SureID Uses RFID to Cut Prescription Errors

The company's PharmaSure application, being tested by three U.S. pharmacies, is designed to make drug dispensing more efficient and less subject to shrinkage.

By Jonathan Collins

May 11, 2006—To help U.S. pharmacies use RFID to combat theft and incorrect dispensing of drugs, security and authentication application developer SureID has created a new RFID application, as well as RFID locking caps.

Though not yet commercially available, SureID's PharmaSure application is being tested in trials involving RFID-tagged bulk bottles of Viagra in three U.S. pharmacies. (On every bottle of Viagra sold in the United States, Pfizer attaches a high-frequency tag, which pharmacists and wholesalers can use to ensure the product is genuine. For more information, see Pfizer Using RFID to Fight Fake Viagra.) In addition, SureID expects to have its software used throughout a retail pharmacy's operations in a trial scheduled for the end of summer.

Although SureID specializes in security applications using biometrics, it has added RFID-based verification to the PharmaSure application. PharmaSure connects with RFID interrogators, which read RFID tags attached to drug bottles, and with a pharmacy's existing pharmacy management application, which determines what drugs to dispense for a particular prescription. The system also records the identity of the employee filling the prescription, either through RFID-enabled badges or some other type of ID system. In this way, PharmaSure monitors the drugs being managed and dispensed. By monitoring the quantity of drugs dispensed, and who dispenses them, the system aims to reduce shrinkage and cut down on prescription errors.

SureID estimates that some pharmacies face shrinkage rates as high as 25 percent for certain drugs, and that they have little ability to tackle the problem without closely monitoring the pharmacist—something many are reticent to do because of the difficulty in attracting trained employees.

"Pharmacists are very costly and very hard to find," says Steve Casey, founder and general manager of SureID, headquartered in Marlton, N.J. "Many companies don't want to rock the boat with pharmacists for fear of losing them. PharmaSure provides a way to catch shrink, but as a bonus to a system that helps pharmacists reduce medication errors."

The application integrates with a pharmacy's existing pharmacy management system and networked pharmacy scales. After the management system determines which drugs to dispense for a particular prescription, the pharmacist has to present the appropriate tagged drug container to an RFID reader connected to PharmaSure. The application then verifies that the drug dispensed matches that indicated on the prescription. To prevent shrinkage, the container is weighed on the pharmacy scales before the drugs are removed. A calculation based on the weight of each drug can then determine how many pills are inside before any dispensing takes place. That data is linked with the RFID read by the PharmaSure application.

For bottles containing bulk quantities of prescription drugs not shipped with their own individual RFID tags, SureID has developed a secure, reusable lid. This lid will allow a user to open a bottle only after the the RFID

interrogator reading the lid's tag has released the lock. According to SureID, the lid can be made to work with either HF or UHF RFID systems, as can the PharmaSure application. While the lids and application will work with any model of RFID reader, the company says it has also created its own design for HF and UHF interrogators to be deployed adjacent to existing pharmacy scales so the weight can be measured while the lid's tag is being read.

SureID reports that around 17 percent of prescriptions are filled incorrectly—at least initially—though the chief pharmacist catches nearly all such mistakes before drugs are actually dispensed to the patient. "Pharmacists catch mistakes, as they have to validate every filled prescription, but the errors still eat into productivity," says Casey.