## Medication Nonadherence The well kept secret

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### World Health Organization:

Increasing adherence may have a

far greater impact

on the health of the population than any
improvement in specific medical
treatments.



# PATIENTS DON'T TAKE THEIR MEDICINE AS PRESCRIBED 50% OF THE TIME

## 25% OF INITIAL PRESCRIPTIONS ARE NEVER FILLED



Osterberg L *N Engl J Med*. 2005;353(5):487-497 Fischer MA, Choudhry NK. *Am J Med*. 2011;124(11):1081.e9-22. Fischer MA, *J Gen Intern Med*. 2010;25(4):284-290. 85% OF PHYSICIANS BELIEVE
THE MAJORITY OF THEIR PATIENTS
ARE ADHERENT

85% OF PATIENTS SURVEYED
STATE THAT THEY WOULD
NOT TELL THEIR DOCTOR
THAT THEY WERE NOT PLANNING
ON BUYING A MEDICINE





Brown MT Family Practice Mgt; March/April 2013 McHorney,C Current Medical Research and Opinion 2009 25:1; 215-238

### We didn't ask and they didn't tell



### Rationale for Hiding Nonadherence

Social desirability bias

• Fear of being punished, admonished or dismissed

Fear of embarrassment



## The Morisky 4-Item Self-Report MEASURE of Medication-taking Behavior [MMAS-4]

No

1.	Do you ever forget to take your (name of health condition)	1
	medicine?	

- 2\*. Do you ever have problems remembering to take your (name 0 1 of health condition) medication?
- 3. When you feel better, do you sometimes stop taking your 0 1 (name of health condition) medicine?
- 4. Sometimes if you feel worse when you take your (name of health condition) medicine, do you stop taking it?

Morisky, DE & DiMatteo, MR. Journal of Clinical Epidemiology. 2011; 64:262-263

<sup>\*</sup>Revised items.

#### The Adherence Estimator

I am convinced of the importance of my prescription medication. Agree Disagree

I worry that my medication will do more harm than good to me.

Agree Disagree

I feel financially burdened by the cost of my prescription medication.



### IF MEDICATION **ADHERENCE NOT ADDRESSED**



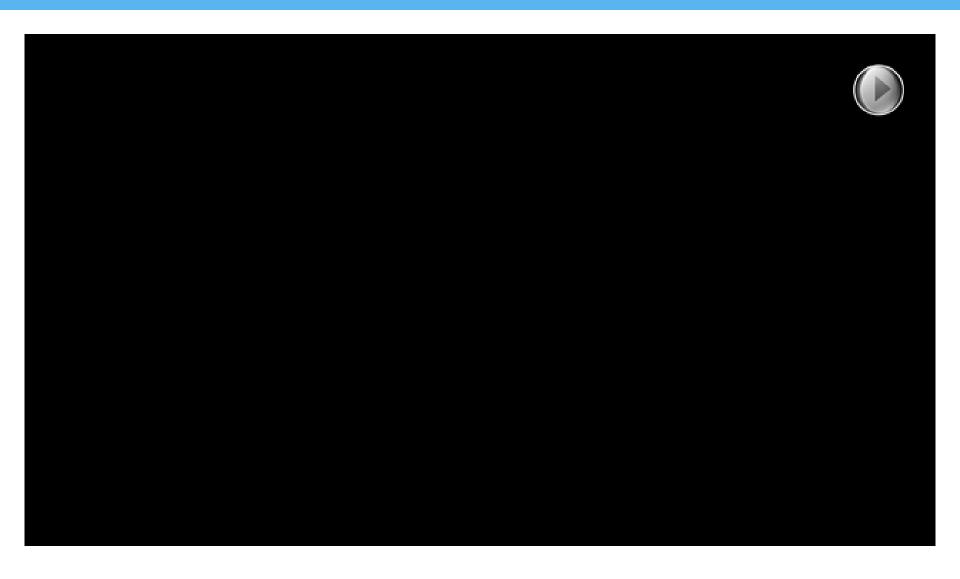


**FORMULARY** 

PATIENT CALL **RE: COST** 

DOSING, COST, ETC

### **OBSTACLES**



### **OBSTACLES**

#### UNINTENTIONAL

vs **INTENTIONAL** 

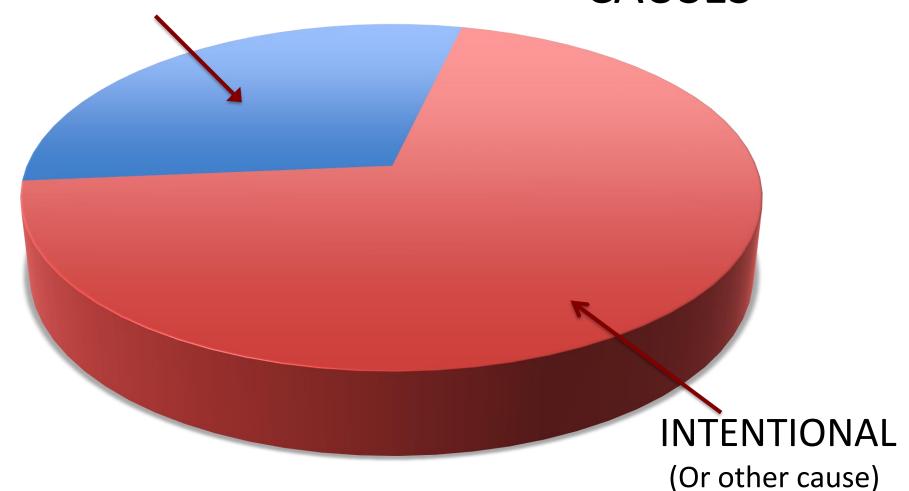
- FORGETTING
- SHIFT WORK
- COST
- CONFUSION
- WORK RESTRICTIONS

- MISTRUST
- FEAR OF SIDE EFFECTS
- MENTAL ILLNESS
- LACK OF BELIEF IN BENEFIT
- FEAR OF DEPENDENCY
- FEAR IT IS DANGEROUS
- LACK OF DESIRE
- NO APPARENT BENEFIT
- ALTRUISM



UNINTENTIONAL (Forgetful)

### NONADHERENCE CAUSES





## Medication Adherence

Improve the health of your patients and reduce overall health care costs





## Eight steps to improve medication adherence in your practice



Consider medication nonadherence first as the reason a patient's condition is not under control



Develop a process for routinely asking about medication adherence



Create a blame-free environment to discuss medications with the patient



Identify **why** the patient is not taking their medicine

## Eight steps to improve medication adherence in your practice



Respond positively and thank the patient for sharing their behavior



Tailor the adherence solution to the individual patient

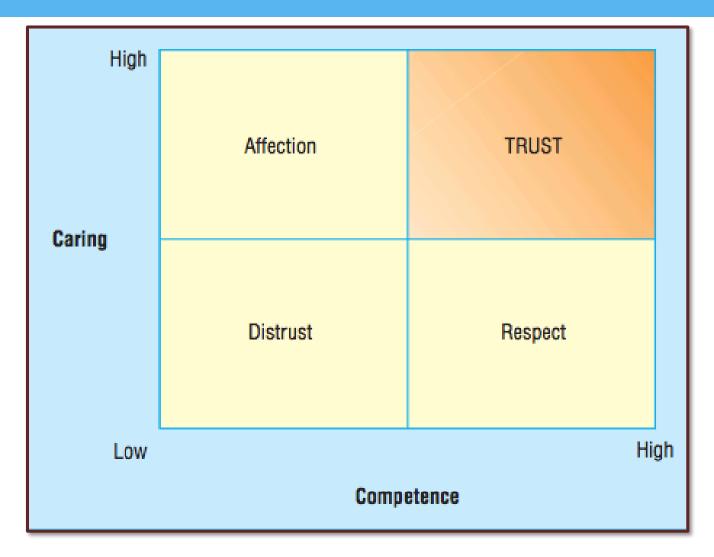


Involve the patient in developing their treatment plan



Set patients up for success

## Competence and caring in relation to building trust



## Trust



## ADHERENCE IS DRIVEN BY PATIENTS' BELIEFS

- \* A 'non-adherent personality' does not exist.
- \* Adherence to prescription medications is unrelated to adherence to self-care and lifestyle recommendations.
- \* There is no consistent relationship between demographic characteristics and adherence.

- \* Medication-taking is a decision-making process, and patients actively make decisions about their medications.
- Non-adherence is rational behavior—it is driven by patient beliefs
- Adherence represents shades of grey patients can be faithfully adherent to one medication, non-fulfill on another, and be nonpersistent to another because they hold different beliefs about each medication.





# PROCEINIC PROCES

REVIEW

**Medication Adherence: WHO Cares?** 

MARIE T. BROWN, MD, AND JENNIFER K. BUSSELL, MD

The treatment of chronic illnesses commonly includes the longterm use of pharmacotherapy. Although these medications are effective in combating disease, their full benefits are often not realized because approximately 50% of patients do not take their medications as prescribed. Factors contributing to poor medication adherence are myriad and include those that are related to patients (eg, suboptimal health literacy and lack of involvement in the treatment decision-making process), those that are related to physicians (eg, prescription of complex drug regimens, communication barriers, ineffective communication of information about adverse effects, and provision of care by multiple physicians), and those that are related to health care systems (eg, office visit time limitations, limited access to care, and lack of health information technology). Because barriers to medication adherence are complex and varied, solutions to improve adherence must be multifactorial. To assess general aspects of medication adherence using cardiovascular disease as an example, a MEDLINE-based

portant that they partner with patients in doing what is right together.

This review will discuss general aspects of medication adherence, using cardiovascular disease (CVD) as an example, and provide the physician with various practical strategies and resources for improving medication adherence among their patients.

#### METHODS

We conducted a MEDLINE database literature search limited to English- and non-English-language articles published between January 1, 1990, and March 31, 2010, using the

#### **eHEALTH INITIATIVE**

- 1. Annual renewal for chronic meds (once/12-15 months for chronic meds: 90 x 4) (Current States which allow only 12 month rx duration impair adherence)
- 2. Transfer prescriptions at patients' request to new pharmacy (Currently patients are directed to provider to rewrite all prescriptions)
- 3. Consolidate refill dates to ensure all meds are filled on same date (Pharmacist may supply more than ordered in 1 fill to provide synchronization)
- 4. Discontinuation of drug or dose change lacks efficient mechanism (Currently requires phone call/fax or > 30 key strokes)
- 5. Change in color and shape of generic drug decreases adherence (6 drugs filled 4 times in 1 year: possible combinations > 1200)
- 6. Match old and new prescription numbers at the pharmacy

New prescription # not linked to prior prescription #
Leads to duplication (27 key strokes and 5 min/patient/med)
Pharmacist requests new prescription, while new rx has already been sent which more than doubles the time to complete task



## eHEALTH INITIATIVE Solutions

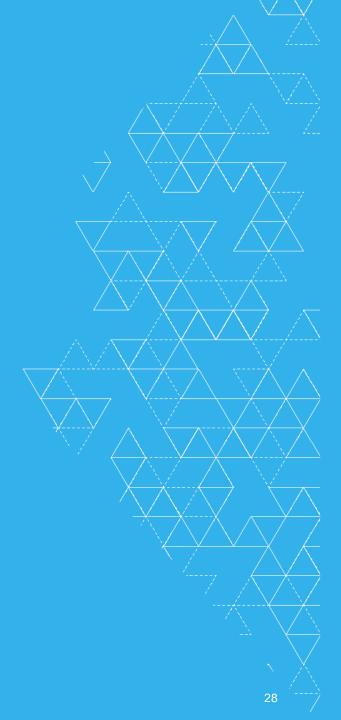
- 1. Annual renewal for chronic meds (once/12-15 months for chronic meds: 90 x 4) Lengthen prescription duration to 15 months
- 2. Transfer prescriptions at patients' request to new pharmacy Educate pharmacists/patients/insurers/providers
- Consolidate refill dates to ensure all meds are filled on same date Design systems improve consolidation rates at the pharmacy
- 4. Discontinuation of drug or dose change lacks efficient mechanism Design simple notification system
- 5. Change in color and shape of generic drug decreases adherence Inform patient and develop policy to avoid frequent changes UK improved asthma control by mandating all controller inhalers be 1 color and all rescue inhalers a different color
- 6. Continuity of chronic med prescription year to year

  Link new prescription # to prior prescription # or check to see if new rx already
  received before automatically notifying provider that no more refills remain



For additional resources, frequently asked questions and implementation support, visit <a href="https://www.stepsforward.org">www.stepsforward.org</a>!

Open access provided by AMA



#### **Medication Adherence**

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