Optimizing Remote Patient Monitoring in Today's New Normal

Discover best practices that can help your organization succeed as COVID-19 challenges persist

When COVID-19 hit, healthcare organizations (HCOs) were blindsided with a paradoxical challenge: With the influx of infected patients, doctors and nurses were overworked and hospitals were understaffed, according to Duane Napier, Business Development Director – Healthcare, HCL-PowerObjects. "At the same time, they were cash-strapped," he said, as patients chose to forego elective and nonessential services.

As HCOs scrambled to respond to this unprecedented conundrum, many turned to remote patient monitoring (RPM) to offer services online, help bolster better patient care and reduce clinician burnout, according to Napier. The tools – which enable patients to gather and send data such as blood pressure, weight and oxygen saturation levels to healthcare professionals – are poised to help HCOs as they continue to cope with COVID-19 challenges.

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DUANE NAPIER | Business Development Director – Healthcare | HCL-PowerObjects

"No one has a crystal ball, but you can look at what happened last year and try to adopt some strategies so that your organization doesn't fall victim to the same plight," he said. HCOs must continue to address ongoing issues such as those brought on by the Delta variant.

In fact, many HCOs now recognize the power of this technology. Not surprisingly, the RPM market is expected to expand at an annual rate of 19.7%, hitting $956.46 million by 2028, according to a study from Grand View Research.[1]

HCOs, however, should go beyond simple adoption and optimize their efforts by implementing the following RPM best practices.

Assess products, processes and people. An overwhelming number of connected devices are available, from simple scales to complex dialysis machines. HCOs need to strategically evaluate products, processes and people to implement the devices that will provide "the proper mix that will lead to improved performance as well as patient satisfaction ... and optimize overall remote patient monitoring efforts," Napier said.

Gather all information in one location. Each RPM device "serves up data, which is great on its own, but healthcare workers need to see everything. They can't log in to 10, 20 or 30 different devices," he noted. "HCL-PowerObjects aggregates all of this different data into a comprehensive 360-degree-view dashboard." Power BI, a component of the Microsoft Power Platform, for example, enables healthcare users to gain actionable insights by combining data from multiple sources, including Dynamics 365, SQL Server, Excel, Azure SQL DB, SharePoint or an HCO's data warehouse, into a single view.

Optimize data management. Often, hundreds of patients undergo the same surgery in any given month, and data elements are collected in an HCO's data lake. To manage an individual's recovery, analysts need to identify the right device data, imaging data, unstructured data, nurse notes and other data, and then cleanse, massage and prepare this information. All of this takes an inordinate amount of time.

HCL-PowerObjects categorizes, tokenizes and democratizes the data and then quickly presents it to the clinician in an easy-to-read format. More specifically, by leveraging Power Automate, another component of Power Platform, HCOs can get notifications, synchronize files, approve requests, collect data and tap into a robotic process automation feature that reduces repetitive manual tasks.

Integrate the pieces. "How many stories have we heard of cancer survivors who are finalizing their treatments only to get a call, a text or even mail that says, 'You're over 40. You should come in for prostate screening,' ... leaving the patients to think that the HCO doesn't even know who they are," said Gowri Shankar Vembu, AVP, MS Ecosystem-HLS, Alliances and Market Development, HCL Technologies. That's why device data needs to integrate with electronic health records (EHRs). As such, it's important to work with a partner like HCL-PowerObjects that relies on standards such as Fast Healthcare Interoperability Resources (FHIR®) and Health Level Seven (HL7®) to integrate disparate data elements from multiple sources on its Microsoft Azure platform.

Working with the right partner

HCOs can also forge ahead with successful RPM initiatives by working with a partner that can support the following remote device management (RDM) best practices.

Digitize fully. Not every manufacturer provides digital-ready RDM devices. Many are still analog, which aren't capable of transmitting alerts to the cloud, according to Shankar Vembu. Power Apps, a third component of Power Platform, makes it easy to efficiently create the functionality needed by supporting a point-and-click approach to app design as well as the ability to add logic using Excel-like expressions in devices.

In addition, by working with a partner that has qualified product development engineers, HCOs can ensure they are leveraging digital-ready tools. "We work directly with manufacturers' research and development departments to make sure the RDM tools they are developing have the right design," he said.

Optimize uptime. HCOs need to ensure the RDM tools being used are experiencing 100% uptime, according to Shankar Vembu. Uptime can be

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GOWRI SHANKAR VEMBU | Assistant Vice President, MS Ecosystem-HLS, Alliances and Market Development | HCL Technologies

enhanced when HCOs work with a partner that can proactively track devices around-the-clock, remotely upgrade software and send service engineers in advance of breakdowns. HCOs also should work with a partner that supports home WiFi, which can be unreliable.

Zero in on security. To protect sensitive data, HCOs need to ensure that "the right players on the team are gaining access to devices. You don't want … ransomware issues," Shankar Vembu said. HCOs should work with a partner that can handle RPM devices by supporting

the access identity management and multi-factor authentication needed to protect sensitive data.

By optimizing RPM and RDM, HCOs can deliver better care, even as they struggle with the uncertainties of an ongoing pandemic. In fact, the data generated by RPM devices can help transform care delivery. "Think about someone who is post-discharge, and the healthcare provider is monitoring that patient at home. If the provider has access to the data … they can make a very small tweak to the patient's care

plan based upon the data that's coming in, and it could drastically reduce the risk of readmission," Napier concluded.

To learn more about how HCL-PowerObjects can help your healthcare organization optimize its remote patient management initiatives, visit powerobjects.com/healthcare.

Reference

1.   Grand View Research. January 2021. Remote patient monitoring system market size, share & trends analysis report by product (vital sign monitors, pecialized monitors), by application, by end-use, and segment forecasts, 2021-2028. https://www.grandviewresearch.com/industry-analysis/remote-patient-monitoring-devices-market.

About HCL-PowerObjects

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