

Fast Facts

- RxEOB's mission is to help PBMs, health plans and TPAs connect with their members.
- We do it through proprietary software applications and effective data management support and analytics.
- RxEOB's portal, mobile and messaging applications help members access the information they need to save money.

How mobile messaging promotes medication adherence

In the U.S., our approach to the management of certain chronic health conditions, such as asthma, diabetes, high blood pressure, and high cholesterol, relies heavily on prescription medication. While lifestyle choices and wellness efforts can have substantial impact on these conditions, the reality is that maintenance medication (i.e., long-term medication regimens that are not expected to end) is often the most effective and efficient approach to managing these diseases.

Costs of medication non-adherence

When patients fail to adhere to their medication regimens by either failing to refill prescriptions or failing to regularly take their prescribed dose, the medication regimen can be rendered ineffective. Sadly, the level of medication non-adherence is far higher than most people realize.¹ A review in the *Annals of Internal Medicine* estimates that a lack of adherence causes nearly 125,000 deaths and 10 percent of hospitalizations and costs the already strained healthcare system between \$100-\$289 billion a year.²

Research estimates that 20-30 percent of medication prescriptions are never filled and approximately 50 percent of medications for chronic disease are not taken as prescribed.³ Reasons for non-compliance vary, including cost, side effects, stigma, denial, health literacy and forgetfulness.

The problem

Managing non-compliance is extremely difficult, especially for prescribers. After a patient leaves the physician's office with a prescription, the physician has no idea if or when that prescription gets filled. Even

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if it is filled once, the physician doesn't have visibility into what happens from there — at least not until the patient returns for their next visit, which might only happen once or twice per year.

Other stakeholders potentially have a better view into patient compliance. A pharmacy might notice that a patient hasn't refilled a prescription. Payers, in particular, are well positioned to track the filling of prescription refills from the claims submitted by network pharmacies.

Possible approaches

The approaches to solving the problem are as broad as the causes. They include efforts to make prescriptions more affordable, combination products (those that simplify regimens by combining multiple products into a single dose), education (especially regarding side-effects), "smart" pill bottles, and member communication/engagement.

Text messaging and other digital communications have proven to be effective in increasing compliance rates. In a published research article⁴ - [BMC Medical Informatics and Decision Making](#) Huang et al. - dramatic improvements were documented:

Possible approaches continued

After participants in the intervention group received SMS reminders to take medication or those in the control group received no messages, incidences of delayed doses were decreased by 46.4 and 78.8 percent for those in the control and intervention groups, respectively. The rate of missed doses was decreased by 90.1 percent for participants in the intervention group and 61.1 percent for those in the control group.

Another study – Jay Thakkar, FRACP; Rahul Kurup, MBBS; Tracey-Lea Laba, PhD; et al. JAMA Intern Med. 2016;176(3):340-349⁵ – published in JAMA showed similarly impressive findings, with:

Mobile phone text messaging approximately doubles the odds of medication adherence. This increase translates into adherence rates improving from 50 percent (assuming this baseline rate in patients with chronic disease) to 67.8 percent, or an absolute increase of 17.8 percent.

The solution

While a combined approach to addressing this issue is warranted, all compliance initiatives should include a patient engagement component. By communicating with the patient, we can not only prompt the patient with reminders to either take a dose, or refill a prescription, we can use the touchpoint to educate them about why compliance is important. In most cases, they are weighing their options, and deciding

RxEOB[®]MercuryMessaging[™] is well equipped to target non-compliant patients, and communicate with them quickly and seamlessly.

not to refill medications because they view the value as less compelling than the cost they'll have to bear or the side effects they'll have to suffer. If these are cognitive choices, the only answer is to help them



According to a JAMA Internal Medicine published study, “Mobile phone text messaging approximately doubles the odds of medication adherence.”

understand the value of compliance. We can do this through well-timed education and reminders, sent conveniently to their mobile phone. Even better, if we can use that touchpoint to understand exactly what factors are driving their non-compliance, then we have the opportunity to help them address the specific issues that are most relevant to them. For example, if we can establish that cost is the issue (via a bi-directional text message exchange, for example), then we have the opportunity to find a solution — such as a coupon, a switch to generic or lower cost brand, or other support options.

The solution continued

RxEOB®MercuryMessaging™ is well equipped to distill massive amounts of claim data to target non-compliant patients and communicate with them quickly and seamlessly. It is preconfigured with a battery of compliance rules that target non-compliance with specific maintenance medication regimens, and can generate messages within minutes to those patients via SMS (text) and email as well as secure message. Mercury can be configured to send follow-up communications and will track the patient's compliance trend to determine if future communications are warranted.

How Mercury differs from other options

Speed to message is key. The faster one can identify a patient trending to non-compliance and message that member, the faster they can be nudged back toward compliance. The ability to educate, in addition to remind, is also key. Patients who understand why they should be compliant are much more likely to get there.

Mercury is designed to minimize false positives. For example, just before sending a message, Mercury automatically rechecks a patient's data to ensure that the patient still qualifies for the reminder message. If a patient just recently refilled the drug in question, that patient's message will be dropped from the distribution to avoid sending a message that asks the patient to take an action that they've already taken. Fewer false positives equals higher patient confidence in our messages.

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Expected outcome

Compliance will increase. Health plans will see potential STAR rating improvement with compliance gains in certain drug classes like diabetes and statin therapy, and, while drug costs might rise with increased compliance, overall health costs will generally see a net decline.



Discover for yourself

To find out how your health plan and its clients can benefit from the use of RxEOB®MercuryMessaging™, call us at 804-643-1540 or visit online at www.rxeob.com.

Sources:

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3. <https://www.ncbi.nlm.nih.gov/pubmed/22964778>
4. <https://bmcmedinformdecismak.biomedcentral.com/articles/10.1186/1472-6947-13-127>
5. Jay Thakkar, FRACP; Rahul Kurup, MBBS; Tracey-Lea Laba, PhD; et al. JAMA Intern Med. 2016;176(3):340-349.