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HOW MEDICAL TECHNOLOGY COMPANIES MUST ADAPT TO LEVERAGE THE GROWING ASC MARKET

INTRODUCTION

The rapid growth in Ambulatory Surgery Centers (ASCs) presents a unique challenge for medical technology companies used to serving hospital customers. ASCs are outpatient facilities offering same-day surgeries that tend to cost less than hospitals because of lower overhead and shorter patient stays. As of 2022, there were over 5,000 Ambulatory Surgery Centers in the U.S. - a number that has grown close to 4% per year for the last five years (IBISWorld, 2020). ASCs performed more than half of all outpatient surgeries in the same time period, and they are expected to grow at a faster pace in the future (Shepherd, 2021). ASCs have unique business drivers, dispersed ownership structures, and different expectations for service that challenge the traditional sales and distribution strategies of medical technology companies.

RISE IN POPULARITY OF ABULATORY SURGERY CENTERS

One aspect that makes ASCs appealing to payers and healthcare consumers is their lower cost compared to hospitals. ASCs generally perform low-risk, low-complication procedures at a reimbursement rate up to 50% less than the same procedure in a hospital (Shepherd, 2021). With a predicted savings of \$40 billion per year for U.S. healthcare (Shepherd, 2021), it is not surprising that payers are driving care to ASCs. "The big thing is the reimbursement," said Joe Pleshek, CEO of Terso Solutions. "Medicare and insurance companies are allowing reimbursement where they have not done so in the past." Medicare sees significant cost savings for procedures performed at ASCs compared to hospitals, at times reimbursing hospitals more than 80% for the same procedure (Badlani, 2019).

Consumers are choosing ASCs to save on cost-share. For example, Blue Cross Blue Shield reported an average savings of \$320 in out-of-pocket expenses for members receiving a laminectomy - a procedure to remove part of the vertebrae (Johns Hopkins Medicine, 2021) - outpatient instead of in a hospital (Badlani, 2019). "More patients want to have surgeries performed at specialized surgery centers, which are lower in cost for patients, yet offer high-quality care," explained David Lefkowitz, Senior Director of Market Strategy at Terso Solutions.

The advance of minimally invasive surgery is also driving the shift of procedures to ASCs (Badlani, 2019). "Many orthopedic, spine and cardio procedures have moved to ASCs over the last few years and will increase the fastest through the mid-2020s," Lefkowitz stated. Forecasts predict inpatient surgery volume will decline 3% while procedures performed in ASCs will increase 30% by 2028 (Peters & Stamler, 2020). This means businesses built around hospital-based care will need to rethink their strategies.

PROBLEMS MEDICAL TECHNOLOGY COMPANIES FACE TRYING TO SERVICE ASCS

Medical technology companies traditionally have a business model built around hospital-based care. "Medical device companies must service ASCs because many of the procedures using their devices are now being performed at ASCs," explained Matt Tourdot, VP of Product Management at Terso Solutions. "They have no choice." Part of the challenge is understanding how ASC customers differ from hospital customers. For example, most medical technology companies focus on large academic medical centers who perform complex procedures. ASCs, on the other hand, are smaller, perform simpler

procedures, , and are more price sensitive because they receive less reimbursement from payers (Shepherd, 2021).

“As a consumer of healthcare, I think this trend is great in terms of moving procedures out of the acute care setting so big hospitals can focus on very complex patient cases,” Pleshek expressed. “However, it is making life for the medical device company much more difficult in terms of the number of distribution points they have to deal with.”

As the number of ASCs around the country grows, the question of how to service this market gets more complex. The ASC industry is highly fragmented - the largest five ASC management companies own only 15% of the total number of ASCs (Badlani, 2019). “There are so many ASCs that medical device companies cannot serve all of them and all the hospitals using their old sales and distribution model,” Tourdot explained.

One of the main areas medical technology companies must rethink is having a sales representative for each account. “Medical device companies have sales reps who are critical to the procedures,” Tourdot continued. “They make sure the hospital has what they need to perform a scheduled procedure, gather the inventory, deliver it to the hospital in time, attend the procedure, and provide the surgeon with information.” This labor-intensive approach has been the hallmark sales approach of medical technology companies.

However, the sales representative model becomes expensive and difficult to maintain with the large number of independently-owned ASCs. “They cannot afford to send sales reps into these smaller settings,” Pleshek explained. “We talked to many med tech companies over the last 18 to 24 months, and almost every one of them has a team focused on the questions of, ‘How are we going to deal with these ambulatory surgery centers? How are we going to make this profitable? How are we going to lower the cost to service an acute care hospital that is generating \$10 million of revenue versus an ASC that might generate \$400,000 in revenue?’ Those cost-to-serve models have to be very different.”

HOW MEDICAL TECHNOLOGY COMPANIES ARE ADAPTING TO THE ASC MARKET

A number of medical technology companies see the writing on the wall and have already begun to adjust their strategy. Several of the largest entities in the market launched ASC-specific products and services

in the last few years. As Lefkowitz explained, “A handful of examples of such services include support for administration, scheduling, operating room utilization, staffing, and co-marketing opportunities.” DePuy Synthes - the orthopaedics company of Johnson & Johnson - is offering special pricing programs, contract solutions, supply chain optimization, as well as other services specifically for ASCs (DePuy Synthes, 2022). Smith & Nephew offers a care management tool that connects ASCs, physicians, and patients (Smith & Nephew, 2022), and Stryker launched an ASC-focused business with offerings such as cash flow optimization agreements that allow ASCs to pay for equipment based on procedure volume (Stryker, 2022).

“Some of these companies are ahead of the game,” Pleshek stated. “We are seeing customers looking at different ways to distribute, and offer inventory management systems and programs. A lot of these ASCs are demanding consigned inventory because they are not going to tie up working capital in buying inventory and putting it on a shelf.”

Many ASCs are looking for ways to match volume to demand and prevent bottlenecks. “One model that medical device manufacturers are adopting, or at least considering, is to dedicate their sales reps to servicing the procedures at hospitals and the complex procedures at ASCs,” Tourdot described. “Then they provide a self-service model for the routine procedures at ASCs and keep a consignment inventory of necessary items. The ASCs can use items from the consignment inventory and the medical device manufacturer will then replenish what was consumed.”

In order for the consignment model to work, medical technology companies need visibility into inventory as it is consumed. That is the central challenge for an industry that has relied on in-person sales representatives to manage inventory. “Med tech companies are worried about how to offer a consignment management program if they do not have the visibility into what has been taken or what is left at the site,” Pleshek explained. “They cannot send anyone in to manually count this stuff. They need to find some sort of automation, some sort of technology to help manage this.”

Technology that automates management of inventory would fill this gap between ASCs and medical technology companies. An end-to-end inventory management system that can ascertain how much

inventory remains and report it back to the medical technology company would alleviate the need for a sales representative onsite, or to rely on the ASC to count and report inventory themselves. "To better manage inventory in ASCs, medical device manufacturers are developing and implementing technology enabled strategies," explained Lefkowitz. "IoT connected sensors like RAIN RFID, inventory management software, predictive analytics, AI, and data integration platforms are all being considered and utilized."

Simply being able to view and replenish inventory is only part of the upside these technologies offer. There are actually many more benefits as Tourdot explained: "Using cloud-based inventory management software and automated inventory management technology such as RAIN RFID provides real-time visibility to the consignment inventory at all ACS from anywhere. This information is then accessible to sales reps, program administrators, and ACS staff. One can ensure necessary items for procedures are in inventory, optimize the inventory levels at each ASC, manage expiry of products, and automate charge capture, billing, and replenishment."

GROWTH OF THE UHF RFID MARKET AND THE OPPORTUNITY WITH ASCS

Industries like retail and travel have used RAIN RFID technology for real-time, end-to-end inventory management for a number of years. The use of RAIN RFID is accelerating in healthcare, and bridging the gap between medical technology companies and ASCs is one high value area. "At Terso, we work with many of the leading med device manufacturers to utilize RAIN RFID technologies to create value-added services that they use to manage inventory and ultimately, build better relationships with ASCs," said Lefkowitz. "These RFID solutions provide visibility to inventory at the ASC and automatically send consumption events to the manufacturers' ERP system for efficient invoicing and replenishment. This automation reduces the amount of inventory required for each ASC leading to lower working capital and a more efficient cost-to-serve model."

Considering the high cost of surgical inventory and the need for medical technology companies to find an affordable distribution model for ASCs, that real-time view enables critical streamlining and efficiency. "The opportunity is really around visibility into inventory and consumption, and RFID is certainly the leading way to do that," said Pleshek. RAIN RFID technology can be embedded in a number of objects, such as cabinets, mobile devices, or medical equipment itself. It can

then transmit information from tagged items, essentially replacing the need to have a sales representative onsite to check inventory stores. "RAIN RFID powered by Terso Solutions can provide ASCs and medical device companies servicing them with the visibility, efficiency gains, and streamlined processes they need to ensure the right products are at the right place at the right time," Lefkowitz explained.

As Tourdot further described, "Terso's Stratosphere® inventory management platform along with Terso's wide range of RAID RFID devices provides a complete automated solution for the management of consignment inventory of medical devices at ASCs. Stratosphere provides full visibility to inventory in real-time from any internet-connected device through a web browser." This technology enables ASCs to monitor inventory on hand and report items that have been used, as well as supports medical device manufacturers in optimizing consignment inventory levels.

Because Stratosphere allows medical technology companies to know when products are used in real-time, they can automatically replenish and invoice for these items. "With automated inventory management solutions - including application-specific, cloud-based software workflows along with RAIN RFID inventory management devices - medical device manufacturers can effectively and efficiently serve their ASC customers without hiring more sales reps," Tourdot explained.

THE TIME FOR MEDICAL TECHNOLOGY COMPANIES TO INNOVATE IS NOW

Medical technology companies who have not yet taken steps to adapt to the ASC market will have to move quickly. Trends indicate surgical procedures will only continue to shift to ASCs, and a model that only works with large hospital systems will become a liability. Technology, such as RAIN RFID inventory management solutions, is critical for adapting the medical technology strategy for sales and distribution. With so many independently owned ASCs around the country, inventory management solutions that automate volume counting, replenishment, and billing are critical for medical technology companies to thrive with their ASC customers.

"Up to this point, med tech companies have been fairly reluctant to implement technology to automate inventory management," Pleshek said. "I do not think they have a choice anymore. The choice is going to be to lose market share in this growing market to

to somebody else who is willing to innovate, or innovate yourself.”

RESOURCES

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