Introduction

For most hospitals across the country, supply costs are second only to labor costs. Because quality people are what make the system run smoothly, Parrish Medical Center (PMC), a public nonprofit acute care hospital with 210 beds located on the Space Coast of Florida, decided to address its second largest cost: supplies.

After gleaning all possible savings by evaluating the quality and pricing of all products, PMC turned to Pyxis supply automation from CareFusion. According to Matthew Graybill, Director of Perioperative Services, the decision to automate was driven by the need for better inventory control.

Unlike many facilities, PMC decided to first implement automation in the cost-intensive procedural areas. Approximately 5,000 surgeries are conducted at PMC each year, with an additional 2,500 conducted in Endoscopy (GI). Medical supply costs within Perioperative Services make up around 60% of the Perioperative Services operating expenses.

Cooperative implementation

PMC experienced a successful implementation because of the teamwork between the OR team and Supply Management. “We involved the nurses in the entire process from the beginning,” said Tina Spangler-Phillips, Operations Manager. “The clinicians helped us build the cabinets, organized them and told us where they wanted them. We continue to make changes to make everyone happy.”

Ongoing improvement meetings

In the initial phases, PMC held weekly meetings between the OR team and Materials Management. “We got a group of techs and nurses together, and we strategized together on how we could make everything run smoother,” shared Phillips. “Nursing has an active voice in the whole process. That’s important because they are there to serve the patients. If they need something, we need to make that happen for them.”

Even after three years, the team still meets biweekly to address improvement opportunities. One thing they discuss is scorecards. “We have a scorecard for each room since the same staff works in the same room for the most part. That allows us to measure [Pyxis supply technologies] compliance among the rooms,” explained Phillips. “Also, if a big ticket item—like a mesh—didn’t get charged out, we know who was in that room, so Matt (Graybill) can address that directly with the employees.”

“If we didn’t have the working relationship we have between departments, we wouldn’t be as successful as we are.”

Tina Spangler-Phillips, Operations Manager
Parrish Medical Center

“Matt and I work really well together. We’re very open; we negotiate well, and we communicate clearly. We have a very good, healthy relationship that makes it work.”

Pyxis®

CareFusion
Core-driven process
After some trial and error to get the right set-up, PMC implemented a core- and room- driven process. “At first, we built universal Pyxis supply cabinets in all the rooms,” explained Graybill. “Over time, we modified the Pyxis cabinets to be mostly service-line based, which helped staff to feel involved—and they saw value in that.”

Having a core-driven set-up has allowed nurses to have what they need at their fingertips. “Not only does it help improve morale and satisfaction, it can reduce the chance of surgical site infection because they’re not leaving the room to get supplies,” shared Graybill. “It also leads to better teamwork within the surgical atmosphere because the physicians are confident that what they need has either been picked or pulled for the case, or is right there in the room.”

While having a core-driven set-up didn’t make a significant difference in compliance, it did improve staff satisfaction. “Placing the Pyxis supply technology in the core and rooms got us from 93–94% compliance to 95% compliance, which is what we were striving for,” continued Graybill. “Having what they wanted, where they wanted it, is what really won them over and led to increased satisfaction with the Pyxis technology.”

Managing par levels and outdates with reports
The Pyxis supply management tool offers many powerful reports to help hospitals manage their supply chain. “Reports are the best value that Pyxis technology brings to the table. We can see a real-time view of our inventory and how many times each item stocks out,” explained Phillips. “If we see too many stockouts, we know we have our par level set incorrectly. We can also see which items in the room aren’t moving. By moving those items out, we can bring items into the room that will be of value to the clinicians and patients while decreasing outdates.”

Pyxis supply management also helps ensure nurses get the supplies they need. “We heard that once nursing sees how the Pyxis technology works for them, they’ll never let you take it away,” said Sherry Blair, Storeroom Supervisor. “I think that’s where we are today. They’re getting what they need, they know par levels are good, and they’re not going to run out of supplies.”

Pyxis automation helped PMC increase revenue by ~$4M after the first year of implementation.

Positively impacting the bottom line
The positive relationship developed between the OR and Supply Management during the Pyxis technologies implementation also led to financial success.

PMC was able to reduce its supply spend by 11%. In the first year, savings were approximately $474,000. With the support of Pyxis automation, PMC increased revenue by approximately $4M (16% from baseline) after the first year of implementation.

Durable medical equipment (DME) is also one key area where PMC saw financial success. “We had about a $40,000 a year spend on DME and approximately $14,000 in cabinetry rental cost,” said Blair. “In a year and a half, after partnering with CareFusion and Choice Medical, our DME spend is zero dollars.”

Recommendations for other hospitals
“First of all, your leadership team must be on board. Without that buy-in, you won’t be successful,” said Phillips. “Second, you must have an excellent working relationship between the OR and Materials Management. And third, your clinicians must be involved. It’s their room, their supplies and their workplace. They need to control that.”

“You also have to be open to change because you’re not going to get it right the first time,” continued Phillips. “The more it develops and the more you learn, the more you’ll realize what the Pyxis technology can do for you and how you can be more successful. The system is ever evolving, and you’re never going to be done making improvements.”

Parrish Medical Center results reflect the hospital’s supply chain management process in combination with Pyxis supply technologies.

References