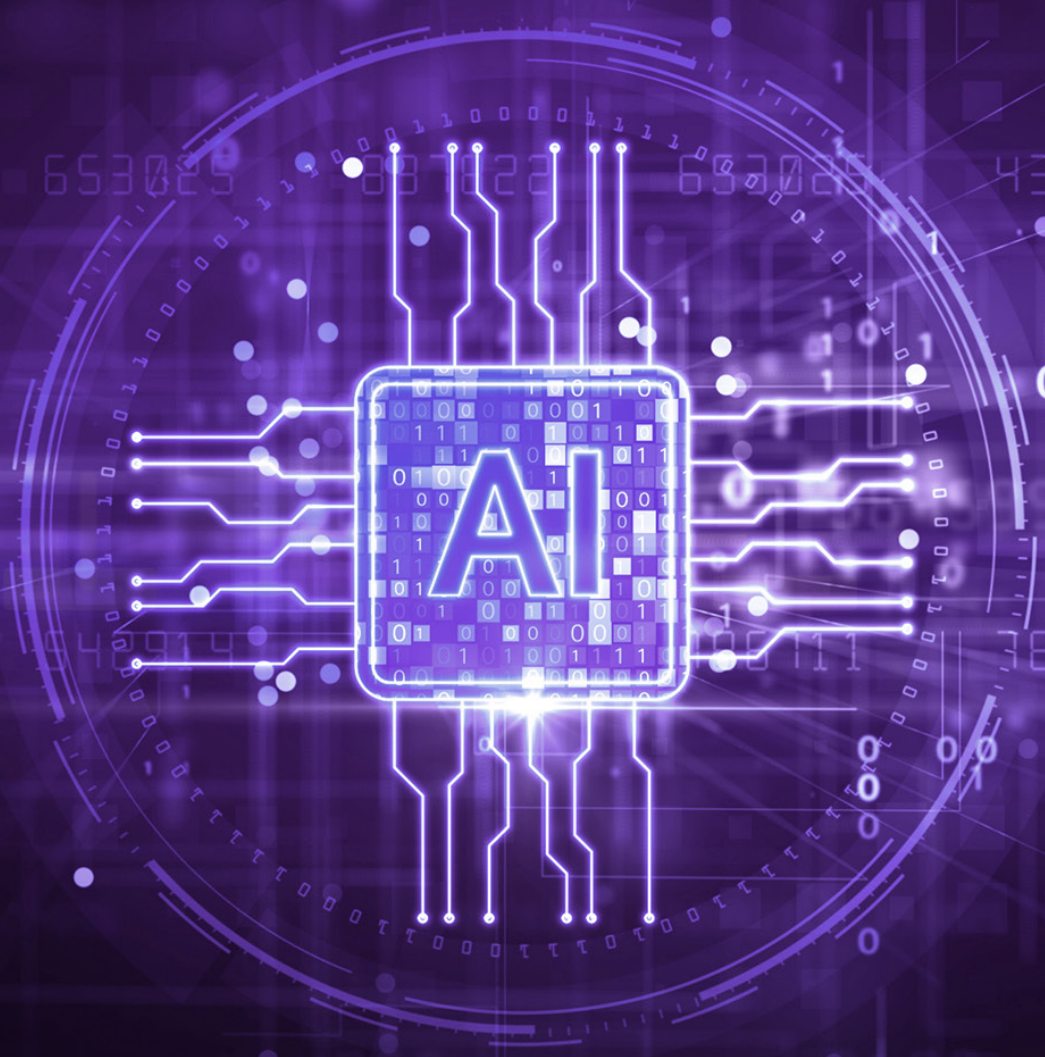


Beyond Remote Patient Monitoring



How Hybrid Healthcare Is Moving Value-Based Care Forward With AI



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EXECUTIVE SUMMARY

In the complex and geographically distributed U.S. healthcare ecosystem, a reliance solely on in-person care is no longer enough to improve health access and equity, drive better outcomes, and control high healthcare spend which reached [\\$4.3 trillion](#) in 2021.¹

Providers have increasingly integrated telehealth and Remote Patient Monitoring (RPM) solutions in an effort to supplement in-person care.

In fact, telehealth utilization consistently remained above [20% between 2021 and 2022](#).² Plus, nearly 9 out of 10 providers have invested or are evaluating investments in RPM, one survey found.³

While the shift to RPM has been in play for years, it was accelerated by the COVID-19 pandemic and at the same time, ushered in a new model: hybrid healthcare.⁴

Hybrid healthcare isn't telehealth or RPM alone. Rather, it is the combination of in-person care and virtual care throughout the care continuum. It merges patient health data received from RPM devices with engagement and program adherence, designed to deliver the right care, at the right time to improve outcomes and lower costs, particularly for home health and chronically ill populations.

Despite hybrid healthcare's benefits, however, existing models fall short, in part, due to RPM itself.

The increased adoption of—and reliance on—RPM solutions exposed a systemic weakness: the lack of human-to-human interaction and the ability to act on the data that RPM provides.

For even the simplest matters, a highly trained human - typically a clinician - is required to react to the data they receive. As a result, RPM may not

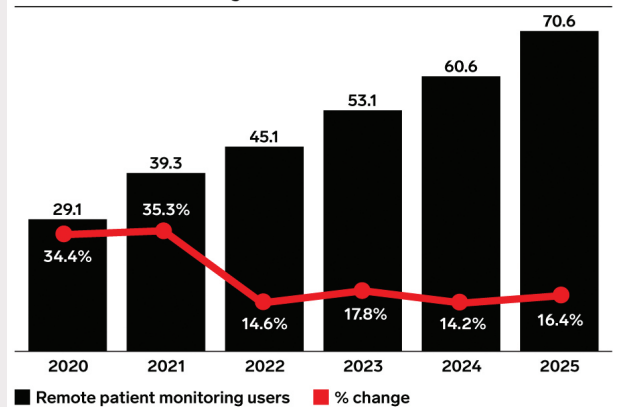
decrease caregiver workloads or lower provider care overhead.

Another gap is the lack of artificial intelligence (AI), which [experts say](#) will improve access, outcomes, and the patient experience and also drive efficiencies.⁵ **Increased adoption of AI could lead to savings of 5-10% in healthcare spending—roughly \$200 billion to \$360 billion, one [study](#) found.**⁶

Overall, the remote side of existing hybrid care paradigms cannot provide one of the most critical parts of healthcare: **care itself**.

KEY STAT: The number of remote patient monitoring users in the US will more than double between 2020 and 2025 to 70.6 million.

US Remote Patient Monitoring Users, 2020-2025
millions and % change



Note: individuals of any age who use wired or wireless devices that remotely track or collect well-being or medical data from the user outside a traditional healthcare setting at least once per month, and exchange it via the internet with electronic health records accessed by a medical professional or healthcare provider; includes wearable devices, home health devices, and sensors

Source: Insider Intelligence, Aug 2021

THE NEXT GENERATION OF HYBRID CARE – AI & AUTOMATION

To move the quality and scope of healthcare to the next level, reduce physician and clinician workloads to address staff shortages, and finally recognize patients as consumers and meet their needs, a new paradigm for hybrid healthcare is required.

This new model must take into account AI and automation and consider how they can play a pivotal role in enabling efficient clinical workflows and add a level of personalization that was previously unattainable for both patients and clinicians.

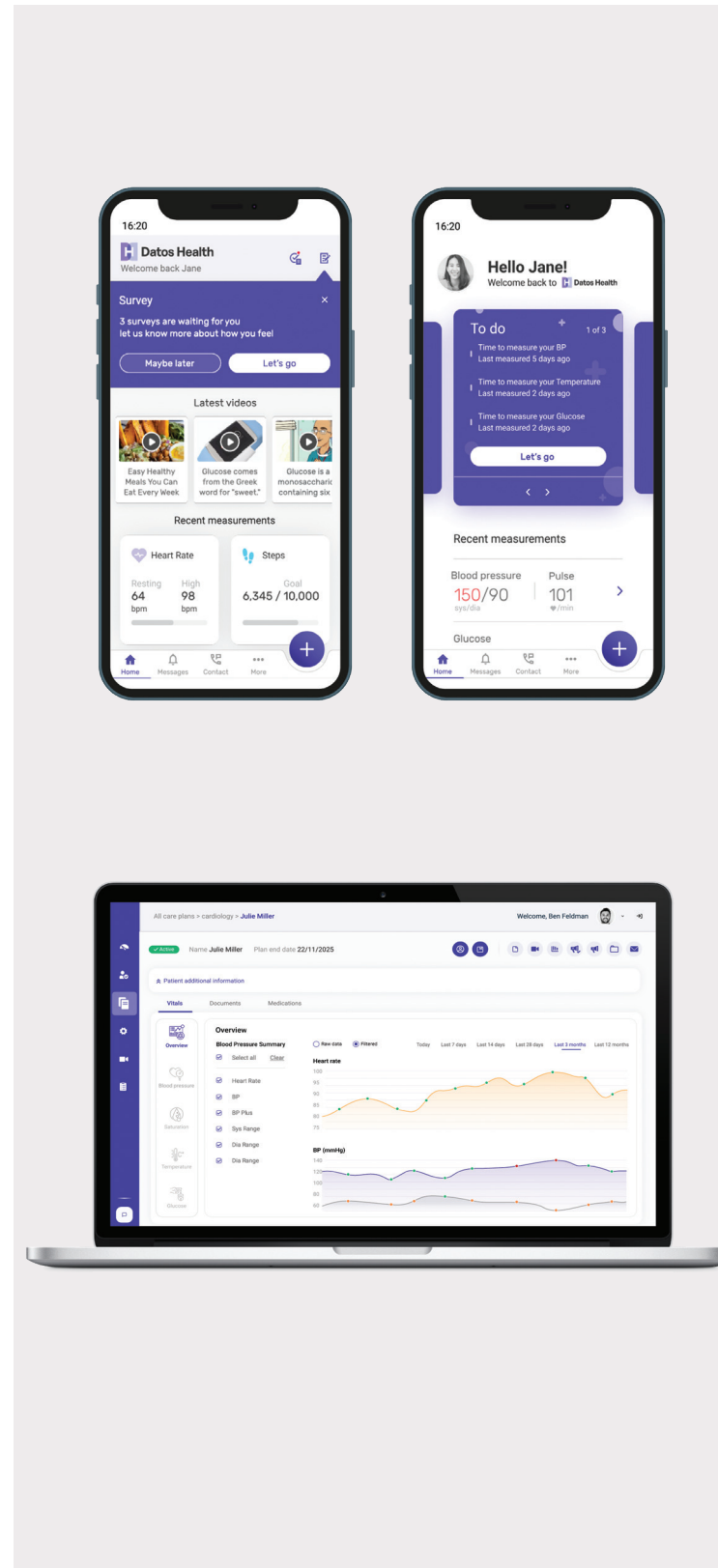
Advanced platforms that enable hybrid care can take raw data and turn it into clinical utility in a non-cumbersome way for clinicians, helping them to make better decisions while leveraging AI. Hybrid models can reduce administrative burden, increase clinical capacity, and allow physicians to practice at the top of their licenses.

With real-time data monitoring, vitals measurements, and survey responses, next-generation hybrid care models can replicate many in-person care experiences in a virtual setting to enable earlier intervention, improved quality of care, and personalization.

Unlike in-person care alone, which only provides a snapshot of an individual's health, next-generation hybrid care combines in-person and virtual care while digitizing the entire journey, allowing for a holistic, continuous view throughout the care continuum.

This new model reduces care team workload and puts automation to work for them by guiding patients through assisted self-care with interactive care apps and providing them with education about their conditions—a unique combination that drives engagement and program adherence and results in better outcomes.

Patients get immediate and accurate responses to outcome-critical day-to-day care issues like symptom and side effect management, enabling providers



to remotely titrate medications, prescribe different exercise routines, and prevent avoidable hospital readmissions.

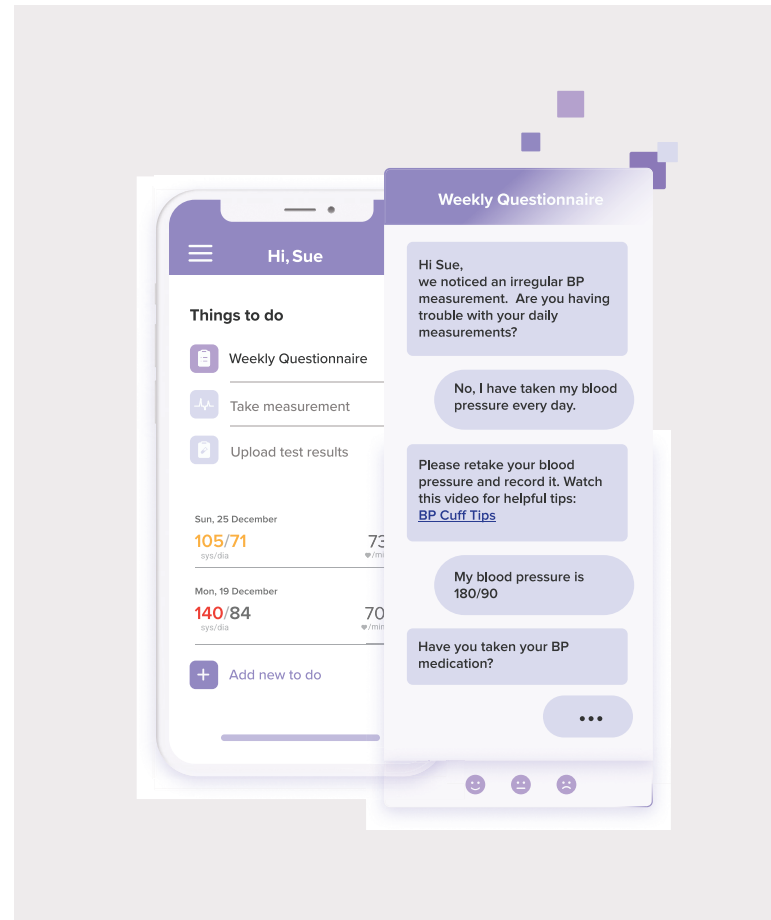
More importantly, effective hybrid care enables early intervention, alerting providers to potential issues before they escalate into crises. Providers are able to treat larger patient populations, while still offering a patient-centric and personalized approach to remote care—a key factor in the success of RPM intervention in reducing acute care use, according to [research](#).⁷

Clinicians need the ability to adjust hybrid care plans when patients need a different level of care just as they would when delivering in-person care. Plus, comprehensive platforms should enable clinicians to tailor and adjust remote care plans when needed, without using developers or having to work at length with their partner solution. These platforms should be nimble enough to support clinicians by streamlining efficiencies and reducing their workload, not adding to it.

While all other industries have adopted a consumer-centric approach to providing products and solutions, healthcare has largely lagged behind.

Yet next-generation hybrid care models will help bring healthcare up to speed, finally meeting the needs for both clinicians and today's healthcare consumers who [increasingly request virtual visits](#) for everything from primary care to chronic care management.⁸

Hybrid care can also be a prime enabler for another rapidly emerging paradigm in healthcare: value-based care (VBC).



SHIFTING TO A VALUE-BASED CARE MINDSET

With more than 18% of the gross domestic product spent on health care, fee-for-service is no longer sustainable—spurring the need for value-based care models that continue to gain traction.⁹

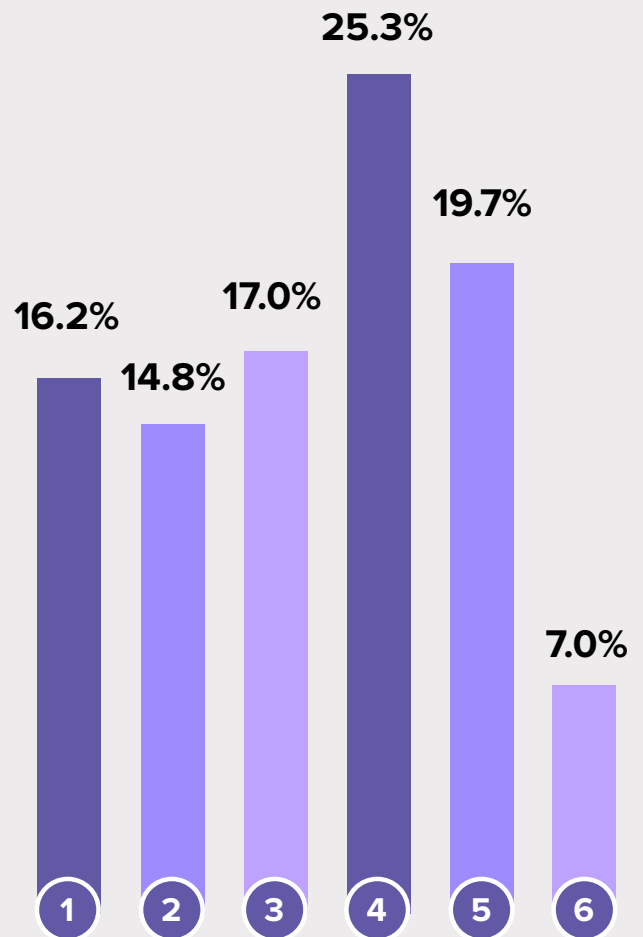
Although there are many challenges with the move to value-based care for payors and providers, one of the most dramatic changes in this paradigm shift is also one of the least tangible: a shift in mindset.

This shift in mindset toward medicine and away from business is a blessing for providers but it demands a reboot. Hybrid care solutions should facilitate the delivery of preventive care and reduce adverse events and hospital readmissions by prioritizing actionable data and higher-quality patient-to-provider interactions. A scalable solution is needed to improve adoption and change the mindset that technology is giving clinicians more work rather than helping them focus their attention on the patients that need them most.

80% of physicians

are interested in participating in value-based care arrangements

BIGGEST BARRIERS WHEN MOVING TO A VALUE-BASED SYSTEM



- 1 Changing regulations/policies
- 2 Trouble with collecting and reporting patient information (i.e.: gaps in care)
- 3 Unpredictability of revenue stream and complexity of financial risk
- 4 Lack of resources (short-staffed, insufficient healthcare IT software, etc.)
- 5 Gaps in interoperability, internally and externally
- 6 'Other' response examples

BENEFITS OF HYBRID CARE

New approaches to hybrid healthcare reduce clinician workloads, increase capacity, and drive better outcomes for patients.

1. Reduces workload and increases clinician capacity

By providing patients with an interactive, fully-automated care app that can support many clinical processes and gather data from integrated devices, surveys and questionnaires, and vitals measurements, new hybrid models:

- **Increase capacity:** clinicians can leverage automation to manage many of their patients and allow prioritization of patients who need the most care—increasing overall capacity without adding staff.
- **Reduce workloads:** AI and RPA (robotic process automation) can be incorporated into care plans in a number of ways on the patient and clinician sides. Many steps in a workflow can be automated. For example, patients who take certain chemotherapy drugs will have a known set of side effects. Based on patient responses to a questionnaire, the system can walk them through the next steps such as discontinuing the medication, using a specific mouthwash, or going to the ED, if necessary.
- **Prevent burnout:** by reducing human intervention, burnout is reduced. Parameters are set so that clinicians determine when to be notified of a change in a patient's health status which reduces alert fatigue.
- **Enable providers to practice at the top of their licenses:** an advanced system prioritizes actionable data in real-time so that clinicians can save time handling the back and forth of symptom and side effect management. Mobile CareApps provide patients with automated assisted self-care and not only guide patients through next steps, they also automate reminders to take medication or complete surveys and assessments and provide personalized content to educate patients.

2. Improves quality of care

Hybrid care enables clinicians to access a continuous flow of data so they can view trend analysis over time and receive escalation alerts. Systems can prioritize actionable data, so clinicians know which patients to focus on based on the parameters they put in place.

Providers can automate many steps to provide close clinical oversight and continuous care in-between visits and facilitate integrated, high-quality, holistic care.

Through Patient-Reported Outcome Measures (PROMs), responses to surveys and questionnaires, and automated, assisted self-care, providers can also intervene in real-time and track, treat, and titrate medications in a timely manner to reduce the risk of adverse events. They can then adjust care plans if a patient needs a higher level of care.

Care teams

are only notified when intervention is needed, thereby preserving care team capacity and providing the right care at the right time.

3. Drives patient engagement

The more patients are involved and engaged in their care, the better the health outcomes.

Hybrid care should facilitate higher-quality touchpoints and communication with care teams via chat and virtual visits and when needed, in-person care.

Patients benefit from automated, assisted self-care, personalized education, and the ability to track their health data. When issues cannot be addressed by automated systems, patients leverage easy-to-use technology such as mobile applications to quickly reach their providers. As a result, patients feel more connected.

Hybrid care enables a patient-centric approach and an experience akin to other consumer interactions. Robust mobile apps allow patients to take control of their care and receive the answers they need when they need them while health systems can meet patients where they are – without increasing the administrative burden.

4. Streamlines efficiencies

By monitoring and recording objective data such as vitals and subjective data such as wellness survey responses over time, clinicians have access to historical data that allows them to identify trends and deviations from baselines.

With a platform that is tailored to the ways in which clinicians practice medicine, care teams can determine the parameters that will trigger notifications, choose which steps should be automated and how to incorporate AI into care plans. These capabilities reduce alert fatigue and allow clinicians to deliver automated, assisted self-care to patients based on their workflows.

5. Ensures program adherence

Patients respond to wellness and rehabilitation programs better with hybrid care—showing upwards of 90%+ adherence in some cardiac rehab and home-based pulmonary rehab programs.

Clinical teams can pre-define tailored content to be sent to patients based on their conditions, vitals, and workflows - delivering personalized care and driving program adherence.

For example, at a pre-determined interval or based on insulin levels for the week, patients with diabetes receive videos with instructions about how to accurately test their blood glucose levels, reminders for when to test and take their medications, as well as curated content on healthy eating habits.

AI-driven platforms

allow care teams to engage patients with education and answers to their health-related questions in an empathetic tone that improves the patient experience.

6. Improves care access

Leveraging hybrid care, patients are far less limited by geography and can access specialists they might not have been able to see otherwise.

Immunocompromised patients can see doctors they need to see, virtual visits can be scheduled outside of normal hours when necessary, and overstretched care teams no longer need to conduct expensive and time-consuming home visits as frequently. Hospital-at-home programs are also well-situated to successfully implement hybrid care models to preserve hospital capacity and enable patients to receive the same level of care at home that they would in a physical hospital.

7. Ensures continuity of care

Approximately 20% of emergency room visits can be avoided using virtual urgent care offerings, while 24% of healthcare office visits could be delivered virtually, research from [McKinsey](#) found.¹⁰

Leveraging hybrid care systems, providers expend resources more efficiently, focusing more on those patients truly in need of in-person care and facilitating greater continuity of care across populations.

A hybrid care platform that houses all patient health data and enables team-led care across multiple disciplines and providers closes gaps in care and drives better health outcomes. Leveraging remote patient monitoring devices help to further support continuity of care and early intervention.

8. Reduces total cost of care

With fewer in-person visits, less costly settings, lower rates of adverse outcomes and hospital readmissions, and better access to care, hybrid care can reduce costs.

Plus, unlike point solutions, a remote care platform can reduce costs for facilities, care delivery, IT, implementation, and logistics. Next-generation hybrid care frees up funds which can then be spread across a given target population, delivering lower cost of care for all, without compromising on quality.

60%

consumers

expect their healthcare digital experience to mirror retail experiences.

CONCLUSION

Hybrid care benefits patients, providers, and the healthcare system as a whole by leveraging technology to offer viable and effective care outside of traditional healthcare delivery settings.

Supplanting legacy and disease-specific point solutions, effective next-generation hybrid care platforms work across the healthcare organization, integrating seamlessly with EMR platforms and adapting easily to any clinical workflow, employee wellness, or population health program.

Hybrid care that leverages AI and automation is fundamentally changing the way modern medicine is practiced, improving the lives of patients worldwide by filling the gaps between patient needs and healthcare provider abilities.

At today's healthcare crossroads, hybrid models enable better overall quality of care, better clinical outcomes, and enhanced patient satisfaction. By streamlining the transition to VBC, hybrid care is ushering in a new world of health and well-being for patients, care teams, and healthcare providers.

ABOUT DATOS HEALTH

Datos Health merges remote monitoring with care and engagement to go beyond what other simple RPM solutions have to offer. With our Open Care platform, clinicians now have the freedom to implement and customize any remote care programs they choose. Our Design Studio allows fine-tuning of any clinical workflow before instantly transforming them into patient CareApps.

To learn more about how Datos Health can help your organization and request a demo, visit [Datos-Health.com](https://www.datos-health.com).

NO LIMITATIONS. PURE POSSIBILITY. DATOS HEALTH – YOUR CARE, YOUR WAY.

Learn more at www.datos-health.com and visit us on LinkedIn.



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