Case Study

Improving Outpatient Pharmacy Workflow with Automation

THE UNIVERSITY OF LOUISVILLE HEALTH CARE OUTPATIENT PHARMACY serves the 404-bed University of Louisville Hospital and 11 ambulatory care clinics. We fill 800 to 1,500 prescriptions per day, including hospital discharge medications, employee prescriptions, and prescriptions for the patients from our indigent clinics. In early 2006, we began evaluating automated technology for the outpatient pharmacy, as our prescription volume had grown 35% to 45%, year over year, for the past five years. We were practically running into each other trying to meet the growing demand for prescriptions.

After conducting some initial product class research, we decided a robotic system with a workflow software overlay would provide better inventory control, increase productivity and efficiency, and decrease our error rate. I knew that a change in our workflow would benefit our patients; recent studies show pharmacist education can have a profound effect on a patient’s prescription adherence. Particularly in indigent populations, adherence is vital; when a pharmacist actively provides information to those patients, we have found they are not as often admitted to the emergency department. Thus, our pharmacists can improve our patients’ quality of life and help our hospital recover soft costs from admissions. Rather than be driven purely by symptomology, we prefer to look at patients holistically, and we felt we would be able to spend more time with our patients by shifting some of our pharmacists’ technical responsibilities to a robotic dispensing system. So, to address these issues, this past July, we implemented ScriptPro’s SP Central Workflow software and the SP 200 robot.

System Selection and Implementation
I have a little bit of age on me, so relationship-building and the responsiveness of a vendor’s sales force to my requests are particularly important to me. That was my primary impetus for selecting ScriptPro technology; our ScriptPro representative was very responsive, and even flew to Louisville to meet the purchase decision-makers, as well as the end users of the product. In fact, I would describe ScriptPro’s service as “platinum.” For example, on the rare occasion that the system is down, I can call ScriptPro when I arrive at the pharmacy at 6:00am, and before the rest of my staff shows up for work, the system is up and running again. That said, we have had very little downtime.

Hospital administration’s buy-in was achieved through the technology’s potential to reduce medication errors. Products that satisfy JCAHO’s patient safety goals get administration’s attention very quickly. Furthermore, we could increase productivity without increasing our HR budget. By presenting administration with that kind of information, it was an easier sell than it would have been if I had just said, “This robot will make processes more efficient for my technicians.”

Upon implementing the technology, we brought our entire staff in for a daylong training session. It was a fairly smooth process at the outset, and ScriptPro also offered follow-up training for our less technology-savvy employees four months later.

Changing our culture was the most difficult aspect of the implementation. We spent a good deal of time communicating to our staff that the purchase was not about eliminating jobs; rather, it was about reapplying their skills from technical activities to customer service activities. I explained the role they would have in providing a higher level of care and a friendlier pharmacy environment for our patients.

Perhaps the biggest culture change we encountered was convincing our technicians that they could continue processing prescriptions while the SP 200 fills those already processed. You can only take advantage of the technology’s potential for efficiencies and productivity increases if your technicians use their newly freed time wisely. So we found it necessary to coax them into new work habits.

System Benefits
Among the workflow efficiencies we have realized, the SP Central Workflow software has aided us in separating prescriptions for University of Louisville Health Care employees from our other customers’ prescriptions. During the prescription batching process, employee prescriptions are placed in a particular area of the pharmacy, closer to the employee prescription pickup area. This practice ensures that our employees receive their prescriptions quickly, so they can get back to their work in patient care, the microbiology lab, food services, radiology, or housekeeping — where they are most needed. The SP Central Workflow software also tracks prescriptions from the moment they enter the system to the moment they are sold to our customers, allowing us to quickly locate them. The software also helps us prepare for third-party audits. Prior to implementation, we could spend upwards of 10 hours preparing paperwork for an audit. Now, because we scan prescriptions and store them as electronic documents in the ScriptPro system, we can prepare for those audits in mere minutes.

Conclusion
For an outpatient pharmacy that fills more than 250 prescriptions a day or one that has the financial means for the purchase, I would wholeheartedly recommend automation. The SP Central Workflow software has made a powerful difference in our day-to-day operations, and it was not that expensive. After all, as opposed to losing a million-dollar lawsuit, the automation more than pays for itself. ■

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