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*From America's Pharmacist...*

## Pharmacy Automation Independents Making a Competitive Difference

Automation behind the pharmacy counter, once a step for pioneers and early-adopters, is grabbing hold of the profession in ways similar to the Internet phenomenon that swept over the industry last year. Why is pharmacy automation such a growing trend? For one, the tidal wave of prescriptions that is cascading across the counter and all of the attendant issues related to a tightening labor market and ensuring patient safety amid the increased volume. For another, with progressively complex therapies, the increased need for pharmacist care services and face-to-face patient counseling.

America's Pharmacist has examined the scope of pharmacy automation, and this first part of a continuing series focuses on robotics - the representative types of product currently in common use and planned for launch, as well as community pharmacists' hands-on experiences with the equipment. Part II will address the issues surrounding central fill and other devices automating pharmacy services.

### Offering More Time for Patient Counseling

"Two trends have been contributing to the increased popularity of these systems," says Mike Coughlin, founder, president, and CEO of ScriptPro, maker of the SP 200 Robotic Prescription Dispensing System. "First of all, there is pharmacist care. Pharmacist care is now front and center. More pharmacists are saying they will be doing this, and they will be charging their patients for it. Because of this, it is more important than ever that automation be there to support the pharmacy practice.

"The other trend is the pharmacist shortage. For years we have seen and heard projections that a shortage was coming. Now we are beginning to see the realities of a shortage. Within the last year, and particularly within the last six months, we have seen these two trends come together to create greater interest in automated dispensing," Coughlin said.

ScriptPro, based in Mission, Kansas, has been in business for about five years, Coughlin said. The SP 200, designed specifically for community and outpatient pharmacies, is ScriptPro's first automation system and was developed over a period of about three years and tested for a year.

This is how the system works. The SP 200 handles the pharmacy's top 200 tablets and capsules and delivers filled and labeled vials at a rate of 100 prescriptions per hour. It uses a computer-controlled robotic arm and fills vials directly from medication dispensing cells.

The SP 200 automatically selects the designated drug and correct vial, dispenses the required quantity, applies the label, and delivers the uncapped vial to the "Control Center" for inspection and verification by the pharmacist. Barcode technology is used throughout the process for input and cross-checking.

The system occupies 28 square feet of floor space, uses standard vials and labels, and works with the pharmacy's existing computer system. "Our approach is to come in and set up the whole pharmacy area," Coughlin said. "Our advance team sets up how the work flow will work. We come in and install everything overnight in 12 hours. So, the next day, you're ready for business. Everything is fully tested at the factory before it is shipped. A trainer or two will stay onsite for about a week to train the pharmacy staff."

So, what's the reception been? "Outstanding," Coughlin says. "The reception has been outstanding across a broad spectrum of pharmacy practice settings. We have 1,600 installed units, primarily throughout the United States and Canada. We just now have installed our first SP 200 in the United Kingdom. Independent pharmacists are really starting to accept automation as well."

One independent community pharmacist who has jumped on the automation bandwagon is Walter Szot, owner of Tidewater Care Pharmacy in Mechanicsville, Maryland. Szot installed the SP 200 in his Tidewater Pharmacy in September 1999 on a leased basis. The pharmacy dispenses approximately 300 prescriptions per day. He says the main reason for the decision was safety.

"My main concern was safety and second was speed," Szot said. "With the low reimbursement rates from third parties and the growing number of prescriptions being covered by third parties, we need a larger prescription volume to cover our overhead. However, increased volume puts a lot of stress on the pharmacist and pharmacy staff and that can lead to mistakes. The ScriptPro is extremely accurate. It just doesn't make mistakes. Everything is barcoded. It has really relieved the stress in the pharmacy."

Sam Kalmanowitz, pharmacist/owner of Kaye's Pharmacy in Meriden, Connecticut, echoes Szot's satisfaction. Kalmanowitz has been in the pharmacy business for more than 30 years and dispenses between 400 and 500 prescriptions a day. He says the addition of automated dispensing at Kaye's is one of the milestones of his practice. "When I look back over my years of practice, I see several milestones. First was the installation of computers in 1980. The second was the decision to install a point-of-sale system in the pharmacy. The third would be the installation of the automated dispensing system," Kalmanowitz said.

He said the decision to install a SP 200 in his pharmacy was based on a desire to differentiate his practice from the competition. "In this ever-changing environment, we are always looking for ways to differentiate ourselves from the competition. This system allows us to spend more time with patients and answer their questions on a face-to-face basis. That definitely differentiates us from our competition," Kalmanowitz said.

"The system provides a lot of benefits - dispensing accuracy, monitoring inventory accurately, tracking actual dispensing - but most important, it allows the staff to go out and speak to patients. If the system can count, label, and dispense about 400 prescriptions a day, then that represents 400 times the pharmacist did not have to go pull a medication off the shelf, count it out, label a vial, and dispense a drug. The times that that occurs over the course of a day add up, and it is time that could be spent counseling patients," Kalmanowitz said. "The system just provides more patient accessibility to the pharmacist in terms of time."

Kalmanowitz also noted the system's accuracy. "Its accuracy is as close to 100 percent as possible. There are safeguards in place - when you load the cells and when the pharmacist double checks the robot after the prescription is dispensed."

That accuracy, and the freedom that comes with the system, has improved morale at Kaye's, Kalmanowitz said. "Everybody around here is a little happier. At the end of the day, you go home at night with a clear head - no doubts."

### Improved Work Flow

Increased safety and speed are not the only benefits Szot has seen from automating. The robotic system also has improved workflow in the pharmacy area, Szot said. "Before, we had people going back and forth pulling prescriptions from the shelves, dispensing them, and putting the bottles back. Sometimes, it got a bit crowded back there. It has really cut down on congestion in the pharmacy area."

The dispensing system also has freed Tidewater pharmacists for other activities, Szot said. Tidewater offers counseling nutritionals and herbals, blood pressure screenings, diabetes counseling, and compounding.

These also are financial benefits. One financial benefit is a reduced need for manpower, which Szot has experienced firsthand. "We lost our senior pharmacy technician the week we got the ScriptPro, and shortly thereafter, we lost a pharmacist. We haven't replaced either one, and it's because the system reduced the need," Szot said.

In addition to the system's cost, which Kalmanowitz deemed a "con" when he judged the "pros and cons" of the system, he says increased inventory is a drawback of the system. "I guess you could say it's a drawback. Let's say I was the owner of an apartment building with 200 apartments, but only 190 were filled. I would work hard to fill those other 10 so I wouldn't lose money. It's the same with this system; you want all 200 cells filled. That could cost you initially in terms of inventory, but after that, it is just maintenance."

Patients seem to be intrigued by the system as well. "Patient interest has been good," Szot said. "They want to come behind the counter and see how it works, and we take the time to show them and explain it to them." Szot also fills a bin with M&M candies to demonstrate the process for those interested.

"Patients love it," Kalmanowitz said. "The robot faces the patients at the prescription counter so that they can see it operating. Once we explain how it works, they are fascinated by it."

Overall, Szot says he is very pleased with his decision to install the SP 200. He and his partner, Leo Mallard, own four pharmacies in southern Maryland, and Szot says, "I'll put one in every pharmacy as the money becomes available."

Kalmanowitz has no regrets about his decision. "I would absolutely do it again. Those who are considering it need to take a look at their prescription volume and make sure it is a financially sound decision. But once you make that decision, everything else is a plus. I think it is the way to go. I think it is the way we have to go."

### **Making the Numbers Work**

So, when is an automated dispensing system financially feasible? Coughlin says the ScriptPro system is affordable for pharmacies dispensing 150 prescriptions a day or more. "We have financial models that show it has a very good return at that level or above. The SP 200 can be placed in a pharmacy for about \$10 per hour under our lease program. That includes everything. There are no hidden costs and no add ons," he said.

"The robot works with the team to increase productivity by 33 percent, and in some cases up to 50 percent," Coughlin said. "Take, for example, an independent community pharmacy dispensing 150 prescriptions per day with one pharmacist and one or two technicians. The robot can readily increase the pharmacy's volume with no additional staff. That's important, especially since that staff is harder to get."

While the SP 200 automates the dispensing of tablets and capsules, ScriptPro is field testing additional equipment that will automate almost all pharmacy dispensing functions.

The SP Station is expected to go on the open market in the next few months, Coughlin said. The SP Station is a workstation for manually dispensed prescriptions. "The SP Station offers labeling, barcode scanning controls, and drug data base verification, just like the SP 200."

ScriptPro also is testing the SP Unit Dispenser, which will automate the dispensing of products packaged in unit-of-use packages, such as inhalers or birth control packs.

While each piece of ScriptPro equipment is designed to stand alone, when the three pieces are used in conjunction with each other, they provide a virtually automated pharmacy. "With this array of products we will have automated everything in the pharmacy that can be automated," Coughlin said.

### **Automation By Function**

What if you are not ready to automate the entire dispensing system in your pharmacy? Mark Sakaniwa, national vice president of sales and marketing for BakerAPS, a division of McKesson-HBOC, says automation comes in many different forms to meet the needs of different pharmacies. "Every pharmacy should have some level of automation," he said. "For example, every pharmacy has to have a scale; why not have a countable scale."

Sakaniwa says BakerAPS prides itself on offering a wide range of automation for pharmacies. Products range from the CheckRx system, which verifies that the stock bottle matches the medication requested on a prescription through a barcode system, to the fully automated robotic dispensing system, AutoScript III.

"I guess the two key words for our systems are: integrateable and scaleable. A pharmacy can grow with us. They can build upon each piece as they go along and as they grow," Sakaniwa said. For example, he says the CheckRx system is popular in combination with its counting scale, the Baker Universal. The scale can count up to 800 tablets in 10 seconds, using a pre-calibrated tablet weight database.

"Some companies sell what I call a size 10 shoe and that's all they sell, and they will try to convince you that you wear a size 10 shoe, but that might not fit your needs," Sakaniwa said. "Our systems can grow with you."

Pharmacies can expand their automation using Baker's first products, the Baker Cells and Cassettes, Sakaniwa said. "Of our products, these have the most widespread use across the board and form the basis of our robotic system." The Baker Cells system automates the dispensing of tablets and capsules.

This is how it works. Using either the Master Control Module or by interfacing the pharmacy's existing computer system, the number of tablets needed is entered. Storage cells are individually tailored for a specific tablet or capsule. Once the quantity has been entered, the individual cell's activating switch is pressed. Then, the product is automatically delivered into a chute, where it awaits the pharmacist's release into the prescription vial.

The system counts up to 10 capsules or tablets per second. A variety of system components also are available, which allows pharmacies to customize to meet individual site needs.