

WHITE PAPER

How a Single, Unified Remote Patient Monitoring Provider Optimizes Healthcare Management



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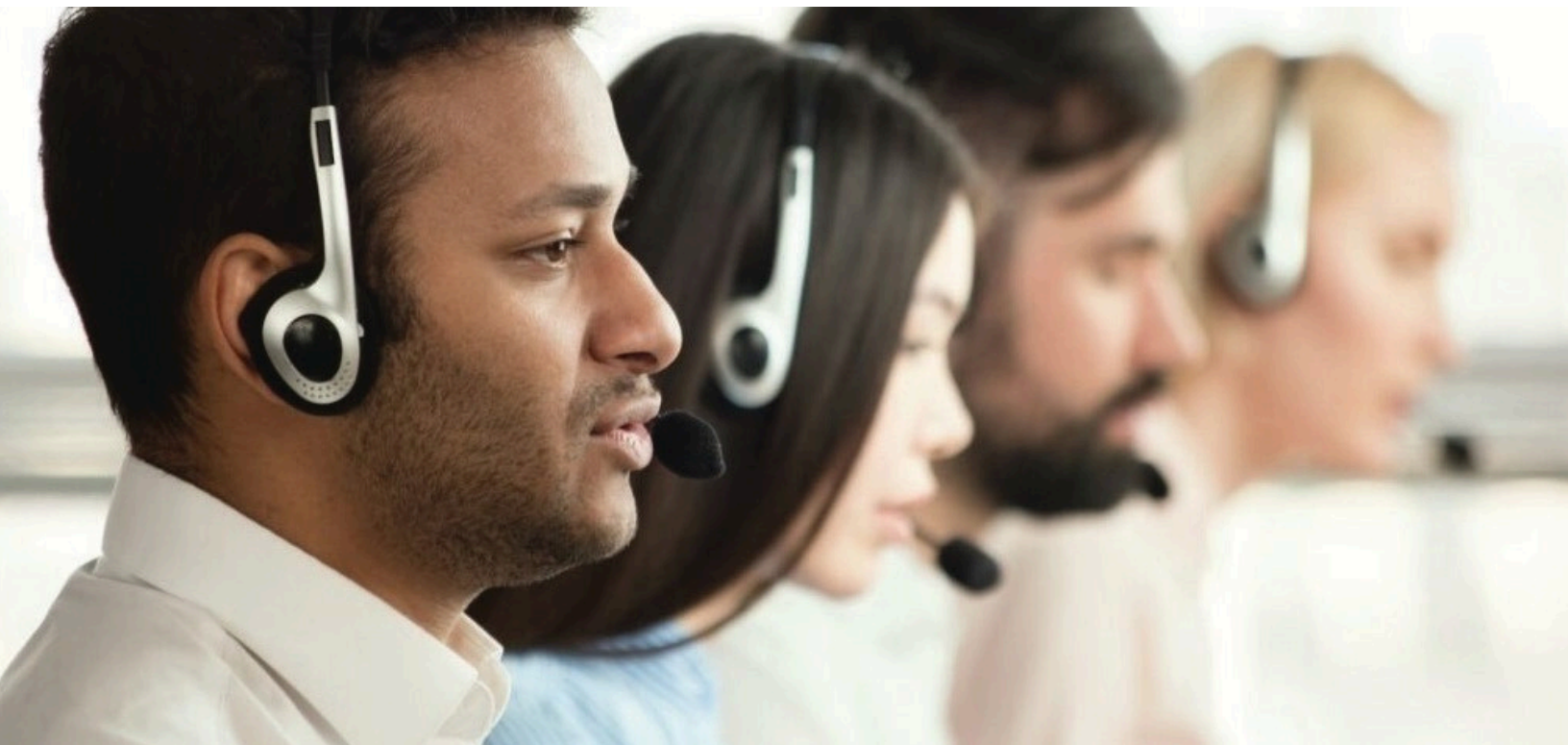
Over the last decade, Remote Patient Monitoring (RPM) has evolved from a promising solution to an integral part of holistic care management. By providing continuous data and communication from outside the clinical environment, RPM allows clinicians to monitor and adjust care remotely, easing clinician workloads and improving patient experience and satisfaction.

But when healthcare organizations acquire RPM resources from disparate vendors, they miss out on many of the operational and clinical benefits of RPM—benefits that can only come from working with one consolidated virtual care solutions provider. While unified solutions promote efficiency, disconnected systems create issues that may adversely impact clinical outcomes.

“If all information doesn’t flow into the electronic health record, providers don’t get a full picture of the patient,” said Debbie Fisher, vice president of customer success and transformation for Medical Guardian (formerly Clear Arch Health), an RPM and Personal Emergency Response Systems (PERS) provider based in Philadelphia, PA. “These information gaps influence timeliness of care, efficiencies, and the ability to provide holistic care.”

RPM disconnect occurs when multiple departments implement remote monitoring without coordinating those programs. It also occurs when healthcare organizations piece together an RPM system using tools from multiple vendors.

For example, a healthcare system may use different vendors for telemonitoring, PERS, mobile device procurement, and medical equipment. One vendor may have a diabetes solution while another caters to hypertension or heart failure (HF).



Contracting with multiple standalone service providers in this way creates inefficiencies, siloed data, technical issues, and unnecessary cost. The result is a suboptimal RPM program that's difficult to set up, hard to maintain, and complicated to use.

Unified solutions cover multiple chronic and acute conditions. This holistic approach eliminates duplicative work, lessens the IT burden, and enables healthcare organizations to leverage economies of scale. The result is an effective, efficient RPM program that delivers optimal value for patients and providers alike.

This white paper explores the advantages of a unified and consolidated RPM solutions partner for quality, connected care. Focus areas include:

- How a unified RPM solutions partner streamlines contracting and equipment rollout while improving patient compliance
- The 8 characteristics of a unified RPM vendor
- How a large healthcare system transformed its RPM program by moving to a unified program supplier

Why RPM adoption is on the rise

For nearly two decades, healthcare organizations have worked diligently to improve care experience, access, quality, and outcomes, all while lowering costs. This was first articulated as the Triple Aim by the Institute for Health Improvement in 2008.¹ Healthcare organizations have worked toward the Triple Aim in a climate clouded by decreasing reimbursements, increased regulation, clinician shortages, consolidation, and emerging competition from retail healthcare.

RPM, a type of telemedicine, enables healthcare organizations to optimize limited resources while improving care, data quality, and patient satisfaction. Studies have reported outcome improvements in patients with congestive heart failure, COPD, diabetes, hypertension, and Alzheimer's disease, among other conditions.²

One study, for example, evaluated the effectiveness of an RPM program in 1,577 total patients with heart failure, randomized into either an RPM program or traditional care. The RPM program consisted of daily weight, blood pressure, heart rate, ECG, and



To implement RPM programs effectively, multiple components and systems must work together to facilitate convenient care. Patients may receive tablets, wearable devices, peripherals (e.g., blood pressure cuffs, scales, pulse oximeters), and educational resources. Providers typically require a clinical dashboard, a call center, and inventory management, procurement, and maintenance support.

pulse oximetry in patients with heart failure. The study found RPM patients had fewer days lost to unplanned hospital admission compared to traditional care (4.88% vs. 6.64%). And almost all (97%) were at least 70% compliant with the RPM program.³

The addition of new Current Procedural Terminology (CPT) codes for Remote Physiologic Monitoring by the Centers for Medicare & Medicaid Services in 2019, followed by COVID-19 expansions of telehealth services in 2020 and 2021, led to a spike in RPM adoption. Between 2019 and 2022, RPM claim volume rose by nearly 1300% according to a report from data analytics company Definitive Healthcare.⁴

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To acquire these devices and capabilities, some healthcare organizations contract with multiple vendors. This scenario creates technical, operational, and clinical headaches. A few of them include:

- Data may not integrate between systems, creating additional work for IT departments.
- Staff must log in and out of different platforms to care for patients with different disease states or conditions.
- Data may not feed into the EHR, leading to incomplete patient records.
- Missing or incomplete records increase risk of patient safety issues, duplicative tests, and misdiagnosis.
- Multiple contracts, invoices and security reviews create additional work for administrative staff, which drives up labor costs.
- Management and maintenance of equipment becomes more time-consuming as staff coordinate with multiple vendors.
- Using disparate systems across departments limits organizations' ability to share knowledge and scale programs.
- Healthcare organizations miss cost-saving opportunities that come from partnering with one vendor for multiple services.

"Without a well-coordinated RPM program, healthcare organizations are at risk of creating redundant processes," said Michelle Hirst, director of clinical operations for Medical Guardian. "They need their clinicians working top-of-license, not running around trying to find out what's going on with multiple digital platforms."

A health system based in New York, * struggled with outdated remote patient monitoring products and an ineffective technology interface, both of which contributed to operational inefficiencies. Additionally, working with multiple vendors involved a cumbersome contracting process that created bottlenecks and delays in program implementation.

With the goal of resolving these issues, the health system turned to Medical Guardian. The company became the health system's sole RPM vendor, resulting in a seamless, fully integrated solution.

"We needed new equipment, as well as a plan to roll out the equipment and onboard patients and staff," said the health system's team supervisor of telemedicine. The organization turned to Medical Guardian to streamline its RPM program and update the technology holistically, rather than turn to point solutions for each clinical use case.

"Having a unified program supplier, one who can provide the right equipment for the right patients, scalable and sustainable to fulfill our training and support needs is a complete game-changer in terms of helping a health system like ours deliver high-quality care to a range of patients," said the telemedicine supervisor. "We have all the essential, expert contacts needed to troubleshoot any issue that might come up. We also have a vendor partner who can assist with education and health data analytics to help keep us on the cutting edge of RPM."

The unified RPM solution

Moving from multiple vendors to a unified RPM program supplier enables healthcare organizations to break through bottlenecks caused by pieced-together systems. Administrative staff have one contract to approve, one security review to manage, and one primary contact to engage with. This single point of focus frees up staff time for higher-value activities.

Additional advantages include:

- **Seamless data integration.** All patient data generated through the RPM program flows through one unified system into the EHR. The patient record is updated with accurate, complete information, enabling more informed decision-making. It also lightens the IT workload; no longer do engineers have to spend time developing workarounds to get disparate systems to cooperate.



"The maintenance involved in managing equipment from multiple vendors can be very costly when healthcare organizations lose or mismanage equipment," said Hirst. "The logistics become more complicated: are you refurbishing your own equipment or is the vendor doing that for you? Are you sending out equipment or is the vendor? A vendor with a standalone solution may not provide this level of service."

- **Optimal use of staff resources.** Working with multiple vendors creates duplicative work for staff responsible for managing contracts, facilitating security reviews, and scheduling maintenance. Consolidating to one vendor frees up hours of their time each month—time better spent on higher-value activities.

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- **Streamlined supply chain.** Implementing an RPM program involves close coordination with clinicians and staff as well as patients. Devices must be tracked and delivered to patients. Defective equipment needs servicing. And everyone needs training. Healthcare organizations may assume vendors take responsibility for shipping, servicing, and training, but that isn’t always the case.

“We stay with our customers through the course of the of the contract to make sure that they have what they need to manage their populations well,” said Fisher. “That starts with onboarding and continues through to shipping and managing equipment returns when patients are discharged.”

- **Scalability.** When multiple departments implement individual RPM programs with different vendors, it becomes more difficult to scale that program to different populations. Which vendor do you choose? Does it have the flexibility to scale to accommodate not only patients with hypertension, but also heart failure and diabetes?



- **Economies of scale.** Contracting with one vendor enables healthcare organizations to take advantage of multi-service discounts. “When you use one source, you’re going to have more opportunities to negotiate than you would with five smaller contracts with different vendors,” said Hirst.

What to look for in an RPM vendor

As RPM adoption has increased, dozens of healthcare technology companies have emerged to serve their needs.⁵ Of them, few offer both a full RPM platform and comprehensive services. Healthcare organizations evaluating RPM vendors should inquire about the following eight characteristics:

1. Expanded Capabilities

A dashboard that includes PERS and automated fall detection along with RPM has become standard practice for healthcare organizations that need to provide home-based elder care. Changes to educational content and surveys should be reasonably simple to make, without the need for development or software updates.

2. An Intuitive Dashboard

A clinical dashboard is the RPM command center. It displays essential patient data so providers can make informed decisions in the moment. In addition to showing data transmitted from remote monitoring devices, an intuitive dashboard will ideally enable providers to prioritize patients by risk level. The platform dashboard should have role-based access to patient data, multiple filter parameters, and default and customizable alert settings for individual patients.

3. Customization

A unified RPM solutions provider can customize programs to suit patient and program needs. Healthcare organizations planning to expand RPM will want a vendor that can accommodate a variety of chronic and/or acute conditions, from hospital stays and patient management to discharge, transitional care and recovery. Patient-specific educational materials, customizable by language and by condition, will help boost self-management, engagement, and satisfaction. Bidirectional text and audio messaging, as well as fully interactive video conferencing capabilities, allow clinical teams to customize population care initiatives more effectively.



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4. Flexibility

An end-to-end RPM vendor must have the flexibility to serve specific and diverse patient populations, business goals, and budgets. Look for multiple kit, device, and hardware solutions, with multiple methods for getting them into patients' homes. By giving patients options, healthcare organizations can boost patient engagement while meeting the needs of diverse patient populations. Flexible payment choices (platform- as-a-service, lease, or purchase) and unlimited clinical licensing are also imperative to program success. An RPM program with this level of flexibility is a clear winner.

5. Electronic Health Records Integrations

The software used in a chosen RPM program must integrate with the most commonly used EHRs to minimize and mitigate any potential disruption in workflow and patient care. Medical Guardian's LifeStream™ clinical monitoring software, for example, integrates with Epic, Cerner, Allscripts, and other platforms via an HL7 interface. Third-party integrations provide seamless data analytics and enhanced EHR compatibility.

6. Logistics Management

Healthcare organizations often have thousands of devices to track and maintain. A unified RPM provider should not add to this list. Look for a vendor that offers comprehensive management of inventory and logistics. beginning with needs assessment and patient enrollment, and continuing through warehousing, shipping, installation, and reverse logistics. Additional services, such as onboarding and training for patients and staff, are a plus.

7. Support

A unified RPM solution must include full technical support as well as 24/7 customer support. An emergency call center for patients and clinical advisory services help ensure technical issues are resolved promptly and clinicians receive real-time information.

8. Stability

Look for a well-funded company with long-term potential. Medical Guardian Healthcare Services leverages the strength and stability of its parent company, Medical Guardian, a recognized leader in the Personal Emergency Response System (PERS) industry. With over 20 years of experience and a top-three ranking among U.S. PERS providers, Medical Guardian supports over 600,000 active users. This extensive industry experience and impressive market presence underscore the solid foundation and reliability of Medical Guardian Healthcare Services.

Conclusion

RPM presents significant clinical and operational advantages. It keeps tabs on patients with both acute and chronic conditions, alerting care teams immediately if their health status changes. This immediacy helps improve outcomes while keeping patients out of the hospital. By leveraging telehealth, RPM also enables healthcare organizations to make the most of limited resources.

A unified RPM solutions provider takes this one step further. With all products and services under one umbrella, healthcare organizations can streamline their RPM programs for greater efficiency, cost savings, patient engagement, and enhanced outcomes.

Contact [Medical Guardian](#) for more information on how Remote Patient Monitoring may benefit your patients.





Medical Guardian has been bridging gaps in remote care since 2016. By empowering healthcare providers with access to meaningful patient data, advanced telehealth/Remote Patient Monitoring solutions and end- to-end virtual care support services, Medical Guardian enables health organizations to enhance the patient experience, minimize cost, reduce hospital readmissions, achieve provider satisfaction, and improve outcomes every day.

Medical Guardian's Remote Patient Monitoring (RPM), Personal Emergency Response Systems (PERS), engagement services, and expert guidance provide a comprehensive suite of solutions to proactively manage high-risk patients. This integrated approach ensures quality healthcare is accessible wherever and whenever it is needed, addressing patient needs effectively and efficiently.

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References

1. Berwick DM, Nolan TW, Whittington J. The triple aim: care, health, and cost. *Health Aff (Millwood)*. 2008;27(3):759- 769. doi:10.1377/hlthaff.27.3.759
2. Hood, Colton MD, et al. Remote Patient Monitoring. Agency for Healthcare Research and Quality. March 15, 2023.2. Bhatia A, Maddox TM. Remote Patient Monitoring in Heart Failure: Factors for Clinical Efficacy. *Int J Heart Fail*. 2020;3(1):31-50. Published 2020 Nov 30. doi:10.36628/ijhf.2020.0023
3. Bhatia A, Maddox TM. Remote Patient Monitoring in Heart Failure: Factors for Clinical Efficacy. *Int J Heart Fail*. 2020;3(1):31-50. Published 2020 Nov 30. doi:10.36628/ijhf.2020.0023
4. Vaidya, Anuja. Remote Patient Monitoring Use Skyrockets 1300%. *mHealth Intelligence*, March 2, 2023.
5. Remote Patient Monitoring Companies. *Healthcare IT Today*.

* To protect client confidentiality, specific details identifying the client have been removed from this document. Contact us for more information.

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