

 CareSignal®
a Lightbeam Company

 AT&T

 boost
mobile

 metro
by T-Mobile



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

Congestive Heart Failure

Inclusion Criteria: LACE, HCC, Diagnosis

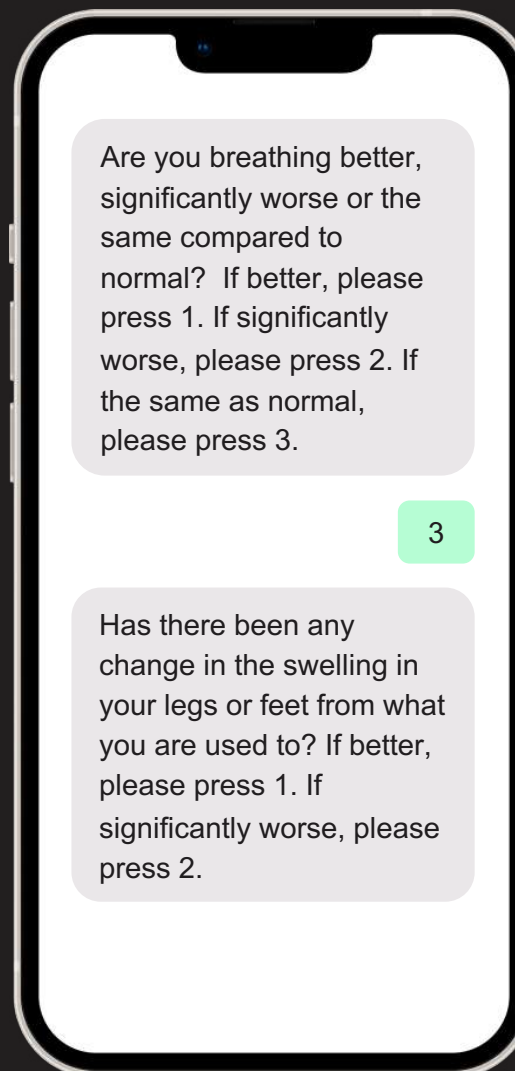
Alert Notifications:

- Worsening breathing
- Worsening swelling
- Excessive weight gain

46%

Average Reduction in ED visits (N > 1,000)

Congestive Heart Failure:
No Alert

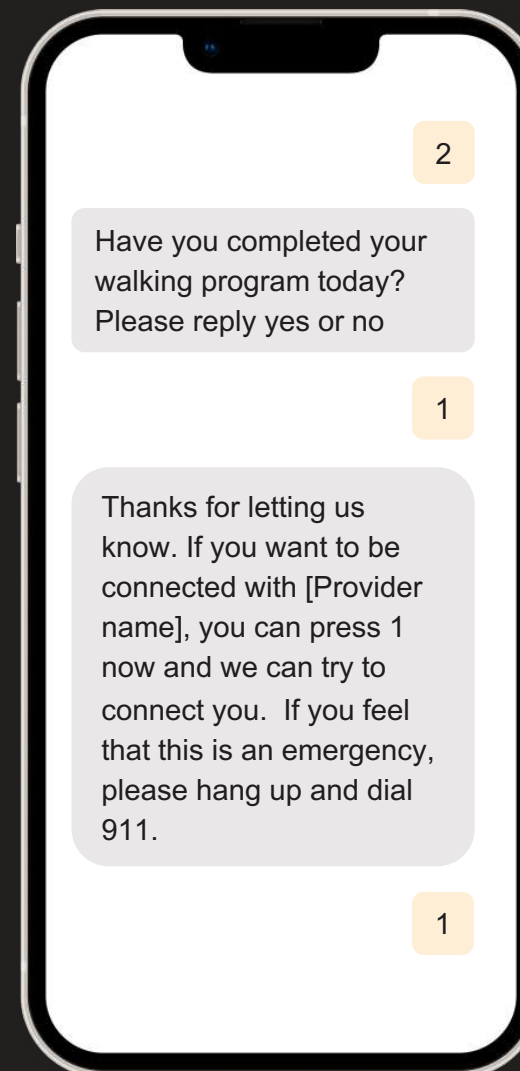


Are you breathing better, significantly worse or the same compared to normal? If better, please press 1. If significantly worse, please press 2. If the same as normal, please press 3.

3

Has there been any change in the swelling in your legs or feet from what you are used to? If better, please press 1. If significantly worse, please press 2.

Congestive Heart Failure:
Alert Triggered



2

Have you completed your walking program today? Please reply yes or no

1

Thanks for letting us know. If you want to be connected with [Provider name], you can press 1 now and we can try to connect you. If you feel that this is an emergency, please hang up and dial 911.

1

Alert
Triggered

Auto
Connect

COPD

Inclusion Criteria: LACE, HCC, Diagnosis with ED visit within 12 months

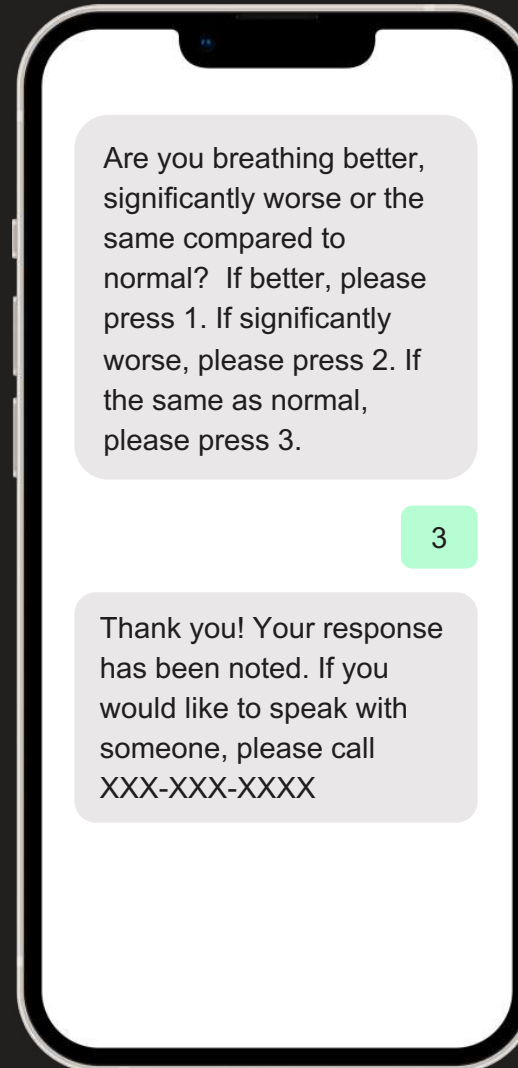
Alert Notifications:

- Worsening breathing
- Worsening cough
- Change appearance of cough
- Risk classification: Danger

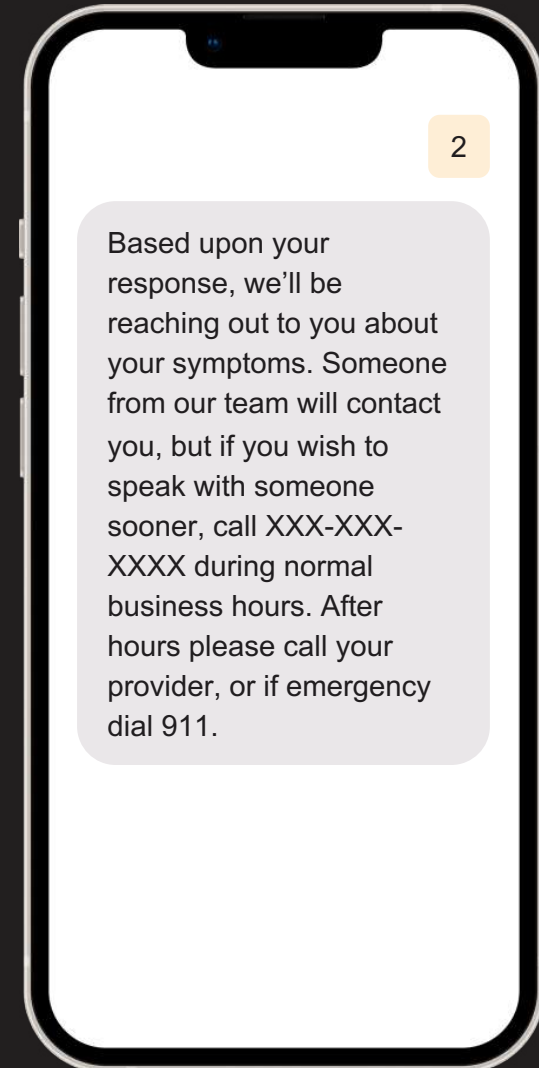
62%

Average Reduction in COPD hospitalizations over 6 months

COPD Example:
No Alert



COPD Example:
Alert Triggered



Alert
Triggered

Social Determinants of Health

Modules:

- Annual Introductory Screener
- Monthly Check-In Screener(s):
 - Food, Transportation, Employment, Housing, Financial Strain, Safety, Health Insurance, Health Literacy, Utilities, Childcare, Family and Community Support

Alerts:

- Alerts are triggered for any urgent need reported

Check-In Screener Features

- Users can text CONNECT to prompt question about urgent needs
- Users get a light-touch reminder each month about the CONNECT feature

Social Determinants of Health:
No Alert

In the next month, how likely is it that your food could run out before you get money to buy more?

1 Unlikely
2 Somewhat likely
3 Very Likely

3

Do you have any urgent needs?

0 - None at this time
1 - You have no food for today

Long-COVID + PHQ-4

Reported Symptoms:

- Feeling worse
- Worsening breathing
- Worsening cough
- Brain Fog
- Fatigue
- Joint or muscle pain
- Fever
- Emotional exhaustion
- Depersonalization
- and more

Users may text:

- Stress
- Tips

Long-COVID

Have you recently, or are you currently, experiencing a fever, cough, or shortness of breath that is not attributable to a previously recognized condition?

Stop

PHQ-4

May we ask you a few quick questions about your stress levels? Please reply Yes/No

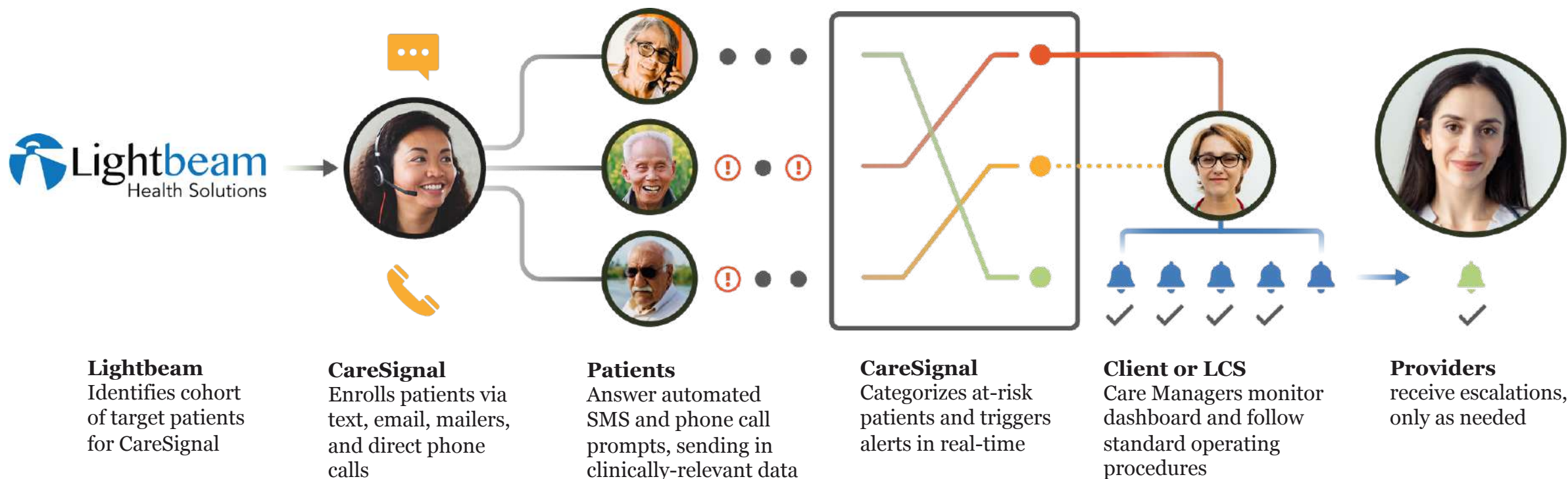
Yes

Over the past week, have you felt so overwhelmed that all of your energy was depleted?

1. Not at all
2. Sometimes
3. Often

2

Patient Journey with CareSignal & Lightbeam



Chronic Care Management in VBC Organizations

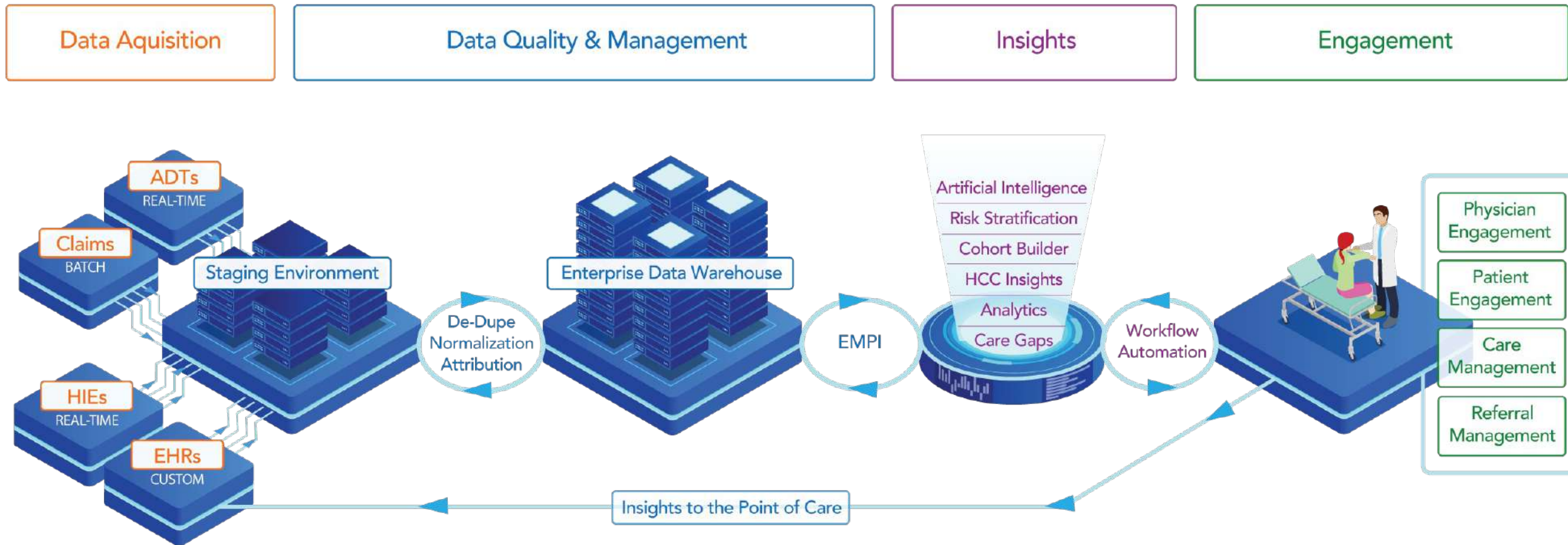
“There is major value in automatically checking in with patients via Deviceless RPM, it is particularly great for patients who are reluctant to reach out to their provider, reaching these patients is most impactful for controlling costs.”

“This is working out very well for me. I receive the text and reply as soon as I can to it. I honestly appreciate this procedure and feel like these people really do care. It also shows that Christie works as a team.” -Patient

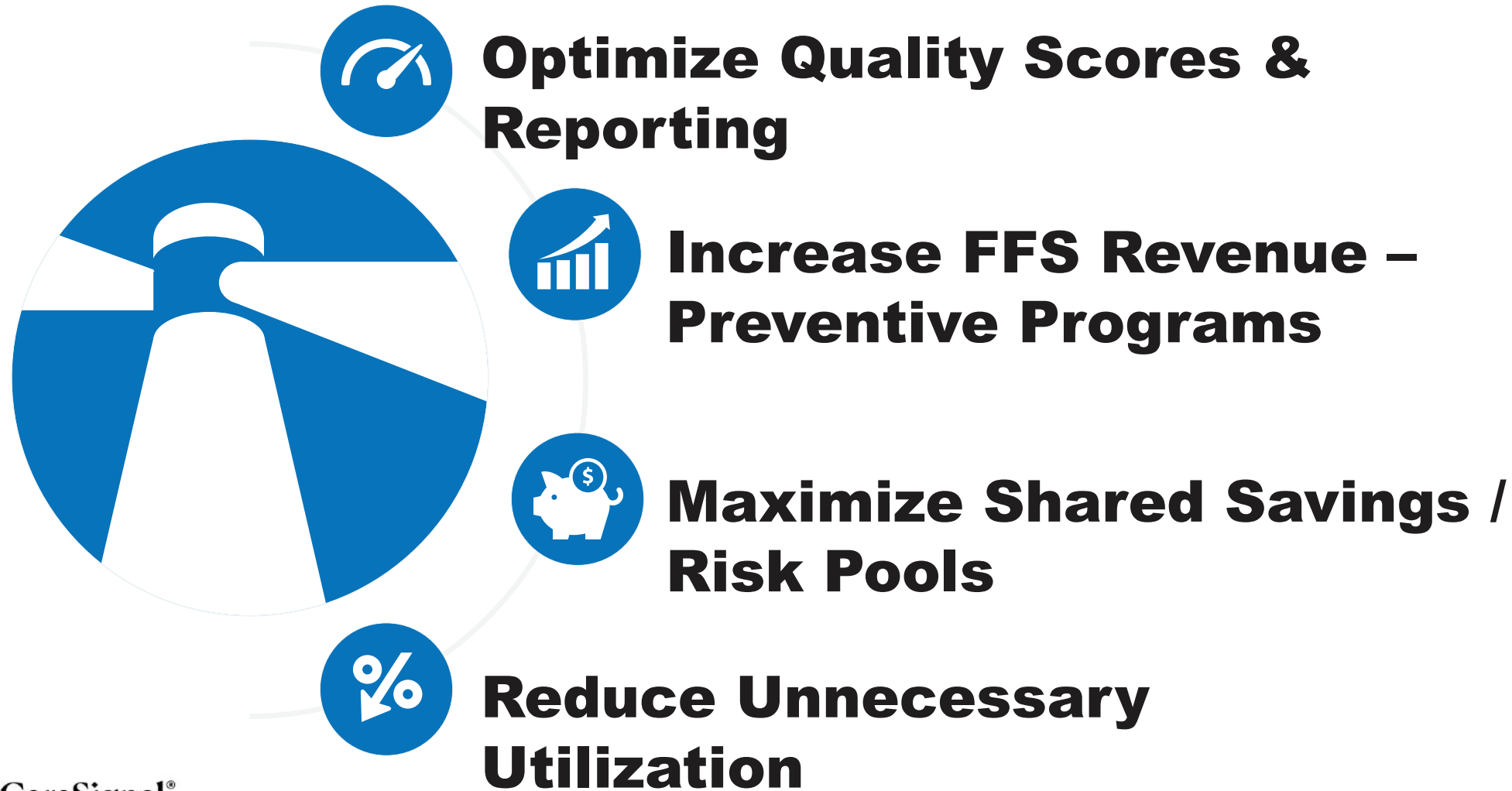
“Deviceless RPM helps closely monitor our patients’ health and alert nurse care managers to quickly reach out to patients who need help. Through simple phone calls or text messages, our patients can report any changes in their health. By knowing how their patients are doing from week to week, our nurses will be able to prevent avoidable hospitalization.

“It’s a fairly painless way to keep a log of general health without having to go in detail, and serves as a reminder that there is help if I need it.” -Patient

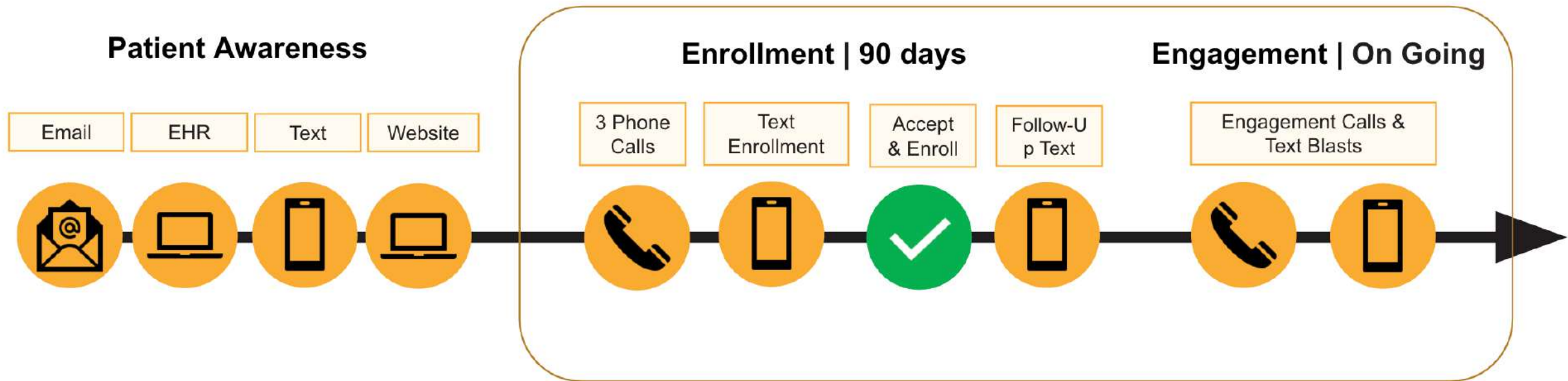
CareSignal + Lightbeam Value Creation



CareSignal + Lightbeam Value Creation



Robust, Cost-effective Enrollment Flow



White-labeled Materials Complement Enrollment

Three C's of Member-Centric Health Care Programs

As you think about taking part in Quartz Care Signal here are three things to keep in mind:

- 1. Connection.** Will this program connect you with a care team or to the resources you need?
- 2. Comfort.** Can you participate from the comfort of your own home? Or, can you use devices you are already comfortable using?
- 3. Cost.** What will it cost you to take part in this program?

Quartz Care Signal addresses each of those items by connecting you with a care team over convenient, automated phone calls or texts—all at no additional cost to you.

Join Our New Program That Puts You at the Center

ENROLL NOW

For your convenience, we've created a unique Quick Access Code for you to enroll. It is:

07B H6 L

As a bonus, members that enroll by now will be eligible to win one of six VISA gift cards.

Enroll Now!

QuartzCareSignal | Quartz 2021 | Remote Health Monitoring

Stay Connected & Healthy with Paramount CareSignal!

Affiliate of ProMedica

How Does Paramount CareSignal Work?

- Paramount CareSignal helps you stay healthy from the comfort of your home.
- This program is free to you with no additional costs.
- All you need is a phone to participate in Paramount CareSignal.
- You will receive weekly messages or phone calls asking about your condition specific symptoms.
- Get immediate help from your Paramount Care Team if you respond with worsening symptoms or health concerns.
- Paramount CareSignal messages or phone calls arrive at a time that you choose. It only takes a few minutes each week to respond to messages.
- Be sure to respond at least once a month to be eligible to win gift cards!**

Why Should I Enroll?

- It's a great way to stay connected with your Paramount Care Team between provider appointments.
- Enrolling in the program will help you & your Paramount Care Team better manage your health.**
- We can support you with the following:
 - Breathing Quality (COPD)
 - Mood
 - Blood Sugars
 - Heart Health
 - Basic Needs

How Do I Enroll?

- In the coming weeks, you will get a phone call or a text message to help you enroll in Paramount CareSignal.
- To enroll, simply answer our call or reply to the text message.

Messaging Available for Any Type of Phone

Example Messages

Paramount Care Team

What is your blood sugar? (example:100)

115

Did you eat anything in the 2 hours before you took your blood sugar? Please reply yes or no.

YES

Learn More & Enroll: 419-482-8834

PLEASE NOTE: This service is not intended to replace any communications you already have with your care team and is not intended to replace 911 or emergency services. Call 911 if you're experiencing an emergency.

Navigate your Health Easier this Fall with your Personal Care Management Team!

With WEA Trust's Remote Health Monitoring, you have the power to send health updates without scheduling an appointment, and from virtually anywhere!

Remote Health Monitoring is designed to support members and their personal health conditions. By simply answering a few automated text messages or phone calls each week, you can spend more time relaxing knowing a clinician at WEA Trust is updated about your health.

Visit <https://crsg.nl/wea-trust> and sign up with your unique access code on other side ▶

Hi Angela! We can send automated check-ins about your health to better support you.

May we ask about your health via this number?

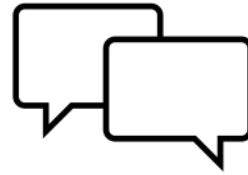
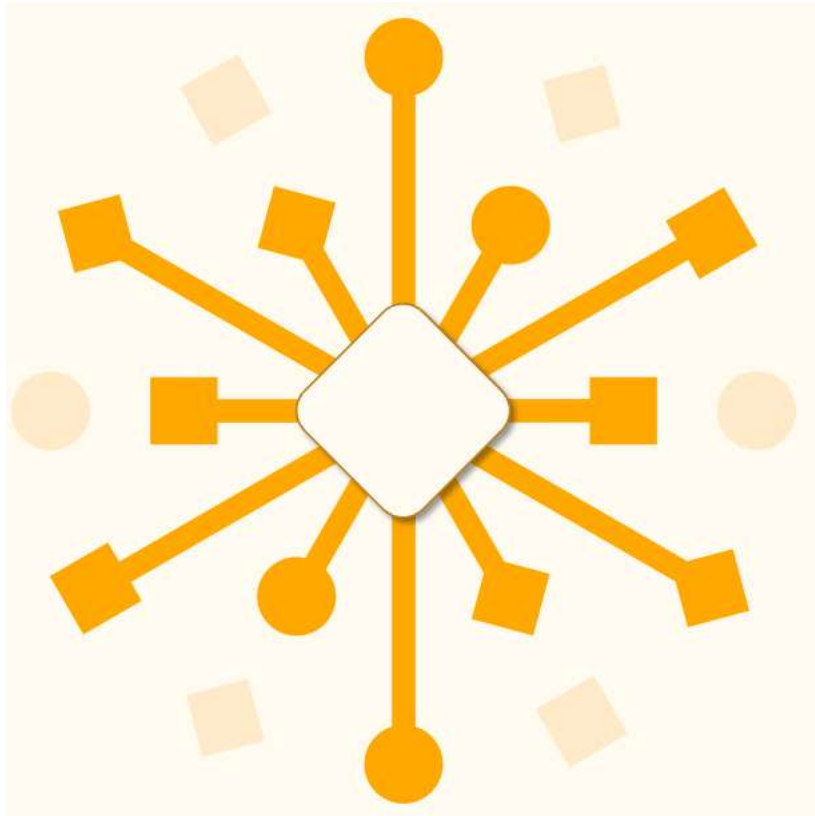
Yes

Great!

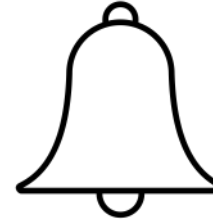
Sample messages for educational purposes only. Exact wording will vary.

CareSignal Capabilities

Features to Extend Scalability



Two-way Messaging
Security chat with patients



Push Messaging
Send preset messages with a click



Blast Messaging
Deliver content to patients at-scale



CareSignal.AI
Predict engagement, outcomes, and cost

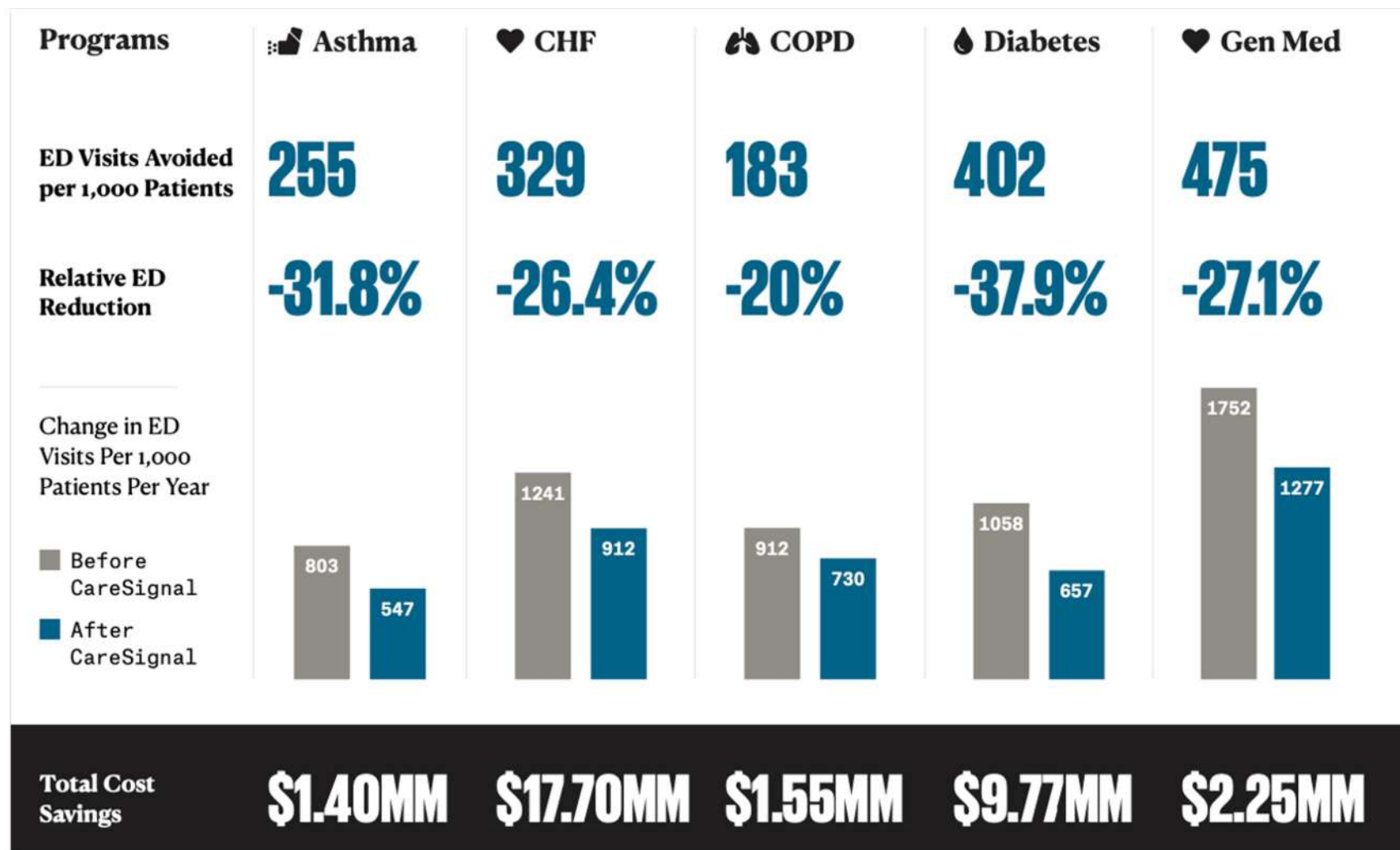


Smart Dashboard
SOPs built into smart queue



Integration
Via HL7, FHIR, or API

Behind the Scenes of One of the Largest RPM Implementations in the US: 35,000 Patients & \$32M in Cost Savings



Midwest Virtual's Deviceless Remote Patient Monitoring Utilization

2016 - 2021

 **35,959**

Total Number of Patients Enrolled

 **2.9MM**

Total Automated Patient Touches

 **2.0MM**

Total Automated Text Messages

 **963,900**

Total Automated Phone Calls

 **80,000**

Proactive Alerts Raised

19 Programs

Currently Utilized by Midwest Virtual



“ The Americares platform has infused another layer of communication between the patient and provider team that allows for real time problem solving and action steps.”

- Linda Judah, Executive Director

🏠 Social Determinants of Health Needs Identified

Health Literacy

196

Employment

344

Community Support

447

Food

1,066

Total Needs Identified

2,053



Patient Satisfaction • Most CareSignal enrollees agree that they are getting the best possible care from [Clinic Name].

Patient Satisfaction • Average = 7.77



1 - Strongly Disagree

Strongly Agree - 9



Communication • Most CareSignal enrollees agree that their communication with [Clinic Name] has improved.

Communication • Average = 7.84



1 - Strongly Disagree

Strongly Agree - 9

The Five Clinics' Impact

Total Automated Touches

87,917

Total Alerts Triggered

272

Engagement

Total Patients Engaged in the Diabetes Program

585

of Patients Remain Engaged after 10 Months

78%

Diabetes Outcomes

Reduction in eHbA1c >8% at baseline (n=81)

1.8%

Reduction in eHbA1c >9% at baseline (n=51)

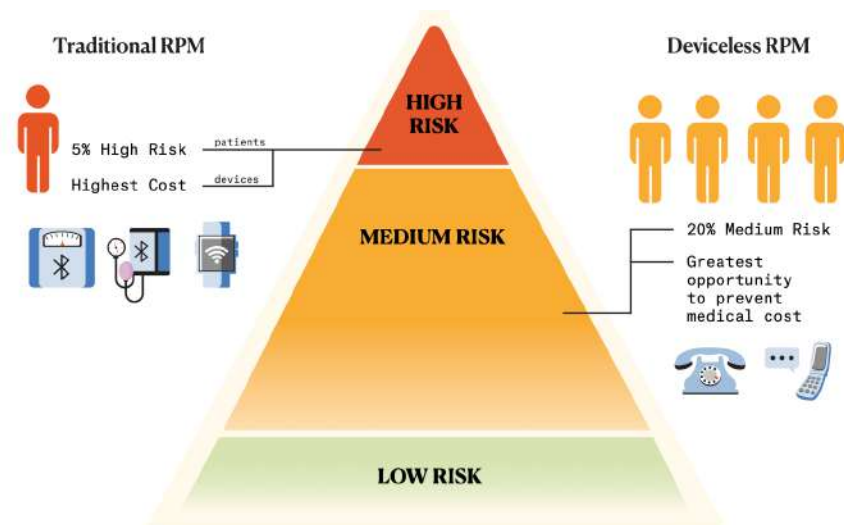
2.5%



Case Study

Traditional RPM

Deviceless RPM



“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

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



3 Hours

Average Time from List Sent to First Call

30 Days

Post-Discharge Monitoring Program

Programs Continue Beyond
Post-Discharge Monitoring



Linda Jenkins
46, Patient



Midwest Virtual Care Team

How are you feeling compared to yesterday? Reply 1 if feeling better, 2 if feeling the same, or 3 if feeling worse.

3

Thanks, someone will contact you soon. If you want to speak sooner, call us at 555-555-5555. If it's a true medical emergency, please call 911.



Linda enrolled in another relevant program after Post-Discharge



Patient is Discharged



Daily ADT List Sent to CareSignal



Patient gets Enrollment Call within 2-24 HR



Epic EHR "FYI Flag"

**CareSignal
Engagement
Specialists
Enroll Patients**



140

Enrollment
Calls Per
Day



57

Patients
Enrolled
Per Day

13,883

Total Patients Enrolled
in Post-Discharge Program

10%

of Patients in Post-Discharge
Program Alert in First 7 Days

General Medical

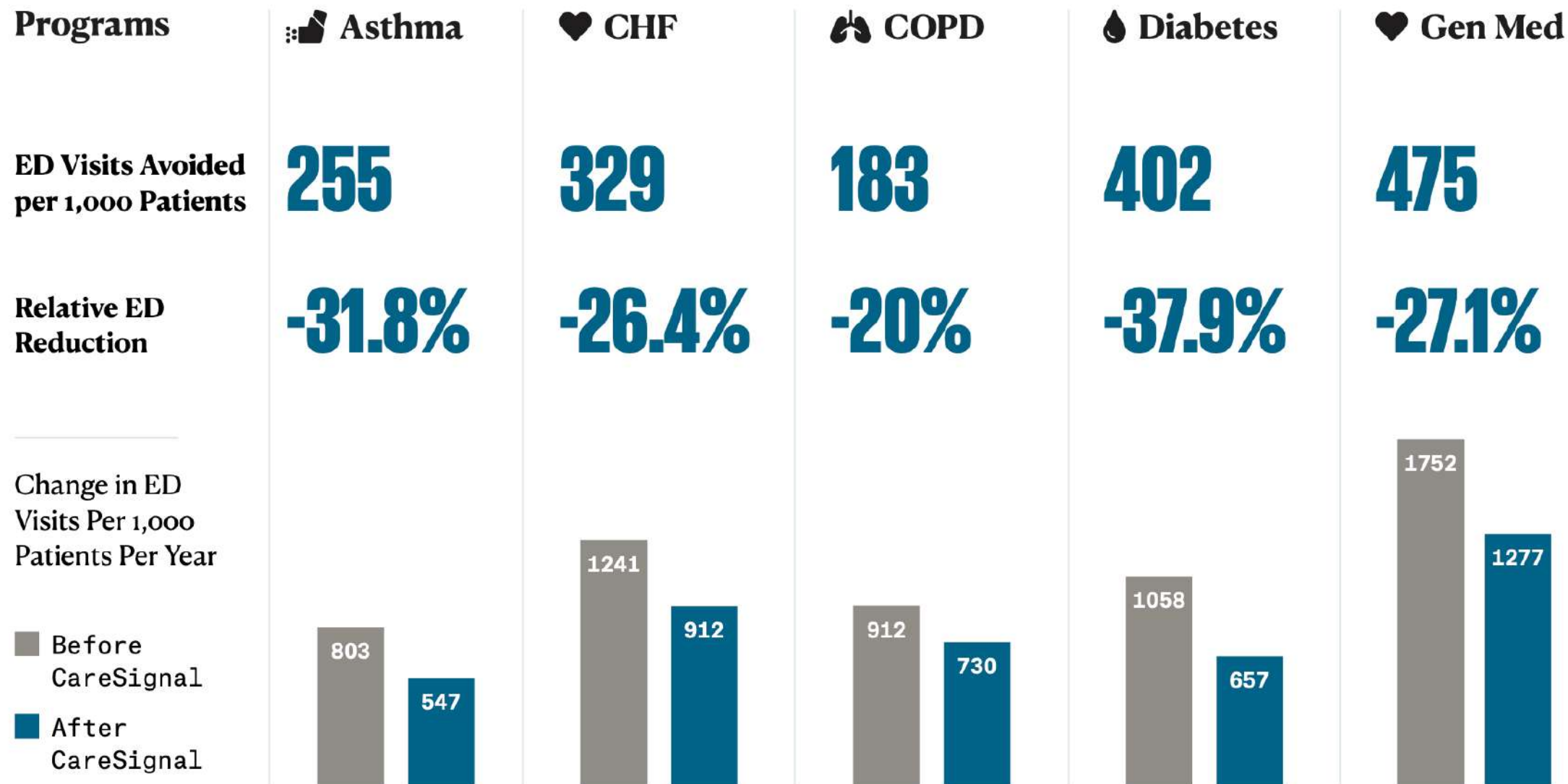
N=9,477

Condition-Specific

N=1,059

Most Common Programs

- Asthma
- COPD
- CHF
- Diabetes



Total Cost Savings

\$1.40MM

\$17.70MM

\$1.55MM

\$9.77MM

\$2.25MM

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

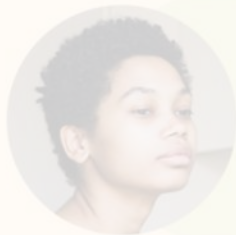
This is Jamie



Visit

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

try.caresignal.health



Chloe
Depression

Start Journey



Sharon
Heart Failure

Start Journey



Antonio
Diabetes

Start Journey



Adam
Asthma

Start Journey



Q&A

Stop by our VBCExhibitHall.com Virtual Booth



[Visit the CareJourney exhibit booth](#)

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