

## **Market Survey of Pharmacy Technology and Automation in Retail and Outpatient Pharmacy**

Pharmacy operators, gearing up to meet the needs of aging Americans, are continuing to automate their pharmacies, and according to a new first of its kind pharmacy technology survey, the trend in the coming years will be for more automated counting devices, more robotics, more central fulfillment facilities and the addition of automated workflow systems.

For the first time, the study, conducted by The ThomsenGroup Inc., a marketing research organization based in Kansas City, Mo., documents the type of technologies that major pharmacy chains, regional drug chains, independents and hospitals are currently using, identifies the systems that are the most widely adopted and identifies the systems most likely to grow dramatically in the next two to three years.

A total of 169 pharmacists were surveyed including the directors of pharmacy for four major chains operating approximately 7300 stores; the directors of pharmacy for 13 regional chains operating approximately 1160 stores as well as directors of pharmacy for 39 hospital outpatient pharmacies and 113 pharmacists who owned their own pharmacies.

The majority of the respondents said that the three most important automation systems to them right now are pharmacy management systems, integrated voice response systems and automated pill counting devices.

Nearly 70% of the respondents said they were satisfied with their current pharmacy management system. Major drug chains, which typically use their own proprietary pharmacy management system, were somewhat more satisfied with their systems than regional chains and independents that are more likely to use commercial systems.

Excluding the work that pharmacists have been doing in the last few years to develop applications that can meet new HIPAA regulations, the biggest concern the respondents have about their pharmacy management systems is service.

Christopher Thomsen, president of The ThomsenGroup, said that pharmacists who use a commercial system are more likely to feel that vendors are too slow in responding requests for minor system changes and system upgrades.

But only 24.5% percent of the respondents who were not satisfied said they had plans to change systems or vendors.

“The most disruptive and challenging thing for a pharmacy to do is change its pharmacy management system,” points out Thomsen, “so although, many pharmacists may have some complaints about their current pharmacy management system, there is really nothing so serious that they plan to change it.”

The second most important piece of pharmacy technology is some type of automated pill counter.

According to the study, each major chain surveyed had some kind of pill counter as did 85 percent of all the regional chains surveyed and 73 percent of the independents. Ninety-two percent of the hospitals surveyed said that they had some kind of automated pill-counting system.

All of regional chains and 78 percent of the independents, who currently do not have an automated counting system, indicated that they plan to install some type of an automated pill counter within the next two years.

Major chains have been much quicker than regional chains or independents to adopt robotic dispensing systems. Seventy-five percent of the major chains who responded said they have one or more robots in some stores compared to 31 percent of the regional chains and 14 percent of independents.

However 33 percent of the regional chains and 24 percent of the independents, without robotics, said they plan to install them in the next two years.

“Those pharmacists that have robotics are absolutely convinced of their value,” says Thomsen, “and ninety percent of the respondents told us that they believe robotics are important. But they also believe that fully automated robotic systems are only cost effective in high volume pharmacies filling more than 350 prescriptions per day for the independent and more than 600 prescriptions per day for the chains.

“It’s clear, given the cost of robotics which typically average about \$200,000 an installation, that pharmacists feel they can’t cost justify such a large investment in every one of their stores.”

Thomsen says that there has been an upsurge in the number of community and outpatient pharmacies and the pharmacy automation vendors to work together to develop “more flexible and scalable systems that allow pharmacies to grow with and can add-on or upgrade and the pharmacy grows and as their needs change.”

IVR systems are becoming almost as common in pharmacies today as pill counters. All the major chains in the survey claimed they have an IVR system, as did 76 percent of the regional chains and 62 percent of the hospitals. But, only 46 percent of the independents surveyed, claimed that they have an IVR system. Many independents indicated that the demographics did not warrant an IVR system while others noted that the Internet was better suited to their client base.

But IVRs are slated to become even more ubiquitous in the years ahead. 33 percent of the regional chains without an IVR said they plan to install the system in the next few years, as did 31 percent of the independents without them. Forty-seven percent of the hospitals without an IVR said they plan to install them in the next two years.

Because of the relatively low penetration of automated workflow systems, their growth is likely to escalate rapidly over the next few years.

Just one of the four major drug chains interviewed said they had an automated workflow system and only 15 percent of the regional chain respondents, said they had workflow.

Only 19 percent of independents responding to the survey said they had automated workflow, but 56 percent of the hospitals who responded indicated that they had some type of an automated workflow system.

Thomsen says that many of the pharmacists who responded to the survey often said that they are very interested in automated workflow systems, but feel that they are still trying to sort through all of the options or are trying to determine “just exactly what their exact needs are based on their individual circumstances.

“It is further complicated by the fact,” says Thomsen, “that there isn’t a common definition of what an automated workflow system is. There are a wide variety of systems, under the automated workflow label, offered by both the pharmacy management system and pharmacy automation vendors and prices can vary from several thousand to hundreds of thousands of dollars for a single installation. Pharmacists are trying to determine just exactly what they need to do to implement an efficient system while keeping costs within reason.”

Considering the fact that just a few years ago, many pharmacists were taking a very conservative approach to the option of having prescriptions filled outside the walls of a retail pharmacy, 33 percent of the pharmacists in the ThomsenGroup survey, said they considered central fill systems “an excellent option for addressing workload and staffing issues.”

And, perhaps inspired by the success of early adopters like Longs Drug, HEB and Giant Eagle, 50 percent of the major chains and 31 percent of the regional chains that responded said they have some type of central fill operation “in place or under consideration.”

Electronic prescribing, the ability for physicians to write prescription orders electronically and for pharmacies to receive those orders automatically into their pharmacy management systems and to electronically transmit refill requests and other data back to physicians, was singled out by 81 percent of the respondents as “a very good idea.”

But most respondents, 96 percent, said they believe e-prescribing will not happen quickly. Only four percent believed e-prescribing would be in mass use in the next two to three years.

According to The ThomsenGroup’s soon to be released pharmacy technology report - **From the Community Pharmacy to the Patient - A review and assessment of prescription filling technologies for retail and outpatient pharmacy** – the pharmacy automation vendors have provided the following system statistics:

--Liz Parks

**Automated Counting Systems**

- AutoMed –200 to 300
- Innovation Associates –700 to 800
- Kirby Lester –18,000 to 20,000
- McKesson APS – 6,000 to 7,000

**Automated Robotic Systems**

- AutoMed – Over 50
- Innovation Associates – First system installed in September 2003
- Parata Systems – Over 40
- McKesson APS – 300 to 400
- ScriptPro – 2,000 to 3,000
- Vanguard medical Systems - First system to be installed in December 2003

**Automated Workflow Systems**

- AutoMed –50 to 100
- Innovation Associates – Over 50
- McKesson APS – 1,500 to 2,000
- ScriptPro – 150 to 200

For the purpose of market segmentation one can generally figure that the above installations are about 70% retail pharmacy and 30% outpatient pharmacy.

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