

MEDICATION ADHERENCE – IMPROVING HEALTH OUTCOMES

A Resource from the American College of Preventive Medicine

A Time Tool for Healthcare Providers

ACPM's Time Tools provide an executive summary of the most up-to-date information on delivering preventive services to patients in the context of a clinical visit. Information presented is based on evidence presented in peer-reviewed journals. Please refer to the Medication Adherence Clinical Reference for more information.

Adherence is the extent to which a patient's behavior coincides with medical or health advice. A synonym is compliance.

Nonadherence (intentional or unintentional) leads to overuse or underuse of prescription medications. This can be caused by delays in filling prescriptions, not filling prescriptions, not picking up prescriptions, skipping doses, splitting pills, stopping medication early, and not refilling a prescription.

Medication Adherence is a Multidimensional Issue

According to the World Health Organization, there are five interacting dimensions of adherence:

1. Social/economic factors
2. Therapy-related factors
3. Patient-related factors
4. Condition-related factors
5. Health system and healthcare team factors

Physician/patient interaction falls under the fifth dimension and is one of the easier to alter to improve patient adherence. Physicians have less control over the other dimensions, but profound effects on patient adherence to medication regimens can be made by improving the provider/patient interaction.

Medication Adherence is an Important Factor Linking Clinical Practice and Patient Outcome

Poor medication adherence is associated with reduced treatment benefits and can obscure the provider's assessment of therapeutic effectiveness.

- Nonadherence accounts for 30% to 50% of treatment failures
- Nonadherence leads to worse outcomes
- Nonadherence accounts for higher hospitalization rates, institutionalization for the frail elderly, and increased healthcare costs

Over 183 million office visits can be prevented through better communication

Studies show that effective communication between patients and physicians enables higher medication adherence rates. This is attributed to trust in the physician, an understanding of the benefits of the medication, and participation in the decision-making process. Hence the challenge is to enhance:

- Verbal and nonverbal communication
- Interviewing skills
- Positive discussion and greater transmission of information
- Continuous expressions of empathy
- Participatory decision-making

There is a Wide Gap Between Writing a Prescription and Actual Medication Use

It is estimated that between 20% and 50% of patients are nonadherent. For every 100 prescriptions written, 50-70 are filled by the pharmacy, 48-66 are picked up, 25-30 are taken properly, and 15-20 are refilled. Poor medical adherence is widespread and widely recognized but it is still difficult to determine which patients will or will not take their medication as directed. Some predictors of such nonadherence include:

- Low literacy
- Homelessness
- Depression
- Psychiatric disease
- Substance abuse
- Lower cognitive function
- Forgetfulness
- Anger, psychological stress, anxiety
- Lack of insight into illness
- Lack of belief in benefit of treatment
- Cultural incongruity with medication
- Belief that the drug is not important or is harmful
- Complexity of medication regimen
- Weariness of taking medications
- Inconvenience of medication regimen
- Side effects or fear of side effects
- Cost of medication, copayment, or both
- Barriers to access to care/drugs
- Inadequate follow-up
- Missed appointments

Providers play an important role in assisting patients in carrying out healthy behaviors

People's beliefs about the benefits and risks of medicines influences whether they take drugs prescribed to them. In addition patient/provider concordance – the extent to which patients and their providers agree on whether, when, and how a medication should be taken – comes into play.

- Adherence requires the patient **believe** there is a benefit to the prescribed medicine and **agree** to follow instructions on how to take it.
- Barriers, such as cost, will prevent medication access.
- The provider's role is to:
 - Understand the patient's belief system
 - Find a way to treat within this belief system
 - Gain trust from the patient
 - Interactively obtain agreement from the patient on when and how to take the medication
 - Discuss cost to ensure the medication is obtained and instructions are followed

Two Minutes To Trust Building

Building trust and developing skills for successful provider/patient communications demand time, effort, knowledge, and practice. The most often expressed barrier to improving provider/patient communication is time. Studies have shown that some patients are interrupted by their physician after an average of 22 seconds. Research shows, that if allowed to speak freely, the average patient would initially speak for less than two minutes. Patience and a free flowing conversation can result in a long-term payoff of better adherence resulting in better patient outcomes, fewer follow-up visits, and shorter, more focused subsequent interactions.

How can providers help their patients take their medication?

Studies show that simple interventions are the most effective. The **SIMPLE** mnemonic below contains strategies to improve adherence. Sample conversations matching the **SIMPLE** approach are found in the Medication Adherence Clinical Reference.

Simplify the regimen
Impart knowledge
Modify patient beliefs and human behavior
Provide communication and trust
Leave the bias
Evaluate adherence

S – Simplify the Regimen

- Adjust timing, frequency, amount, and dosage
- Match regimen to patients' activities of daily living
- Recommend all medications be taken at same time of day
- Avoid prescribing medications with special needs
- Investigate customized packing for patients
- Break the medication regimen down into simple steps
- Encourage the use of adherence aids

I – Impart Knowledge

- Focus on patient-provider shared decision making
- Encourage discussions with physician, nurse, and pharmacist
- Provide clear instructions (written and verbal) for all prescriptions (see the Medication Adherence Patient Guide)
 - Limit instructions to 3 or 4 major points
 - Use simple, everyday language
 - Use written information or pamphlets and verbal education at all encounters
- Involve family and friends in the discussion when appropriate
- Provide quality web sites for patients wishing to access health education information from the Internet
- Suggest computerized self-instruction for complex chronic conditions
- Provide concrete advice for how to cope with medication costs
- Reinforce all discussions often, especially for low-literacy patients

M – Modify Patient Beliefs and Human Behavior

- Empower patients to self-manage their condition
 - Ask patients about their needs. Create an open dialogue with each patient and ask about his or her expectations, needs, and experiences in taking medication.
 - Ask patients what might help them become and remain adherent
- Ensure that patients understand they will be at risk if they don't take their medication
- Ask patients to describe the consequences of not taking their medication
- Have patients restate the positive benefits of taking their medication
- Address fears and concerns (perceived barriers) of taking the medication
- Consider the use of contingency contracting; provide rewards for adherence

P – Provide Communication and Trust

- Modifying patient beliefs is only possible if a high level of patient trust exists. A physician's communication style is one of the strongest predictors of a patient's trust in his or her physician. Many physicians are weak in communications. Consider these statistics:
- At least 50% of patients leave the office not understanding what they have been told
- Physicians miss 50% of psychosocial and psychiatric problems due to poor communication skills
- Physicians interrupt patients on an average of 22 seconds into the patients' descriptions of the presenting problems
- 54% of patients' problems and 45% of patient concerns are neither elicited by the physician nor disclosed by the patient

- 71% of patients cited poor relationships as a reason for their malpractice claims
Seven Ways to Improve Communication

1. Improve interviewing skills
2. Practice active listening
3. Provide emotional support
4. Provide clear, direct, and thorough information
5. Elicit patient's input in treatment decision-making
6. Allow adequate time for patients to ask questions
7. Build trust

L – Leave the Bias

- Learn more about low health literacy and how it affects patient outcomes
- Examine self-efficacy regarding care of ethnically and socially diverse patient populations
- Review communication style to see if it is patient-centered
- Acknowledge biases in medical decision-making (intentional or unintentional)
- Address discordant patient-provider race/ethnicity and language

E – Evaluate Adherence

- The act of measuring adherence can lead to better patient compliance
- Self-reports are the most commonly used tool in measuring adherence
- Ask your patients simply and directly if they are sticking to their drug regimen
- Ask about adherence behavior at every encounter
- Ferret out adherence barriers and lack of receptivity to medical information
- If self-report still leaves questions about adherence, try pill counting or measuring serum or urine drug levels
- Periodically review patient's medication containers, noting renewal dates

A Final Thought

Adherence is critical to patient outcomes but is often hard to achieve. Improving adherence is a complex and variable process. The most effective physician strategy is to build patient trust and better communicate the benefits of taking medication as directed.

For other information and useful links, visit the American College of Preventive Medicine website at www.acpm.org.

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