# What's It's Going to Take to Help Patients Stick to Therapy?

Innovative technology personalizes medication adherence to remove financial, educational, and behavioral barriers







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"My cousin, a working single mom, had a seizure in the shower, hit her head and died. She had medication to effectively prevent seizures, but she'd run out and couldn't afford to refill it yet. She was hoping maybe next month she'd be able to afford her meds again."

Maura Quint, a humor writer and activist known for her contributions to *The Onion, McSweeney*'s and The New Yorker, shared this story on Twitter<sup>1</sup> in May 2019. Within a few days the post had been retweeted five thousand times. The common thread among Quint's followers: You are not alone. Your cousin was not an anomaly. That could just as well be me.

People have not followed through with their provider's recommended drug therapy, to one degree or another, since the earliest days of paper prescription pads, and likely well before. A supposition, true, but the anecdotal evidence holds up. It was 2003 before medication adherence came under the weight and measure of global health scrutiny in the form of a report from the World Health Organization (WHO) calling for the healthcare industry to address the problem.<sup>2</sup>

And healthcare organizations did—or they tried, at least, with the limited view they had 20 years ago of the barriers that lead patients to abandon a prescription at the pharmacy, skip doses, or quit taking their medication altogether. A decade would pass before the scope of the challenge became clear with data from the U.S. Food and Drug Administration<sup>3</sup> (FDA) that showed half of Americans not taking medication as prescribed.

"You can follow the breadcrumbs of medication non-adherence that ultimately leads to poor outcomes and treatment failures that lead to a plethora of comorbidities and can cascade into Emergency Department visits, hospital readmissions, and even death," said Colin Banas, MD, MHA, chief medical officer of DrFirst.







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In fact, non-adherence contributes to about 125,000 preventable deaths each year in the U.S.4 where half of all treatment failures and one-quarter of unnecessary hospital readmissions stem from prescription abandonment.

"Hospital and health systems are laser focused on reducing these unnecessary readmissions, especially among high-risk patients with a chronic disease diagnosis," said Banas. "Negative outcomes for these patients are an indicator of care quality that can ultimately leave the hospital footing the bill in more ways than one," Banas said.

Getting and keeping older patients on therapy is more challenging as they age and more complicated given the prevalence of chronic conditions. In the U.S. today, six in 10 adults have one chronic condition, while four in 10 have more than one chronic condition, according to the CDC.5 About half of these patients struggle to take their medications as prescribed, putting them at risk for serious health risks.

# Shifting the burden

There was a sense in the early days of digital healthcare that electronic prescribing would solve many of the reasons behind prescription abandonment. Surely paper prescriptions – so easy to lose track of and frequently hard to read if the doctor's handwriting was barely legible – were the cause of patients not getting to the pharmacy on time or at all. That assumption proved false.

The school of thought was that paper prescriptions failed because they relied on the patient to be the delivery model, Banas said.

"The industry thought by sending the prescription to the pharmacy electronically, it would remove the patient burden of bringing a physical piece of paper into a pharmacy and ultimately improve fill rates," he said. "But all e-prescribing did was shift the burden to the pharmacy. Now the pharmacy does the work of adjudicating and filling the prescription, but because 25% of prescriptions aren't picked up, 15 days later they do the extra work of unfilling and restocking the prescription. Pharmacies are left with a lot of frustration and inefficiency."

E-prescribing may not have improved adherence as the healthcare industry hoped, but it did open a window into the patient journey with valuable insight from the point of prescribing to the point of sale. Today, that insight informs the digital strategies aimed at removing the three primary barriers that prevent patients from filling a prescription cost, education, and procrastination.

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COLIN BANAS MD, MHA Chief Medical Officer DrFirst







## Rising costs, uncertain economy compromise adherence

While financial barriers have traditionally been the most common challenge to getting those with a new prescription on therapy, rising costs and a tightening economy can quickly lead to a patient quitting medication midcourse.

According to a Timely by DrFirst survey.6 more than a third of Americans report making hard compromises in recent months if they can't afford their prescription medication. Timely works to improve adherence to medication through collaborations with life science brands.

The survey of 1,023 healthcare consumers explores how the economy is affecting people's ability to afford their medications. With consumers reporting a wide range of experiences, from the economy having little or no impact on prescriptions for some, to others who have quit drug therapy altogether due to cost, the findings show adherence at key points of risk and opportunity in the patient journey.

Consumers said the economy has led to them:

- Finding it harder to afford their medication (25%)
- Comparing costs at different pharmacies to find the lowest price (25%)
- Using coupons and discount cards to save money (21%)
- Taking less than the prescribed dose to make the medication last (20%)
- Accessing patient assistance programs, such as those available from pharmaceutical manufacturers (18%)
- Quitting their medication (15%)

Whatever is, or isn't, going on with the economy at present, one thing is certain: medication costs have been on the rise for several years running. According to a report from the Office of the Assistant Secretary for Planning and Evaluation, prices for 1,216 products increased during the 12-month period from July 2021 to July 2022 at a rate that exceeded inflation. The average price increase for these drugs was 31.6%. In fact, some drugs in 2022 increased by more than 500%.

"Folks are really having to make critical decisions about what they can and can't afford – can they fill the car with enough gas to get to a care visit, and if they can get there, can they afford their co-pay? Or maybe they do fill that blood pressure medication, but they split it in half because they want it to last longer. These are choices that can have a tremendous impact on a person's health," Banas said.

Cost-related nonadherence is not only on the rise—it's on tap to become a new leading cause of death in the U.S. by 2030, surpassing diabetes, influenza, pneumonia and kidney disease, according to research by nonprofit West Health Policy Center.8

Complicating matters is the fact that patients and providers often aren't accustomed to talking about the financial component of the medication being prescribed. In fact, 51% of consumers in the Timely by DrFirst survey said they've never discussed options to save money on prescriptions with their doctor; something Banas calls "a missed opportunity."







"I want to point out the positive within that data point, which is that of the 49% of patients who said they are comfortable having these conversations with their provider, the vast majority - 83% - say that doing so helped them find a more affordable option. It underscores what we already know: that physicians and pharmacists are great resources for patients concerned about cost."

# No blame, no shame in forgetting

While financial barriers are bubbling to the top in today's costconscious world, patient education and behavioral barriers also prevent patients from sticking to recommended medication therapies.

Without clinical education at key points in the therapeutic journey, Banas said patients "often don't understand why it's important to take their medication, or they may let concerns over potential side effects keep them from starting therapy, not realizing that the biggest threat to their health is what will happen if their condition is left untreated."

The third leading barrier to adherence comes down to a basic truth about human behavior—people forget. And sometimes they put things off.

## The point of inception

Healthcare organizations need tools with digital touchpoints across the patient journey to address the root causes of these leading barriers to adherence—cost, education, forgetfulness and procrastination. That starts by extending the reach of the provider beyond the exam room to support the prescribing decision throughout the patient's therapeutic journey, according to Andrew Burns, chief growth officer for Timely by DrFirst.

Supplying this guidance at the point of inception – the period immediately after the care visit prior to the patient picking the medication up at the pharmacy – can be the difference between a patient starting therapy or abandoning a prescription and leaving their condition untreated.

"That is that make-or-break moment in the patient journey when we talk about the point of inception," said Burns. "Whatever does, or doesn't, happen there has huge bearing on the course of treatment and the chance of it leading to a successful outcome for the patient."

While care providers may clock slightly different start times for the point of inception, Burns said there's general agreement that it comes around 15 minutes after the patient leaves the exam room—enough time for them to get in their car and get ready to leave. That's the ideal time, as it turns out, for the patient to receive the first secure text message in support of a new medication. Being able to bridge the adherence gap for patients at the point of inception is a major differentiator for Timely.



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**ANDREW BURNS** Chief Growth Officer Timely by DrFirst









DrFirst's core business of electronic medication management gives Timely unique reach into the patient experience, explains Burns, "so as an adherence solution, we can start reinforcing the clinical decision within minutes - not hours or days later - for all patients receiving a prescription."

The depth of the company's EHR integration – currently at 300 electronic health records and growing – positions Timely to drive adherence results with unparalleled scale.

"Our technical differentiation is significant, but the human touch of our patient engagement is equally important," he said. "Every patient has different needs depending on their diagnosis, whether they're just starting therapy, have a new commercial health plan, or a host of other factors. Real-time insights allow us to tailor each patient experience initiated by the text message with the most timely, relevant, and appropriate information, so that each patient gets the communication they need to get and stay on therapy when they need it most."

Personalized mobile communication starts with an alert delivered to the patient's mobile phone asking them to review prescription details and pharmacy information. The patient has an opportunity to view a clinically relevant educational video, depending on the medication they were prescribed. Access to copay assistance and drug savings cards are delivered before they arrive at the pharmacy, avoiding the potential for sticker shock.

#### The end of sticker shock

"Sticker shock continues to be a barrier to medication adherence, and there is simply no reason for it," said Burns. "Patients should never be surprised by the cost of medication at the pharmacy counter."

Getting financial information and access to cost-saving opportunities at crucial times, however, can help patients better find the resources they need to afford their medication, or work with the provider to find an optimal alternative. Providing copay information, for example, can help patients anticipate their financial obligation. The ability to access coupons in real time also helps to increase adherence.

Without such assistance in place, healthcare organizations are effectively leaving the patient to their own devices, according to Burns.

"Integration is everything when delivering financial assistance tools," said Burns. "Otherwise, if a patient wants a coupon card, they have to go get the coupon card app and Google it or print it out to take with them to the pharmacy. Timely, on the other hand, does all of that for the patient in real time, thanks to DrFirst's deep EHR integration."

# Financial transparency

Indeed, the importance of financial transparency and support became readily apparent to Magnolia Regional Health Center, a multi-specialty hospital in Corinth, Miss., as they worked with DrFirst to improve medication adherence among congestive heart failure (CHF) patients.

While antithrombotic or anticoagulant medications are commonly prescribed to CHF patients following a hospitalization, some have incredibly high out-of-pocket costs. Therefore, some patients don't adhere to their medication regimen, according to Brian Davis, CIO at Magnolia.







"The team theorized that if patients knew their out-of-pocket costs in the exam room, they could ask the provider to switch to a less expensive drug," Davis said. "The lower cost might make them more likely to fill the prescription."

From July 2020 to September 2021, Magnolia Regional studied medication adherence and prescription fill rates for 417 patients with CHF. When medications were broken down by drug class, first-fill prescription abandonment for more expensive antithrombotics was higher in readmitted patients (50%) than in non-readmitted patients (35%). However, when prescribed less expensive anticoagulants, first-fill prescription abandonment hit just 31% in readmitted patients and 32% in non-readmitted patients.

"With prescription drug prices rising at every turn, patients need price transparency and the ability to discuss options with their doctors during office visits," Davis advised. "The goal is to allow patients to compare the cost of prescription drugs, request a similarly effective option, and better understand what they will need to pay before they are standing at the pharmacy counter. By reducing the frequency of prescription abandonment due to sticker shock, a real-time prescription benefit solution in tandem with complete medication history data can help hospitals and health systems address medication adherence challenges in vulnerable patient populations."

# Relevant clinical education. personalized reminders

In addition, by offering access to a variety of educational options, providers can demonstrate the value of starting and staying on their medications.

"Clinical education has to deliver relevant information that's been carefully curated behind the scenes to bridge gaps in patient knowledge, so the patient knows what to expect and why to take the medication," said Banas.

Providing personalized behavioral reminders at critical points in the therapeutic journey – from first fill to renewal – can help patients overcome procrastination. Technology prompts patients to act by contacting them at the appropriate time, making it possible for the message to resonate and stand out from the information overload that consumers have to deal with in today's electronic world, Burns pointed out.

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**BRIAN DAVIS** CIO Magnolia







# **Unprecedented adherence results with Timely**

Every patient encounter leading to a new prescription presents an opportunity to address the challenges of medication adherence. By offering the right information and resources at crucial moments, patients are empowered to initiate and maintain their provider's prescribed therapy, resulting in healthier outcomes with measurable results.

Timely by DrFirst is an innovative end-to-end digital adherence solution that collaborates with over 80 life science brands, reaching a rapidly growing audience of 50 million patients and 200,000 providers. This personalized mobile engagement experience reduces prescription abandonment by extending the reach of prescribers, supporting patients throughout their therapeutic journey, beginning from the critical decision-making point to initiate and maintain treatment.

With carefully customized message delivery strategies, Timely creates an impact exactly where the adherence stakes are highest. Due to DrFirst's EHR integration, Timely can influence one in four new prescriptions written in the U.S. by addressing the most prevalent and expensive barriers to medication adherence. This comprehensive approach delivers the clinical education patients require to understand their medication, the financial support to improve affordability, and personalized behavioral reminders at key points in their treatment journey, from first fill to renewal, helping patients stay on track with their provider's plan.

Timely's unique digital strategy measurably impacts adherence, achieving improvements of up to 14% in the last year. In fact, patient engagement rates with Timely are as high as 65%, and patient opt-out rates are less than 1%.

"Many of the adherence solutions on the market today are limited to patient messaging that occurs outside of that critical window in the healthcare journey between the doctor's office and the pharmacy," said Burns.

In contrast, Timely's digital approach partners with life sciences brands to offer clinical and cost insights to providers within the EHR, which allows for value creation throughout the course of therapy. "Because we're an extension of the EHR, we can engage the physician in-workflow to keep them educated, informed, and connected to their patients well beyond the exam room," Burns added.

EHR integration ensures enough reach to drive significant results at scale, enabling patients to receive personalized prescription, cost, and education notifications on behalf of their provider, ultimately promoting improved adherence from the point of inception and throughout the treatment journey.







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Learn more or request a demo: Timely (timely-health.com)





