

## Today's and Tomorrow's Challenges

**Volume** - U.S. pharmacies filled an estimated 3.14 billion prescriptions in 2002. The volume of dispensed prescriptions is expected to balloon 46 percent over the next five years.

The projected increase in the number of available pharmacists over that same period of time will only be a modest 5.4 percent, a rate that's 10 times slower than Rx volume. (Source: NACDS)

**Dispensing errors** - classified as everything from the wrong label to the wrong drug - occur at a rate of 4 errors per day in a pharmacy filling 250 per day. That's an estimated 51.5 million errors annually. (Source: Auburn University 2003 study of 50 community and outpatient pharmacies)

## Automation and Technology: A Practical Solution for Your Pharmacy

(Part I of a 2-part series by Christopher Thomsen, president of The ThomsenGroup, Inc.)

### Understanding Today's Pharmacy Challenges

The statistics and challenges that face today's pharmacist are downright mind-boggling. Prescription volumes are on the rise, the projected number of new pharmacists is woefully inadequate to cover demand, and the incidence of errors is compounded by the hectic pace.

Pharmacists, often cited as one of the most trusted professions in the country, are also faced with the challenge of becoming more involved in disease state management and providing extended counseling services. Noted for being perfectionists, pharmacists are under immense pressure to find ways to efficiently fill more prescriptions and ensure that patient satisfaction and safety is maintained.

It's no wonder why more and more community pharmacists feel the urgent need to make a change.

### Bringing About Scalability and Efficiency

The old way of addressing these challenges was simply to hire more pharmacists and technicians. Today, however, this is just simply not an option.

Community pharmacies are turning to technology and automation as a natural solution. Pharmacy owners and managers are eager to employ technologies that will enable them to handle an ever-escalating number of prescriptions and demands for their time. Placing more people into already crowded pharmacy spaces not only raises concerns about decreased efficiency, it also raises important economical and patient safety questions.

It is also important to understand that pharmacy automation is not just another term for robotics. Today's pharmacy automation is all about scalability and a variety of systems and solutions that meet the unique needs of each and every pharmacy.

A recent study by The ThomsenGroup Inc., discovered that automated counting systems can provide very real and affordable (\$5,000 to \$12,000) solutions for pharmacies filling 150 to 400 prescriptions per day. The study notes that automated counting systems can reduce filling times by as much as 48 percent and can increase prescription filling capacities by as much as 16 percent.



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Efficiency is about utilizing the right technology for your operation and standardizing the workload and workflow process. Automated counting systems are a viable and important prescription dispensing solution and should not be overlooked.

### **Stepping up the Automation Investment**

To survive and remain competitive, today's pharmacist must also be capable of navigating a maze of PBM obstacles, understanding and complying with HIPAA regulations and recognizing how the Medicare drug benefit bill will impact his or her business. As the business of pharmacy continues to grow and evolve, it has also become much more complex to understand and operate. Sometimes there is a good reason to move beyond a simple automated counting system and step up the level of investment in automation.

Robots in community pharmacy are no longer a novelty. First introduced in 1997, a ThomsenGroup Report estimates that there are now between 1,670 and 2,440 robotic dispensing systems in community and outpatient pharmacies. And, while the average list price for a robotic system hovers around \$200,000, the benefits provided by these systems - at the appropriate volume - can generally justify the price.

Putting things into financial perspective, first consider the fact that the average hourly wage is \$65 for a pharmacist and \$15 for a technician. Next, remember a robotic system performs several manual functions – selecting the vial, storing, selecting and counting the medication and labeling the vial – in a span of about 30 seconds per prescription.

Since the average community pharmacy dispenses about 82 percent of its daily prescription volume from bulk tablets and capsules and the other 18 percent in the form of unit-of-use packages, this means that a robotic system, with 200 or more cells, is capable of handling 45 percent or more of the total daily volume. With barcode scanning and onscreen drug image verification as part of most robotic systems, this is certainly a big step toward addressing a larger portion of the dispensing process and providing controls to ensure patient safety.

**In Part II of this series, Christopher Thomsen will examine automated workflow systems that can handle the entire prescription dispensing process.**