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FROST & SULLIVAN BEST PRACTICES AWARD

CARE COORDINATION - UNITED STATES

Product Line Strategy Leadership 2019

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2019 BEST PRACTICES AWARD

lumeon

Contents

Background and Company Performance

Industry Challenges

Demographic shifts combined with rising demand for evidence-based care and risk-based contracting make coordinated care an increasingly critical competency for payers and providers across the United States. A Frost & Sullivan study reported that more than 70% of US patients feel fully satisfied when they are empowered to view, download, and transmit medical data across the care continuum. Yet more than 50% of all hospitals remain vulnerable to an excessive number of readmissions every year since most of these patients, despite their ability to access and transfer medical data, fail to fully comprehend their care plans and do not adhere to medication and wellness goals after their in-patient stays. Such inefficiencies result in aggressive scrutiny by payers, and in most cases hospitals carry the burden of reimbursement penalties of as much as 3% of their yearly patient revenue. Since most US-based hospitals operate with a narrow margin, such penalties often force them to either file for bankruptcy or merge with a larger provider. Frost & Sullivan believes that patients' ability to share or exchange medical data among health systems is not enough: they should also be able to access, manage, monitor, and track their individualized care plans via a dedicated digital platform.

Care coordination technologies that provide transitional health management support, especially for vulnerable, high-cost populations, have experienced rapid adoption in the recent past. Capabilities that are tailored for both private and public reimbursement models include identification, stratification, and management of high-risk populations to improve care quality, streamline costs, and deliver better outcomes. Overall, the need for improved clinical utility and optimized financial productivity remains the main driver of interest in care coordination technology and services in the United States.

Despite the benefits of coordinated care, the challenges are daunting. The US care coordination information technology (CCIT) market has not matured yet; dedicated adoption of CCIT solutions is restricted to the few payers and providers that are aligning a majority of their net patient revenue to value- or risk-based contracts. Frost & Sullivan found that 53% of all US-based providers have acknowledged that their care pathways are somewhat coordinated versus 7% that said they are fully coordinated. This is because more than 50% of all care plans in the United States are stored in legacy electronic health record (EHR) systems that do not grant comprehensive access to patients, resulting in more than 75% of patients not utilizing their care plans during care transitions. EHRs also lack the pathway process knowledge to manage a multitude of tasks over time, personalize care plan activities to emergent patient needs, track progress across care settings and task care team activities accordingly - all essential components for effective care coordination.

The ideal approach is to invest in an IT-enabled care management infrastructure that normalizes disparate patient data, triggers automated case-based attribution of tasks among care teams, manages transitional care and real-time reporting. Ideally, providers are expected to launch a central digital command center that will interface with internal EHRs and external referral management systems to create, communicate, update, action and report customized care plans for patients. Frost & Sullivan notes that only a few

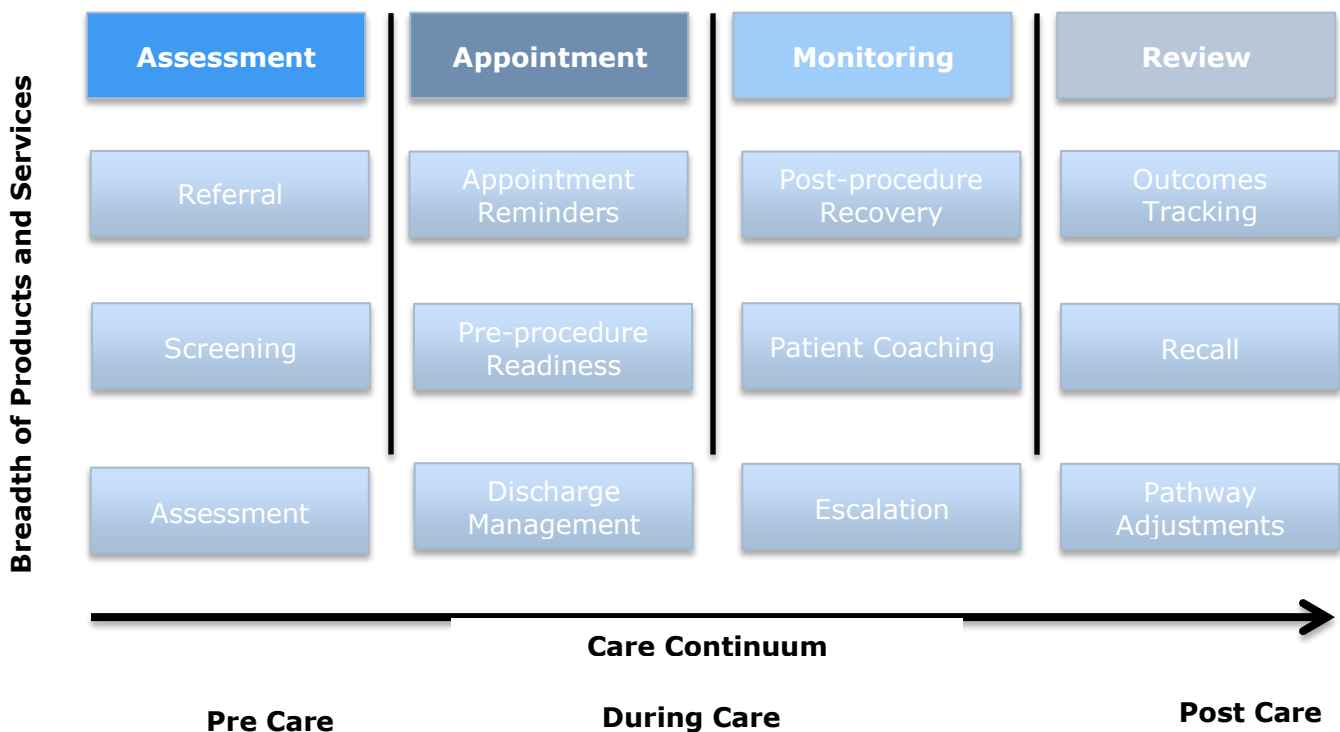companies are able to offer these end-to-end care coordination capabilities, and one stands out from the rest.

Product Line Strength and Customer Impact

Breadth and Scalability

Established in 2005 and based in Boston and London, Lumeon is a global healthcare IT company that offers a flagship care pathway management (CPM) solution to a wide range of customers including ambulatory surgical centers, multispecialty hospitals, and large integrated delivery networks.

CPM essentially automates the care delivery process by harmonizing disparate patient information across the care continuum, automating care pathway activities accordingly and delivering coordinated insight to care teams that are tasked with standardizing operations, reducing revenue leakages, and maximizing the use of resources for a defined patient population. As patients transition through primary, inpatient, and long-term rehabilitation care, Lumeon helps relevant care teams manage patient referrals and triage; evaluate their eligibilities for appointments; deliver educational materials before and after interventional services; coordinate discharge activities; and initiate automated follow-ups that include personalized goal tracking. By covering the entire patient journey, as Exhibit 1 illustrates, Lumeon estimates that it can increase a health clinics' operational capacity by as much as 20%, improve patient satisfaction scores by up to 60%, and reduce the cost of patient-related clinical operations by as much as 30%.

Exhibit 1: Capabilities of Lumeon's CPM Platform

Breadth of Products and Services

Assessment	Appointment	Monitoring	Review
Referral	Appointment Reminders	Post-procedure Recovery	Outcomes Tracking
Screening	Pre-procedure Readiness	Patient Coaching	Recall
Assessment	Discharge Management	Escalation	Pathway Adjustments

Care Continuum

Pre Care   During Care   Post Care

Features and Technology Leverage

Frost & Sullivan's recent research on the US care coordination software market reveals that payers and providers prefer to procure CCIT solutions that are scalable in a patient- and payer-agnostic ecosystem. Industry-leading solutions are capable of seamlessly coordinating care within and outside of hospitals, resulting in deployment of standardized care pathways for both surgical patients and chronic patients. For surgical patients, Lumeon pioneered this approach by empowering customers with an integrated care coordination solution that delivers preoperative readiness support, discharge management and post-surgery recovery education and outcomes tracking. It quantifies patient risks before surgery, focusing high-touch in-person clinical interactions on high-risk patients for optimal results. Lumeon also differentiates itself by offering real-time information to patients, surgeons, anesthesiologists, nurses, physicians, and home health agencies across the care continuum to reduce delays and cancellations of interventional services, prevent readmission, and optimize costs.

Lumeon has further revolutionized care coordination with its care traffic control solution that acts as a healthcare command center. It visualizes care plans, virtualizes monitoring, and automates routine tasks to ultimately reduce manual intervention and save money for providers.

For chronic patients, Lumeon offers a system-generated program that includes health plan eligibility assessment, appointment schedules, clinical tasks, disease- and patient-specific educational information, wellness reminders, and virtual coaching. The end-to-end chronic condition management program also connects with external medical devices for data-driven outcomes tracking. Patients and providers gain a 360-degree view of how a disease is progressing and what needs to be done to cost-effectively improve outcomes.

Customer Purchase and Ownership Experience

Frost & Sullivan recognizes that Lumeon's CPM solutions have increased operational efficiency and reduced manual intervention costs for many health systems across the United States and Europe. Lumeon recently digitized the postnatal care pathway for the Chelsea and Westminster Hospital NHS Foundation Trust in the United Kingdom. All operational and clinical tasks involving postnatal care and discharge are now digitized and visualized on a virtual dashboard that allows a multidisciplinary team of care providers to prioritize interventions for new mothers and babies. This automated process of care management has improved patient satisfaction significantly while allowing Chelsea and Westminster Hospital NHS Foundation Trust to align core clinical principles with the National Health Service mandate for higher adoption of digital health tools and services for the UK maternity population.

Conclusion

Frost & Sullivan believes that multi-disciplinary care teams in provider organizations will be the greatest promoters and users of care coordination tools so that they can educate, manage, and monitor patients during care transitions. Patients are also waking up to a new reality of preventive self-care, automated provider engagement, and goal-based recovery management supported by integrated clinical workflows. Lumeon is well positioned to maintain its unique competitive advantage in this market as it caters to these needs and goes beyond to manage personalized intervention plans for complex patient populations across the care continuum.

For its patient-centric platform and unparalleled care coordination capabilities, Lumeon is recognized with Frost & Sullivan's 2019 Product Line Strategy Leadership Award in the US care coordination IT market.

Significance of Product Line Strategy

Ultimately, growth in any organization depends on customers purchasing from a company and then making the decision to return time and again. A full, comprehensive product line that addresses numerous customer needs and preferences is, therefore, critical to a company's long-term retention efforts. To achieve the dual goals of customer value and product line strength, an organization must be best in class in 3 key areas: understanding demand, nurturing the brand, and differentiating from the competition.

Understanding Product Line Strategy Leadership

Driving demand, strengthening brand, and differentiating from the competition all play critical roles in delivering unique value to customers. This three-fold focus, however, must ideally be complemented by an equally rigorous focus on building a superior and comprehensive product line.

Key Benchmarking Criteria

For the Product Line Strategy Leadership Award, Frost & Sullivan analysts independently evaluated Product Line Strength and Customer Impact according to the criteria identified below.

Product Line Strength

Criterion 1: Breadth
Requirement: Product line addresses the full range of customer needs and applications.

Criterion 2: Scalability
Requirement: Product line offers products at a variety of price points and functionality levels.

Criterion 3: Technology Leverage
Requirement: Demonstrated commitment to incorporating leading-edge technologies into product offerings results in greater product performance and value.

Criterion 4: Features
Requirement: Products offer a comprehensive suite of features to serve customers at multiple levels of functionality, ease of use, and applications.

Criterion 5: Supply Chain Reliability
Requirement: There is sufficient control over the supply chain to ensure availability of products and components.

Customer Impact

Criterion 1: Price/Performance Value
Requirement: Products or services offer the best value for the price, compared to similar offerings in the market.

Criterion 2: Customer Purchase Experience
Requirement: Customers feel they are buying the optimal solution that addresses both their unique needs and their unique constraints.

Criterion 3: Customer Ownership Experience
Requirement: Customers are proud to own the company's product or service and have a positive experience throughout the life of the product or service.

Criterion 4: Customer Service Experience
Requirement: Customer service is accessible, fast, stress-free, and of high quality.

Criterion 5: Brand Equity
Requirement: Customers have a positive view of the brand and exhibit high brand loyalty.

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	• Present 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 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, 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 practices 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.