

Adherence

This adherence toolkit was developed for the use of the CME community by the University of Virginia Department of Medicine, the University of Cincinnati Center for Continuing Professional Development, Healthcare Performance Consulting and Interstate Postgraduate Medical Association.



Patient Adherence may be the greatest challenge to public health today

Patient non-adherence to therapy is a widespread problem; optimally, physicians and health care providers should consider the possibility of non-adherence with every patient, at every visit. Providers realize that adherence is a crucial issue in patient therapeutic response, but are unsure how to

recognize and address it. This toolkit provides resources to identify the adherence-related competencies and barriers that apply to your practice, as well as materials to integrate important adherence concepts when developing continuing professional development activities on chronic disease.

Predictors of Adherence

- Cost of medication
- Dose Frequency
- Depressive Symptoms
- Self-efficacy

Components of adherence

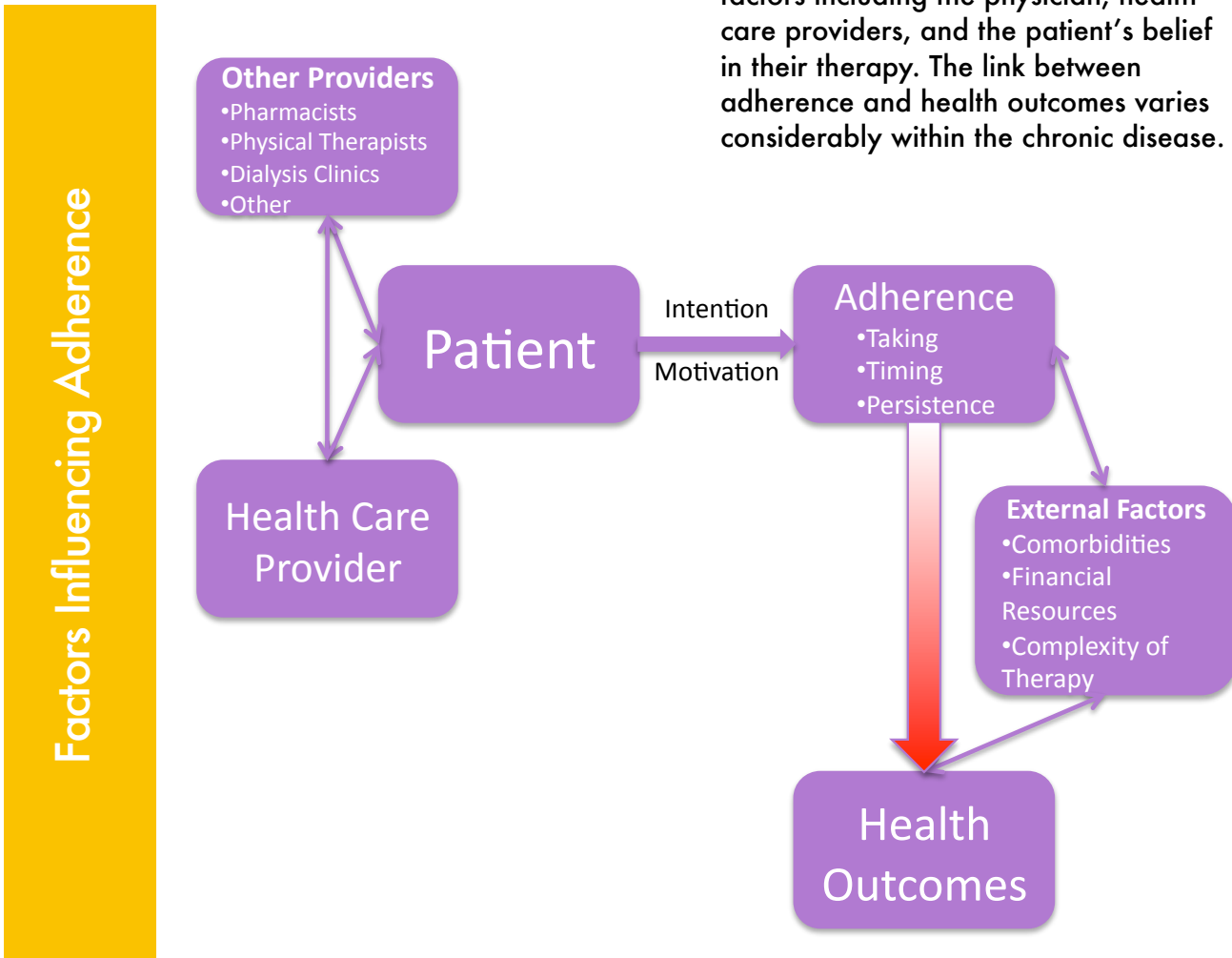
Initial filling of prescription- was the prescription initially filled? 32% of prescriptions are never filled.

Persistence- how long does the patient continue to get the prescription filled? For chronic disease most patients fall off after 6 months.

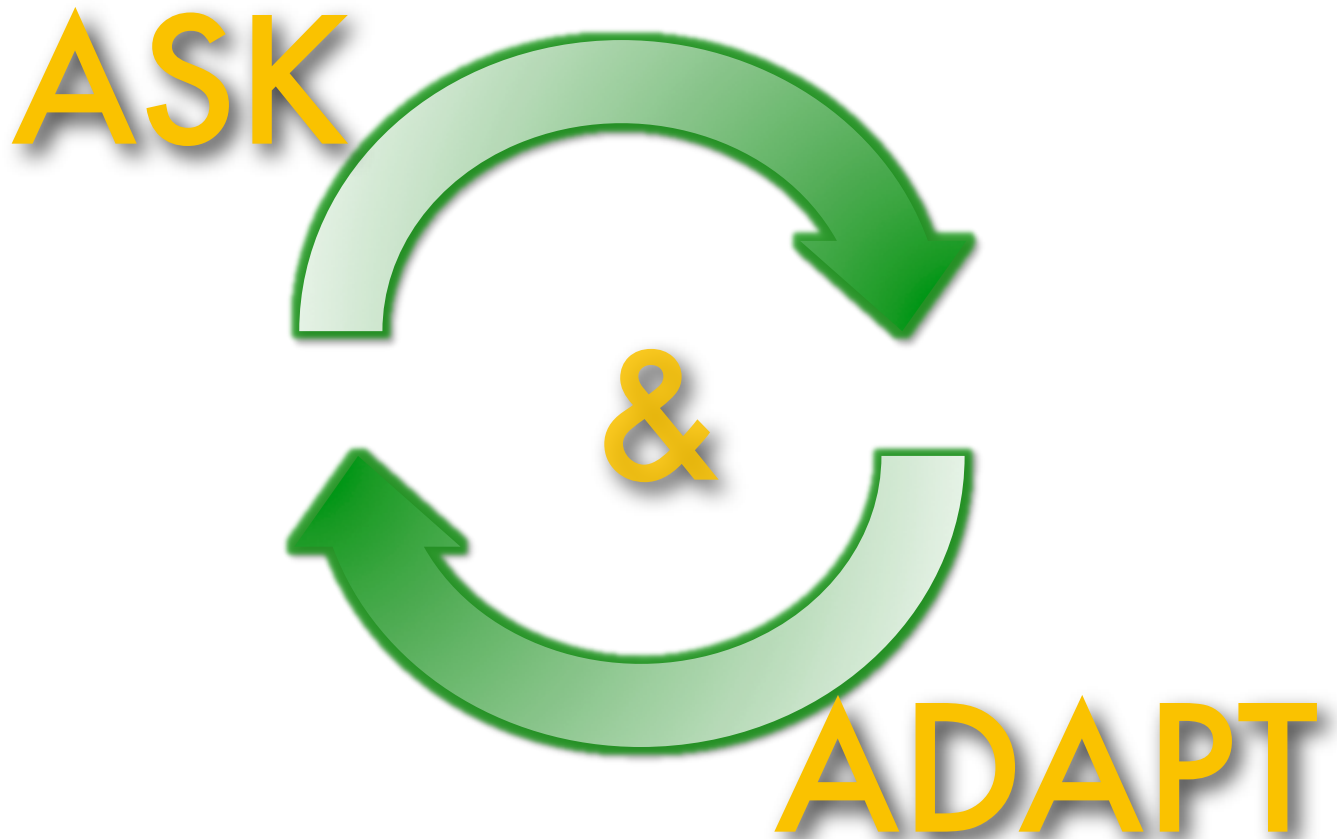
Timing- is the prescription taken at the right time? Is the prescription taken as prescribed?

Dosage- is the proper dosage taken? Does the patient split dosage or take every other day?

Adherence is influenced by many factors including the physician, health care providers, and the patient's belief in their therapy. The link between adherence and health outcomes varies considerably within the chronic disease.



Physician Barriers to Adherence	Medication costs	Formularies	Lack of time
	Low health literacy	Conflicting instructions	HIPAA
	Unable to follow-up with patients	Lack of access to medical information	Lack of EHR



System Questions to Guide CME Discussions

Before the patient leaves the office, what does the patient/family need to know about the therapy that you have prescribed?

Who is responsible for communicating the plan of care and critical messages that impact patient adherence?

How do you document the communication of these messages?

Is there a mechanism for follow up with the patient to assess adherence?

What information do you want to know when the patient returns for follow up?

Adherence Competencies

ASK

Identify patient factors that may contribute to non-adherence (cognitive impairment, lack of belief in the treatment)

Identify medication factors that may contribute to non-adherence (complex regimen, side effects, etc.)

Ensure that patients understand the value and effect of adherence

Determine whether a given patient will be able to adhere to directions

Identify therapies and medications prescribed by other physicians that see my patients

ADAPT

Customize the regimen according to patient wishes and needs

Provide simple clear instructions on the regimen

Engage family and other caregivers when needed

Enlist ancillary healthcare providers to help patients comply

Identify sources of free or reduced-cost medications for my patients

Provide patient literature in language that my patients can understand

Reinforce desirable behavior and results when appropriate

Hypertension

A 40-year-old woman is referred to a cardiologist for management of hypertension. She presents as an overweight woman with a BMI of 38 and a waist circumference of 40 inches. Her vital signs include a pulse rate of 85 bpm, BP 168/98 at rest.

After completion of the history and physical examination, the cardiologist recommends that the woman be placed on an anti-hypertensive medication. He writes the prescription and tells the patient that he would like to see her in 30 days for a follow up visit to determine how well the medication is working.

What information would help assess adherence in this situation?

- 1) Does the patient understand what "hypertension" means?
- 2) What is a normal blood pressure? What is the goal blood pressure for this patient?
- 3) What are the risks to the patient? Why is it important that she take the anti-hypertensive medication?
- 4) What type of insurance does the patient have? Does it cover the medication that was ordered? What is the co-pay?
- 5) Does the patient understand what the side effects of the medication are? What actions does the physician expect if the patient experiences any of these side effects?

Diabetes

A 35 year old man is diagnosed with type II diabetes. His fasting glucose is 435. His BMI is 34, pulse is 88 and blood pressure is 130/80. The endocrinologist recommends initiating insulin therapy for this patient. The diabetic nurse educator, the nutritionist and the social worker meet with the patient to review his understanding of type II diabetes, how to monitor his nutrition intake and how it relates to insulin production. The patient voices his concern that he won't remember everything that he is required to learn and is anxious that it will be a problem. He wants to know how soon the doctor will see him again to be sure that he is doing ok.

What questions/strategies should the endocrinologist and the diabetes education team consider?

- 1) Does the patient understand what type II diabetes is and why insulin is the recommended medical therapy?
- 2) Can the patient describe what actions he will need to take to manage his diabetes at home on a daily basis?
- 3) Can the patient articulate what the glucometer results are supposed to be when he tests his blood?
- 4) What actions should the patient take if the results are not within the specified parameters?
- 5) What office and community resources are available to support this patient as he starts the therapeutic course for diabetes type II?

Asthma

A 28 year old woman is referred to a pulmonologist/allergist for assessment of asthma as a chronic condition. The woman has experienced shortness of breath when visiting her mother and when exercising. The patient describes a wheezing pattern and air hunger. She is unable to get her respirations back to normal unless she rests or showers.

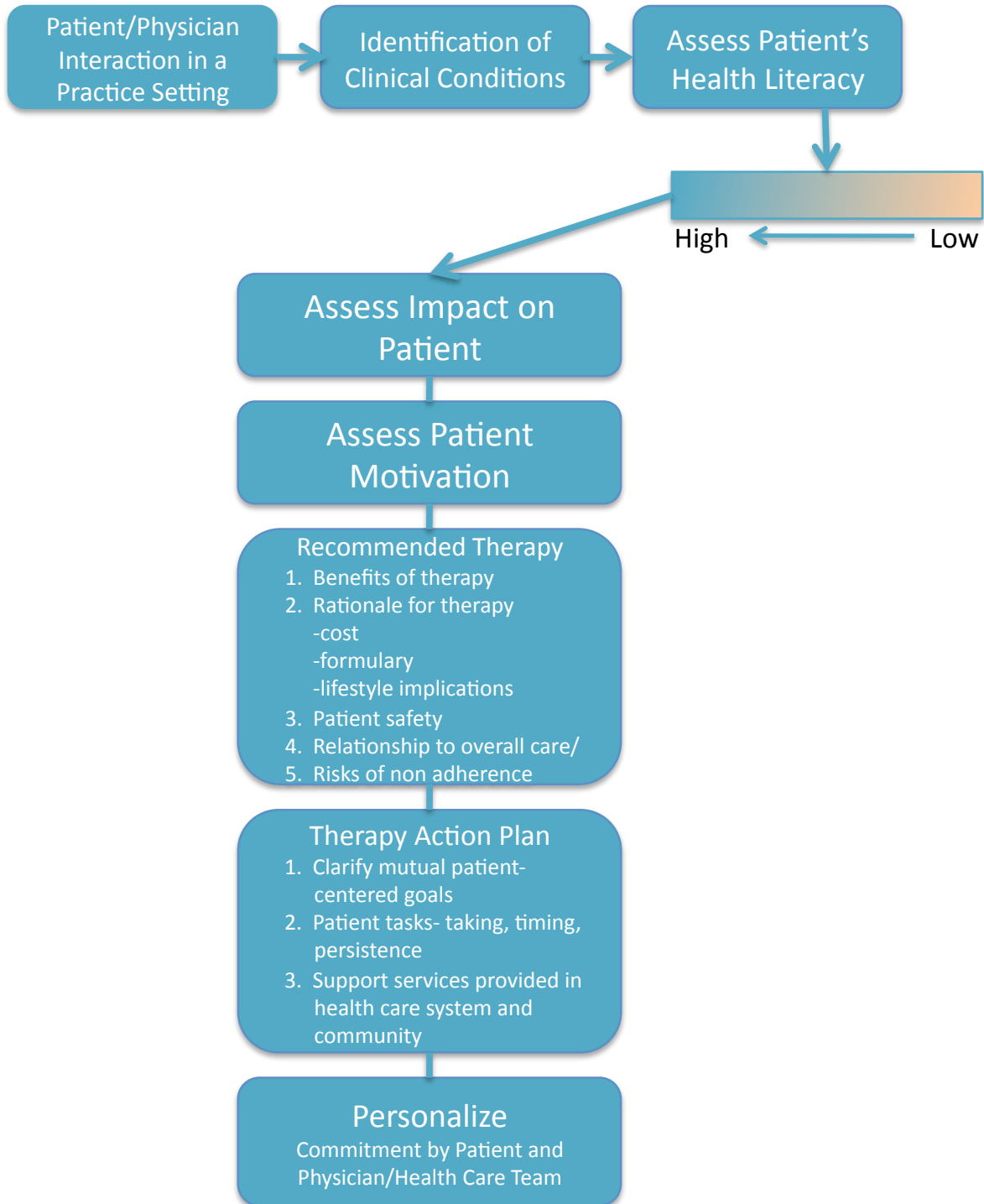
Upon physical examination, she is a slender woman with a respiratory rate of 24, and a pulse rate of 76. her blood pressure is 120/76. Auscultation of her chest reveals bilateral wheezing in both lungs—with decreased breath sounds in the lower lobes.

The pulmonologist/allergist recommends an albuterol inhaler for acute management of shortness of breath and a long acting anti-asthmatic medication. He writes the prescriptions for both medications. The patient is scheduled to return in 1 month.

What steps does the physician/health care team need to take to improve adherence?

- 1) Clarify the patient's understanding of asthma and help to identify trigger events that can be avoided/managed.
- 2) Describe asthma, its symptoms and the role of the medications in the management of the disease.
- 3) Discuss the roles of the two different medications and how they can complement each other to control asthma.
- 4) Instruct the patient in the appropriate technique and use of an inhaler.
- 5) Discuss the side effects of the medications and strategies for emergency management of asthma exacerbations.
- 6) Instruct the patient in respiratory self assessment as part of the daily self-care strategy.

Assessing Adherence at Diagnosis



Follow up visits

Hypertension

72-year-old male, who recently moved to the area, is in the office for his first physician visit. He has a history of hypertension and has been on medication for the past 20 years. The history indicates that the patient reports that he takes his medication most of the time. Physical examination reveals a slightly overweight man with a BMI of 25. Vital signs, Pulse 84, Blood pressure 160/84 in both arms.

As part of your evaluation of this patient, the following questions would be relevant to the appropriate management of this patient.

- 1) What is the patient's understanding of "high blood pressure"? What has he been told in the past by his previous physician(s)?
- 2) What medication(s) is the patient currently on? Are there any other medications or instructions that the patient has been instructed/encouraged to use in maintaining his health?
- 3) What is his daily routine? What types of foods does he generally eat?
- 4) Does he have health insurance? Medicare? Any supplemental coverage?

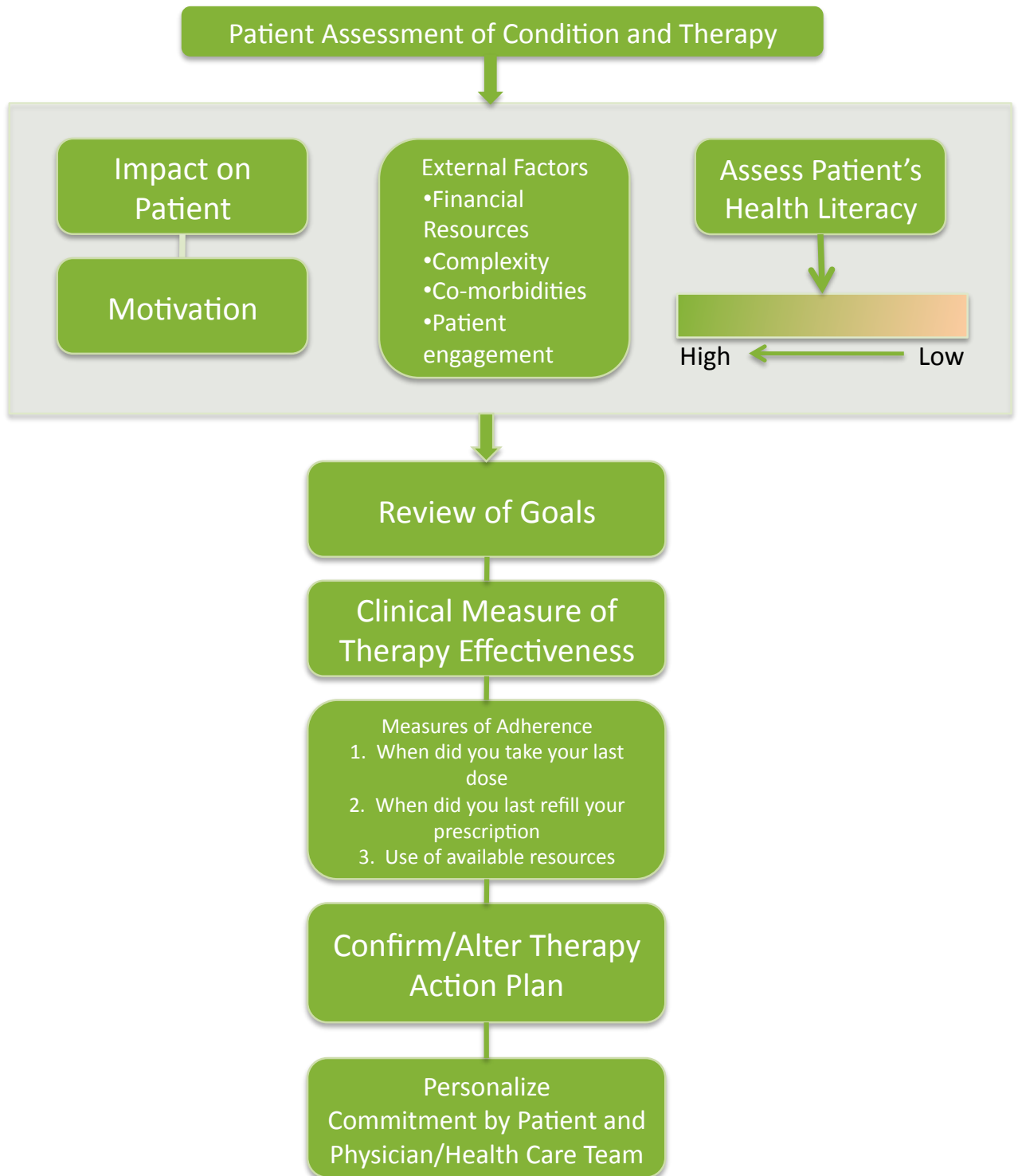
Asthma

A 60 year old woman is scheduled for an urgent visit due to shortness of breath. She is visiting her mother so has not been seen in this practice before today. The patient reports experiencing shortness of breath while taking out the trash. The patient has a long history of asthma, first diagnosed during adolescence. The patient uses a long acting asthma medication and a inhaler for emergency /breakthrough episodes of asthma. The patient reports that the inhaler didn't work this time and is concerned about her breathing. The patient presents with mild labored breathing, evidence of pale conjunctiva and mucosa in the mouth. Patient is a thin, small boned woman with a BMI of 18. Her respiratory rate is 32, Pulse 90 and BP 118/74.

What additional information do you need to evaluate this woman's condition?

- 1) What information has the patient received in the past from her physician (s) about asthma? What instructions was she given about how to assess and manage asthma and asthma attacks?
- 2) What are the current medications? Does she have the rescue inhaler with her?
- 3) What is her daily pattern for assessment of asthma and taking her prescriptions? Have there been any recent changes in her medication regime? What is the expiration date on the inhaler? When was the last time (before today) that she used the inhaler?
- 4) What healthcare coverage does she have? Does this emergent visit require any special actions by the physician? Who is her primary care physician at home?

Assessing Adherence at Follow-up



Assessing the learner's behavior focuses education at the gap between current and desired behavior. These questions can be incorporated into CME activities as ARS questions, pre/post test questions, and assessment tools.

What percentage of your patients have difficulty adhering to your prescribed therapies?

0-20	20-40	40-60	60-80	80-100
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How often do you provide your patients with resources to aid with adherence?

Very rarely				Almost Always
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How often do you educate your patients about the importance of adherence?

Very rarely				Almost Always
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How often do you assess patient adherence on follow-up?

Very rarely				Almost Always
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How often do you educate your patients about the importance of adherence?

Very rarely				Almost Always
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How often do you assess reasons patients are not/cannot be adherent?

Very rarely				Almost Always
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How often do you verify that patients understand what they need to do and why?

Very rarely				Almost Always
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