



**CareSignal®** Deviceless Remote  
Patient Monitoring®

## **Deviceless Remote Patient Monitoring® Goes Beyond Chronic Conditions: Proactively Monitor Behavioral Health and Social Determinants**

The pandemic has both exacerbated and brought to light the urgent need to improve access to behavioral health care and address social determinants of health. As the prevalence of depression diagnoses are on the rise, providers and payers are challenged with the high medical costs associated with unmanaged symptoms. A recent Milliman Report<sup>1</sup> shows that patients with behavioral health conditions (e.g., mental health or substance use disorders) in addition to physical health conditions (e.g., diabetes) drive high healthcare costs, accounting for 44% of all healthcare spending. Yet half of these patients had very little to no spending on treating behavioral health conditions, with the majority of spending going to treat physical health conditions. Substantial savings and better outcomes are achievable if patients are proactively given behavioral health support in the same way they are supported with their physical health.

### **Identifying a Major Gap in the Digital Health Landscape**

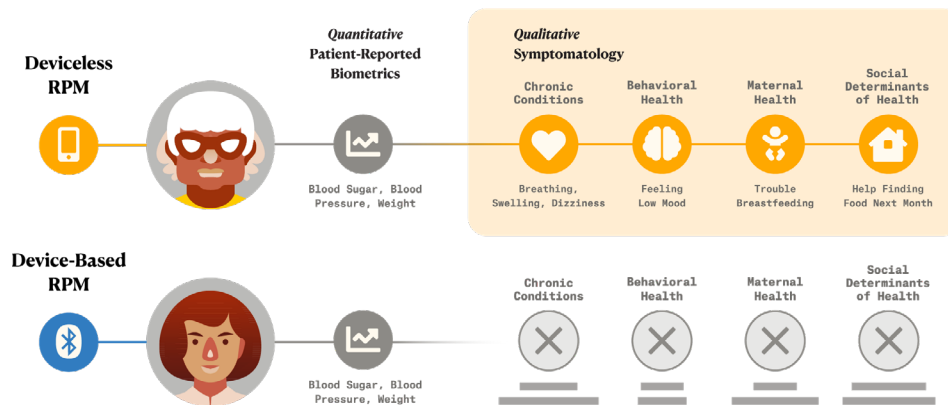
In an effort to improve access to healthcare and condition self-management, providers are turning to digital health solutions. For example, Wi-Fi-connected device-based remote patient monitoring (RPM) solutions have proven effective at helping a subset of patients with chronic illnesses such as heart failure, COPD, hypertension, diabetes, and others involving well-defined quantitative metrics. However, there is no remote patient monitoring solution to collect qualitative behavioral health and social determinants of health data (*see comparison graphic on page 2*).

Thus far, digital solutions to behavioral health and SDoH issues have been limited. For example, some tools aggregate local resources around free and reduced-cost food, health resources, housing, job retraining, and financial assistance programs, while telehealth or “therapists on-demand” can help patients who take the effort to schedule the appointment.

Both of these examples are valuable, but they’re inherently reactive modalities that become useful only after a patient has indicated there’s a problem and sought help on their own, which takes an incredible amount of self-activation. In order to proactively help individuals monitor mental health symptoms, substance use disorders, and social determinants, the healthcare industry needs to adopt a new approach: Deviceless Remote Patient Monitoring®.

1. <https://www.nationalalliancehealth.org/www/initiatives/initiatives-national/workplace-mental-health/pathforward/milliman-report>

## Deviceless RPM Collects Data for Whole-Patient Care: Chronic Conditions, Behavioral Health, and Social Determinants



## Extending Deviceless Remote Patient Monitoring to Mental Health

2019 data from the Pew Research Center indicates that 96% of Americans have cellphones, and Deviceless RPM® capitalizes on the familiarity of phone calls and text messages to engage patients and encourage regular data collection.<sup>2</sup> Deviceless RPM regularly collects patient-reported symptom data to ensure case managers have timely data to provide effective care.

Collecting behavioral health and SDoH data via phone might sound simple, but the data is collected using validated surveys to ensure the information is clinically relevant. The platform sends patients weekly questionnaires from evidence-based measures of depression or anxiety — such as Patient Health Questionnaire-9 (PHQ-9) and Generalized Anxiety Disorder Assessment-7 (GAD-7).

### A Sample Text Message Tracking Depression with Alert

**Sample PHQ-9 Messages for Depression**  
Scale: 0 = not at all, 3 = almost daily

How often have you felt tired or had little energy? Rate 0 to 3. **3**

How often have you had trouble concentrating? Rate 0 to 3. **3**

Care Managers get alerts if members report a PHQ-9 score > 15, low mood, or thoughts of self-harm.

## Depression Surveys Enable Care Team Action

The patient's answer is then recorded for longitudinal analysis to help healthcare workers identify and support those who may be struggling with suicidal ideation or more acute concerns.

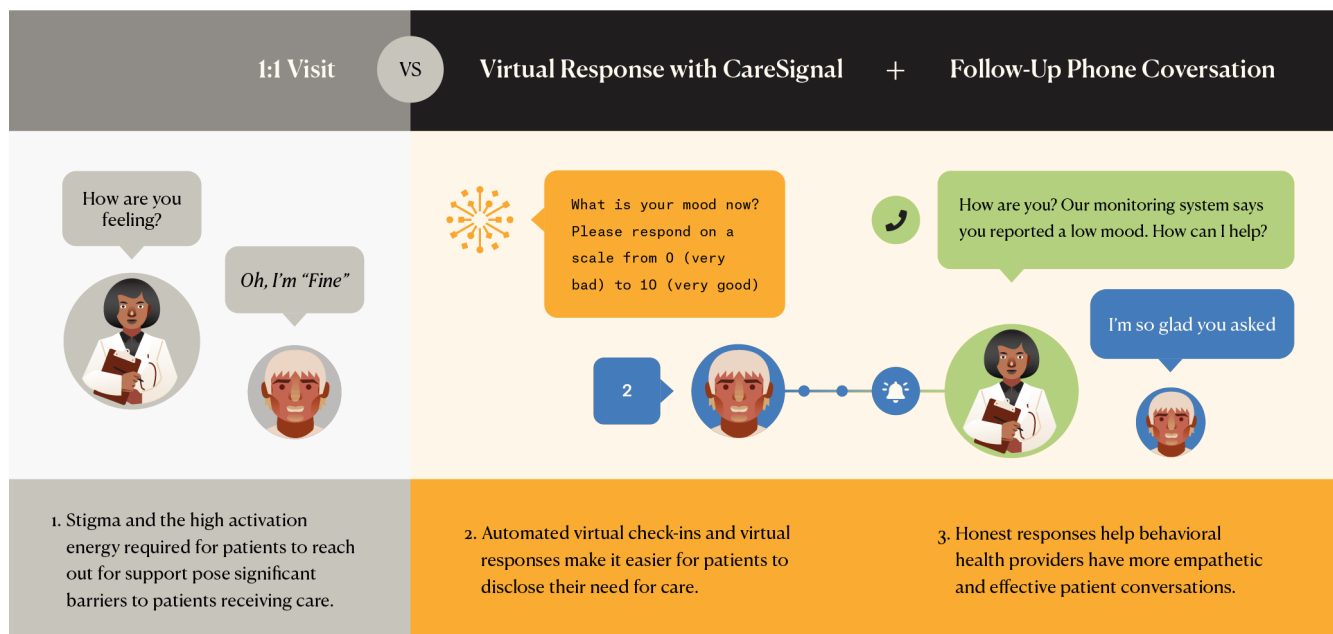
Substance abuse can be tracked in a similar fashion, and over time, results will show when patients need additional support or resources to avoid a dangerous relapse.

<sup>2</sup>. <https://www.pewresearch.org/internet/fact-sheet/mobile/>

## Reducing Stigma Around Behavioral Health

Patients often have trouble disclosing struggles with behavioral health issues like depression, anxiety, or substance abuse to healthcare professionals due to the prevailing stigma concerning these disorders.<sup>3</sup> As a result, it's estimated that some 70% of patients suffering from mental illness never receive treatment.<sup>4</sup>

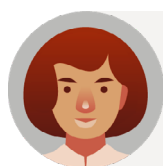
### Virtual Check-Ins Help Patients Disclose Needs for Behavioral Health Support Leading to More Effective Patient Care



Technology can help healthcare workers overcome this obstacle because patients are more willing to provide honest information to an automated data collection system.

**Case in point:** In a 2014 study where participants were asked questions by a virtual interviewer, those who were told the interviewer was fully automated were much less fearful of self-disclosure and impression management than those who thought the remote interviewer was human.<sup>5</sup>

Providing patients with an automated system to report symptoms enables them to experience less apprehension and report honestly. Healthcare workers are able to have insight into the issue at hand and can reach out with greater empathy and timeliness to support the patient.



"I like being checked in with every day. It makes me feel safe." - Patient



"They let me freely state how I am feeling on that particular day, and if I feel bad, someone will talk to me." - Patient

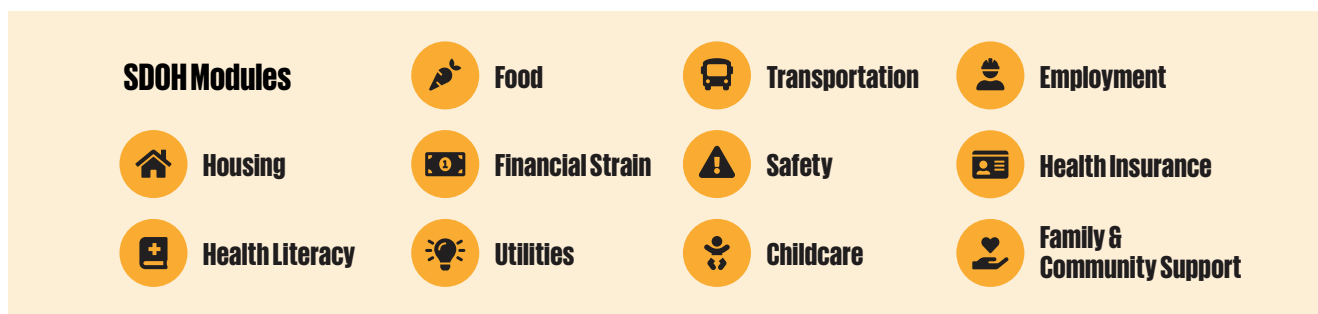
3. <https://www.pewresearch.org/internet/fact-sheet/mobile>

4. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3698814/>

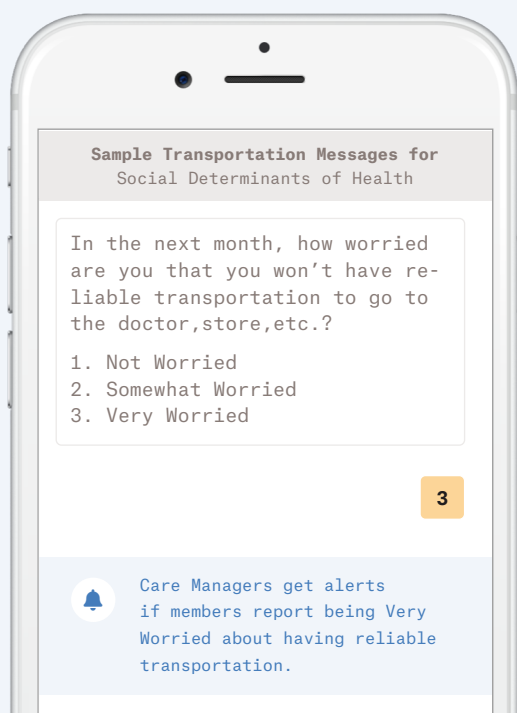
5. <https://ict.usc.edu/pubs/ItsOnlyaComputerVirtualHumansIncreaseWillingnesstoDisclose.pdf>

## Extending Deviceless Remote Patient Monitoring to Social Determinants of Health

Deviceless RPM® is well-positioned to assess SDoH risks in much the same way PHQ-9 weighs the severity of depression or GAD-7 measures anxiety. Through a series of 11 SDoH modules, we can piece together a comprehensive picture of an individual's vulnerability to the following factors:



### A Sample Text Message Tracking Transportation with Alert



## Social Determinants of Health Surveys Enable Care Team Action

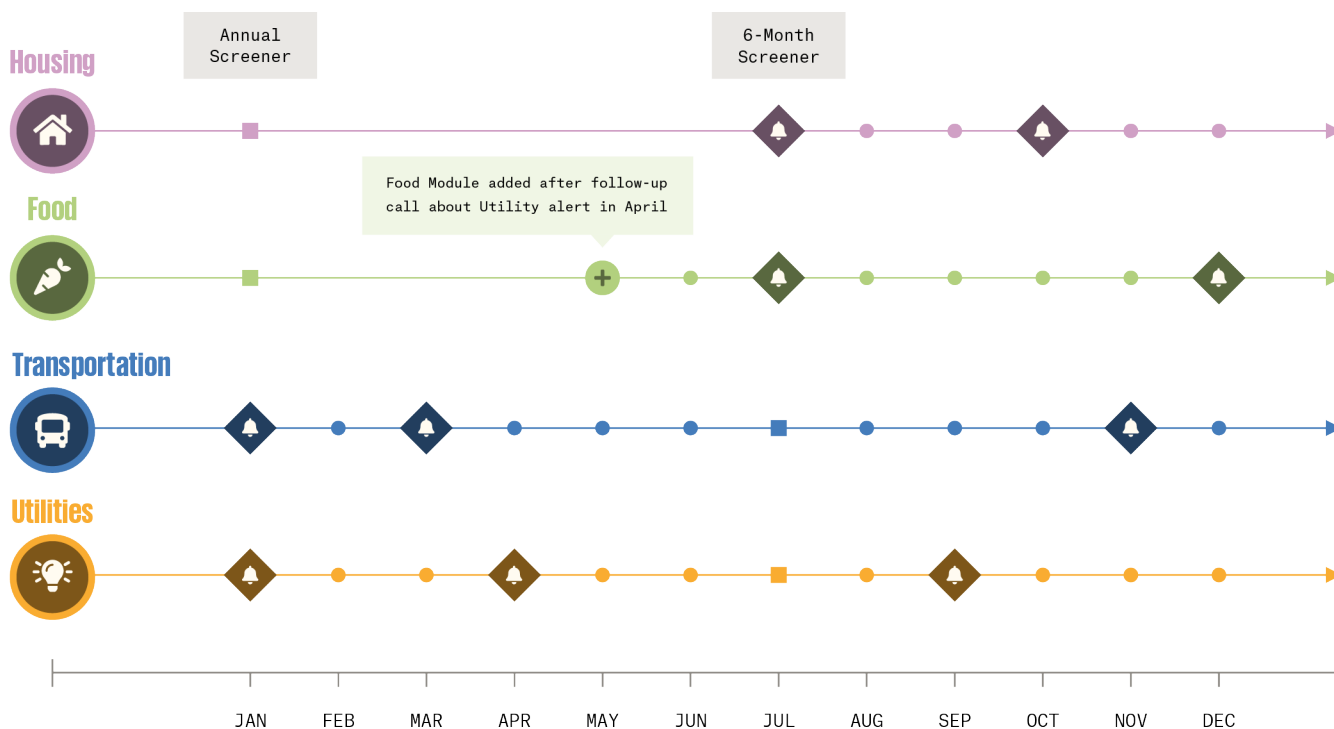
Because the recipient responded very worried, the system logs the answer and triggers a provider notification indicating that the patient needs to have a ride arranged. As a result, not only will the patient's health outcomes improve, but that minuscule transportation investment made by the provider could eliminate the need for a risky, invasive, and expensive procedure later down the line.

## From a One-Time Survey to an Ongoing Monitoring Strategy

Traditionally, hospitals across the U.S offer SDoH surveys to patients after they have arrived at the ED to receive care. Oftentimes, many of the same patients do not have a primary care provider, making follow-up challenging. Now with the pandemic, many more people have faced job loss and economic uncertainty, adding new pressures and stress. This larger and vulnerable population could also benefit from receiving ongoing SDoH surveys.

While traditional SDoH surveys represent one snapshot of a patient's needs, Deviceless RPM enables both initial assessments and **ongoing monitoring** to identify emerging needs. A lot can happen in a year: If a patient is worried about paying utility bills, Deviceless RPM checks in monthly with the person to get real-time data. When the need arises, providers can connect patients to community resources and people can receive financial support before the water or electricity is turned off.

### Consistent and Responsive Screening Captures a Patient's Varying Social Determinants of Health Needs Over 12 Months



## Behavioral Health and Social Determinants of Health are Increasingly Important to Success in Value-Based Care

Much of healthcare moving toward value-based care has effectively applied device-based RPM to chronic conditions, but behavioral health and SDoH remain both costly and clinically relevant blind spots. Forward-thinking organizations can turn to Deviceless RPM® as a means to combat chronic conditions, but it's an equally effective way of gathering real-time patient data on overlooked mental health symptoms, substance use disorders, and social determinants of health and enable proactive care.

SDoH factors are believed to drive 80% to 90% of health outcomes, and healthcare organizations that proactively gather information and connect individuals with the right resources in their portfolio of services stand to improve outcomes and reduce costs.<sup>6</sup> As the U.S. healthcare system continues to shift away from a fee-for-service model and toward value-based care, Deviceless RPM® can help healthcare organizations monitor population health via ubiquitous communication tools — extending the reach of disease management and opening a new chapter of digital medicine.

## Learn More



CareSignal helps dozens of payers and providers engage and monitor patient with chronic and Mental Health needs. **Schedule time** to speak with sales-member Ann Conrath MSW, LCSW.



Discover how payer WEA Trust uses Deviceless RPM® to support members with mental health needs:



Our mission is to highlight key moments for life-changing intervention, accentuating care our partners provide.

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6. <https://nam.edu/social-determinants-of-health-101-for-health-care-five-plus-five/>