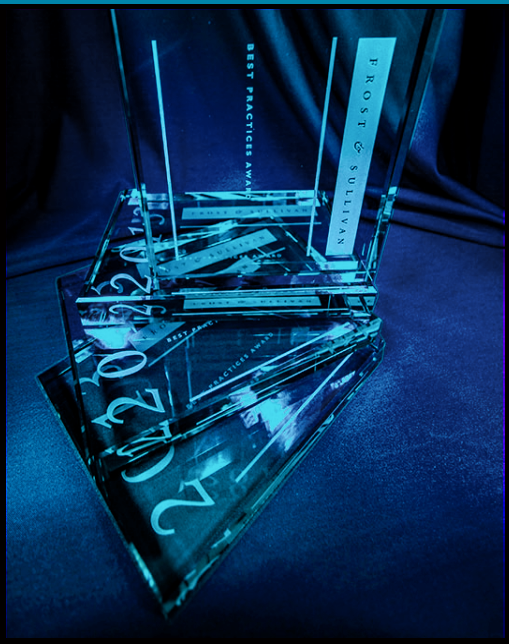


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ascom

2016 North American
Nurse Workflow Management Solutions
Enabling Technology Leadership Award



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BEST
2016 PRACTICES
AWARD

NORTH AMERICAN
NURSE WORKFLOW MANAGEMENT SOLUTIONS
ENABLING TECHNOLOGY LEADERSHIP AWARD

2016
BEST PRACTICES
AWARDS

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Background and Company Performance

Industry Challenges

The United States (US) reimbursement structure has seen a shift from a fee-for-service structure to a value-based reimbursement (VBR) structure. The former structure pays physicians based on the number of patients treated, while the latter structure compensates physicians for the quality of care, patient satisfaction, and treatment outcomes—monitored within hospital systems through the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey. The overall Medicare payment under VBR provisions is currently close to 85%, an estimated total net worth of almost \$305 billion in early 2015—leading to a re-centering where patients are now the focus rather than healthcare providers. This changed perspective now takes into account patient's needs, preference, and values throughout the healthcare process.

In coherence with this shift, for the past five years, US healthcare providers (physicians and hospitals) have been almost singularly focused on accelerating the transition to electronic medical records (EMR) to qualify for Meaningful Use and capture much-needed incentive funds provided by the Centers for Medicare & Medicaid Services EHR Incentive Program. This migration towards digitized information enables advanced nurse workflow management solutions that utilize IT capabilities, as a way to increase communication of critical information to mobile caregivers, streamlining care workflows to raise patient satisfaction and improve HCAHPS scores. Competitors within the nurse workflow management market specialize on a single segment of the workflow process, leaving many hospitals with gaps in nurse workflows due to integration constraints between vendors' solutions.

Technology Leverage and Customer Impact of Ascom Wireless Solutions

Ascom Wireless Solutions maintains highly advanced solutions — the Ascom Myco™ smart device, Ascom Unite software, and Ascom Telligence nurse call system among others — across the full value chain of nurse workflow management. As a result, Ascom's full line can heighten care mobility, reduce nurse steps, and eliminate workflow bottlenecks, thereby resulting in higher patient satisfaction rates and corresponding improvements in impacted areas of care.

Ascom's Full Value Chain of Solutions - the *Ascom Myco™*

Ascom developed the Ascom Myco™ smart device as a purpose-built solution combining the applications-based device perspective with a patient-centric focus to provide caregivers with an easy-to-use smartphone that pushes information generated at the bedside or through patient alerts directly to the correct, assigned caregiver. As a result, the Ascom Myco™ can decrease the amount of ambient noise and alarm fatigue significantly, as noted in a recent joint Ascom and GE study in an acute care setting that showed a 50% reduction in ambient

noise. In addition to allowing caregivers to focus on spending more quality time with their patients, the Ascom Myco™ also seamlessly integrates with patient monitoring devices to deliver alarms to care providers upon patient events. Its intelligent alarm management capabilities rank alarms by acuity level (low, high, or crisis level), enabling clinicians to respond to the most critical alerts first. The devices have an escalation system that automatically sends alerts to other care providers if the initial alert is rejected or unanswered, commissioning timely notification response times. The smartphones also feature a screen on the top (i.e., the pager window) for hands-free monitoring. The top screen displays patient alerts with acuity level, text notifications, caller identification for incoming calls, an LED light that flashes different colors, as well as an alarm and vibration pattern that correspond to the acuity level of the patient event, allowing caregivers to receive complete information with just a glance. Devices can withstand multiple drops and corrosion from disinfection agents, ensuring a long device life.

Ascom chose to utilize the Android platform for its Myco™ solution, as Android's platform has advanced levels of security and the flexibility to integrate Ascom's customized software for application prioritization and advanced security features that enable the device to be wiped clean from a central workstation, ensuring devices are HIPAA compliant. Furthermore, devices have "lockout capabilities" that require the caregiver to reenter a log-in code after remaining unused for a specific time period. Devices do not display patient-identifying information, but instead are either integrated with room numbers or assign patients with non-identifying numbers, safeguarding patient privacy compliant with HIPAA regulations.

Ascom Unite Software Platform

Ascom Unite is a software platform that enables seamless communication between mobile clinicians and patient monitoring solutions for faster responses to patient events, thereby improving the quality of care and patient satisfaction. Its flexible integration empowers hospitals and healthcare communities to tailor an escalation chain with their standards and response times to help hospitals expedite workflow processes to individual specifications. Furthermore, Ascom Unite can be integrated with existing real-time locating systems (RTLS) to allow staff at the central nurse station to assign unanswered notifications to the nearest caregiver. When integrated with a nurse call system with specific call notifications (e.g., pain or bathroom button), Ascom Unite triages calls and routes them to the proper caregiver, enabling low-acuity calls to be routed to health technicians that will respond faster than a nurse with more responsibilities.

Ascom Unite logs call data, including when calls were initiated, answered, cleared, to whom calls were routed and if notifications were escalated, and creates reports. Analysis of these reports enables hospital administrators to identify gaps in workflows, detect clinician push-back on the new technology, and compare how different units are seeing success, e.g., higher HCAHPS scores or reduction of readmission rates. These data analytic capabilities let Ascom work with customers to make any changes they need to enact a more streamlined

workflow and identify the best way to implement the solution across different units.

Telligence Nurse Call System

Ascom designed the Telligence Nurse Call System to reduce unnecessary time spent on functions, optimize nurse workflows, and increase the time available for the caregiver to spend at a patient's bedside. The platform delivers specific information directly to the relevant caregiver, promoting fast response times and eliciting high rates of patient satisfaction. Traditionally, nurses receive a patient call and must go to that patient's room to check what was needed. Nurses would then have to leave the room to get whatever the patient needed and then return to actually provide care. Ascom's Telligence Nurse Call System streamlines this process, as the in-room patient call devices integrate with specific alerts that send a text notification to caregivers with information regarding the specific need, eliminating the need for multiple trips to and from the room to answer one call. Furthermore, Ascom's Telligence Nurse Call System can set rounding timers for individual rooms, enabling caregivers to anticipate patient needs, thereby improving care and patient satisfaction scores. The system uses touchscreen workflow monitors mounted in doorways of patient rooms that displays rounding reminders, standardizing care and ensuring patients receive regular communication from their caregivers.

Cost-conscious Solutions with Open Integration

Nurse call systems are a proven and invaluable technology at hospitals across the globe and typically considered de rigeur to run a modern facility. However, their typical 10 to 15-year life cycle leads many hospitals to only partially upgrade solutions as portions of their systems became obsolete. Faced with this challenge, Ascom designed its Ascom Myco™, Unite software, and Telligence nurse call solutions as an open environment, allowing integration with a hospital's current, non-obsolete solutions. This cost-conscious and cooperative approach allows hospitals to choose any combination of these three solutions to integrate into its nurse workflow management system without having to re-purchase technology previously acquired elsewhere. Ascom's open environment allows the company to easily integrate new capabilities and remain on the technological forefront of capabilities enacting high quality of care and a streamlined care workflow.

Identifying a Hospital's Specific Needs

Ascom primarily receives customer leads through its network of healthcare information and communication technology partners associated with nurse call systems and similar technologies which have an established relationship with clients seeking a more advanced nurse workflow management or call solution. Since Ascom sells primarily through channel partners, it does not control end-user pricing but authorizes purchasing capabilities for its partners to price the solution to potential customers based on the required solution size (i.e., amount of beds or locations receiving alerts). During the request for proposal process, Ascom's clinical team works with hospital clinicians to identify the hospital system's needs,

workflow bottlenecks, and best practices and creates a solution specific to the health center's current technology and capabilities. Since Ascom's nurse workflow solutions utilize the open environment design, Ascom can ensure the cost-effectiveness of its solution. The entire purchase process takes a month on average but greatly varies dependent on the solution's features and the health center's existing systems needing integration. Ascom maintains close communication and engagement with partners and the customer throughout the integration and go-live process to ensure that integration is seamless and notifications are set to enact changes in nurse workflow.

Continuous Engagement Leading to High Customer Satisfaction

Ascom maintains close relationships with customers throughout the lifecycle of their project from the front-end consultation to implementation to ensure the nursing staff is optimizing the solution's use, and it is enacting desired changes. Health centers can choose to have Ascom's clinical team provide training to individual clinicians or implement a train-the-trainer model, where Ascom trains a few clinicians within the health center who then train the remaining employees and future new hires. Ascom's clinical team remains on site after the 'go-live' and helps identify system tweaks—primarily in regard to escalation time or vital monitoring alerts—ensuring that nurses do not experience alarm fatigue and still utilize the solution to optimize their level of care. These changes to the solution are completed based on the specific hospital unit's feedback and structure, ensuring caregivers can receive the data they need at the moment they need it. Customers remain in contact with Ascom for service requests either through the Ascom partners who created the initial lead or with Ascom's field agents, who continuously reach out to customers to ensure satisfaction. Furthermore, as many health centers choose to implement Ascom's solution in a single unit and then expand to additional departments after becoming comfortable with a solution's use, Ascom's clinical team will check back with previous units during the integration of the solution in new departments to ensure the solution is producing the desired results.

Conclusion

Regulations requiring hospitals to implement a nurse call system combined with the 10 to 15-year lifespan of call systems has led many health centers to have old and outdated call systems in need of an upgrade. Ascom created its expansive line of nurse workflow solutions — the Ascom Myco™, Telligence Nurse Call System, and Unite software — to give mobile care providers real-time access to patient information to provide high-quality care. Its patient alert system with integrated escalation capabilities ensures that caregivers are given acuity-based, prioritized alerts to enable them to respond to alerts in a timely manner. Ascom's commitment to offering cost-conscious solutions led it to design with an open environment, facilitating integration with existing technologies within a health center.

With its strong overall performance, Ascom Wireless Solutions earns Frost & Sullivan's 2016 North America Enabling Technology Leadership Award in the nurse workflow management solutions industry.

Significance of Enabling Technology Leadership

Ultimately, growth in any organization depends upon customers purchasing from your company, and then making the decision to return time and again. In a sense, then, everything is truly about the customer—and making those customers happy is the cornerstone of any long-term successful growth strategy. To achieve these goals through 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, best-practice organizations 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 two key factors—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

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 players and for identifying those performing at best-in-class levels.



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

Frost & Sullivan Awards 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 Monitor, target, and screen	Identify award recipient candidates from around the globe	<ul style="list-style-type: none"> • Conduct in-depth industry research • Identify emerging sectors • Scan multiple geographies 	Pipeline of candidates who potentially meet all best-practice criteria
2 Perform 360-degree research	Perform comprehensive, 360-degree research on all candidates in the pipeline	<ul style="list-style-type: none"> • Interview thought leaders and industry practitioners • Assess candidates' fit with best-practice criteria • Rank all candidates 	Matrix positioning all candidates' performance relative to one another
3 Invite thought leadership in best practices	Perform in-depth examination of all candidates	<ul style="list-style-type: none"> • Confirm best-practice 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	<ul style="list-style-type: none"> • Brainstorm ranking options • Invite multiple perspectives on candidates' performance • Update candidate profiles 	Final prioritization of all eligible candidates and companion best-practice positioning paper
5 Assemble panel of industry experts	Present findings to an expert panel of industry thought leaders	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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-practice award recipient	<ul style="list-style-type: none"> • Review analysis with panel • Build consensus • Select winner 	Decision on which company performs best against all best-practice criteria
9 Communicate recognition	Inform award recipient of award recognition	<ul style="list-style-type: none"> • 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 may share award news with stakeholders and customers	<ul style="list-style-type: none"> • Coordinate media outreach • Design a marketing plan • Assess award's role in future strategic planning 	Widespread awareness of recipient's award status among investors, media personnel, and employees

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 almost 50 years of experience in partnering with Global 1000 companies, emerging businesses and the investment community from 31 offices on six continents. To join our Growth Partnership, please visit <http://www.frost.com>.