Remote patient monitoring needs proactive, signal-based care

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Healthcare has too often been reactive. But a more forward-thinking approach, using tools and technologies for RPM, can help reduce readmissions, improve patient outcomes and enable success with value-based care models.

Remote Patient Monitoring
Global

Kent Dicks, CEO of Life365

Photo: Life365

The U.S. healthcare system has long been defined by its reactivity. Care is delivered when symptoms surface, when patients seek care or when conditions escalate to a point of urgency. However, this reactive model – shaped in part by historical limitations in data management and communication – is increasingly misaligned with what modern tools and technologies make possible.

Today, a growing body of evidence supports the efficacy of a transition from symptom-based interventions to a more proactive, "signal-based" model of care. Here, healthcare does not wait for overt symptoms to materialize. Instead, it

leverages subtle physiological and behavioral indicators, captured passively and continuously, to initiate earlier and more personalized intervention.

A 2023 report from the World Health Organization found that chronic diseases account for approximately 74% of all global deaths annually. Many of these conditions are preventable or manageable if detected early. Yet most care systems for home-based care continue to rely on periodic, patient-initiated encounters to flag deterioration. Signal-based care, by contrast, positions early detection as the norm rather than the exception.

We spoke with Kent Dicks, CEO of Life365, a remote patient monitoring technology and services company based on signal-based care, for a deep dive into how technology can enable this different style of healthcare.

Q. Please explain what you mean by saying the reactive model of healthcare increasingly is misaligned with what modern tools and technologies make possible.

A. For decades, healthcare has been shaped by a reactive framework. Patients typically seek care only when they develop noticeable symptoms, often when a condition has already reached a critical stage. This made sense historically, as providers had few ways to monitor patients outside the clinic or hospital.

Today, however, with the availability of connected devices, continuous monitoring and advanced analytics, waiting for illness to escalate before acting is increasingly out of step with what technology makes possible.

Modern tools can identify subtle changes in physiology and behavior long before symptoms appear. For example, sensors can detect disruptions in sleep, variations in blood pressure or reduced activity levels. When analyzed in context, these small shifts can signal health risks that warrant timely outreach.

Shifting to this model helps us move beyond episodic encounters – where it can be challenging to identify pre-symptomatic signs of exacerbation – to continuous, anticipatory and personal.

This evolution also supports the broader shift toward value-based care. A system that prioritizes prevention and early intervention can help patients, employers, providers and payers avoid costly hospital visits while also improving outcomes.

Persisting with a reactive, fee-for-service model squanders the opportunity to leverage data and digital health to prevent avoidable crises and enhance long-term health.

Q. Please explain exactly what you say is a "signal-based" model of care.

A. A signal-based model of care focuses on detecting and responding to early signals of potential health decline rather than waiting for full-blown symptoms. These signals might be changes in weight, blood pressure, sleep quality, movement patterns or even voice characteristics. On their own, these deviations might look trivial and be ignored. However, when aggregated and interpreted continuously, they provide meaningful insights that can help clinicians intervene earlier and more precisely.

There are different forms of signal-based care. Exception-based monitoring allows clinicians to concentrate on meaningful deviations rather than raw data points. Another model uses predictive analytics, powered by AI, to forecast events, such as heart failure exacerbation, days before a crisis occurs.

Both approaches share a common goal: to move care upstream by identifying risks earlier, making interventions more personalized and ensuring resources are directed to those who need them most.

Crucially, in no way do these models replace clinicians. Instead, they augment their skills and experience to manage care efficiently at scale. By surfacing insights rather than overwhelming providers with data, signal-based care strengthens patient-clinician relationships and helps ensure that patient experiences are defined by trust and connection, not by emergency department visits.

Q. What is the role of remote patient monitoring technology in signal-based care?

A. Remote patient monitoring provides the infrastructure that makes signal-based care possible. Sensors, devices and platforms enable continuous data collection from patients in their homes. Historically, RPM often relied on manual data entry, technical know-how and burdensome hardware, which limited scalability.

The next generation of RPM focuses on automation, simplicity and passive monitoring, minimizing the tasks patients must perform while still generating rich, actionable insights.

By feeding continuous data into AI-driven analytics, RPM shifts from threshold-based alerts to context-aware insights. For instance, subtle weight gain in a heart failure patient, coupled with blood pressure fluctuations, might predict fluid retention before it becomes symptomatic.

Similarly, changes in sleep patterns or vocal biomarkers could signal medication nonadherence or early mood disorders. These insights allow clinicians to prioritize interventions based on urgency and risk.

This model also addresses scalability. Health systems are under immense pressure from workforce shortages and shrinking margins. Automated monitoring, coupled with AI triage, enables clinicians to oversee larger patient populations without sacrificing quality. In this way, RPM evolves from a data-gathering tool into the engine of a proactive, signal-based model of care.

Q. Is RPM-fueled signal-based care being used today? And what is needed to make this model of care and the RPM technologies that support it more mainstream?

A. Yes, RPM-fueled signal-based care is already being applied with highly encouraging results. One strong example is a heart failure study at a suburban hospital near New York City. Patients discharged from the hospital were provided with cellular-connected devices, tele-pharmacy services, and virtual and in-person care coordination.

The program reduced 30-day readmission rates to just 2.6%, compared with the national average of 23%. This illustrates the power of continuous monitoring to enable timely, preventive intervention.

Signal-based care also demonstrates value at the individual level. An older woman I know of with only one kidney functioning at 30% capacity, successfully avoided dialysis and hospitalization thanks to monitoring her blood pressure, glucose and weight at home.

Twice, her devices flagged subtle yet important changes that led to early interventions, including the detection of a leaking heart aneurysm that could have been fatal. These outcomes show how subtle signals, if acted upon, can change the trajectory of care.

To make this approach mainstream, healthcare organizations need to shift investments from reactive, fee-for-service infrastructure toward proactive, AI-enabled models. Technologies must be inclusive, easy to use and able to operate in the background with minimal patient effort, particularly for older adults and underserved populations.

Just as important is building trust through transparency: Patients and clinicians need to understand how signals are detected and why alerts are triggered. Addressing these issues will help signal-based care evolve from promising pilots

into standard practice across the industry.

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