

Medication Adherence

Improve Patient Outcomes and Reduce Costs

Developed in partnership with



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How will this module help me?

- 1 Defines medication adherence and its importance for patient health.
- 2 Recognizes the importance of developing a routine process for inquiring about medication adherence.
- 3 Identifies top reasons for patients' intentional nonadherence to medications.
- 4 Provides answers to common questions about how to involve staff and patients in identifying nonadherence and changing behaviors.



Introduction

What is medication adherence?

A patient is considered adherent if they take 80 percent of their prescribed medicine(s). If patients take less than 80 percent of their prescribed medication(s), they are considered nonadherent.¹

How common is medication nonadherence?

Patients don't take their medicine as prescribed about half the time.^{2 R3}

Why is it important to assess adherence?

Patients are often reluctant to tell their doctor if they do not take their medication as prescribed. Barriers to adherence can include a lack of understanding around the medical diagnosis, the need for treatment, or an inability to obtain medication due to cost, scarcity, or time conflicts. Patients may feel shame or mistrust about the issues that limit their disclosure of whether they take medications as prescribed. Unless a patient's medication-taking behavior is understood, therapy may be needlessly escalated.

Medication nonadherence can lead to unnecessary hospitalization and emergency room (ER) visits, increased costs to the patient and health care system, potential harm to the patient, and unnecessary work on the part of the practice during the visit. The following STEPS can help identify and improve patients' adherence to their medications.

Eight STEPS to improve medication adherence

1. Consider medication nonadherence first as a reason a patient's condition is not under control.

2. Develop a process for routinely asking about medication adherence.

3. Create a shame- and blame-free environment to discuss medications with the patient.

4. Identify why the patient is not taking their medicine.

5. Respond positively and thank the patient for sharing their behavior.

6. Tailor the adherence solution to the individual patient.

7. Involve the patient in developing their treatment plan.

8. Set the patient up for success.



Consider medication nonadherence first as a reason a patient's condition is not under control.

Think about nonadherence when reviewing patient medications, especially when considering escalating therapy or adding another medication. Many physicians are surprised to learn that:

- Patients typically do not take their medications half of the time.^{2 R3}
- Approximately a quarter of new prescriptions are never filled.^{4 R5}

- Most patients who decide not to fill a prescription or take a medicine do not tell their doctor.

Escalating therapy when nonadherence is hidden can be very dangerous, costly, and time-consuming. If a physician prescribes another medicine to an already nonadherent patient, this can have catastrophic results if the patient suddenly starts taking all their medicines. For example, consider a patient who is hospitalized and is given medication according to their home medication list. The hospital physician is unaware that the patient had not previously been taking all their prescribed medications. When the patient begins their medications (suddenly adherent), the patient may develop severe hypotension or hypoglycemia, resulting in the need for additional care and management.

Q&A

If a patient is nonadherent, are they nonadherent to all their medications or just one?

It depends. Patients may be adherent to one medicine and nonadherent to others depending on their beliefs and understanding about each medication as well as their costs.

What is primary medication nonadherence?

Primary medication nonadherence is failing to fill or take a new prescription. Before e-prescribing, physicians were unable to track whether a patient filled a new prescription; with this technology, practices are now able to identify prescribed medications that were never filled.

How common is primary medication nonadherence?

Approximately a quarter of patients never fill a new prescription.^{4 R5}

2

Develop a process for routinely asking about medication adherence.

Every practice should develop a tailored process to assess adherence. Simply asking “Are these your meds?” only addresses whether the current list of prescribed medications is correct and does not address the patient’s medication-taking behavior. One option is for the medical assistant (MA) and/or receptionist to offer the patient a pre-visit questionnaire at check-in that includes questions about medication usage. The questionnaire may be accompanied by a list of the patient’s current medications with directions to cross out medications they are no longer taking and circle any they don’t take regularly or would like to discuss. You can then review this questionnaire with the patient during their visit. It is often more convenient for the patient to look at a simple paper list in their hand rather than a computer screen at some distance.

Another option is having the MA or nurse gather medication information when rooming the patient, alerting the physician of any potential issues to discuss during the visit.



Q&A

I'm already so busy. Won't this take a lot of time?

With the approach outlined above, much of the medication review is done during the patient's time in the waiting room and is completed before the physician enters the room. The MA or nurse who rooms your patients or makes pre-visit phone calls can assist in reconciling medications, and can initiate the conversation about adherence. In fact, identifying nonadherence before the visit may save time in the long run. For example, if you know that the patient is nonadherent, you can save time by addressing nonadherence as opposed to ordering another medicine or changing the dose.

I've learned that patients don't always remember or even know their medications when they come to the office. Do you have any suggestions?

Medication review does not need to occur while the patient is on-site. Staff may reach out to all new patients before their upcoming appointment to conduct an in-depth medication review and discuss medication-taking behavior during a pre-visit phone call. This can save time during rooming and allows patients to look at their medication bottles at home. A call to a family member or their pharmacist may be needed if the patient is unsure of their medications.

I've heard of practices that ask patients to bring in their medications. Could that work?

This is called a "brown bag review," and it works for some practices. Patients are asked to bring in all medications, discontinued medications, and supplements. During this review, medication duplication and medication nonadherence may be identified (e.g., too many refills left, pill counts may be off, last refill date can be noted). This is an effective way to understand all the patient's medications, including those that have been prescribed by other physicians, at other organizations, or in the emergency department.

How can I get patients in the habit of bringing in any new medications since their last visit with us?

Some practices ask their staff to call each patient the day before their appointment to remind them to bring in their medication list or medication bottles. Other practices include this message in automated reminder calls, letters, emails, or messages sent via the electronic health record (EHR) patient portal.

3

Create a shame- and blame-free environment to discuss medications with the patient.

The patient may have good reasons for not taking their medications and should be reassured that they can share their true medication-taking behavior without judgment. Some patients may be less reluctant to reveal

their true medication-taking behavior to a MA or nurse; often due to concerns that their physician may be disappointed or angry to learn of their nonadherence.



Q&A

Why is it important to create a shame and blame-free environment?

A shame- and blame-free environment encourages patients to be honest with their physician. Some patients start to take their medications a few days or weeks prior to seeing their doctor. This gives the false impression that the patient is always adherent. This behavior is known as “white coat adherence,” which allows patients to honestly say “yes” when a staff member asks if they are taking their medicine.

Can you give examples of nonjudgmental approaches I can use to ask my patients about their medication-taking behavior?

Asking patients, “Why aren't you taking the medications I prescribed?” is confrontational and suggests that you think the patient's nonadherence is their fault. Instead, try saying, “Many people have trouble taking their medications on a regular basis. Do you find that this is the case for any of your medications?” This removes blame from the patient, and allows them to share personal information about challenges they face or concerns they have.

4

Identify why the patient is not taking their medicine.

Medication nonadherence may often be intentional. Patients may make a rational decision to not take their medicine based on their knowledge, experience, and beliefs.

Factors related to intentional nonadherence.

Q&A

Why wouldn't a patient take medicine that would help them?

Some patients may not understand progressive illnesses, and may not understand that taking medicine for an asymptomatic condition could prevent adverse outcomes in the future. Patients are often focused on short-term benefits, and are unaware of the future implications that medication nonadherence can have on their overall health.

How should I approach reasons for nonadherence that may embarrass the patient, such as needing help getting to a pharmacy, not being able to pay for a prescription, or being afraid to admit that they do not understand the purpose of the medication?

You may be able to uncover barriers to adherence by listing these issues and asking if they can relate to any of the problems. Reduce the embarrassment by expressing that many patients experience similar challenges.

If a patient has transportation issues, they may benefit from a ride-share arrangement or a delivery service like mail-order pharmacies. If a family member is routinely picking up the medications for the patient, offer to send the prescription to a pharmacy conveniently located near the helper.

Patients who do not understand their diagnosis, medication, or treatment plan may benefit from group classes or a one-on-one session with an educator. Discussions about their condition and treatment options may help close the knowledge gap.

Overall, practices should help patients understand that medication concerns and challenges are common. Resources from the practice, organization, and community can help eliminate barriers and promote medication adherence.

Why do patients stop taking their medicine once their condition is under control?

Physicians often assume that patients understand that they will need to be on a medication for a long period of time, and therefore fail to explicitly inform their patients of this or explain to their patients why it is necessary. Once a patient's condition is controlled, such as when symptoms of depression improve with medication, the patient may think the problem has resolved and may discontinue their use of the medication. Inform your patient that they may need to take the medicine for the rest of their life and why.

Cost of medication is an issue for many of my patients. What can I do to help?

Check that the drug you're prescribing is on the patient's insurance formulary. Patients are embarrassed to tell you that they cannot afford a drug. Selecting and prescribing medications known to be on a discount list can decrease the cost regardless of insurance. Pharmacy price comparison websites, such as GoodRx, are an additional resource to help reduce medication costs. Ask a care manager or someone in financial services at your practice to help patients find financial assistance and insurance plans that may offer better prescription coverage.

What are the potential effects of using generic medicines on adherence?

Prescribing generics may help some patients overcome financial barriers to adherence. However, patients and physicians are often not aware that the appearance of generic pills may change frequently—adding to confusion or general mistrust. Patients should be encouraged to ask the pharmacist about changes to their medication to confirm the pills and administration instructions are still correct. This is an opportunity for patients to engage in their own care. Changes in pill color and shape are associated with lower adherence.

Is medication nonadherence ever unintentional?

Yes, nonadherence is occasionally unintentional resulting from forgetfulness or low health literacy. Frequent changes in a patient's schedule, such as shift work, can lead to unintentional nonadherence. Patients who often forget to take their medication may find pill boxes useful, which organize medications by day of the week and time of day make it easy for patients to stay on schedule because they know exactly when they need to take each medication. Setting alarms, phone alerts, and calendars may also help patients remember to take medications on time.

5

Respond positively and thank the patient for sharing their behavior.

Physicians are often surprised to hear that their patient is choosing not to follow their advice. Once a patient shares their nonadherence with care team or the physician, the physician should respond positively. For example, the physician may consider saying, “Thank you for letting us know that you are not taking your medications as prescribed. Can we talk through this together?” A positive and thankful response will make patients more comfortable with sharing their reasons for not taking the medicine. On the other hand, scolding patients may encourage them to withhold their true medication-taking behavior.

Q&A

How can I talk with patients in a way that improves their medication adherence?

Inadequate patient-physician communication may account for 55% percent of medication nonadherence.⁶ Communication and medication adherence are connected. Therefore, it is important to understand the patient's rationale for nonadherence, and engage them in further medication decisions. Patient engagement often increases the chances that adherence will improve.⁵

6

Tailor the adherence solution to the individual patient.

Each patient may have a unique reason for not taking their medicine. By identifying and discussing these unique reasons you can develop a personalized approach that promotes adherence in the future.

Q&A

One of my patients skips his medications because of shift work and a busy schedule—despite reminders and pillboxes. What should I do?

Using “forgiving drugs” is often helpful in addressing this form of nonadherence. These are drugs with longer half-lives that may be given once a week or once a month and have little if any symptoms upon discontinuation. For example, fluoxetine has a long half-life compared to other commonly used antidepressants, and may be a good choice for treating depression in this situation.

It may also be helpful to inquire about the patient's schedule, and identify aspects of their daily routine that can be altered to provide an opportunity to take their medications. Encouraging a patient to set a phone alarm during the visit is another strategy to consider. Asking the patient to assign a family member or friend to be their “health coach” to remind them about medications can also provide benefits. Some practices employ community health workers and use smart phone technology that allows for “face time” visits with patients who take high-value medications, such as antibiotics or retroviral therapy. Directly observed therapy (DOT), as promoted by Partners in Health for drug-resistant tuberculosis (TB), has been found to be of high value when resources are available.

How can I simplify a treatment regimen to encourage adherence?

Adherence increases as the frequency of dosing decreases. You can try simplifying a patient's dosing schedule by adjusting medicines so that they can all be taken at the same time of day. Choosing long-acting drugs is also useful if the dosing burden is too complex. If possible, consolidate medicines by using combination products. Ask the patient what time of day is most convenient for them to take their medications. Try to arrange for all medications to be taken at the same time each day. For example, note that not all statins need to be taken at bedtime.

If I inform patients of potential side effects of a medicine, won't that scare them and add additional reasons for nonadherence?

Patients are entitled to know what might happen when they take a medicine. Informing patients of potential side effects develops trust, engages the patient, and gives the patient the opportunity to develop the best treatment plan together with the physician. Include the treatment plan and any potential side effects in the after-visit summary.

7

Involve the patient in developing their treatment plan.

Patients who are included in decisions about the medications are more likely to adhere to their treatment plan. Before starting a new medication, you might offer the patients a choice: “We could either start a blood pressure medication today or you could make some other changes to see if you can control your blood pressure without medication. To control your blood pressure without medication, try to exercise more often and start a low salt diet. It's also important that you monitor your blood pressure at home three times a week to make sure you're on track. When you come back in a few weeks, we can re-assess your blood pressure and discuss options. Which do you prefer?”

Q&A

How do I know if my patient understands their treatment plan?

The “teach-back” method is a good way to find out if the patient understands their medications and the treatment approach you recommend. During the expanded discharge process at the end of the visit (see the [rooming and discharge module](#) for more information), someone on the team, such as the nurse or MA, asks the patient to describe the next steps as he or she understands them. The patient would then “teach” the team member about the next steps. This gives the team member the opportunity to fill in any gaps in the patient's understanding of his or her treatment plan or medication regimen. It also provides an opportunity for the team member to expand on details or answer questions. The care team should also ensure that the patient has written instructions to take home.

One of my patients has consistently elevated blood pressure yet remains nonadherent to prescribed medications. I'd like to see if a new medication improves adherence. Do you have any suggestions?

As described previously, patients have numerous reasons for intentionally not taking their medication. Start by trying to understand why this patient is not regularly taking the medication previously prescribed. Sometimes it helps to negotiate with the patient and agree to stop a less essential medication, at least for a time, while the patient tries the new medication. Another option is to offer lifestyle changes to address the elevated blood pressure, such as increasing exercise and decreasing salt intake. Alternatively, you may suggest starting with a lower dose of a new medication to acclimate the patient to the potential side effects. Finally, you might suggest a brief trial of the new medication with a plan to reassess together in a few weeks. This will reassure the patient that if the new medication doesn't agree with them, they will be able to stop taking it. If the patient is still hesitant to take the new medicine, accept their reluctance with plans to re-evaluate together in the near future.

8

Set the patient up for success.

Make it easy for patients to adhere to their medication regimen. One simple way for your practice to achieve this is to give patients an updated medication list at the end of each visit that highlights any changes to their treatment plan. If the patient agrees, you may also ask if the family or caregiver would like an extra copy. Patients who need assistance may give family members permission (proxy) to access their electronic chart.

Q&A

How can I predict which patients won't take their medication?

It is very difficult to predict which patients will be nonadherent. Most patients will not tell a physician that they do not plan to start their medicine. Encourage your patients to contact you if they decide not to fill the medicine. Let them know that they can tell you this without fear of judgment, and that you are committed to understanding any concerns they may have or obstacles they may encounter. If the patient calls, primary nonadherence can be addressed.

Preventing primary nonadherence is particularly important with certain drugs, such as antiplatelet therapies after a stent is placed. Some EHRs alert the practice if certain medications are not picked up. Alternatively, when prescribing electronically a “note to the pharmacist” area can be used to request notification if the medication is not picked up.

If I start a patient on a new medication for a chronic illness, should I tell them that they will be on it indefinitely?

Yes. Patients are often unaware that medicines should be taken for an extended duration, especially when the directions on the label state “take one pill a day for three months.” The patient may misinterpret these instructions, and will stop taking the medicine after three months. Physicians are often reluctant to inform a patient of long-term therapy because they fear it will increase patient's resistance to treatment or may make the patient depressed. Some or all of those fears may be realized, but it is always best to be clear with your patients about the importance of their medication and the role it plays in improving their health.

What is the financial impact of medication nonadherence?

Increasing medication adherence is good for the patient as well as the bottom line. Medication nonadherence is responsible for one-third to two-thirds of all medical hospital admissions, over 10 percent of hospital readmissions, and nearly one-third of preventable ER visits.^{7,8} Moving to an accountable care organization (ACO) model may allow physicians to access resources (health coaches, community health workers, or visiting nurses) to assess patient adherence in their home setting.

Conclusion

Addressing medication nonadherence is critical for patient health and safety, and will allow your practice to deliver the most effective care possible. This module provides information on medication nonadherence and suggests how you can discuss this subject with your patients. Use the strategies and tactics in this module to improve your patients' medication adherence.



AMA Pearls

Remember to ask

If we ask, patients will be more likely to tell us about their medication adherence; however, be sure to ask in a nonjudgmental and blame-free manner. Patients have their own reasons for nonadherence.

Spend to save

Every dollar spent improving adherence saves seven dollars in total healthcare costs.^{6 R7}



Learning Objectives

1. Define medication adherence and its importance for patient health
2. Recognize the importance of developing a routine process for inquiring about medication adherence
3. Identify top reasons for patients' intentional nonadherence to medications
4. Explain the importance of a personalized approach to medication adherence and patient involvement in treatment plans

Article Information

About the AMA Professional Satisfaction and Practice Sustainability Group: The AMA Professional Satisfaction and Practice Sustainability group has been tasked with developing and promoting innovative strategies that create sustainable practices. Leveraging findings from the 2013 AMA/RAND Health study, “Factors affecting physician professional satisfaction and their implications for patient care, health systems and health policy,” and other research sources, the group developed a series of practice transformation strategies. Each has the potential to reduce or eliminate inefficiency in broader office-based physician practices and improve health outcomes, increase operational productivity and reduce health care costs.

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