

# MEDICATION ADHERENCE TECHNIQUES FOR PATIENT SELF- EFFICACY

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## LEARNING OBJECTIVES

- Discuss risks of non-adherence to medications.
- Review tools to assist with medication adherence in older adults.
- Evaluate patient case scenarios using tools to assist with medication adherence.

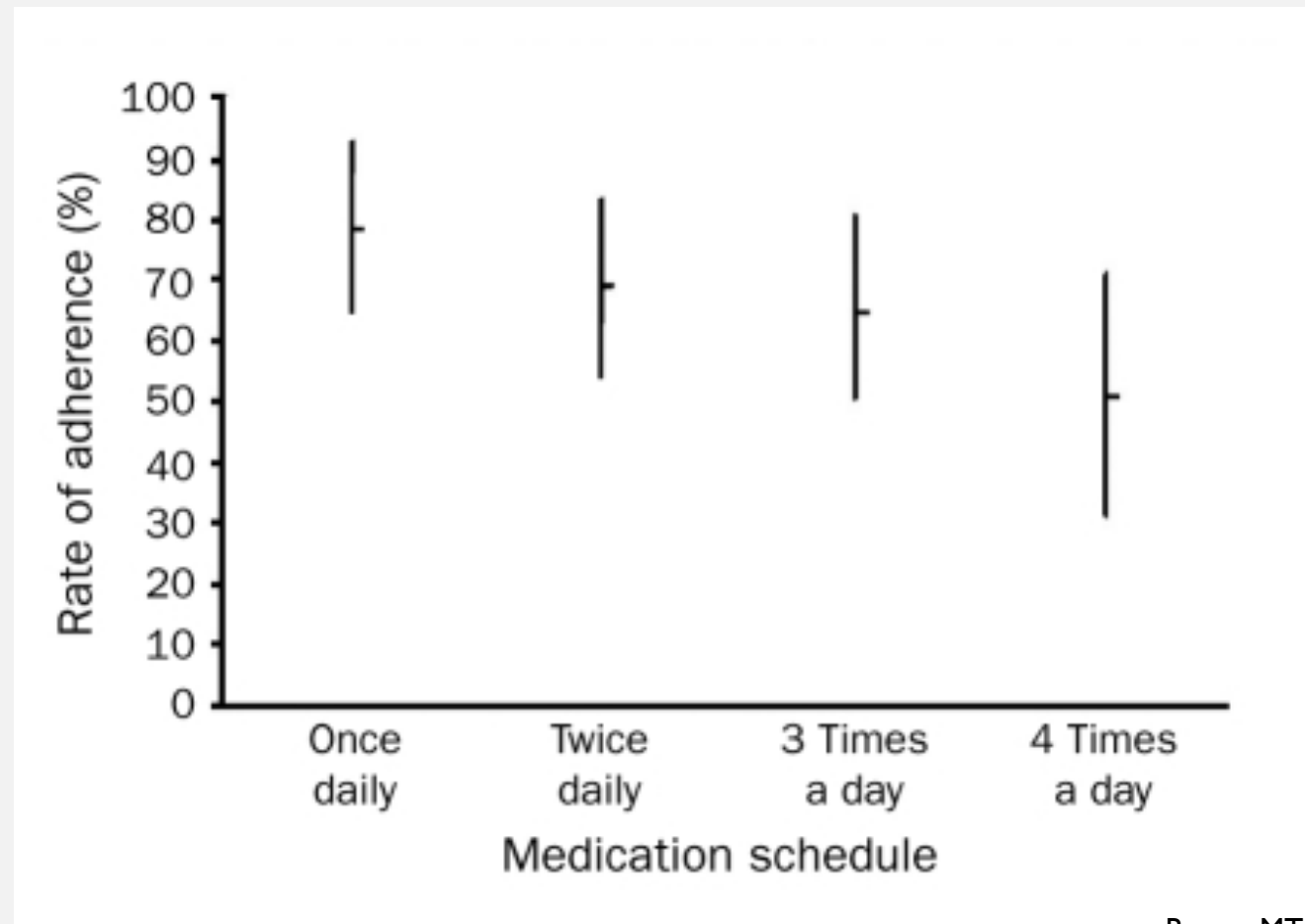
# ADHERENCE VS. COMPLIANCE

- Adherence:
  - Patient and provider collaborate to improve patient's health by integrating the provider's medical opinion
- Compliance:
  - Patient obedience to provider's authority

## BACKGROUND

- Treatment of chronic disease non-adherence: 30 to 50%
  - Highest rate of non-adherence within first few months
- 40 - 60% of patients cannot report provider expectations 10 - 80 minutes after their visit
- Yearly cost of non-adherence: \$396 to \$792 million

# BACKGROUND



## RISKS OF NON-ADHERENCE

- Adverse drug events
- Poorly managed disease states
- One-third to one-half of hospitalizations are medication-related
- Decreased quality of life

## DISCUSSING NON-ADHERENCE

- “Many people have trouble taking their medications on a regular basis. Do you find this is the case for any of your medications?”
- “Why aren’t you taking the medication I prescribed?”

# DISCUSSION POINTS

**TABLE 2. Questions a Clinician Can Ask to Assess a Patient's Medication Adherence**

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I know it must be difficult to take all your medications regularly. How often do you miss taking them?<sup>3</sup>

Of the medications prescribed to you, which ones are you taking?

Of the medications you listed, which ones are you taking?

Have you had to stop any of your medications for any reason?

How often do you not take medication X? (address each medication individually)

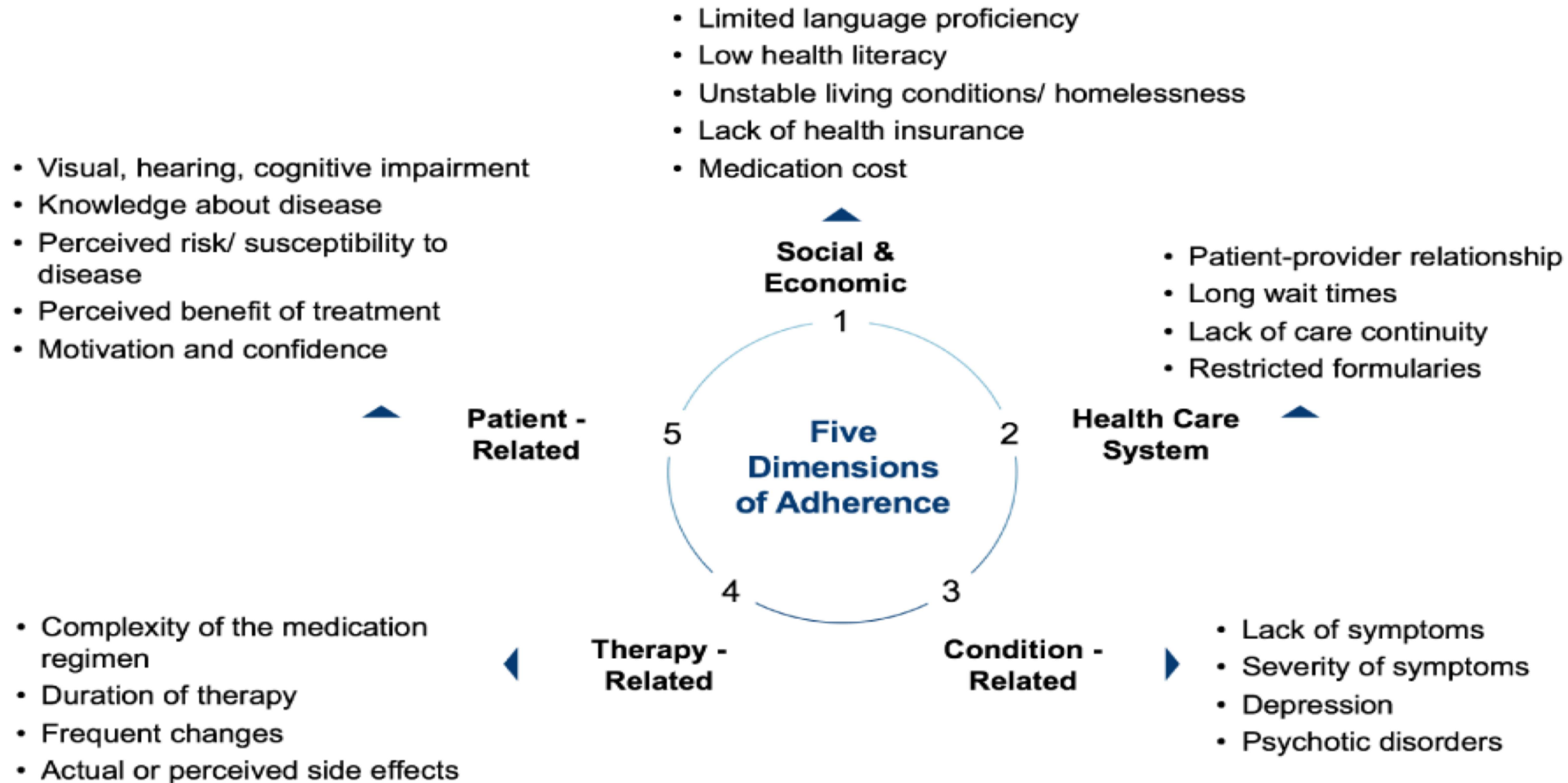
When was the last time you took medication X? (address each medication individually)

Have you noticed any adverse effects from your medications?

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# Diagram Outlining the Factors Related to Non-Adherence.



# BARRIERS TO ADHERENCE

- Social and economic
  - Cost of treatment (donut-hole)
  - Socioeconomic variables
  - Transportation
- Patient related
  - View of therapy, cognitive functioning, health literacy, motivation, disease states

## EXAMPLE INSTRUCTIONS

- Gabapentin 300 mg capsule, take one every 12 hours
- Gabapentin 300 mg capsule, take one twice daily
- Bisacodyl suppository, use once daily
- Bisacodyl suppository, insert daily

# BARRIERS TO ADHERENCE

- Health system related
  - Prescriber follow-up, multiple providers
- Condition related
  - Severity of disease, chronic or acute
- Therapy related
  - Multiple medications, complexity of therapy, adverse drug reactions, duration of therapy

## PATIENT CASE

- Patient is at clinic for routine follow-up. He recently saw his cardiologist who added a new medication and changed his fluid pill. The patient forgot the name of the new medication.
- **Vitals:** BP 116/58 mmHg, HR 66, weight 170 lbs (up 10 lbs from visit 1 month ago)

INDIVIDUAL OR SYSTEM LEVEL  
APPROACH?

# QUALITY MEASURES

- HEDIS measures
  - HTN medication adherence
  - Diabetes (oral) medication adherence
  - Cholesterol medication adherence
- Medicare Shared Savings Program (MSSP)
  - Depression, HTN, DM, ischemic vascular disease

# TOOLS FOR ADHERENCE

- Self-management
- Mailed communications or telephone follow-up
- Simplifying medication regimens
  - Pillboxes, generic medications, combination drug regimens, once daily dosing, deprescribing
- Assistance from family members



# SELF-MANAGEMENT

- Definition:

“the ability of the individual, in conjugation with family, community, and health professionals, to manage symptoms, treatments, lifestyle changes, and psychosocial, cultural, and spiritual consequences of chronic disease”

# SELF-MANAGEMENT

- Collaborative approach when prescribing medications
  - Patients have a sense of ownership
- Educate patient on key information
  - What, why, when, how, and how long
  - Side effects
- Use technology if possible

# SELF-EFFICACY

- Positive self-efficacy beliefs predict adoption/adherence to:
  - Exercise regimens
  - Dietary recommendations
  - Self-management behaviors
- Resulting in improvements in health

# MAILED COMMUNICATIONS



UCHealth Seniors Clinic - Anschutz Medical  
Campus  
Anschutz Outpatient Pavilion  
1635 Aurora Ct. 5th Fl  
Aurora CO 80045-2548  
O: 720-848-3400  
F: 720-848-3401

[uchealth.org](https://www.uchealth.org)

May 17, 2018

Ms. Waltraud A Zeligman  
8726 E Illiff Dr  
Denver CO 80231

Dear Ms. Zeligman:

Below are the results from your recent visit: Labs are either normal or stable where slightly out of normal range, save for iron stores in body (ferritin level) are lower than in the past and you are slightly more anemic. In response I would like you to start taking a daily iron supplement, ferrous gluconate 325mg once daily with food. Know that iron can make stool appear very dark or even black.

## TELEPHONE FOLLOW-UP

Deprescribing.org has recommendations for tapering benzodiazepines in patients. Typically, it is recommended to decrease the dose by 25% every 2 weeks; however, temazepam's formulation is a capsule and the doses available are 7.5 mg and 15 mg. Due to history of anxiety and low mood, the patient would likely not tolerate a reduction of 50% or using 7.5 mg nightly. Given this information, the patient's TWD of temazepam is 105 mg. Therefore, decreasing by 25% would result in a TWD of 80 mg x 2 weeks, followed by a TWD of 60 mg x 2 weeks, then 45 mg x 2 weeks, then ~30 mg x 2 weeks, etc. Additionally, patient may warrant a higher dose of trazodone, as the 50 mg tablet did not help. Additionally, with taper, patient could also take melatonin 10 mg nightly with trazodone to see if this helps the patient fall asleep. She was open to these recommendations.

- The patient has #25 capsules of temazepam 15 mg with #2 refills remaining.

### TAPER #1 (12 weeks): PATIENT PREFERENCE




- Take temazepam 15 mg nightly, except on Sunday (TWD = 90 mg). Take trazodone + melatonin on Sunday x 2 weeks.
- Take temazepam 15 mg nightly, except on Sunday and Thursday (TWD = 75 mg). Take trazodone + melatonin on Sunday and Thursday x 2 weeks.
- Take temazepam 15 mg nightly on M/W/F/Sat (TWD = 60 mg). Take trazodone + melatonin on other days x 2 weeks.
- Take temazepam 15 mg nightly on M/W/F (TWD = 45 mg). Take trazodone + melatonin on other days x 2 weeks.
- Take temazepam 15 mg nightly on Monday and Friday (TWD = 30 mg). Take trazodone + melatonin on other nights x 2 weeks.
- Take temazepam 15 mg on Monday. Take trazodone + melatonin on other nights x 2 weeks.
- Only use trazodone + melatonin for sleep.

## SIMPLIFYING REGIMENS

- Mail-order or 90-day supplies
  - Save \$\$
  - More likely to be adherent to chronic medications
- Medication combinations
  - Ex: Lisinopril-hydrochlorothiazide
- Reminders
  - Pillbox, phone alarm, medication chart

# How to take your medications

## START taking these medications

	Morning	Noon	Evening	Bedtime	Other	As Needed
 <b>azithromycin</b> 250 mg tablet Commonly known as: ZITHROMAX for COPD Exacerbation. Take 1 tablet daily for two more days. Quantity: 2 tablet Last time this was given: 250 mg on 9/2/2018 8:59 AM						
 <b>dextromethorphan-guaifenesin</b> 2-20 mg/mL ORAL syrup Commonly known as: ROBITUSSIN DM Take 10 mLs by mouth every 4 hours as needed for Cough. Quantity: 120 mL Last time this was given: 10 mLs on 9/1/2018 8:35 PM						
 <b>predniSONE</b> 20 mg tablet Commonly known as: DELTASONE Take 2 tablets by mouth daily for Obstructive Pulmonary Disease. Take 2 tablets at one time, daily, for the next 2 days for a COPD exacerbation. Quantity: 2 tablet Last time this was given: 40 mg on 9/2/2018 8:59 AM						

## CONTINUE taking these medications

	Morning	Noon	Evening	Bedtime	Other	As Needed
<b>acetaminophen</b> 500 mg tablet Commonly known as: TYLENOL Take 2 tablets by mouth 3 times daily for Pain. Quantity: 60 tablet Last time this was given: 1,000 mg on 9/13/2018 3:29 PM						Every 8 hours as needed.
<b>atorvaSTATin</b> 40 mg tablet Commonly known as: LIPITOR Take 1 tablet by mouth daily for myocardial infarction prevention, prevention of cerebrovascular accident. Quantity: 90 tablet	✓					
<b>B complex-vitamin C-folic acid</b> per tablet Commonly known as: NEPHRO-VITE Take 1 tablet by mouth daily for Vitamin Deficiency. Quantity: 90 tablet	✓					
<b>benzonatate</b> 100 mg capsule Commonly known as: TESSALON Take 1 capsule by mouth 3 times daily for Cough. Quantity: 30 capsule						3 times daily.

## CAREGIVER ASSISTANCE

- Organize medications each week
- Provide transportation to appointments
- Pick-up medications



## PATIENT CASE

- 84 yoF recently discharged from the hospital after a fall. She lives alone and uses a taxi for her medical appointments. You discover she is missing 2-3 doses of her medications each week.
- **PMH:** depression, HFrEF, HTN, hypothyroidism, osteoarthritis, and urinary incontinence

## WHAT DO YOU RECOMMEND?

### Medication list

Acetaminophen 500 mg  
prn pain

Aspirin 81 mg/d

Ascorbic acid 1000 mg/d

Calcium carbonate –  
vitamin D twice daily

Cyanocobalamin 1000  
mcg/d

Escitalopram 10 mg/d

Furosemide 40 mg/d

Lisinopril 20 mg/d

Levothyroxine 100 mcg/d

Metoprolol succinate 25  
mg/d

Multivitamin daily

Vitamin E 400 units/d

## PATIENT CASE

- 90-yoM with severe macular degeneration is having difficulty taking his medications. His sight is limiting him from seeing what medications to take throughout the day.
- **PMH:** AMD, Gout, HTN, Pain, T2DM
- What do you suggest?

## PATIENT CASE

### Medication list

Acetaminophen 500 mg,  
take 2 tablets TID

Atorvastatin 20 mg/d

Allopurinol 100 mg/d

Calcium carbonate –  
vitamin D twice daily

Glipizide 5 mg BID

HCTZ 12.5 mg/d

Lisinopril 20 mg/d

Melatonin 3 mg qhs prn

Metformin 500 mg BID

Preservision daily

## PATIENT CASE

- Pt comes in today stating she is in the “donut-hole” and would like to know if there is anything she can do.
- She has Humana Part D insurance and you find out she has \$3,440 to pay before she is out of the donut-hole.

WHAT DO YOU RECOMMEND?

## Prescription Medication list

Apixaban 5 mg BID

Buspirone 15 mg BID

Lomotil QID prn

Methenamine 1 g BID

Metoprolol XL 50 mg,  
2 tablets daily

Venlafaxine 75 mg/d

## PATIENT CASE

- 70 yoF lives with her daughter and has been hospitalized 3 times in the last month for COPD exacerbation or acute on chronic heart failure. Based on inpatient notes, medication non-adherence is suspected.
- The daughter tries to assist with medications but the patient is adamant about managing her medications. What is your next step?

## OTHER TOOLS



GoodRx



PATIENT  
ASSISTANCE





QUESTIONS?