FROST & SULLIVAN

BEST PRACTICES AWARDS

current

2020 NORTH AMERICAN REMOTE PATIENT MONITORING TECHNOLOGY INNOVATION LEADERSHIP AWARD

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Background and Company Performance

Industry Challenges

The growing prevalence of chronic diseases globally increases the burden on hospitals as patients seek ongoing treatment and care. The healthcare resources utilized by patients with chronic diseases account for 81% of hospital admissions in the United States (US) alone[1]. While diseases can be effectively treated in hospitals due to frequent monitoring by health professionals, once patients are discharged, health monitoring is infrequent, leaving patients vulnerable to conditions such as infections and sepsis. When undetected, these conditions can lead to critical and costly exacerbations and hospital readmissions.

Frost & Sullivan analysts monitor the way that remote patient monitoring (RPM) devices have the potential to completely transform patient care by alleviating the pressure on healthcare systems by allowing the effective use of resources. Nevertheless, conventional RPM has drawbacks that can limit their efficacy.

Some of the limitations are briefly summarized in Figure 1.

Figure 1: Remote Patient Monitoring Limitations

[1] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5266427/

Specifically, current devices used to monitor patients at home typically capture only a single health parameter. Multiple devices are required to monitor other health vitals—posing a significant financial burden on patients, while also being quite inconvenient. Furthermore, patients are required to be actively involved in the monitoring process, as readings must be either manually recorded or entered into digital interfaces. Frost & Sullivan research reveals that this entire process is both time-consuming and prone to incorrect data capture due to human error. Wearable devices used to track patients' physiologic parameters also must be worn for a long duration of time to capture accurate readings. However, these devices can cause patient discomfort due to their size and place of the attachment - while also impacting their ability to perform daily activities. Moreover, extended use of these devices can cause problems like irritation or allergies, negatively impacting patient adherence.

Frost & Sullivan concludes that the drawbacks of current RPM solutions drives demand for a more user-friendly option that can measure multiple health parameters through a single device while facilitating the automated capture of readings. Frost & Sullivan believes that the success of a market participant depends upon the ability to properly address patients' health and cost concerns - while at the same time providing enhanced monitoring capabilities when compared to other current products.

Technology Leverage and Business Impact

Introducing a Novel Solution for Automated and Continuous Patient Monitoring

Founded in 2015 and headquartered in Edinburgh, United Kingdom (UK), Current Health Ltd. (Current Health) has developed a breakthrough technology aimed at overcoming the limitations of current RPM devices. To that end, the company has developed the Current wearable health monitoring system, a CE-marked and FDA-cleared artificial intelligence (AI)-powered platform consisting of an all-in-one wearable device, a dedicated home hub, and a cloud-based back end. The ergonomically-designed wearable device is worn on the upper arm and can passively monitor patients' core physiologic parameters, including respiration rate, body temperature, posture, pulse rate, blood oxygen saturation levels, and motion. The platform offers intensive care unit-level accuracy without causing discomfort, allowing users to perform their daily tasks with ease. Frost & Sullivan appreciates how this cost-effective solution not only provides greater convenience to end users, but it also improves their adherence. The wearable continuously monitors health parameters in real time, 24x7, and recordings are automated — negating the need for manual intervention and improving the accuracy of captured data.

Using AI to Derive Uniquely Actionable Insights

Like many vendors, Current Health's platform leverages proprietary algorithms to analyze data generated by the wearable device, resulting in actionable insights. However, unlike other competitors, the company's algorithms are built using the industry's largest real-time physiological data set, which allows for the accurate mapping of health parameter changes and subsequently alerting of providers with insightful and actionable information when there are signs of deterioration in a patient's health. By using Current Health's companion application, providers can access mobile and web-based dashboards for quick

and precise identification of at-risk patients. Virtual video visits can be scheduled with at-risk patients, allowing the care team to offer interventions such as prescribing medications to stabilize and improve patients' conditions. Automated phone calls, customized alerts, and educational content are also provided to patients to support their recovery.

In addition to assisting healthcare providers, Current Health's platform can also be used by pharmaceutical companies to monitor drug-related developments during clinical trials. When utilizing the system, drug developers can access phenotypical data with unmatched accuracy during trials and information related to the type of patients who can benefit most from therapies as well as the identification of those at-risk to particular interventions. These insights can help pharmaceutical companies develop precision medicine tailored to individual patient's needs.

Leveraging Advanced Technology to Enable a Wide Range of Applications across Multiple Indications

Frost & Sullivan notes that the ability to monitor multiple health vitals facilitates the use of Current Health's platform across different chronic diseases, including diabetes, cancer, heart failure, and chronic obstructive pulmonary disease. Additionally, the company's technology can also track physiologic parameters before and after surgery, making the system an invaluable health monitoring tool for patients suffering from two or more chronic conditions. These capabilities are especially valuable to providers as an estimated one in four adults in the US alone have multiple chronic conditions, with the number increasing significantly among the elderly population.[2] Overall, the rise in the geriatric population worldwide - coupled with unhealthy lifestyles in many countries - further contributes to an increase in concurrent chronic conditions, providing a large addressable market for the company. Furthermore, Current Health is testing the utility of its platform to improve post-pregnancy care for women. In January 2020, the company partnered with Uganda's Mbarara Hospital to pilot its offering for women who had undergone cesarean section surgery in a bid to prevent maternal deaths related to pregnancy and childbirth.

Finally, Current Health has the proper capabilities to help mitigate the impact that the widespread outbreak of novel coronavirus (COVID-19) has had across the globe. With the virus putting an enormous burden on hospitals to manage the ever-increasing number of infected patients, centralized care delivery models observed in hospitals in countries such as Italy are no longer sufficient. Furthermore, such a care delivery approach leads to the spread of the disease among non-COVID-19 patients. To reduce hospital-induced infection transmission, Current Health is enabling the use of RPM to both monitor and engage suspected COVID-19 patients as well as low-acuity and immune-compromised individuals at home. The ability to manage patients from their homes not only decreases the spread of the contagion, but also helps preserve hospital facilities for individuals in urgent need of care. Frost & Sullivan firmly believes that this latest development is a testament to Current Health's innovation and commitment to delivering a technology platform closely aligned to market needs. Consequently, prominent investors such as MMC Ventures, Scottish Investment Bank, and Legal & General supports the company's visionary thinking.

[2] https://www.hhs.gov/ash/about-ash/multiple-chronic-conditions/about-mcc/index.html

Improving Patient Outcomes while Reducing Healthcare Delivery Costs

Frost & Sullivan research shows that the deployment of Current Health's RPM platform allows healthcare providers to improve care to patients at their homes, in turn improving health outcomes. For example, UK-based Dartford and Gravesham National Health Service (NHS) Trust have employed Current Health's technology to prioritize home visits for clinicians and staff based on patients' criticality level—leading to a 22% reduction of in-home visits. The system's user-friendly interface and intuitive mode of operation also enable health professionals to start monitoring patients within 24-hours of deployment and with minimal training. Finally, Current Health can allow providers to manage their workforce shortages efficiently by preventing hospital readmissions.

As a result, Current Health is witnessing tremendous growth buoyed by the strong adoption of its technology by US- and UK-based healthcare providers. In the past 12 months alone, the company reported over 300% revenue growth. As the emergence of COVID-19 accelerates the shift towards adoption of RPM to enable at-home care delivery models, Current Health expects to continue the rapid growth of its powerful tools. The company's RPM platform is currently used by over 30 major health systems in the United States and United Kingdom, including Mayo Clinic, Baptist Health, Imperial College Healthcare NHS Trust and Dartford & Gravesham NHS Trust. Moreover, two of the world's largest pharmaceuticals are collaborating with the company to adopt the Current Health's platform in their clinical trials.

Leveraging Industry-leading Expertise to Provide a Holistic View of Patients' Health

Current Health was founded in 2015 by Christopher McCann and Stewart Whiting to develop a proactive RPM solution that shifts the conventional reactive delivery of care. Within a few years of its inception, the company received multiple regulatory approvals from the US Food and Drug Administration for hospital and home care applications.

Recently, the company partnered with VivaLNK, MIR, and other medical wearable solution providers to add additional system functionalities, including axillary temperature tracking, spirometry measurement, continuous glucose monitoring, and blood coagulation assessment. The company plans to include an additional fifty integrations with best-in-class peripherals such as weight, core temperature, blood pressure, and so on to capture other health metrics accurately. With the aim of preventing illness for over one million patients worldwide by 2021, Frost & Sullivan analysts expect Current Health to reduce the expensive clinical burden on health systems due to unnecessary hospital readmissions that cost US hospitals alone around $26 billion annually.[3]

[3] *https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/OMH_Readmissions_Guide.pdf*

Conclusion

Frost & Sullivan lauds Current Health's successful delivery of a convenient remote patient monitoring system that eliminates manual data entry while lowering the financial burden on patients. Through seamless integration with multiple peripherals and the use of advanced algorithms, the company provides unprecedented insight into patient health, allowing for cost-effective early intervention measures for clients. Through the rapid deployment of its platform during the ongoing COVID-19 pandemic, Current Health is successfully enabling the shift from in-hospital treatment to community-based care, thus helping preserve health care resources for critical patients while containing the spread of disease.

For its technical excellence, exceptional scalability, and proven ability to reduce healthcare costs while empowering better patient outcomes, Current Health earns the 2020 Frost & Sullivan Technology Innovation Leadership Award.

Significance of Technology Innovation Leadership

Technology-rich companies with strong commercialization strategies benefit from the demand for high-quality, technologically innovative products that help shape the brand, resulting in a strong, differentiated market position.

Understanding Technology Innovation Leadership

Technology innovation leadership recognizes companies that lead the development and successful introduction of high-tech solutions to customers' most pressing needs, altering the industry or business landscape in the process. These companies shape the future of technology and its uses. Ultimately, success is measured by the degree to which a technology is leveraged and the impact it has on growing the business.

Key Benchmarking Criteria

For the Technology Innovation Leadership Award, Frost & Sullivan analysts independently evaluated 2 key factors—Technology Leverage and Business Impact—according to the criteria identified below.

Technology Leverage

Criterion 1: Commitment to Innovation
Criterion 2: Commitment to Creativity
Criterion 3: Technology Incubation
Criterion 4: Commercialization Success
Criterion 5: Application Diversity

Business Impact

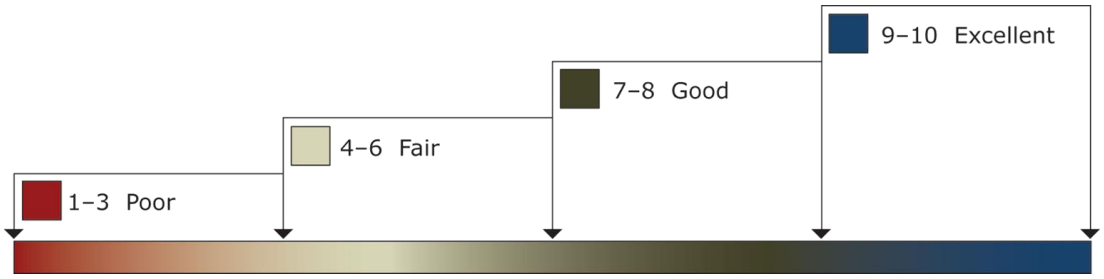
Criterion 1: Financial Performance
Criterion 2: Customer Acquisition
Criterion 3: Operational Efficiency
Criterion 4: Growth Potential
Criterion 5: Human Capital

Best Practices Award Analysis for Current Health

Decision Support Scorecard

To support its evaluation of best practices across multiple business performance categories, Frost & Sullivan employs a customized Decision Support Scorecard. This tool allows research and consulting teams to objectively analyze performance according to the key benchmarking criteria listed in the previous section, and to assign ratings on that basis. The tool follows a 10-point scale that allows for nuances in performance evaluation. Ratings guidelines are illustrated below.

RATINGS GUIDELINES



The Decision Support Scorecard considers Technology Leverage and Business Impact (i.e., the overarching categories for all 10 benchmarking criteria; the definitions for each criterion are provided beneath the scorecard). The research team confirms the veracity of this weighted scorecard through sensitivity analysis, which confirms that small changes to the ratings for a specific criterion do not lead to a significant change in the overall relative rankings of the companies.

The results of this analysis are shown below. To remain unbiased and to protect the interests of all organizations reviewed, Frost & Sullivan has chosen to refer to the other key participants as Competitor 2 and Competitor 3.

Measurement of 1–10 (1 = poor; 10 = excellent)			
Technology Innovation Leadership	Technology Leverage	Business Impact	**Average Rating**
Current Health	**9.6**	**9.7**	**9.7**
Competitor 2	6.2	5.9	6.1
Competitor 3	4.1	5.0	4.6

Technology Leverage

Criterion 1: Commitment to Innovation

Requirement: Conscious, ongoing development of an organization's culture that supports the pursuit of groundbreaking ideas through the leverage of technology.

Criterion 2: Commitment to Creativity

Requirement: Employees rewarded for pushing the limits of form and function by integrating the latest technologies to enhance products.

Criterion 3: Technology Incubation

Requirement: A structured process with adequate investment to incubate new technologies developed internally or through strategic partnerships.

Criterion 4: Commercialization Success

Requirement: A proven track record of commercializing new technologies by enabling new products and/or through licensing strategies.

Criterion 5: Application Diversity

Requirement: The development of technologies that serve multiple products, multiple applications, and multiple user environments.

Business Impact

Criterion 1: Financial Performance

Requirement: Overall financial performance is strong in terms of revenue, revenue growth, operating margin, and other key financial metrics.

Criterion 2: Customer Acquisition

Requirement: Overall technology strength enables acquisition of new customers, even as it enhances retention of current customers.

Criterion 3: Operational Efficiency

Requirement: Staff is able to perform assigned tasks productively, quickly, and to a high quality standard.

Criterion 4: Growth Potential

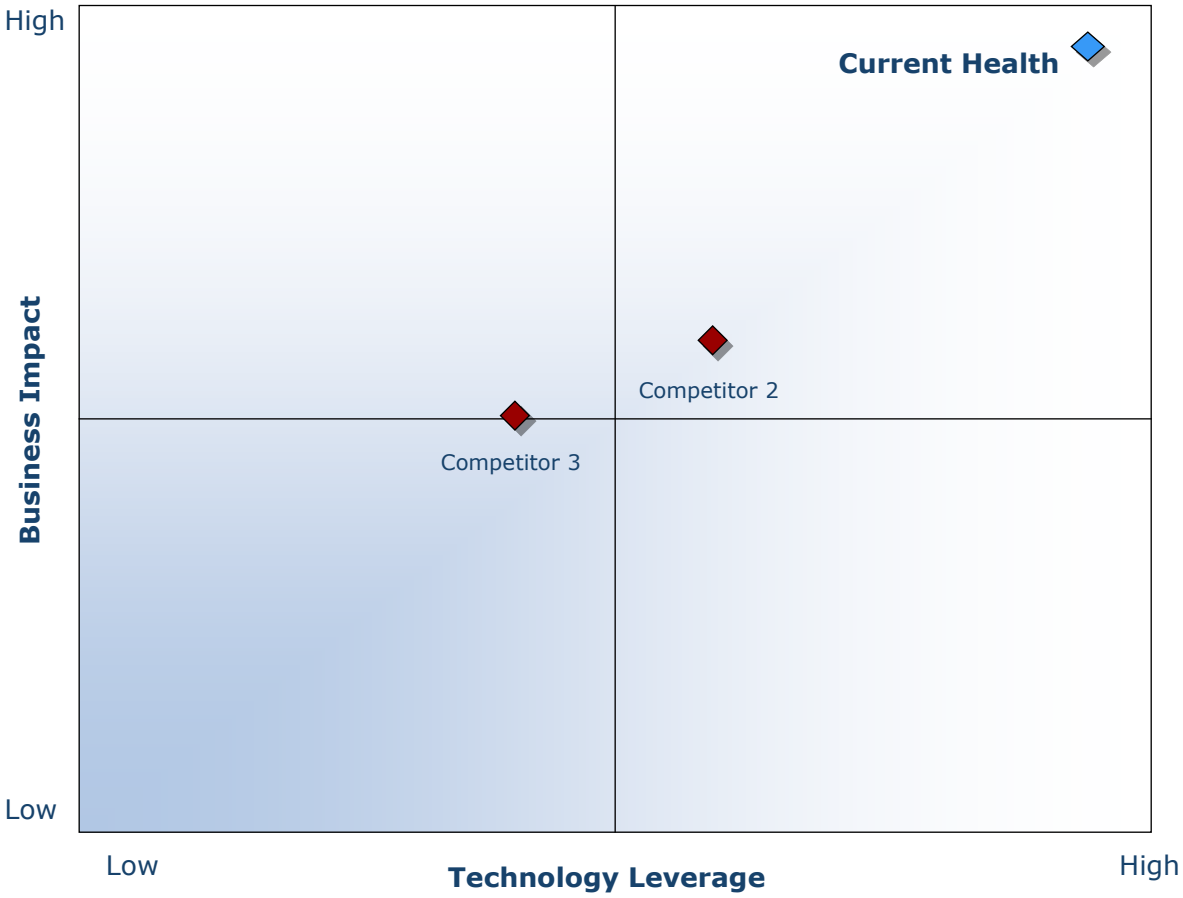
Requirements: Technology focus strengthens brand, reinforces customer loyalty, and enhances growth potential.

Criterion 5: Human Capital

Requirement: Company culture is characterized by a strong commitment to customer impact through technology leverage, which enhances employee morale and retention.

Decision Support Matrix

Once all companies have been evaluated according to the Decision Support Scorecard, analysts then position the candidates on the matrix shown below, enabling them to visualize which companies are truly breakthrough and which ones are not yet operating at best-in-class levels.



Best Practices Recognition: 10 Steps to Researching, Identifying, and Recognizing Best Practices

Frost & Sullivan analysts follow a 10-step process to evaluate Award candidates and assess their fit with select best practices criteria. The reputation and integrity of the Awards are based on close adherence to this process.

	STEP	OBJECTIVE	KEY ACTIVITIES	OUTPUT
1	**Monitor, target, and screen**	Identify Award recipient candidates from around the world	• Conduct in-depth industry research • Identify emerging industries • Scan multiple regions	Pipeline of candidates that potentially meet all best practices criteria
2	**Perform 360-degree research**	Perform comprehensive, 360-degree research on all candidates in the pipeline	• Interview thought leaders and industry practitioners • Assess candidates' fit with best practices criteria • Rank all candidates	Matrix positioning of all candidates' performance relative to one another
3	**Invite thought leadership in best practices**	Perform in-depth examination of all candidates	• Confirm best practices criteria • Examine eligibility of all candidates • Identify any information gaps	Detailed profiles of all ranked candidates
4	**Initiate research director review**	Conduct an unbiased evaluation of all candidate profiles	• Brainstorm ranking options • Invite multiple perspectives on candidates' performance • Update candidate profiles	Final prioritization of all eligible candidates and companion best practices positioning paper
5	**Assemble panel of industry experts**	Present findings to an expert panel of industry thought leaders	• Share findings • Strengthen cases for candidate eligibility • Prioritize candidates	Refined list of prioritized Award candidates
6	**Conduct global industry review**	Build consensus on Award candidates' eligibility	• Hold global team meeting to review all candidates • Pressure-test fit with criteria • Confirm inclusion of all eligible candidates	Final list of eligible Award candidates, representing success stories worldwide
7	**Perform quality check**	Develop official Award consideration materials	• Perform final performance benchmarking activities • Write nominations • Perform quality review	High-quality, accurate, and creative presentation of nominees' successes
8	**Reconnect with panel of industry experts**	Finalize the selection of the best practices Award recipient	• Review analysis with panel • Build consensus • Select recipient	Decision on which company performs best against all best practices criteria
9	**Communicate recognition**	Inform Award recipient of recognition	• Announce Award to the CEO • Inspire the organization for continued success • Celebrate the recipient's performance	Announcement of Award and plan for how recipient can use the Award to enhance the brand
10	**Take strategic action**	Upon licensing, company is able to share Award news with stakeholders and customers	• Coordinate media outreach • Design a marketing plan • Assess Award's role in strategic planning	Widespread awareness of recipient's Award status among investors, media personnel, and employees

The Intersection between 360-Degree Research and Best Practices Awards

Research Methodology

Frost & Sullivan's 360-degree research methodology represents the analytical rigor of the research process. It offers a 360-degree view of industry challenges, trends, and issues by integrating all 7 of Frost & Sullivan's research methodologies. Too often companies make important growth decisions based on a narrow understanding of their environment, resulting in errors of both omission and commission. Successful growth strategies are founded on a thorough understanding of market, technical, economic, financial, customer, best practices, and demographic analyses. The integration of these research disciplines into the 360-degree research methodology provides an evaluation platform for benchmarking industry players and for identifying those performing at best-in-class levels.

360-DEGREE RESEARCH: SEEING ORDER IN THE CHAOS

About Frost & Sullivan

Frost & Sullivan, the Growth Partnership Company, helps clients accelerate growth and achieve best-in-class positions in growth, innovation, and leadership. The company's Growth Partnership Service provides the CEO and the CEO's growth team with disciplined research and best practice models to drive the generation, evaluation and implementation of powerful growth strategies. Frost & Sullivan leverages nearly 60 years of experience in partnering with Global 1000 companies, emerging businesses, and the investment community from 45 offices on 6 continents. To join Frost & Sullivan's Growth Partnership, visit http://www.frost.com.