The World Health Organization defines adherence as “the extent to which a person’s behavior — taking medications, following a diet, and/or executing lifestyle changes corresponds with agreed recommendations from a health care provider.” It implies a collaborative decision between the patient and the healthcare provider. An agreement on a therapeutic regimen fosters patient ownership, responsibility, and empowerment. “Drugs don’t work in patients who don’t take them” is a well-known quote from a former U.S. Surgeon General, C. Everett Koop. The impact of medication non-adherence can include treatment failure, unnecessary treatment, disease exacerbation, increased utilization, patient and physician frustration and death.

Incidence of non-adherence:
- 50% of patients with chronic disease do not take their medications as prescribed.2
- Non-adherence accounts for 30-50% of treatment failures.3
- 1 of 3 patients fail to fill their prescription.4
- One-third to 2/3 of all medication related hospitalizations in the U.S. are the result of poor medication adherence.2
- Cost of non-adherence in the U.S. exceeds $100 billion annually.2

Five Dimensions of Adherence1:

Consider the following five dimensions of adherence as potential causes or predictors of poor medication adherence. It is important to understand why a patient may not take their medication in order to effectively collaborate and communicate with the patient to successfully overcome barriers. A patient can fall into more than one of these categories at any given time.

<table>
<thead>
<tr>
<th>Dimension of Adherence</th>
<th>Factors Affecting Adherence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social/economic</td>
<td>Financial stress (cost of medication, copayment, or both), low “health” literacy, lack of family support, lack of transportation, cultural beliefs</td>
</tr>
<tr>
<td>Health system and health care team factors</td>
<td>Inadequate follow-up or discharge planning, poor provider-patient relationship, lack of positive reinforcement, lack of continuity of care</td>
</tr>
<tr>
<td>Condition-related</td>
<td>Treatment of asymptomatic disease, chronic conditions, inadequate understanding of the disease</td>
</tr>
<tr>
<td>Therapy-related</td>
<td>Complex regimen, side effects, frequent changes of medication regimen, long duration of treatment, lifestyle burden</td>
</tr>
<tr>
<td>Patient-related</td>
<td>Knowledge, resources, attitudes, beliefs, and expectations</td>
</tr>
</tbody>
</table>
How Can We Improve Medication Adherence?

- Incorporate a patient-centered approach and shared decision-making when discussing treatment options with your patients.
  - Ask them what time of day is best to take their medications
  - Ask them how quickly they would like to reach treatment goals
  - Consider cost of the medication to improve long-term adherence

- Ask about medication adherence at every appointment. Examples of open-ended questions include:
  - “Some patients have trouble taking their medication the way their doctors ask them to. What gets in the way of you taking your medication?”
  - Some patients say they miss a dose of their medication or adjust it to suit their own needs. Tell me, when does this happens to you?
  - “What concerns you the most about your medication?”

- Consider implementing medication adherence tools to assess adherence with your patients during patient encounters.

- Review claims and prescription bottles (refill dates) to objectively measure adherence.

- Complete a medication reconciliation at every appointment.

- Educate patients regarding the importance of maintaining an accurate medication list.

- Be available to review medications and answer questions with patients.

- Use a team approach- identify roles for clinical and nonclinical staff.

Examples of Medication Adherence Tools:

- Medication Knowledge Assessment
  - Is used to assess the patient’s knowledge and ability to read and comprehend information necessary for appropriate medication use
  - Available at: http://www.adultmeducation.com/AssessmentTools.html

- Rapid Estimate of Adult Literacy in Medicine Revised (Realm R)
  - A brief screening instrument used to assess an adult’s ability to read common medical words and is designed to assist medical professionals in identifying patients at risk for poor literacy skills.
  - Available at: http://www.adultmeducation.com/AssessmentTools.html

- Consumer Information
  - Adherence self assessment
  - Questions you should ask about your medications
  - Importance of medications
  - Medication record form
  - Available at: http://www.adultmeducation.com/ConsumerInformation.html

References: