

## Half of Your Patients Aren't Taking Medication Correctly. What Can You Do About It?

When it comes to performance goals, 50% is not a good score. If you scored 50% on a test or safely drove home from work 50% of the time, that would constitute a really poor outcome.

Yet, the average patient achieves only 50% [medication adherence](#). This equates to patients taking the correct dose at the right time consistently, only half of the time. This is in stark contrast to the [therapeutic goal](#) of 80% medication adherence.

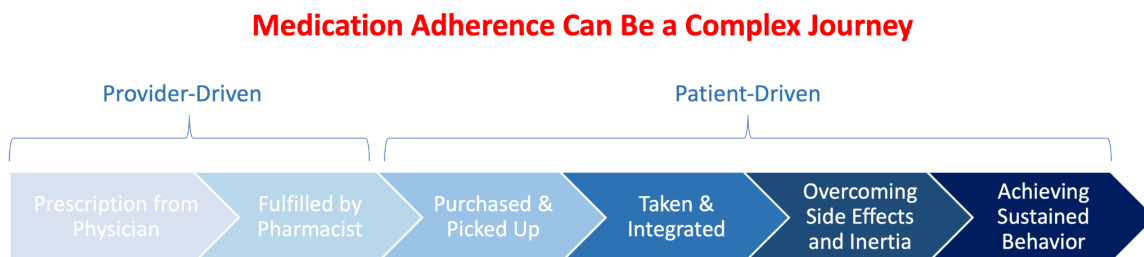
For patients, achieving optimal therapeutic effect from medications is fundamental to curing, halting, or preventing disease and easing symptoms.

For providers, achieving medication adherence is a fundamental performance quality issue. This is particularly impactful when you consider that 3.8 billion [prescriptions](#) are written in the US annually.

### Why medication adherence is a provider performance quality issue

Physicians have the ability to diagnose and choose the most effective and least harmful treatment for their patients. However, regarding medication adherence, this approach equates to a provider's responsibility ending once they write a prescription.

In contrast, [research](#) shows that medication adherence is a more complicated cycle than standard approaches would indicate. As shown in Figure 1, medication adherence is a chain of initial and ongoing decisions and behaviors that include provider-driven and patient-driven activities.



*Figure 1: Medication adherence is a complex chain of initial and ongoing decisions and behaviors that include provider-driven and patient-driven activities.*

Physicians have two primary treatment avenues, particularly for patients with one or more chronic illnesses: pharmacological and lifestyle. Out of these two, providers have the most control and impact over the patient's medication regimen.

Yet, they are not achieving adequate adherence.

This affects the physician's performance and thwarts their oath-driven efforts to "treat a sick human being." In today's [value-based care](#) environment, a lack of attention to comprehensive medication adherence significantly affects a provider's quality outcomes metrics. It hurts their ability to achieve performance-based financial targets.

A holistic and collaborative approach to medication adherence honors that pharmacological treatment requires a set of initial and ongoing decisions and behaviors over time. This journey can be more difficult based on the patient's clinical picture and their specific barriers.

According to [research](#), these barriers include:

- Poor provider-patient communication
- Inadequate knowledge about a drug and its use
- Unconvinced of the need for treatment
- Fear of adverse effects of the drug
- Long-term drug regimens
- Complex regimens that require numerous medications with varying dosing schedules
- Affordability and access issues

These barriers make it challenging to follow the prescribed protocol. For example, poor communication of medical information is responsible for nearly 50% of all [medication errors](#). Other [research](#) indicates that 40-60% of patients can't recall their physician's expectations of them 10-80 minutes after their appointment.

## **The cost of poor medication adherence affects health, quality, and cost**

Medication adherence is a serious public health problem that isn't receiving adequate attention. [Research](#) demonstrates that nonadherence can lead to a host of harmful outcomes, including:

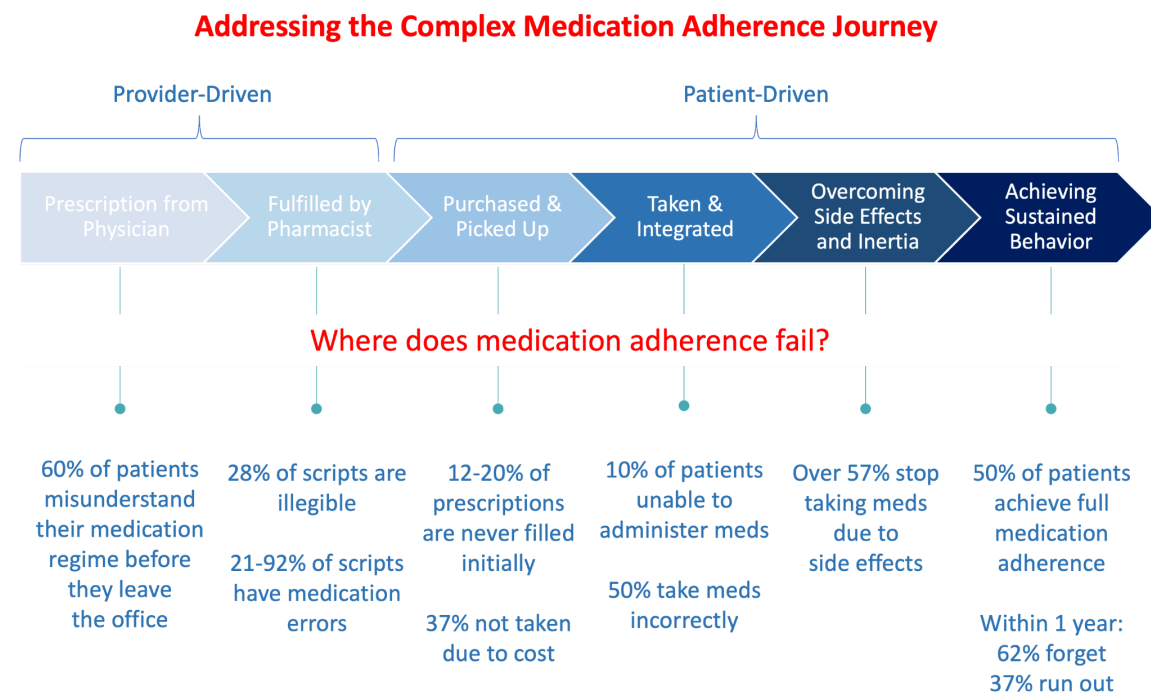
- Treatment failure
- Increased hospital readmissions
- Additional medical or surgical procedures
- Unnecessary healthcare costs

- Increased mortality
- Reduced functional abilities
- Lower quality of life

For example, [hospitalization risk](#) was more than double for patients with diseases like diabetes, hypercholesterolemia, hypertension, or congestive heart failure who were non adherent to prescribed therapies.

Ultimately, nonadherence has been [estimated](#) to cause at least 125,000 preventable deaths and \$100-300 billion in [preventable medical costs](#) each year.

As Figure 2 highlights, various research studies provide clues as to why medication adherence fails in each phase of a patient's treatment journey.



*Figure 2: Various research studies indicate why medication adherence fails and in what phase of the patient's treatment journey.*

This realization creates an opportunity. By equipping providers, health systems, and practices with evidence-based tools, patients can gain more direct support and avoid common pitfalls.

## **An innovative approach to medication adherence empowers providers and patients to achieve better health, cost and quality outcomes**

By approaching medication adherence as a cycle of decisions and behaviors rather than a “one-and-done” prescription-writing activity, providers can vastly improve their patients' treatment, outcomes, and cost.

Today, there are a host of effective and novel tools and strategies that enable physicians and their care teams to realize higher levels of adherence, as well as benefits to health outcomes, care quality, and pay-for-performance.

### **How providers can address medication adherence**

Integrated, multimodal, and digital technologies [have been shown](#) to increase medication adherence. Successful approaches proactively assess and address common barriers and tailor a patient's regimen based on personal risk factors.

Here are three strategies to increase overall patient medication adherence.

#### **Strategy #1: Assume adherence issues will occur and plan for them**

Research indicates that, as [medical complexity increases](#), so does the risk of medication nonadherence. Multi-morbidity – having two or more chronic medical conditions – and polypharmacy – taking five or more medications simultaneously – greatly increase a patient's likelihood that they will not be able to sustain desired therapeutic levels.

With 39% of adults over 65 taking five or more daily medications, it's prudent to approach most patients with the supposition that they will face some hurdles toward achieving medication adherence.

Armed with this assumption, physicians and their care teams can further tailor a patient's medication regimen based on general and specific factors that could create barriers. For example, if a patient is housebound, providers can arrange for mail-order pharmacy delivery. Or, if a patient tends to forget to refill their prescriptions, a clinician can set a prescription to auto-fill.

#### **Strategy #2: Integrate interventions and tailor to patient risks**

According to the World Health Organization, there are [five dimensions](#) of individual patient risk factors for nonadherence, including:

- Socio-economic and demographic
- Therapy-related
- Health care system or related to the health team
- Individual and condition-related

In addition to types of risk, there are three types of [medication nonadherence](#).

**Primary nonadherence** occurs when a provider writes a prescription, but the medication is never filled or initiated. This is also referred to as nonfulfillment adherence.

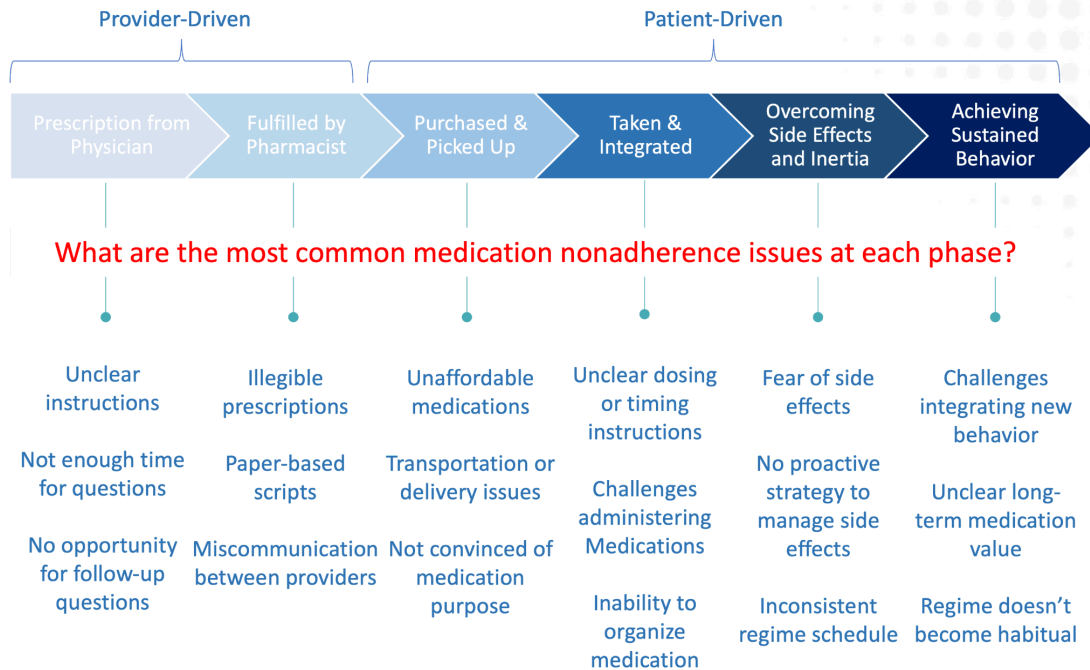
**Non-persistence** occurs when a patient decides to stop taking a medication after starting it without instructions from a health professional. Most non-persistence is unintentional and results from miscommunication between patients and providers.

**Unintentional nonadherence** can also be caused by a lack of capacity, ability, or resources, preventing patients from implementing their decisions to follow treatment recommendations.

Conversely, intentional nonadherence or nonconforming is due to a patient's beliefs, attitudes, and expectations that cause them to skip or take incorrect doses, take medications at the wrong times, or even take more than was prescribed.

Utilizing the patient's medication journey in Figure 3, physicians and their care teams can create multimodal interventions for common adherence issues at each phase. Proactively raising and planning for frequent barriers can help patients adopt new medications more seamlessly.

### Addressing the Complex Medication Adherence Journey



*Figure 3: Specific barriers are common at each phase as a patient adopts a new medication or regimen.*

Research supports that addressing specific barriers at the right time in the adoption cycle can help patients reach higher levels of adherence:

- Tools like medication calendars, medication charts, drug cards, and dosing information sheets were correlated with [higher adherence](#).
- E-prescribing via an electronic medical record supports higher adherence rates. In one [study](#), it achieved rates above 80%; in [another](#), it increased first-fill medication adherence by 10%.
- [Multifaceted intervention](#) approaches were shown to achieve adherence rates over 80% for hypertension control, including techniques like:
  - o Outreach to provide behavioral support for nonadherent patients or who have poor control
  - o Using pharmacists to provide proactive education and outreach to counsel patients
  - o Initiating chronic care management programs for ongoing support and follow-up
  - o Implementing disease-specific health education classes
  - o Providing training to improve physician-patient communication and shared-decision making

- Engaging family caregivers improved medication adherence and disease management in numerous studies.
- Create a medication regimen that encompasses all medications and is as simple as possible. Polypills or fixed-dose combination pills may be appropriate solutions.
- [Remote patient monitoring](#) devices, like home blood pressure monitors, were combined with other strategies to increase hypertension control from 68% to 79%.

### Strategy #3: Help patients see the value of medication to goals

Therapy adherence is a primary determinant of treatment success. It's paramount that a physician explain and confirm the patient's understanding of a medication's purpose, therapeutic goal, and effective usage.

If patients don't comprehend and accept the importance of drugs to their disease treatment or prevention, they won't be committed to the required change in routine and behavior.

[Studies](#) show a direct relationship between patients' perceptions of their need for prescribed treatment and medication adherence. Additionally, a direct correlation exists between patients' sense of empowerment and self-efficacy and medication adherence.

Motivational interviewing is one of the fundamental tools for uncovering a patient's health goals and aligning them with pharmacological treatment. Time-strapped physicians can implement team-based care, pharmacist- or care manager-led engagement, and digital tools to support their efforts to demonstrate how taking prescribed medication consistently over time can benefit their health goals.

Motivational interviewing, an [evidence-based](#) counseling style, is effective in studies on [treatment adherence](#). This approach engages patients around health issues and goals, focusing on resolving an individual's ambivalence around making positive change.

### ThoroughCare has partnered with DayaMed to equip providers and support the patient's medication adherence journey

As a comprehensive care coordination platform, ThoroughCare offers evidence-based and proven approaches that enable providers and care teams to deliver value-driven programs like Chronic Care Management, Remote Patient Monitoring, and Annual Wellness Visits.

Through a preferred partnership, ThoroughCare is offering access to DayaMed's medication management platform. DayaMed offers high value digital tools needed for a care team to increase medication adherence, including:

- 360-degree view of medications
- Easy medication reconciliation
- Automated medication reminders and schedules
- Telemedicine support for patient education

With ThoroughCare and DayaMed, providers can improve medication adherence, meet quality goals, and realize better health outcomes.