

Five Critical Considerations in Selecting a Pharmacy Technology System



Introduction

Although it dates back at least 75 years, the mantra of the [Project Management Triangle](#), also known as the Iron Triangle, still holds sway today: “You can have it good, fast or cheap. Pick two.”

The implication is that certain trade-offs are required in pursuit of an end objective. And this may be true in certain industries or in certain scenarios. Former Department of Homeland Security Secretary John Kelly, for example, told a U.S. Congressional committee that the Trump Administration moved too quickly in implementing a 2017 executive order on immigration – and suffered unintended consequences as a result. As described by [The Wall Street Journal](#) those consequences included “initial confusion and confrontation at airports around the country....”

In another example of “fast” coming at the expense of “good” or “cheap,” [Facebook CEO Mark Zuckerberg](#) noted a few years ago that the company’s *Move Fast* core value “gets us into tons of trouble.” Speaking at a San Francisco technology conference, Zuckerberg explained: “Sometimes we go too fast and we mess up a bunch of stuff, and we have to go back and fix it.”

And one British marketing agency cited Uber in yet another example. “Some might say that Uber is fast, cheap and good,” noted a [Connected-UK](#) blog posting. However, “if you’ve [used] Uber a lot then you’ll no doubt have been hammered by surge pricing and terrible “estimated arrival [times],” sometimes making Uber both expensive and slow.”

When it comes to technology solutions available to help pharmacy managers automate and improve operations, a variation of “good,

fast and cheap” might be “good, efficient and innovative.” Is it possible to have all three?

A cursory internet search turns up an array of options including off-the-shelf software modules that can be ordered from Amazon and other e-commerce providers; specialty solutions offered by niche providers that address specific needs; and advanced systems that can be customized for a pharmacy’s specific needs. And within these categories, a pharmacy manager will find a diverse range of capabilities, effectiveness, and price points.

Understanding the different options available, and the characteristics that distinguish one system from another can be among the more consequential decisions a pharmacy manager will make. A pharmacy manager will want to carefully consider all available options, and really delve into the nuts-and-bolts of each system. It can be an overwhelming process, with technology upgrades continually raising the bar with regard to capabilities and efficiencies.

Following is an overview of five critical “must haves” to help a pharmacy manager in identifying the best possible technology solution. These considerations reflect “core” capabilities, as well as innovations some technology providers have introduced that provide heightened efficiency and functionality. Ultimately, a pharmacy manager will choose the best system for his or her unique needs. But as the following review will make clear, when it comes to pharmacy management systems, good, efficient and innovative aren’t asking too much.

#1. System should Prioritize Patient Care/Facilitate Outreach

A few years ago, [Governing.com](#) profiled a family practitioner in Portland, Maine who had decided to maintain his traditional reliance on paper records, rather than implement an electronic system. The physician didn't have anything against technology, the article noted, "but a failed attempt to go electronic several years ago left him frustrated." As the physician explained: "What we found was a system that just wasn't patient-centered. The primary function was to enhance billing, not to build a physician-patient relationship. Our productivity went down 25 percent."

This physician's experience was, of course, the exact opposite of how a successful technology system should work. Health providers – including pharmacy managers – invest in technology to make patient care easier – not more difficult.

Specific to pharmacies, tremendous strides have been made in improving technology's role in patient care – and outcomes. Certain management solutions, including PrimeRx™ by Micro Merchant Systems, were developed in direct coordination with pharmacists, who identified specific needs and pain points that could benefit from a pharmacy-specific technology solution. As a result, systems are available that facilitate patient/pharmacist interactions; allow pharmacists to more actively oversee patient care; and proactively communicate with patients on a range of issues. Key capabilities to look for include:

Comprehensive patient history. Although this may seem like a core function, it is important to ensure that a system allows the pharmacy to maintain and store all patient records. This includes basic patient information, along with a comprehensive medication history. In addition, an advanced system should allow the pharmacist to record



notes and observations, that can also be added to the patient's record and easily accessed.

Medication adherence indicators. The system should automatically alert the pharmacist if a patient has become non-adherent with a prescribed medication regime – or appears at risk of becoming non-adherent. In some instances, a pharmacy may choose to target illnesses most susceptible to patient non-adherence – diabetes, hypertension, and cholesterol – and develop "adherence plans" for each affected patient to help improve the likelihood of adherence.

Medication Synchronization. Research reported in [JAMA Internal Medicine](#) found more than 35 percent of older adults take at least five medications, a situation referred to as "polypharmacy," and almost two-thirds reported using dietary supplements. Inability to manage these medications can result in non-adherence, as patients become overwhelmed by costs, scheduling, dosages and potential side effects.

Pharmacists can address this issue – and gain control of inventory management at the same time – through medication synchronization programs. These programs allow patients to schedule monthly meetings with their pharmacists and pick up that month’s supply of all medications. Patients benefit from the organized pick-up schedule and greater understanding about their medications. At the same time, the pharmacy is able to more reliably predict inventory needs, with confidence that medications will be picked up on time and used as prescribed.

Conflicting Medication Alerts. As mentioned previously, patients prescribed multiple medications can be at risk of an adverse reaction. An advanced technology system will alert pharmacy staff whenever patient medications are in conflict.

Automated communication processes. Proactive refill reminders and “prescription ready for pickup” alerts are not only a convenience but can also be an important tool in helping address non-adherence. A comprehensive review of data, published in the March 2016 issue of [JAMA Internal Medicine](#), found “mobile text messaging approximately doubles the odds of medication adherence.” Similarly, a [study](#)



conducted by Walgreens of non-adherent pharmacy patients enrolled in Medicare Prescription Drug Plans (Part D) found patients who received reminder calls demonstrated nearly 23 percent greater adherence within the first 14 days of the expected refill date.

Mobile Apps. Convenience and flexibility have come to define patient expectations for their pharmacy experiences. Essentially, patients want to be able to order refills and manage their pharmacy accounts on their schedules. Advanced technology systems are responding with mobile applications that allow patients direct access to the pharmacy. The FillMyRefills™ app, for example, which is available to PrimeRx™ pharmacies, allows patients a range of functionality including automatic reorders, the ability to transfer prescriptions between pharmacies, and full visibility into their prescription histories.

Patient e-Care Plans. As pharmacists’ role in patient care continues to evolve and expand, so too has the need for pharmacists to exchange important patient information with prescribers and other care members. An important development in recent years has been the emergence of “eCare plans,” which allow pharmacists to record comprehensive information about all services provided to patients – services that go beyond medication dispensing – which can be exchanged seamlessly with patients, their doctors and other professionals. Since eCare plans are a relatively new development, not all pharmacy technology systems allow for the creation of such detailed records.

One system that does is PrimeRx™, which includes a desktop “eCare plan” button that leads directly to formatted plan-related fields. These fields allow the user to easily capture critical information regarding patient referrals, interventions, noted health concerns and

patient goals. Once new information has been added, the system records and stores all updates.

#2. Choose a “One-Stop Solution” that Seamlessly Integrated and Automates All Capabilities

While delivering quality patient care remains the top priority of all pharmacies, managers must contend with the many different hats they wear throughout the course of the day. This includes prescription management, regulatory compliance, inventory management, staff productivity, point-of-sale, record keeping, reporting, billing and accounts management.

The good news is technology can automate and manage each of these key areas. But the better news is that comprehensive systems – including PrimeRx™ - will integrate each function to ensure seamless, accurate updated data across all functions. This means, for example, that when a particular drug is dispensed to a patient, the system will automatically update the patient’s record, adjust inventory levels, and mark the sale in the pharmacy’s accounting records. Conversely, with a non-integrated system, each of these functions would occur apart from each other, as separate transactions, with no coordination or visibility.

Important functionality to look for in choosing a comprehensive technology system includes:

Inventory management. Pharmacy managers have a lot at stake in ensuring proper inventory management, both in terms of the dollars invested in inventory procurement, and in ensuring adequate supplies of required medications. It’s important to ensure a system can seamlessly manage all aspects of inventory control, including:

- Ability to track supplies of all medications, and make required adjustments as prescriptions are filled, or withdrawn for

compounding. Once a medication reaches a pre-determined supply level, an alert can be generated, and an automatic refill request transmitted.

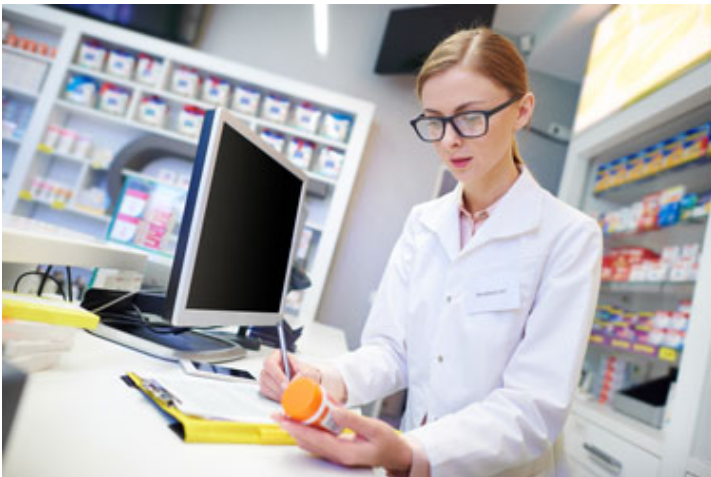
- Ability to automatically make adjustments if a medication is added back to inventory, which occurs when a prescription is not picked up, for example.
- Identification of fast-moving medications, and with the ability to seamlessly adjust order levels.
- Ability to automatically “flag” prescriptions for rare or high-priced drugs and, before submitting an order, alert the pharmacy staff so that a patient’s intention to pick up the drug can be verified.
- Expired drugs can be a serious risk for pharmacies, both in terms of cost and patient risk. An advanced system will automatically track all expiration information, and alert pharmacy staff when a medication is close to its expiration date or, has in fact become expired.
- System should be able to capture and store data across a wide range of inventory-related issues:
 - Order histories
 - Daily and historical inventory volume
 - Most popular medicines and sales laggards
 - Perpetual inventory records regarding controlled substance volume
 - Prescriptions left in bin or abandoned
 - Claims rejected by insurer.

Workflow management. Improving pharmacy efficiency is a primary reason for why most pharmacy managers invest in a technology system, so it’s essential to select a system that prioritizes workflow efficiency. No two pharmacies are the same, and within any pharmacy, no two days are ever exactly the same. This means each pharmacy needs the capacity to build its own processes to determine

staff priorities and responsibilities. An efficient plan will identify key pharmacy “tasks,” including the number of prescriptions waiting in queue, and determine staff priorities. This will ensure valuable staff time is allocated appropriately, and that nothing is allowed to fall through the cracks.

Electronic Prescribing. With [85 percent](#) of all medications prescribed electronically, look for a technology system that offers comprehensive e-prescription processing. This includes validating the prescription, automatically adding the prescription to the processing queue, updating the patient’s electronic record, and filing the prescription.

Claims Reconciliation/Management. A study sponsored by the [National Community Pharmacists Association](#) found the “average” independent pharmacy loses almost \$7,000 per year in differences between reimbursement claims submitted to third-parties, and amounts actually paid. That’s a significant amount of money, and as a result pharmacies are often forced to dedicate staff time to tracking and questioning reimbursement levels, and to ensuring determined amounts are actually paid.



The process is highly bureaucratic and time consuming, and a source of frustration for pharmacy personnel. Which is why, for many pharmacies, moving to an electronic reconciliation platform has brought relief, with capabilities that can include:

- Automatic claims filing, including attachment of all required documentation
- Seamless tracking of claims as they move through the review process
- Reconciliation of all payments
- Recapture of lost revenue due to unpaid claims and missing reimbursement checks
- Documentation of all claims and related correspondence
- Customized report generation on all reconciliation-related metrics.

Claims Submissions. Third party reimbursements are a vital source of revenue for the typical pharmacy – and a significant source of bureaucratic frustration. However, an automated system will allow claims to be filed electronically, with seamless transmission to multiple parties. Critically important though, a pharmacy must ensure its technology system includes an “auto-correct” capability which will automatically scan a claim, and ensure it is coded properly and aligned with a particular third-party payer’s reimbursement protocols.

Integration of Accounts Receivable. Systems including PrimeRx™ allow a pharmacy manager to easily customize reports, so that point-of-sale receipts can be viewed on a daily, weekly or monthly basis. Data can also be aggregated based on key metrics, as determined by the pharmacy manager.

Regulatory Compliance. A comprehensive system will facilitate compliance with the numerous state and federal regulatory

requirements affecting pharmacies and prescription drugs. This includes critical recordkeeping capabilities; safe storage of patient records, signatures, and claims; and mandatory reporting requirements. And, as federal drug supply chain mandates take effect, pharmacies will rely on their technology systems to document each drug's chain of custody, and safety.

An advanced system will have direct access to the National Drug Code listing as a way to verify prescribed medications and list proper drug codes on all documentation. In addition, a system can provide direct access to state pharmacy boards for prescriber verification, immunization and controlled substance reporting, and to assist in federal reporting mandates.

Point-of-Sale. A pharmacy's point-of-sale process can also be integrated directly with the overall pharmacy management system, to ensure fast, accurate transactions. Key things to look for in an integrated point-of-sale system include compliance with all HIPAA requirements, electronic signature capture and storage, automatic price checks, seamless updates to inventory levels, and detailed report capability. For some pharmacies, customer loyalty programs are important, so it would be essential to ensure that a system can accommodate and seamlessly manage such an initiative.

#3. Integration with External Partners

According to the [Computing Technology Industry Association](#) (CompTIA), almost 525,000 tech businesses (firms with payrolls) were operating in the United States during 2018, staffed by nearly 12 million employees. This figure includes more than 40,500 startups that were launched that single year. While not all are engaged in healthcare-related initiative, a sizeable number are – with impressive new technology solutions coming to market on a regular basis.

As such, it's important to select a pharmacy technology system that avails itself of the most relevant and beneficial technology. In fact, it's probably a good idea to rule out any technology provider that ignores the important services available through outside providers.

Look for a system that has established partnerships with third parties, as a way to expand capabilities and improve efficiency. Some of the more important third-party partnerships to look for include:

- [Script Management Partners](#) – Immunization Registry Reporting
- [Elsevier](#) -- Multi-lingual translation services, patient medication information, and updated drug listings
- [Prescribe Wellness](#) – Medication adherence initiatives and customer loyalty programs
- [Surescripts Network Alliance](#) – Transmission of electronic prescriptions and timely, accurate processing of patient information.
- [DocNetwork](#) – Electronic health records management solutions for camps, childcare facilities and schools
- [Wolters Kluwer](#) – Health, tax and accounting, risk and compliance, and legal services management
- [Datarithm](#) – Inventory control
- [CoverMyMeds](#) – automates the prior authorization process of many U.S. insurance companies
- [Amplicare](#) – Comprehensive review and comparison of Medicare plans
- [Kirby Lester](#) – Pharmacy automation and high-speed pill/tablet counting solutions
- [Parata Systems](#) – Technology solutions including Parata Max, a high-speed robotic dispenser that can automate up to 60 percent of a typical pharmacy's script volume
- [TelemanageRx](#) – Electronic prescription refill solutions.

The list is a small sample of the innovative third parties working to improve pharmacy technology capabilities. Clearly, any technology system would be improved by partnering with these providers, so it's important to select a provider that understands the value of reaching out to include innovative, third-party companies.

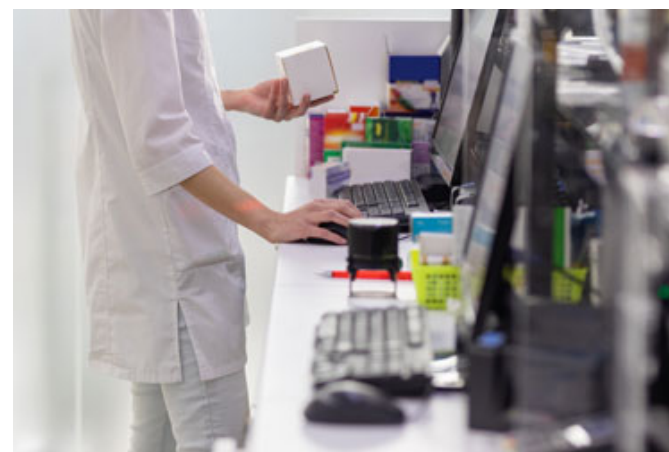
#4. Continual Improvement – Regular Upgrades and Innovative Advances

A pharmacy manager should also look for a technology provider that offers regular updates and system improvements. Not just system fixes to correct glitches, but comprehensive upgrades that improve functionality and reflect technological best practices.

Insist on a technology provider that seeks continuous improvement, and is highly engaged with stakeholders – pharmacists, regulators, trade associations, drug manufacturers, payers, and patients – to better understand changing needs and expectations. A provider will use feedback from these interactions to identify opportunities for technology to solve problems and add efficiency.

The recent introduction of [Pharmacist eCare Plans](#) offers a good example. Electronic care plans were developed over a period of years by a consortium of community pharmacists, interested in creating a single platform from which to more effectively manage patient relationships, and document the wide scope of services pharmacists regularly provide – services that go beyond medication dispensing.

Following an extensive development stage, a model for the eCare plan was finalized in [2016](#). The approved model is based on [Health Level Seven \(HL7\)](#) standards and relies on previously-adopted medical community standards that can be developed into care plans using technology systems already available. As such, technology vendors played a critical role in plan development and functionality.



Micro Merchant Systems was among the early “visionaries” to recognize the transformative impact eCare Plans could have on pharmacies – and the need for pharmacists to be able to easily create and manage care plans for their patients.

So, the company’s technicians went to work, and soon unveiled capability within the PrimeRx™ operating system that allows eCare Plan functionality. PrimeRx™ users will notice an “eCare Plan” tab within the system, that allows direct access to plan creation functionality. This includes the ability for a pharmacist to record notes about all patient interactions, list patient goals and recommendations, and record all updates. And, the eCare Plan can be seamlessly transmitted – with formatting intact – across a patient’s health care team.

Not every technology provider took the initiative to (a) recognize the importance of the eCare Plan initiative and (b) proactively develop a solution so that users could easily create plans for their patients. As this example illustrates, it’s important to select a technology provider that is actively engaged and recognizes the need to continually provide new and better solutions.



#5. Choose a technology partner, not just a technology system

“They were so attentive during the sales process, now I can’t get my calls returned.” Few things are more disheartening than being fussed and fawned over by a sales team, only to have those levels of attention plunge after the contract is signed.

The consequences of poor customer service can be especially problematic in a pharmacy setting, where patient records, medication information and compliance reporting must be highly accurate and easily accessible at all times. Which is why a pharmacy manager must prioritize customer service in considering various technology providers. Important considerations must include:

Product demonstrations. Will the technology provider allow for a demonstration of its pharmacy system? A company that believes in its product will allow a potential buyer to fully test its system and explore all capabilities.

Understanding each pharmacy’s needs. A responsible technology company would rather forego a sale, then sell a product that is not a good match for a pharmacy’s specific needs. Make sure a potential technology provider takes the time to fully understand your pharmacy and can accommodate your priorities. Certain advanced systems, including PrimeRx™, can be customized to meet a pharmacy’s specific needs, while other systems do not offer any degree of flexibility.

Implementation and training. Make sure the provider offers a detailed “what to expect” overview with regard to implementation and staff training. Will the training be conducted via a staff member, or will you be handed an instruction manual, or directed to an online training session? Do not assume a technology company prioritizes training, or that you are “on the same page” with regard to expectations. Demand a written, detailed overview of the installation process, and an accompanying outline for training.

24/7 access to support personnel. A pharmacy manager will also need to understand a technology provider’s understanding of what constitutes “good customer service.” Many pharmacies have been shocked to find that their previously attentive sales representative is nowhere to be found when a problem arises. Or, that a customer service “hotline” is only accessible during business hours and is not staffed by trained technicians. A pharmacy manager will want to understand the company’s commitment to customer service, and precisely who to call when the unexpected happens.

Ongoing training. As mentioned above, there is great value in selecting a technology provider that offers continuous improvements, and partners with innovative solution providers. But new capabilities mean additional training. It’s important to determine how new capabilities will be delivered – and the process for training staff.

Many companies offer webinars, for example, that allow pharmacies to actively participate – and to view again later should additional staff require training. At the same time though, access to company personnel will be essential, so a pharmacy must ensure availability of individuals who can demonstrate new capabilities.

As important as good customer service is to a pharmacy, it should be a priority for a pharmacy technology provider. Afterall, a technology company truly interested in offering efficiency and solutions should want a front row seat as customers utilize its products, and an opportunity to solicit feedback about system strengths – and areas of weakness. It's essential then, to feel as if you are entering into a partnership with your technology provider, rather than simply conducting a transaction.

Conclusion

A January 2020 article in [The New York Times](#) highlighted complaints among pharmacists at several leading pharmacy chains about “understaffed and chaotic workplaces” that make it difficult for them to do their jobs safely. “They struggle to fill prescriptions, give flu shots, tend the drive-through, answer phones, work the register, counsel patients and call doctors and insurance companies,” the article noted, “all the while racing to meet corporate performance metrics that they characterized as unreasonable and unsafe in an industry squeezed to do more with less.”

In a letter to the Texas State Board of Pharmacy, one pharmacist stated: “I am a danger to the public.”

Clearly, today's pharmacists are being asked to play a larger role in patient care than ever before, with expanded expectations for patient

management and service offerings. And with compliance requirements increasing, and pharmacies operating under the constant cloud of audit threats, it's clear that pharmacies need a better way forward.

That better way just might be a comprehensive technology solution. A fully integrated system can significantly improve workflow processes, help pharmacists prioritize tasks, and automate key compliance and recordkeeping requirements. But as the above discussion makes clear, not all technology systems are equal. So, take the time to carefully examine a system's capabilities, and choose wisely.

Micro Merchant Systems “Software Without Limits”

We are a market leader in the pharmacy software industry with pharmacy management systems installed in pharmacies nationwide.

With almost 30 years of experience, we understand the changing dynamics of the pharmacy system industry better than our competitors, and the critical role of technology in adapting to those changes.

Our company motto, “Software without Limits,” is testament to our commitment to continual improvement and innovation. Your pharmacy’s technology system is only as good as its next upgrade.

Our customers trust us to provide the technology pharmacy solutions that meet their unique pharmacy software needs. And our customers know they can rely on our superior customer service to provide immediate assistance when needed.

For more information

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