Healthcare without Bounds: Trends in Remote Patient Monitoring 2019		
TITLE:	Trends in Trends in Remote Patient Monitoring 2019	
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STUDY OVERVIEW:	Healthcare providers are making investments in Remote Patient Monitoring (RPM) solutions to help their transition to value-based healthcare. These solutions have been demonstrated to be clinically effective as an early symptom management tool when used in conjunction with a comprehensive disease management and care coordination program to automate the collection of patient vital signs and symptomatic data, and proactively identify if a patient's condition is deteriorating or becoming life threatening.  Market drivers. Healthcare provider investments in RPM solutions are being driven by several underlying market factors including exploding healthcare costs, a rising aging baby boomer population, the increased prevalence of chronic disease, and continuous healthcare professional labor shortages. There are more than 133 million Americans representing 45% of the U.S. population have at least one chronic disease. Chronic diseases are responsible for seven out of every 10 deaths in the United States, killing more than 1.7 million Americans every year.  Early market adopters. Early market adopters of RPM solutions are capitated managed care organizations with fiscal responsibility for their patients across the spectrum of care. This includes accountable care organizations, health maintenance organizations, home health agencies, hospices, disease management companies and government agencies including the Department of Veterans Affairs. The primary investment driver for RPM solutions has been cost avoidance which has helped organizations reduce hospital readmissions, emergency department visits, and overall healthcare utilization.	
	Return on Investment. Health care providers is struggling to develop a compelling ROI to justify large-scale investments to expand existing chronic care management program(s) and leverage RPM technologies. Clinical trials have been limited in size and scope, payer reimbursement is dominated by fee-for-service contracts, and there is a limited understanding of the costs associated with managing chronically ill patients across the care continuum.  Value-based care imperative. Healthcare providers, with the passage of the Affordable Care Act, are rapidly consolidating into larger integrated delivery networks and transitioning toward various at-risk payment and care delivery models. Many are formulating strategies and deploying foundational processes, infrastructure, and tools required to support population health management programs. Provider organizations have an imperative to expand their existing chronic care management program(s) and to evaluate innovative RPM technologies that could	

help manage value-based risk associated with large patient populations with complex chronic conditions.

Healthcare provider RPM investments are helping drive the transition to value-based care. 88% of providers surveyed have invested or are evaluating investments in RPM technologies to support high-risk chronically ill patients whose conditions are considered unstable and at-risk for hospital readmissions.

Healthcare providers are encouraging patients to proactively manage their health. 89% of providers surveyed have developed or are in the process of developing engagement strategies to encourage patients, family members, and care givers to take a proactive role in managing their chronic conditions. They are leveraging mobile technologies including Smartphones and Tablets, deploying EHR-based patient portals, offering telehealth video conferencing services, and evaluating emerging healthcare wearables.

Healthcare providers are facing significant RPM deployment challenges. Majority of providers surveyed have limited budgets and resources to expand their care management program(s), RPM tools and data are not well integrated with existing clinical information systems and workflow, and they lack the clinical programs, personnel, processes and tools to take advantage of CMS' new CPT codes that provide reimbursement for RPM equipment and monitoring services.

## STUDY METHODOLOGY

Trends in Remote Patient Monitoring 2019 presents the findings of an end-user market study focused on the market opportunities and challenges for US-based healthcare provider organizations who have developed strategies and are considering new or incremental investments in remote patient monitoring (RPM) solutions. These solutions enable risk-bearing organizations to remotely monitor and manage high-risk patients with chronic conditions including CHF, COPD, Diabetes, Hypertension, and Asthma in order to help control healthcare costs, improve care quality and outcomes, and increase access to care for patients living in underserved rural/remote areas.

Spyglass surveyed one hundred (100) clinical informatics and health IT thought leaders who are technically competent and knowledgeable about telehealth/telemedicine. They were affiliated with leading integrated delivery networks, community hospitals, ambulatory environments, home health agencies, and government organizations. The survey was designed to gain an understanding of RPM from the viewpoint of a healthcare provider organization and was not intended to be an evaluation of existing vendor solutions or strategies.

The telephone interviews were conducted over a three-month period starting in April 2019. During the interviews, Spyglass identified the market requirements for RPM solutions through discussions about:

- impact and benefits for deploying RPM for supporting population health,
- existing workflow inefficiencies in managing chronically ill patients, and
- challenges for integrating RPM with existing clinical processes, infrastructure and tools.

Spyglass also evaluated several early adopter healthcare organizations that have successfully deployed RPM solutions.

## TARGET AUDIENCE

- Software and hardware vendors, systems integrators and management consulting groups who are selling hardware, applications and services into the healthcare industry
- **Healthcare administrators and IT executives** who are making strategic decisions to fund clinical information technology solutions
- Clinicians who are involved in informatics and clinical system evaluation and selection
- Investment banking and private equity investors

ABOUT SPYGLASS CONSULTING GROUP



**Spyglass Consulting Group** is a market advisory firm focused on disruptive technologies, changing business models, and growth opportunities within the healthcare and life sciences industries.

Gregg Malkary is the Founder and Managing Director of Spyglass. With more than 30 years of strategic planning, marketing, and business development experience, he is a nationally recognized leader in digital and clinical transformation helping its clients create, protect and transform business value to support executive decision making, drive innovation, and enable sustainable competitive advantage.

Spyglass offers its clients market leading portfolio methodologies, tools, and services in the following growth areas:

- Evaluating disruptive technologies
- Transitioning to value-based care and population health management
- Embracing consumerism and digital health
- Improving operational performance through analytics
- Optimizing clinical workflows and EHR systems

Spyglass clients include leading technology companies, management consulting firms, healthcare provider organizations, and the investment community which includes Cisco, IBM, Microsoft, Intel, Accenture, Hewlett Packard, GE Healthcare, Philips Healthcare, Kaiser Permanente, and Johns Hopkins.

Prior to founding Spyglass Consulting Group in August 2002, Malkary was an Associate Partner at Outlook Ventures, a venture capital firm that focuses on early stage investments in enterprise software and communications companies. Previously, Malkary was the Director of Strategic Planning for Exodus Communications where he was responsible for identifying, evaluating and executing growth initiatives for Exodus in the managed web-hosting marketplace. Malkary has also held consulting and senior management roles in business development, strategic planning and product marketing for public and private technology companies including IBM, Hewlett Packard, Accenture, Silicon Graphics, SkyTel Communications and Liberate Technologies.

Malkary frequently speaks at regional and national conferences focused on mobile computing, wireless technologies and healthcare-related issues. He has been written about and quoted in numerous industry publications including the Wall Street Journal, CIO, Business 2.0, MIT Technology Review, Network World and eWeek.

Malkary graduated with honors from Brown University where he earned a MS and BA in Computer Science. He was also awarded the prestigious North American Philips Corporation Fellowship for his graduate research work in graphical simulation environments.

For additional information about this study, please contact Gregg Malkary at <a href="mailto:gmalkary@spyglass-consulting.com">gmalkary@spyglass-consulting.com</a>.

## Trends in Remote Patient Monitoring October 2019

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