

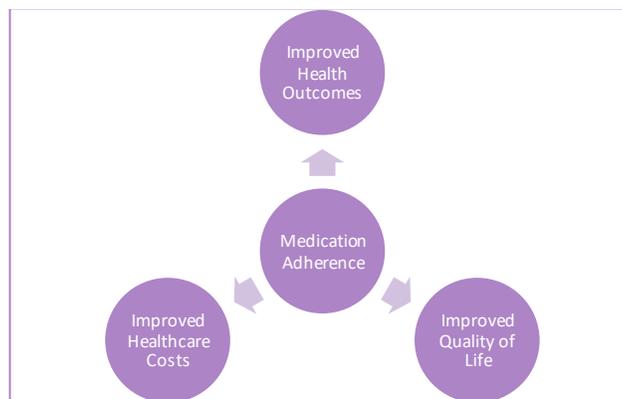
Effects of Medication Adherence

Medication Adherence at-a-Glance

Medication adherence among patients has a significant impact on the likelihood of adverse health events, inpatient and emergency department visits, health care spend, and quality of life. Adherence can be impacted by factors like social determinant of health (SDoH) need, racial and ethnic disparities, education, urban vs. rural environment, cultural philosophy towards health care, and more.

The World Health Organization (WHO) defines adherence as ‘the extent to which a person’s behavior in taking medication that corresponds with agreed recommendations from a health care provider.’ In short, a patient is considered to be medication adherent when they follow the recommendations made by their provider. It is important to note, the absence of a first fill of medication does not mean the medication was not prescribed.

- Data from the World Health Organization states that patients benefit more from adherence than they do from the actual treatment for their chronic health conditions
- Effects of Nonadherence
 - ~25% hospitalizations
 - ~50% treatment failures
 - ~125,000 deaths
 - ~\$105 billion in avoidable healthcare costs
 - ~\$289 billion in avoidable medical spend
 - ~\$528 billion in drug-related morbidity and mortality from nonoptimized therapy
- Optimal therapeutic efficacy is achieved with at least 80% medication adherence
 - Primary nonadherence rates by disease state: hypertension (28%), dyslipidemia (28%) and diabetes (31%)
- Chronic medication adherence is estimated to be about 50%, decreasing over time after initial prescription is administered
- Medication Adherence leads to:



Barriers to Medication Adherence

Social Determinants of Health:

- Does the patient have barriers such as transportation to getting to the prescriber and/or pharmacy?
- Does the patient have access to proper storage for certain types of medication?
- Is there any type of social stigma associated with their condition?
- Are there direct/indirect costs associated with their medications that they cannot afford?

Health Literacy/Communication:

- Does the patient understand the instructions provided by the prescriber and/or pharmacist?
- Does the patient understand why the medication is important for their overall health and what missed dosages means long term?

Racial Disparities in Healthcare:

- After self-reporting pain in the ER, African Americans were found to be less likely to receive analgesics than White Americans (57% vs 74%). Due to potential racial bias by the prescriber, different ethnic groups may be under-prescribed medication. There can also be a lack of trust for the prescriber by the patient which can lead to non-adherence.

Medication Formulation:

- The dosage form of a medication can impact a patient's adherence.
- Does the patient have issues with the prescribed dosage form that may result in decreased adherence? For example, are the pills prescribed difficult to swallow?
- Does the patient have a fear of needles, preventing them from injecting their medication?

Addressing Medication Adherence

Providers and Pharmacists:

- Build rapport with patients. Patients and provider interactions build trust. Initiate conversation with patients to gauge how they are feeling and how they feel about their prescriptions.
- Provide education and counseling to patients that includes why the medication was prescribed and its importance, how to take the medication, address potential side effects. Patients are more likely to be adherent to their medications if they understand why they are taking it.

Patients:

- Prepare a weekly medicine case (pill box)
- Keep a small pill case in your pocket with emergency meds, just in case you are away from home for a few hours.
- When traveling always keep your medicines with you versus in luggage in the event luggage gets lost.
- Keep water next to the weekly medicine case, so you are fully prepared.
- Utilize Mobile App Notifications
- Set alarms on mobile device
- Use accountability partners such as family and friends who will call/text you daily

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Written by April Cox, PharmD