

FROST & SULLIVAN

# BEST PRACTICES

AWARDS

FROST & SULLIVAN

2020 BEST PRACTICES AWARD



**CipherHealth**

The Patient Engagement Company

**2020 NORTH AMERICAN  
PATIENT ENGAGEMENT SOLUTIONS  
ENABLING TECHNOLOGY LEADERSHIP AWARD**

## Contents

Background and Company Performance .....	3
<i>Industry Challenges</i> .....	3
<i>Technology Leverage and Customer Impact of CipherHealth</i> .....	4
<i>Conclusion</i> .....	8
Significance of Enabling Technology Leadership .....	9
Understanding Enabling Technology Leadership .....	9
<i>Key Benchmarking Criteria</i> .....	10
Best Practices Recognition: 10 Steps to Researching, Identifying, and Recognizing Best Practices .....	11
The Intersection between 360-Degree Research and Best Practices Awards.....	12
<i>Research Methodology</i> .....	12
About Frost & Sullivan .....	12

## Background and Company Performance

### *Industry Challenges*

The United States (US) healthcare delivery system landscape is evolving from a provider-centric to a patient-centric model focusing on clinical outcomes and higher quality care at reduced costs. The emerging value-driven ecosystem relies on active patient involvement to succeed. In such a scenario, deficient proactive patient outreach programs and irregular appointment scheduling result in otherwise preventable hospital admissions with high-cost and inadequate care delivery implications.

Patients transitioning from primary to acute to post-acute set-ups seldom receive periodic care instructions about comorbidities, medications, personalized treatment options, and follow-up appointments outside the healthcare network. Inefficient transmission support from primary to acute care facilities is driving increased resource utilization. Post-discharge, a lack of targeted follow-up procedure leads to appointment no-shows and flawed adherence alerts cause ineffective medication compliance and subsequent patient readmission.

The need to achieve improved care coordination between patients and physicians is high. In-patients have inadequate knowledge concerning the procedures they are about to undergo. Hence, physicians fail to access patients' consolidated medical history at the point-of-care (POC), and patients are often unable to refer, update, and transfer medical information remotely. Therefore health systems require patient engagement (PE) solutions that prepare patients well before visits and curtail interventions by the operating staff. Frost & Sullivan's research reveals that providers are increasingly turning toward innovative PE solutions to mitigate the length of hospital stay and patient readmission resulting from inadequate communication and care delivery.

Also, regulatory directives incentivize health enterprises that achieve better connectivity and facilitate cross-continuum PE. At the same time, readmission prevalence caused by ineffective PE attracts regulatory penalties and impacts providers' financial outcomes negatively. Thus, the ability to increase patient feedback is particularly important for providers pressured to deliver value-based care and garner positive feedback critical to value-based payment systems. Furthermore, measuring patients' perspectives of hospital care enables providers to make workflow adjustments.

To meet these objectives, the Institute for Healthcare Improvement's quadruple aim intends to optimize health systems' performance by reducing costs, improving population health, enhancing patient experience, and furthering healthcare providers' experience. The approach drives healthcare systems to invest in advanced solutions and technologies that support quadruple aim objectives. PE offerings must facilitate preventive care and personalized medicine, streamline operational efficiencies to reduce care costs, drive revenue, support providers, and engage patients more effectively.

Similarly, the Centers for Medicare & Medicaid Services' (CMS) bundled payment programs strive to benchmark providers' care delivery and associated costs for every care episode.

CMS mandates PE programs support preparing patients before care interventions, so they seek fewer but tailored services from providers. Such initiatives help healthcare systems to reduce operational costs, drive positive patient outcomes, and improve the patient experience.

A truly rewarding PE approach that improves patient outcomes and secures regulatory incentives commands patient-centric collaboration between all stakeholders. Driving meaningful PE stands as a significant opportunity for providers, health plans, and life sciences companies in this highly dynamic, value-based environment. Vendors that enable a holistic, integrated, and health-specific approach to consumer engagement will bridge yet another gap towards affordable, high-quality, patient-centered care. More importantly, PE can also boost virtual care, particularly relevant in the current coronavirus (COVID-19) pandemic. Hospitals require adjusting their resources and making administrative changes to cater to evolving healthcare needs.

Therefore the need for automated solutions that leverage continuous patient feedback to enhance healthcare accessibility, efficacy, and affordability for early intervention and risk reduction is urgent. Apart from traditional PE approaches, such as surveys and educational seminars, automated digital solutions and telehealth are vital to improving treatment adherence through reminders and monitoring, follow-up care, health coaching, and long-term PE. Patient portals for patient education are also important engagement tools for chronic disease management. Smarter engagement tools can spur behavioral changes—leading to enhanced population health management (PHM) efficacy for preventive health care.

### *Technology Leverage and Customer Impact of CipherHealth*

Founded in 2009 and headquartered in New York, the US, CipherHealth provides multiple PE solutions for the entire provider market spectrum. The company works with 10 of the top 20 US hospitals, engaging over 16 million patients. Its applications collectively cover the disease continuum, supporting diverse healthcare stakeholders such as nurses, physicians, patients, and care managers. CipherHealth's solution caters to the unique needs of hospitals, accountable care organizations, ambulatory surgery centers and practices, long-term and post-acute care providers, urgent care facilities, and specialty pharmacies. Notable customers include the University of California, San Francisco Medical Center (UCSF), Banner Health, Northwell Health, Rush University Medical Center, Intermountain Healthcare, and Henry Ford Health.

### **PE Platform Improving Patient Care Journey for Improved Outcomes**

At the front-end of American Healthcare Reform, specifically hospital readmissions, CipherHealth introduced its PE platform to enable healthcare providers to enhance care delivery across the continuum for improved patient outcomes and experience. It also helps providers' free-up manual intervention via automated patient outreach. The powerful readmission reduction solution ensures seamless care transitions and matchless PE.

The company's first product, CipherOutreach, which focused initially on hospital acute discharges, enables automated post-discharge follow-up call and text programs for transitional care management. Within 24 to 48 hours after encounter, the solution engages with patients, queries them on clinically relevant discharge diagnosis topics, and allows re-stratification if unwell and requiring assistance with prescribed medications.

The solution proactively addresses potentially adverse events through personalized patient care recordings (suited specific diseases and procedures) and regular recovery checkups. In case a patient's response triggers a concern (for example, a recording replay above the threshold limit), the solution identifies the patients at risk for readmission and connects them to a care team member. Over the next month, the patient receives further calls, texts, and emails to ensure that the nurses monitor the patient's recovery path effectively.

At the organizational level, CipherHealth's solutions enable tracking enterprise-wide trends to drive improvements. Besides, the company optimizes provider's existing PE investment with plug-in applications that maximize the efficiency of currently used PE platforms and portals. Improving the patient care journey lowers avoidable readmission rates, vital for the health center's quality ranking and financial incentives' eligibility. Patients are thrice less likely to receive automated calls for readmission versus manual calls, decreasing readmissions rates. For example, at UPenn Home Care, the readmission rate declined by 16%, and 52% in orthopedic readmission at Middlesex Hospital.

CipherHealth has POC and remote PE tools through automated outreach calls and text in the same PE recording platform, a key market differentiator. Thus, unlike competitive offerings, the solution covers the full patient continuum in the care journey from pre-arrival to POC to post-discharge and PHM.

### **Product Roadmap Strategy to Manage the Care Pathway**

After its initial solution launch, CipherHealth collaborated with leading providers, health systems, and agile healthcare information technology (IT) vendors to continuously innovate for product co-development and periodic feature audits and enhancements.

Firstly, from the product offering perspective, the company expanded its CipherOutreach solution's breadth and application to support additional use cases. Apart from hospital follow-ups, the solution reinforced emergency department follow-ups, population health outreach, preventive care outreach, and pre-arrival engagements. Pre-arrival engagement reduces patient no-show rates via automated appointment reminders and integrates into the hospital's routine workflows. The solution also encourages patients to communicate with providers leveraging educational information and pre-arrival surveys, facilitating holistic patient information for timely and proper interventions.

Survey responses allow providers to determine and resolve patient issues during their stay or visit. After the hospital stay, patients can communicate seamlessly with providers through their recovery process.

The solution notifies potential risks to the care team to minimize safety risks (a fall, an infection, and readmission) during the visit, enhancing patient safety.

Additionally, the company added secondary products to its PE platforms such as CiperRounds, with a digital rounding application to support nursing leader rounding on patients' bedsides. With typical hospital applications that digitize regular nurse rounding such as hourly rounding, quality rounding, patient experience rounding, and manage the identified issues through a learning triage workflow process on the back-end.

CipherHealth licenses its new products to providers on an ala-carte basis, enabling improving engagement on both rounding and outreach applications and expanding existing provider relationships.

### **Preventive Care Outreach for Population Health Management**

CipherHealth's outreach programs cost-effectively engage patients for preventive health initiatives such as flu vaccination and cancer screening. Health centers can streamline workflows and improve staff efficiency by integrating the CiperOutreach solution seamlessly with their electronic medical records and patient registries. They then can locate patients requiring outreach, resolving clinical concerns through multiple calls, texts (in the patient's preferred language), and customizable notifications. The programs provide in-depth reports with actionable insights to drive long-term improvements and connect with the care team through the live transfer features.

The UCSF leveraged the CiperOutreach platform for cancer screening, re-designing care delivery for at-risk patients. The solution witnessed a four-fold increase in patients reached and a three and a half times increase in screened patients. UCSF and CipherHealth built CiperCareManagement. The customized platform couples CipherHealth's PE software solution with evidence-based patient care plans to enhance care experience. The solution helps analyze patients' longitudinal data and visualize care types delivered to broader patient populations to decide the most optimal care.

CipherHealth's Consumer Assessment of Healthcare Providers & Systems (CAHPS), a patient satisfaction solution, ensures that the facility improves the care quality holistically by creating and enhancing patient interactions, analyzing, and improving patient satisfaction (PS) drivers. PS is vital in hospital's qualitative benchmarking as CAHPS scores determine eligibility for reimbursement and ratings.

### **Lateral Market Growth Strategy**

Apart from product offering growth, CipherHealth expanded into different verticals, including multiple buyer personas and profiles in various markets. The company's first expansion into acute care was in the ambulatory outpatient clinic setting, a natural progression from hospitals to nearly 300 clinics owned by health systems through several use-cases. It launched CiperHealth Kiosk, a POC and patient-facing digital patient experience service, to capture data for improving care.



The company also launched a post-acute business with Medicare-certified home health agencies. Typical use-cases include engaging patients throughout and following care episodes. CipherHealth's scalable PE solutions address clinical effectiveness, operational efficiency, and home health agencies' reputation management. With payment reforms' (Patient-Driven Groupings Model) impact affecting reimbursement receipts and referrals, CipherHealth's solutions automate processes to save time and effort, improving performance and bottom-line revenues.

Homecare Homebase, a market-leading software offering for home-based care, partnered with CipherHealth to provide matchless patient outreach for the evolving home health and hospice industry. The company also collaborated with Medline, a global manufacturer, distributor, and solution provider, to drive CipherOutreach's solution enabling home health agencies to scale telephonic patient communication with automation. The partnership will engage patients between home visits, prevent adverse clinical events, and improve the providers overall operating performance for better patient experience.

The company's recent emerging market focus is on scalable organizations that provide outsourced managed services to CipherHealth's target healthcare verticals, such as staffing and care management companies. These objectives include post-discharge follow-up to support care management functions within those organizations and care-gap closures (full vaccination outreach and preventive outreach).

CipherHealth operates across all US states. The typical go-to-market strategy combines licensing one product to the health system and the enterprise team upselling and cross-selling the next institution-wide development. Hence, the sales team targets new business and existing enterprise expansion. However, the company also licenses multiple products in the initial contracting process. Product bundling supports initiatives like bundled payment programs, which require pre-, during-, and after-care to support the longitudinal PE journey.

### **COVID-19 Response Strategy**

Repositioning in the COVID-19 pandemic with several add-on capabilities and virtual care services, CipherHealth is supporting healthcare systems for virtual, patient-centric care delivery. To help combat the increase in caseload, the company initiated applications in use cases such as pre-screening of patients scheduled for outpatient visits through automated outreach. The solution queries on symptoms, exposure, and travel history, assessing the answers to alert and divert the in-patient appointment for a telehealth visit.

Secondly, CipherHealth rapidly scaled patient communications with automated texts and notifications of positively and negatively tested patients in hotspots to manage surge capacity proactively and minimize community exposure risks. Automating test result notification eases work pressure and streamlines communication substantially. The volume to reach out and notify patients manually is exceptionally challenging for the already overwhelmed nursing staff with the patient flow.

Thirdly, the company supports longitudinal monitoring of both COVID-19 positive and negative patients, including routine follow-ups, symptoms monitoring, and reporting deteriorating conditions to the provider teams. CipherHealth is building its connected patient communication platform around virtual encounters. Services include appointment reminders for telehealth visits, broadcasting messages to inform large population groups about telehealth services' availability in particular markets with specific providers, and texting links to patients post-discharge to schedule a telehealth appointment. Some applications on the rounding site incorporate specific scripts built-into the product to ensure patient and staff safety. The solution monitors infection prevention and preparedness protocols in real-time by auditing the care team's necessary resources.

Lastly, the company further supports the community by creating awareness with the latest updates on COVID-19 to limit the viral spread. It educates the community on appropriate personal safeguards and targets its patient outreach to the at-risk population.

### *Conclusion*

The need to improve care quality, coordination, and patient engagement (PE) across the care pathway is urgent to positively impact patients' health outcomes, lower costs, prevent readmission, improve treatment adherence, and drive provider efficiency.

CipherHealth's PE solutions apply across the care continuum. Within the hospital and remotely, the company helps providers, patients, and caregivers better manage health for improved outcomes, reduced costs, and improved bottom-lines while enhancing patient and provider experiences, thus meeting the quadruple aim of healthcare. The robust solutions meet all healthcare stakeholders' needs by facilitating flexible care transition to prevent readmission. The company's offerings enable free-up manual intervention via automated patient outreach, remote monitoring, and recording personalized care plans securely for at-home accessibility by patients and caregivers.

Besides, CipherHealth's scalable PE programs assure clinical effectiveness, operational efficiency, and healthcare organizations' reputation management, including ambulatory clinics, telehealth, and home health services. Through its PE technology and services, Cipherhealth redesigns patient-centric care delivery models for the at-risk and general population. The company plays a crucial role for providers and payers by supporting and optimizing care coordination and population health management initiatives such as cancer screening and, more recently, dealing with the recent COVID-19 pandemic.

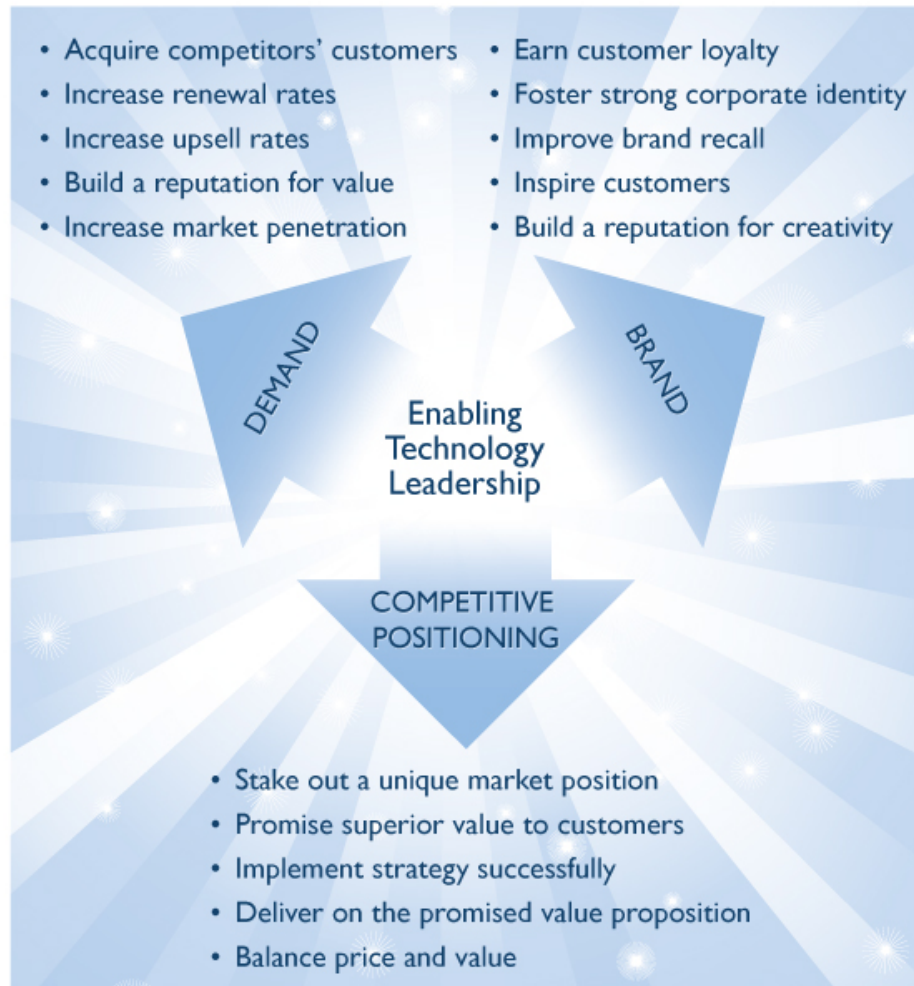
CipherHealth focuses on enhanced and continuous communication across various touchpoints, proactively supports preventive care interventions and longitudinal patient monitoring, and positions as a leading PE solution provider.

With its strong overall performance, CipherHealth earns Frost & Sullivan's 2020 North America Enabling Technology Leadership Award in the patient engagement solutions market.



## Significance of Enabling Technology Leadership

Ultimately, growth in any organization depends on customers purchasing from a company and then making the decision to return time and again. In a sense, then, everything is truly about the customer. Making customers happy is the cornerstone of any successful, long-term growth strategy. To achieve these goals through enabling technology leadership, an organization must be best in class in three key areas: understanding demand, nurturing the brand, and differentiating from the competition.



## Understanding Enabling Technology Leadership

Product quality (driven by innovative technology) is the foundation of delivering customer value. When complemented by an equally rigorous focus on the customer, companies can begin to differentiate themselves from the competition. From awareness, to consideration, to purchase, to follow-up support, organizations that demonstrate best practices deliver a unique and enjoyable experience that gives customers confidence in the company, its products, and its integrity.

## *Key Benchmarking Criteria*

For the Enabling Technology Leadership Award, Frost & Sullivan analysts independently evaluated Technology Leverage and Customer Impact according to the criteria identified below.

### **Technology Leverage**

- Criterion 1: Commitment to Innovation
- Criterion 2: Commitment to Creativity
- Criterion 3: Stage Gate Efficiency
- Criterion 4: Commercialization Success
- Criterion 5: Application Diversity

### **Customer Impact**

- Criterion 1: Price/Performance Value
- Criterion 2: Customer Purchase Experience
- Criterion 3: Customer Ownership Experience
- Criterion 4: Customer Service Experience
- Criterion 5: Brand Equity

## 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 practice criteria. The reputation and integrity of the Awards are based on close adherence to this process.

STEP	OBJECTIVE	KEY ACTIVITIES	OUTPUT
1 <b>Monitor, target, and screen</b>	Identify Award recipient candidates from around the globe	<ul style="list-style-type: none"> <li>• Conduct in-depth industry research</li> <li>• Identify emerging sectors</li> <li>• Scan multiple geographies</li> </ul>	Pipeline of candidates who potentially meet all best-practice criteria
2 <b>Perform 360-degree research</b>	Perform comprehensive, 360-degree research on all candidates in the pipeline	<ul style="list-style-type: none"> <li>• Interview thought leaders and industry practitioners</li> <li>• Assess candidates' fit with best-practice criteria</li> <li>• Rank all candidates</li> </ul>	Matrix positioning of all candidates' performance relative to one another
3 <b>Invite thought leadership in best practices</b>	Perform in-depth examination of all candidates	<ul style="list-style-type: none"> <li>• Confirm best-practice criteria</li> <li>• Examine eligibility of all candidates</li> <li>• Identify any information gaps</li> </ul>	Detailed profiles of all ranked candidates
4 <b>Initiate research director review</b>	Conduct an unbiased evaluation of all candidate profiles	<ul style="list-style-type: none"> <li>• Brainstorm ranking options</li> <li>• Invite multiple perspectives on candidates' performance</li> <li>• Update candidate profiles</li> </ul>	Final prioritization of all eligible candidates and companion best-practice positioning paper
5 <b>Assemble panel of industry experts</b>	Present findings to an expert panel of industry thought leaders	<ul style="list-style-type: none"> <li>• Share findings</li> <li>• Strengthen cases for candidate eligibility</li> <li>• Prioritize candidates</li> </ul>	Refined list of prioritized Award candidates
6 <b>Conduct global industry review</b>	Build consensus on Award candidates' eligibility	<ul style="list-style-type: none"> <li>• Hold global team meeting to review all candidates</li> <li>• Pressure-test fit with criteria</li> <li>• Confirm inclusion of all eligible candidates</li> </ul>	Final list of eligible Award candidates, representing success stories worldwide
7 <b>Perform quality check</b>	Develop official Award consideration materials	<ul style="list-style-type: none"> <li>• Perform final performance benchmarking activities</li> <li>• Write nominations</li> <li>• Perform quality review</li> </ul>	High-quality, accurate, and creative presentation of nominees' successes
8 <b>Reconnect with panel of industry experts</b>	Finalize the selection of the best-practice Award recipient	<ul style="list-style-type: none"> <li>• Review analysis with panel</li> <li>• Build consensus</li> <li>• Select recipient</li> </ul>	Decision on which company performs best against all best-practice criteria
9 <b>Communicate recognition</b>	Inform Award recipient of Award recognition	<ul style="list-style-type: none"> <li>• Announce Award to the CEO</li> <li>• Inspire the organization for continued success</li> <li>• Celebrate the recipient's performance</li> </ul>	Announcement of Award and plan for how recipient can use the Award to enhance the brand
10 <b>Take strategic action</b>	Upon licensing, company is able to share Award news with stakeholders and customers	<ul style="list-style-type: none"> <li>• Coordinate media outreach</li> <li>• Design a marketing plan</li> <li>• Assess Award's role in future strategic planning</li> </ul>	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 our 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, leading to 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 participants 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, enables clients to 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 more than 50 years of experience in partnering with Global 1000 companies, emerging businesses, and the investment community from 45 offices on six continents. To join our Growth Partnership, please visit <http://www.frost.com>.