A consultant's view and role during a Pyxis® Anesthesia System installation

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Pre-Contract

Let's start at the beginning—the sales cycle. The truth is that it's sometimes a challenge to get anesthesia providers to agree that there is a place for automation in the Operating Room (OR), particularly if they are being asked to use it. Often pharmacy staff understands the benefits of automation, no matter who is using it. From the beginning, it is also imperative that the anesthesia providers participate in the medication management assessment process and understand how automated medication systems can improve their workflow, facilitate charge capture and help improve medication safety. The expertise of a clinical consultant is often warranted in situations where there is resistance to new technologies. For example, during the sales cycle, a clinical consultant may be asked to conduct an assessment of the medication management process in the perioperative areas—often with a focus on anesthesia medications. During this time, the clinical consultant discovers where medications are stored, how they are retrieved, returned, wasted and reconciled. It is often an eye-opening experience for all involved. When onsite, the clinical consultant often recognizes where there are good processes in place—and where opportunities for improvement exist. During assessments, for example, CareFusion consultants have seen clinicians going to multiple locations to get medications each morning—adding time and effort to their workflow. By implementing an automated secure system, medications could be made available in one central place. Hospitals who have made this process change have reported gaining an extra 20-30 minutes each day to reallocate towards patient care.

As a 32-year RN and senior clinical consultant for CareFusion, I often participate in the medication management assessment process. Having a clinical consultant onsite to assist sales with this function helps establish a clinician-to-clinician relationship with the customer early on in the process, assuring the end users that their particular challenges are understood. During this time it is important to review the workflow process, OR room size and location of the anesthesia carts and supplies. While often overlooked, procedural areas beyond the OR can also significantly benefit from using automated systems. Having a clinical consultant onsite helps ensure that the customer is considering all areas. Only after understanding these factors, amongst others, can the type of equipment needed to meet the goals of the healthcare facility be determined.

Specific to anesthesia providers, understanding how the Pyxis® Anesthesia System will accommodate their needed items is a primary concern. In addition, determining if there are regulatory concerns in the facility is also a consideration. A demonstration of the Pyxis® Anesthesia System for the provider staff, followed by an assessment of their concerns, is sometimes warranted as well.

Again, buy-in from anesthesia providers is crucial to meeting a healthcare facility's goal of using automated systems. For example, I once experienced the following at a 400 bed facility in an urban area: goals such as security of controlled substances, ensuring convenient medication accessibility, improving charge capture and decreasing manual tracking of medications were determined following initial meetings with the facility. After recommendations were in place, the onsite anesthesiologist and project lead decided to relocate to another facility. Therefore, another anesthesiologist was assigned to the project. Without her buy-in, system implementation could have potentially been delayed or met with resistance. By educating her on the benefits of automation and best practices upfront, we established a strong partnership and

the project moved forward. I will illustrate the Pyxis® Anesthesia System implementation process of this particular project throughout this article.

Planning

After the contract is signed, the next step is typically to bring all interested potential users of the Pyxis® Anesthesia System units together to participate in a workflow/design decision meeting. This meeting strengthens the collaborative process for Anesthesia and Pharmacy departments. Often these two entities do not meet regularly, so this is an opportunity to bring them together to discuss changes in their workflow, concerns and expected outcomes. The meeting is typically attended by Pharmacy leadership and support staff, OR leadership, Anesthesia leadership and support staff. If there are other departments that will have the Pyxis® Anesthesia System installed, such as the Cath Lab, GI Lab, Interventional Radiology, etc., they are also encouraged to attend. For the 400 bed facility project, Pyxis® Anesthesia System units were installed in the In-Patient and Out-Patient Operating Rooms. The Senior Project Manager attended the workflow/design meeting and kept notes on the decisions made for reference at a future date. As the clinical consultant onsite, I coordinated this meeting with the goal of facilitating dialogue between all of the departments attending—with an emphasis on the anesthesia providers. During this meeting, I discussed in detail system features, emergency procedures and the need to establish policies and procedures for medication inventory and supply management. Emphasizing the need for pre- and post-install metrics was also discussed, so the customer could later measure and determine if their goals have been met. Assessing the readiness of the facility and its providers to adopt the new technologies is important before moving forward. At this particular site, all the necessary stakeholders were ready to set a fairly aggressive implementation plan to accommodate additional major projects on the horizon.

As mentioned, establishing policies and procedures is a necessity. As the clinical consultant, I provided the team with

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a policy and procedure template that is specific to the use of Pyxis® Anesthesia System units. Following a policy and procedure meeting, the team was left to discuss and develop policies and procedures specific to their needs—which I reviewed prior to creating a training matrix.

During the ongoing communication between the CareFusion team and the onsite team, I offered consultation and advice around specific concerns such as system set up, needed inventory levels, refill times, drawer design, the use of multi-dose vials, waste documentation, etc. Again, because of the earlier established relationship, the end users felt comfortable talking to me and sharing their concerns regarding the implementation of the Pyxis® Anesthesia System units. There was also frequent communication with the implementation team. While the interface testing was being completed and all of the desired features were being thoroughly tested, we developed a go live schedule. Because we were installing 28 machines, the facility opted to install them in stages.

Execution

Getting ready for go live day can bring about both a sense of anxiety and exciting anticipation. Everyone wants the first day to be successful, so there are checklists and meetings. After reviewing the policy and procedures with the team, a training matrix is developed. A training matrix is used to train all of the staff that will be using the Pyxis® Anesthesia System units. This task is often no small undertaking. This 400 bed facility, for example, had more than a 100 providers that required training. Working closely with the Physician Project Lead, the training began with a presentation to the entire group during one of their weekly meetings. Using a Pyxis® Anesthesia System that was connected to a video projector, the staff received an introduction to the features of the system which generated a Q&A session. The next step for the anesthesia providers was to set up three Pyxis® Anesthesia System units in their lounge, so that they could complete the user-required online tutorial. Having this requirement was a testimony to the commitment of the customer and their goal for success. After approximately two weeks of self training, CareFusion then went onsite

to conduct one-on-one training—using the training matrix developed earlier. The Application Specialist was also responsible for training.

Occasionally there are customers, due to their size, complexity or other factors, which will warrant go live support from the clinical consultant. These clients are more the exception than the rule, and most challenges can be handled with a conference call or web meeting. Because of the nature of this customer, I was onsite for training and go live support. With the committed support of Anesthesia leadership, Pharmacy leadership and support staff, the training was successful—users clearly understood how to use the Pyxis® Anesthesia System, as well as the established hospital policies and processes.

Finally, go live day arrives. A CareFusion team is onsite early to be available to users when they enter the room and are ready to start cases. Having ample onsite go live support has proven to be invaluable. The reassurance that a practitioner knows that there is someone just outside of the door to start their cases gives the providers a sense of confidence when using new technologies. The CareFusion team reminds them of the proper use of the Pyxis® Anesthesia System, re-enforces proper process and assists with ensuring users are following hospital policy guidelines. It is my belief that go live day should be boring for the CareFusion staff–indicating the customer was appropriately prepared! At the end of go live day, a meeting is held to celebrate successes and discuss lessons learned—and determine any opportunities for improvement. We also ensure the customer checks for appropriate charges from the Pyxis® Anesthesia System, as well as provide suggestions for the refill process.

Support

As a clinical consultant, I can't express how important it is to return to the facility for an onsite post-install assessment. The

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hope is that the facility has followed previously established guidelines, is using the Pyxis® Anesthesia System as intended and is meeting previously established goals. The onsite review involves meeting with end users, observing their practice and a visual inspection of the stations. There is also a process interview with Pharmacy, which can include review of reports from the Pyxis® MedStation® system console. Pyxis® MedStation® system console reports and Pyxis® Anesthesia System settings can be reviewed prior to the facility visit so that information can be shared with the customer. Before the visit is complete, a verbal synopsis of the visit is shared with Pharmacy, Anesthesia and any other departments visited. The synopsis for the 400 bed facility uncovered that the customer was meeting their goals, with minimal workflow challenges that were later addressed. A written report followed the visit.

Conclusion

As exemplified, the turnkey involvement of a clinical consultant when installing Pyxis® Anesthesia System units greatly improves the customer experience. Customers understand the technology and its benefits better, while using its features accurately and to the system's full potential. I am finding that, increasingly, customers are asking for more medication security and safety–and are eager to move forward with the installation of automation at the bedside. I am even seeing more users who have previous experience with automation, and want to bring this experience to their current facilities. I would like to believe that the knowledge of clinical consultants, such as myself, assists with acceptance of automation in the OR and improves the overall customer experience with Pyxis® Anesthesia System units. As CareFusion strives to deliver clinically differentiated products and services, such as the Pyxis® Anesthesia System and clinician involvement, the customer can experience improvements in their workflow productivity and provide better patient care.

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