



## **MOBILE TECHNOLOGY & MEDICATION ADHERENCE:**

Why pharmacy needs to go mobile — today

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Today's pharmacy is so unlike that of past generations that it might as well be an entirely new profession. From the rise of the aging baby boomer population and the growing role the pharmacist plays in managing "high-touch" chronic disease states, to advances in the electronic health record and e-prescribing, the pharmacist has become a more central link in the healthcare chain.

Key developments in pharmacy technology have not only enabled this fundamental shift; they are transforming the industry more rapidly than ever.

Perhaps the biggest technology opportunities for the pharmacy industry lie in mobile applications. Turn on the TV, look outside, or check around the office or dinner table — mobile technology is everywhere.

According to the wireless-lobbying group CTIA, 303 million Americans reported owning a mobile device, with 63.2 million Americans owning a smartphone. What's more, according to Insight Express, 82% of consumers have used their mobile phones in a store, and 55% have used them in a doctor's office or hospital.

Clearly, mobile is becoming the preferred consumer channel for communication, and with 6,000 mobile health apps already in the Apple App Store, according to Mobile-HealthNews.com, consumers are poised to take a more active role in their own health management. For pharmacy, mobile applications are a way to better connect with patients and improve the customer experience. Most important, though, is the opportunity to address the medication adherence shortfall — which costs the healthcare industry upward of \$100 billion every year in avoidable hospitalizations. While mobile apps can be amazingly simple to use, the potential for getting patients to remain compliant with their medications, thereby improving healthcare results and lowering costs, is nothing short of revolutionary.

In this whitepaper, we will discuss the steps that independent and national pharmacies can take to bring robust mobile offerings to their customers and their staff for improved medication adherence and prescription management.



# Adherence Management

Whether a pharmacy is small and independent, or an expansive national network, the initial investment necessary to begin offering medication-adherence and prescription-management assistance may seem daunting. Today's technologies and mobile applications, however, enable pharmacies to begin to realize a positive return on investment in a relatively short period of time:

- With custom reminders and refill notifications, patients will be less likely to neglect filling a prescription, resulting in reimbursements for the pharmacy providing the alerts;
- Patients who are regularly engaged by their pharmacists are more likely to fill additional prescriptions at the same location or the same chain — and may do additional shopping at the store; and
- Much like case management studies have proven, interaction between pharmacists and patients with a chronic disease fosters a sense of patient accountability, encouraging the patient to visit the pharmacy more often.



Independent, community-based pharmacies willing to make an investment to partner with the patient in his or her self care can reap significant benefits. With an intelligent choice of offerings, they can offer a range of differentiated services to their patient population. Likewise, larger retail pharmacies with established networks are also well-positioned to assist patients, albeit from a different perspective. Retail pharmacy networks have a substantial infrastructure in place to support patients' increasingly complex needs, which can be leveraged to encourage greater patient loyalty.

## SPOTLIGHT ON *Walgreens*

Earlier this year, Walgreens released "Refill by Scan," a smartphone and tablet app that lets customers scan the bar code on their prescription labels with their mobile device to order their medication refills. Within four months, Refill by Scan accounted for more than half of all prescription refills ordered through Walgreens mobile applications. Additionally, Walgreens has had more than 1 million customers sign up for its prescription text alerts, an app that sends customers a text message when their prescription is ready for pickup.

According to Sona Chawla, Walgreens President of E-Commerce, "Our customers have enthusiastically adopted our mobile applications, and we're continuing to bring innovative technology to our online and mobile platforms to enhance the customer experience. With Refill by Scan, prescription text alerts, unique photo features, and the ability to shop or browse products all available on a mobile device, we're adding new levels of choice control and convenience for our rapidly growing numbers of mobile customers."

# Online and Mobile Features — Benefits for the Patient

For the average consumer, price is always a considerable factor when purchase decisions are made. With various prescription plans and subscriptions, however, direct patient costs for prescription drugs are becoming standard across pharmacies. Even when prices vary — independent pharmacies, for instance, may be eligible for “best available” pricing from manufacturers — the differences can be equalized by offering patients greater convenience and personalized services.

## A forward-thinking set of offerings includes:

### 1. Medication reminders

These solutions can be developed so that the patient can manage the application or the pharmacist can enter medication information on behalf of the patient. (Either way, of course, data entry must be accurate and precise — often a challenge for patients lacking pharmaceutical training). Reminders are sent to the patient — depending on his or her mobile device preferences — via SMS, a J2ME application or a smartphone app.

### 2. Adherence reports

With the use of a mobile application, reports can be generated within the app or sent on a regular basis from the pharmacy to patients and their immediate family, demonstrating medication adherence or a lack thereof.

### 3. Automatic or one-tap refill requests

This solution is about convenience. “One-tap” refill requests offered via mobile applications generate an automated message from the patient to the pharmacist. Similarly, solutions deliver an automatic message, prompting the pharmacist to initiate a refill procedure.

### 4. Prescription plan and card information

With countless prescription benefit plans available, mobile applications have been developed to alert the patient of cost-saving opportunities and provide discounts on drug purchases. This feature enables the plan member’s associated card number, bar code, card image, etc. — depending on the phone capabilities — to be available to the application user at all times.

### 5. Medication reference and education

Large, integrated health plans, such as Kaiser Permanente, have reported high usage rates with online “health encyclopedias” and reference guides. Patient-friendly web-based guides for prescription medications are also available for convenience and additional information. These options further advance patient accountability because they encourage patients to proactively seek answers to questions they may have.

### 6. Email the pharmacist

Patients request the capability to email their pharmacist directly, just as they like to reach out to their physicians electronically. The same protocols and applications used to facilitate secure online messaging with providers are easily replicated for pharmacists. Such communication tools allow the patient to quickly clarify questions about medications without overburdening on-site personnel. Possible billing opportunities exist in conjunction with this service.

### 7. Kiosk

Pharmacy-stationed patient kiosks with much of the functionality mentioned above can be used as the basis for initial consultations — which often lead to subsequent billable consults.

# Online and Mobile Features — Benefits for the Pharmacist

Pharmacists are in great demand. With increasingly busy schedules, a plethora of drugs to keep mentally cataloged and the responsibility to care for significant numbers of patients, pharmacists are in desperate need of professional solutions that help them improve efficiency while delivering services with uncompromised quality. Certain application-facilitated features, if tied with back-end systems (easily accomplished via web services or scraping), will dramatically simplify pharmacist duties and free more time to be spent with patients rather than a computer.

## Key benefits include:

### 1. Drug ordering — periodic and ad-hoc

Re-ordering drugs to maintain inventory levels is a time-consuming, ongoing activity. Mobile solutions can enable this functionality for regular day-to-day restocking, as well as ad-hoc ordering (while walking through the aisles). Both activities can be completed via manual entry or bar code scanning — the latter being extremely efficient and accurate. Time saved through the automatic and precise ordering capabilities of a bar-coding system allows pharmacists to focus more time with patients rather than back-room activities. This results in greater customer satisfaction and a significant reduction in inventory errors.

### 2. Portable drug reference

A mobile drug reference guide acts as a quick resource, allowing the pharmacist to create educational handouts for patients based on their specific prescription or prescriptions. The reference guide can be cross-linked to the wholesaler of choice to ensure that drugs to be ordered are the ones that can, in fact, be procured at the right price and quantity.

### 3. Dosage calculator

Coupled with a mobile drug guide, a “quick reference” dosage calculator can be used as needed to avoid potential medication prescription errors.

### 4. Secure patient communications

A complementary communications tool to the “email the pharmacist” patient feature, secure patient messaging allows the pharmacist to correspond with the patient and establish a strong relationship. Such rapport ensures ongoing refills and consultations and creates the basis for activities such as medication therapy management (MTM) and medication reconciliation (MR). With the advent of accountable care organizations (ACO), secure messaging channels lay the groundwork for pharmacists to actively participate in and be reimbursed for care coordination activities.

### 5. Refill request management

Refill request management serves as a counterpart to the “request refill” patient feature. Such an application can be designed as a simple reminder for the pharmacist to call the patient about a refill or, conversely, as an SMS directly to patients to remind them their prescription is due to be refilled.

# Mobile Application Considerations

While mobile features, if implemented correctly and in combination, are likely to drive substantial value, patients and pharmacists tend to “bring their own” device to the equation. This phenomenon essentially implies a diversity of mobile devices, both in terms of capabilities — a smartphone versus a “feature” phone, for example — as well as associated operating systems (e.g., iOS, Android, BlackBerry, Brew, and Windows Phone).

Developers often encounter problems when developing applications to be utilized across multiple mobile operating systems. Platforms such as the solution offered by Kony, however, have been developed with a “write once, run everywhere” functionality. This enables application development in a single language and a single codebase that is able to generate and deploy native applications, mobile web, hybrid applications (for iOS, Android, multiple versions of BlackBerry), Windows Phone, J2ME apps for feature phones, two-way SMS, kiosk and Windows 7-based widgets.



## Partnering with Kony

Medication adherence is a major issue the health-care industry is struggling to manage. Pharmacies are well-positioned to take a lead role in helping patients comply with prescription schedules — as well as improve related areas of care such as medication therapy management and medication reconciliation. Mobile applications, such as those offered by Kony, provide the tools necessary to address the challenges outlined earlier in this paper — and both patients and pharmacies can benefit from such solutions.

Kony is ideally positioned to help pharmacies define and deploy an effective and ROI-based mobile strategy through its comprehensive software and services offerings.



## About Kony: Mobilize, Empower and Connect the Healthcare Ecosystem.

Kony offers feature-rich and future-proof mobile applications in less time and at a lower cost than any other solution to organizations that support and deliver health care. Pharmacies and drug store retailers rely upon Kony apps to help customers locate their store; refill prescriptions; research medications and their costs; schedule a pharmacy consult, manage their health and well-being, investigate health plan benefits, maintain a PHR and shop in an “endless aisle.” This functionality allows pharmacies to put their whole store in customers’ hands, discourages trips to their competitors, and increases customer retention and loyalty.

For more information,  
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