



# Medication Adherence: The Key to Positive Patient Outcomes

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## Medication Adherence and Why it Matters

Medication adherence is defined by the World Health Organization as “the extent to which a person’s behavior in taking medication...corresponds with agreed recommendations from a health care provider.”<sup>1,2</sup>

Taking medications as prescribed is important to control chronic conditions, treat temporary conditions, and improve patient outcomes.<sup>3-6</sup> Based on the literature, only about 50% to 60% of people are adherent to their prescribed chronic medication regimen, and there are important differences in adherence patterns.<sup>7,8</sup> Some patients never initiate taking a prescribed medication; some patients delay, omit, miss, or even take extra doses; and still others discontinue taking a medication altogether.

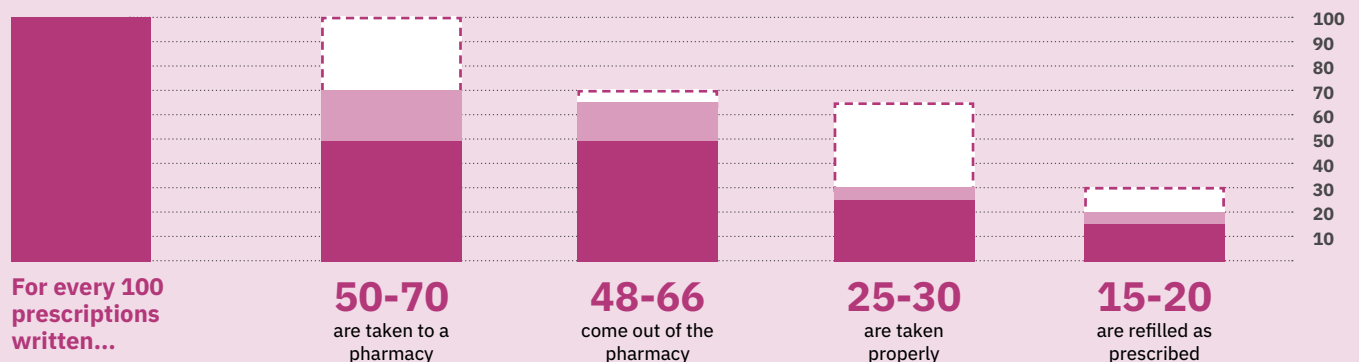
It is critical to recognize that there are many reasons why patients may not adhere to their medication regimens.<sup>9,10</sup> Understanding the reasons behind medication nonadherence often can help clinicians resolve the issue and target the problem accurately. By exploring and resolving nonadherence, clinicians can help ensure positive patient outcomes.

### Adherence and Patient Sensitivity

The language of medicine is moving away from the term adherence. “Adherence,” like “compliance,” implies a dichotomy in which a person is either “adherent” or “nonadherent.” These words may evoke stigma and assign labels to individuals who may not take every dose of medication. When communicating with patients, it is recommended that clinicians replace “adherence” with patient-sensitive language such as: medication taking, participation, involvement, and engagement.

\*This document uses the terms adherence and nonadherence for the purpose of communicating with clinicians.

## Medication Adherence by the Numbers



\*This graph reflects acute and chronic prescriptions.

Adapted from: Million Hearts [Internet]. Atlanta, GA; Centers for Disease Control and Prevention. Improving medication adherence among patients with hypertension; 2017 Feb [cited 2020 Mar]. Available from: [https://millionhearts.hhs.gov/files/TipSheet\\_HCP\\_MedAdherence.pdf](https://millionhearts.hhs.gov/files/TipSheet_HCP_MedAdherence.pdf)

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## Medication Adherence Toolkit

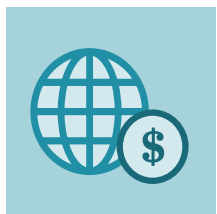
The Medication Adherence Toolkit is a useful guide to help clinicians assess the following aspects of adherence:

- Which determinants cause patients to not take medication as prescribed
- How to determine if and why a patient is nonadherent
- How to improve adherence

Each of these areas is explored further in the following sections.

### Determinants of Nonadherence<sup>2</sup>

Many factors may serve as determinants to medication nonadherence. Consider nonadherence when a patient's conditions are not controlled, the patient is not regularly filling medications, or when the patient appears confused and/or cannot articulate the medication regimen. The information below can help primary care teams explore potential causes with patients.



#### Social and Economic

Low health literacy  
Medication cost  
Lack of health insurance  
Lack of transportation



#### Health Care System

Lack of care continuity  
Restricted formularies  
Long wait times  
Medication recalls



#### Condition Related

Lack of symptoms  
Depression  
Severity of symptoms



#### Patient Related

Visual, hearing, or cognitive impairment  
Perceived disease risk  
Perceived benefit of treatment



#### Therapy Related

Complexity of regimen  
Frequent changes  
Actual or perceived side effects

## Determine If and Why a Patient is Nonadherent:

### Aim to Investigate Adherence at Every Visit<sup>1-3</sup>

It is important to determine whether a patient may be nonadherent to medications and the reason(s) for nonadherence in order to help identify the appropriate solution. The information below suggests ways to assess medication adherence, however challenges may remain in identifying nonadherent patients. Using approaches that can help prevent nonadherence are therefore highly encouraged.

## 1. Obtain Objective Information

### *Claims Data*

- If possible, determine if the patient is filling medications on time by obtaining information from electronic medical records (EMR).
- Call the pharmacy to obtain fill dates if pharmacy claims data is not integrated into EMR.
- These data can fill in information gaps and determine a baseline medication list if the patient is unaware of the current regimen. Be mindful that this information does not directly correlate to adherence and can be inaccurate.

### *Clinical Data*

- If a patient has an uncontrolled disease state(s), this also should trigger the exploration of whether medication adherence is the cause. Ensure the patient is taking the prescribed medications accurately prior to changing the medication regimen.

## 2. Solicit Subjective Information from Patient

- Ensure effective communication and use motivational interviewing approaches with the patient, both of which are important to this process.
- Ask open-ended questions regarding adherence to promote a productive conversation and judgment-free environment.
- Use motivational interviewing to assess if a patient is nonadherent and as a strategy to improve medication adherence.<sup>9</sup> Motivational interviewing helps clinicians:
  - Foster a collaborative clinical approach to help patients make positive behavioral changes to support better health.
  - Focus on exploring and resolving patient ambivalence, and centers on individualized motivational processes consistent with the individual's values, beliefs, or wishes that facilitate change.
  - For more on Motivational Interviewing, see [Additional Resources](#).

### **Examples of effective communication and open-ended questions:**

- “Many patients miss their medications at times during the week. How often in a week do you miss a dose of medication?”
- “What medications do you miss, if any?”
- “What dose of medications do you miss most often?”
- “How do you manage your medications at home (pill box, alarms, routine)?”
- “How can I help you manage your medications?”

### 3. Address Health Literacy

Addressing health literacy can improve or prevent nonadherence and is critically important to assess and address in Medicaid or low income patients. Listed below is additional information on this particular issue to assist clinicians.

- A 4-minute video by the [American Medical Association](#) is a powerful reminder of why assessing and addressing health literacy is so important. The video demonstrates how people with hypertension may not understand a diagnosis or standard medication instructions given by a health care professional.<sup>10</sup>
- Show the video to all staff/providers at a regular clinic meeting. Discuss reactions to the video as well as strategies to address health literacy at your office as described below.

#### Strategies to Address Health Literacy:

- Use non-medical language and consider use of pictures whenever possible.
- Write prescriptions with explicit instructions.
- Provide indications for medication in directions or help patients create a medication list that discusses why they are taking their medications.
- Use the Teach Back Method (i.e., ask patients to repeat back any instructions for their care). This is not a test of the individual but of how well you explained a concept. Let the patient know this.
- Review education materials verbally with all patients or those who may screen positive for low literacy.
- Conduct person-centered visits (e.g., listen to people more and speak less, encourage more individual questions).
- Focus on 1-3 key points per visit and repeat those key points; have staff re-emphasize the key points as well.
- For more information, access Cardi-OH's expanded resource on [health literacy](#).

#### Examples of prescriptions with explicit instructions:

- Take 1 tablet before breakfast and 1 tablet before dinner for high blood pressure.
- Provide pictures of a sun and moon rather than writing "take 1 tablet twice daily."

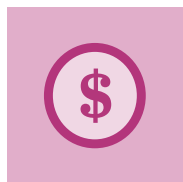
### Improving Adherence

There are many possible reasons for nonadherence so it is critical to create a patient-specific approach to improving medication adherence. Engaging the patient in creating the plan and obtaining patient buy-in will help prevent and address nonadherence. The chart below offers tips to help prevent and address nonadherence.



#### Adverse Effects

- Prescribe alternative medication
- Switch formulation of medication
- Provide education to address perceived adverse effects



#### Cost

- Encourage the use of manufacturer coupons
- Ensure patient is using in-network pharmacy
- Investigate insurance formulary
- Utilize pharmacy discount cards



#### Lack of Understanding

- Educate patient on disease state, lifestyle, and/or medications
- Refer patient to specialists for additional education (e.g., dietitian)
- Assess and address health literacy



#### Forgetfulness

- Set alarms for reminders
- Keep medications in a visible place
- Establish a daily routine to take medications
- Utilize adherence applications



#### Regimen Complexity

- Change formulation (once daily vs. twice daily)
- Deprescribe medications
- Use medication synchronization programs
- Prescribe blister pack medications
- Order 90-day prescriptions

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## Additional Resources

### Medication Adherence

- Clinical Strategies to Promote Medication Adherence.  
[thenationalcouncil.org/wp-content/uploads/2020/03/Clinical-Strategies-to-Promote-Medication-Adherence-6.20.18.pdf](https://thenationalcouncil.org/wp-content/uploads/2020/03/Clinical-Strategies-to-Promote-Medication-Adherence-6.20.18.pdf)
- Engaging Patients in Their Care: Medication Adherence & Health Literacy in Clinical Practice.  
[cardi-oh.org/files/assets/2019conferenceworkshopengagingpatients.pdf](https://cardi-oh.org/files/assets/2019conferenceworkshopengagingpatients.pdf)
- Medication Adherence Action Kit.  
[nyc.gov/site/doh/providers/resources/public-health-action-kits-medication-adherence.page](https://nyc.gov/site/doh/providers/resources/public-health-action-kits-medication-adherence.page)
- Medication Adherence: Improve Patient Outcomes and Reduce Costs.  
[stepsforward.org/modules/medication-adherence](https://stepsforward.org/modules/medication-adherence)
- Medication Adherence Educators Toolkit.  
[aaccp.org/sites/default/files/aaccp\\_ncpa\\_medication\\_adherence\\_educators\\_toolkit\\_0.pdf](https://aaccp.org/sites/default/files/aaccp_ncpa_medication_adherence_educators_toolkit_0.pdf)
- Strategies to Educate Patients on Medication Adherence.  
[millionhearts.hhs.gov/tools-protocols/medication-adherence.html](https://millionhearts.hhs.gov/tools-protocols/medication-adherence.html)

### Motivational Interviewing

- Clinician's Pocket Guide on Motivational Interviewing.  
[cardi-oh.org/resources/clinicians-pocket-guide-on-motivational-interviewing](https://cardi-oh.org/resources/clinicians-pocket-guide-on-motivational-interviewing)
- Motivational Interviewing Definition, Principles and Approach.  
[umass.edu/studentlife/sites/default/files/documents/pdf/Motivational\\_Interviewing\\_Definition\\_Principles\\_Approach.pdf](https://umass.edu/studentlife/sites/default/files/documents/pdf/Motivational_Interviewing_Definition_Principles_Approach.pdf)
- Motivational Interviewing.  
[accp.com/docs/bookstore/psap/p7b08.sample01.pdf](https://accp.com/docs/bookstore/psap/p7b08.sample01.pdf)
- Principles of Motivational Interviewing.  
[cardi-oh.org/resources/principles-of-motivational-interviewing](https://cardi-oh.org/resources/principles-of-motivational-interviewing)

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