

# Improving Patient Adherence Through Health Behavior Change

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## Upon completion of this workshop you will learn:

- About recent medication adherence research and how to talk to patients to improve their adherence to medication
- How to help patients commit to a plan appropriate to their stage of change
- An empathic yet directive counseling style
- The key principles of motivational interviewing
  - ◆ Roll with resistance
  - ◆ Express empathy
  - ◆ Develop discrepancy
  - ◆ Support self-efficacy
- Strategies you can use to negotiate behavior change with patients

## What percentage of US prescriptions dispensed are not taken correctly?

- A. <10%
- B. 10%-20%
- C. 21%-40%
- D. 41%-50%
- E. >50%

## Incidence of medication nonadherence

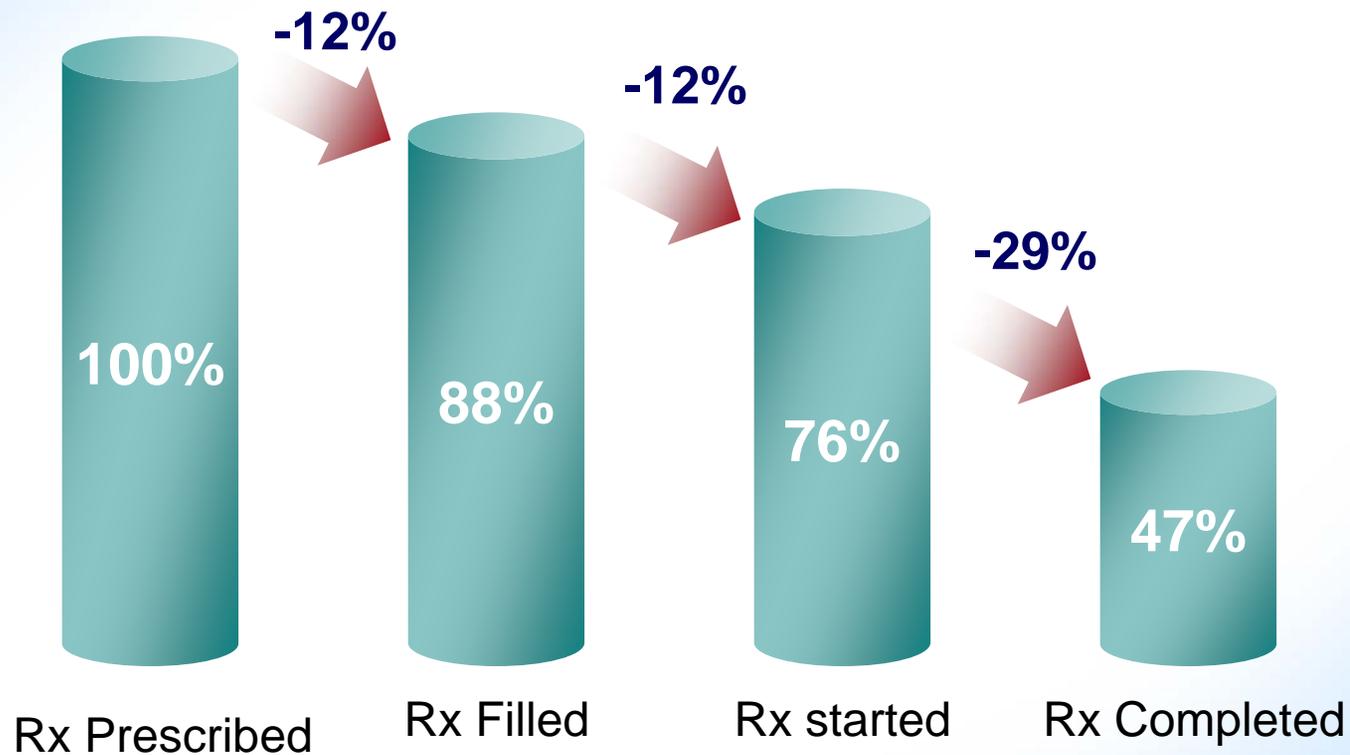
- According to the American Heart Association (AHA), more than half of all Americans with chronic diseases don't follow their physician's medication and lifestyle guidance
- Two-thirds of all Americans fail to take any or all of their prescription medicines

# What percentage of patients don't fill their prescription or don't even begin taking the medication?

Adherence  
Research

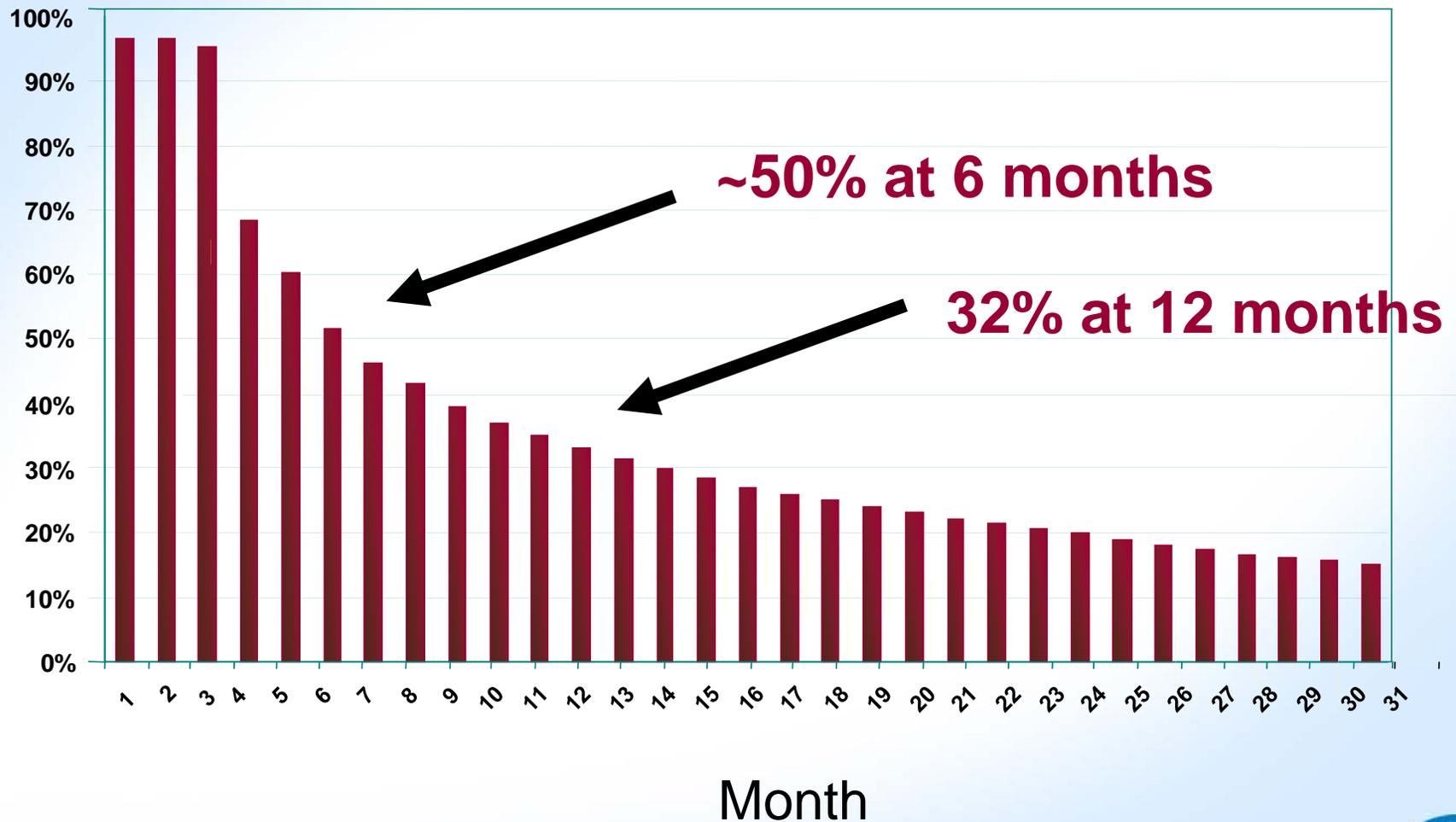
- A. <10%
- B. Approximately 24%
- C. >30%

# US Patients do not take medications as prescribed



American Heart Association. Statistics you need to know. Available at:  
<http://www.americanheart.org/presenter.jhtml?identifier=107>. Accessed July 23, 2004.

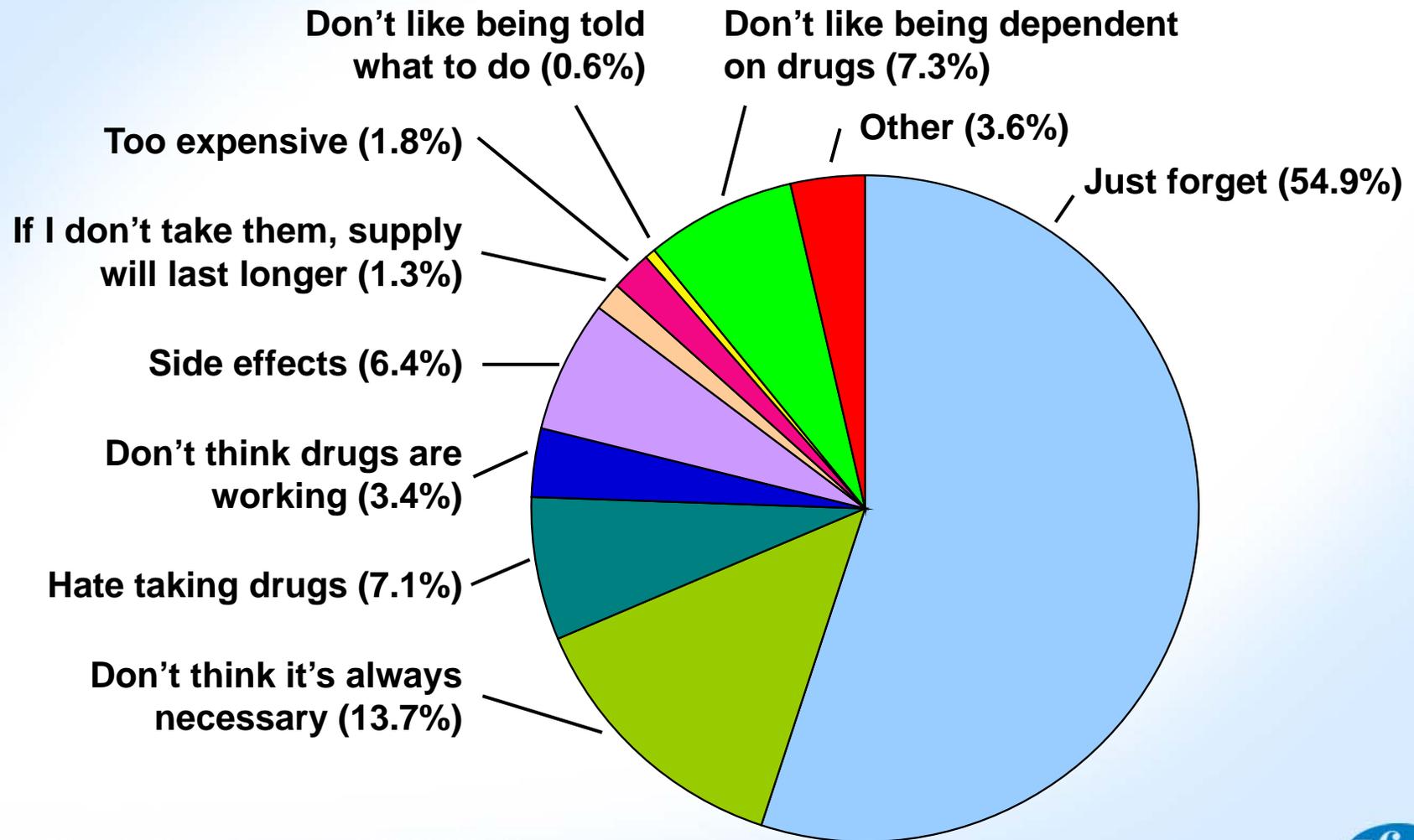
# Statin persistency (11,708 patients analyzed)



NDC Health Services Analysis, 2000, data on file

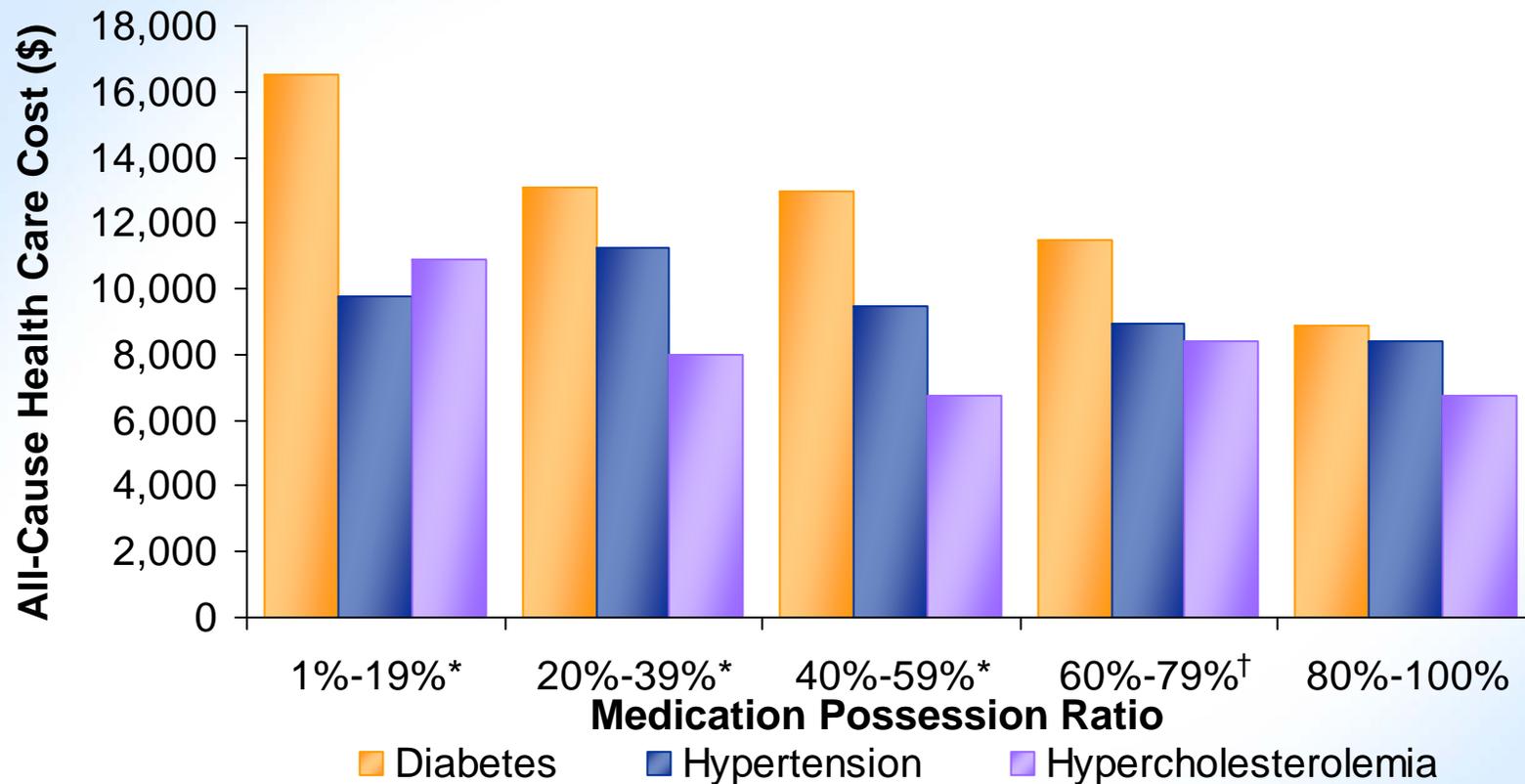


# Patient-reported reasons for nonadherence



Cheng JW, et al. *Pharmacotherapy*. 2001;21:828-841.

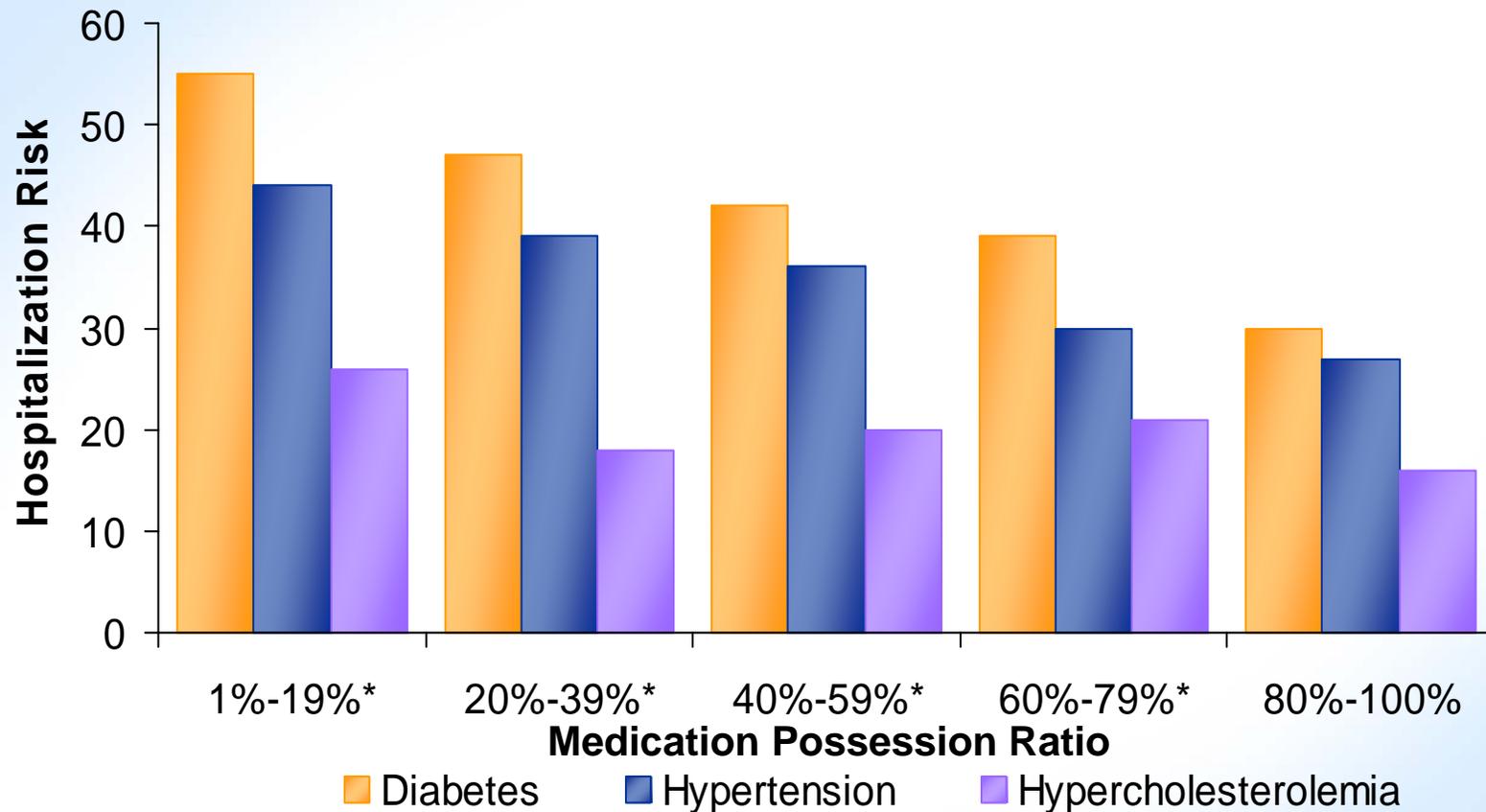
# Impact of medication adherence on all-cause health care costs



\*  $P < 0.05$  vs. 80%-100% group.

†  $P < 0.05$  vs. 80%-100% group in diabetes and hypercholesterolemia patients.  
Sokol MC, et al. *Med Care*. 2005;43:521-530.

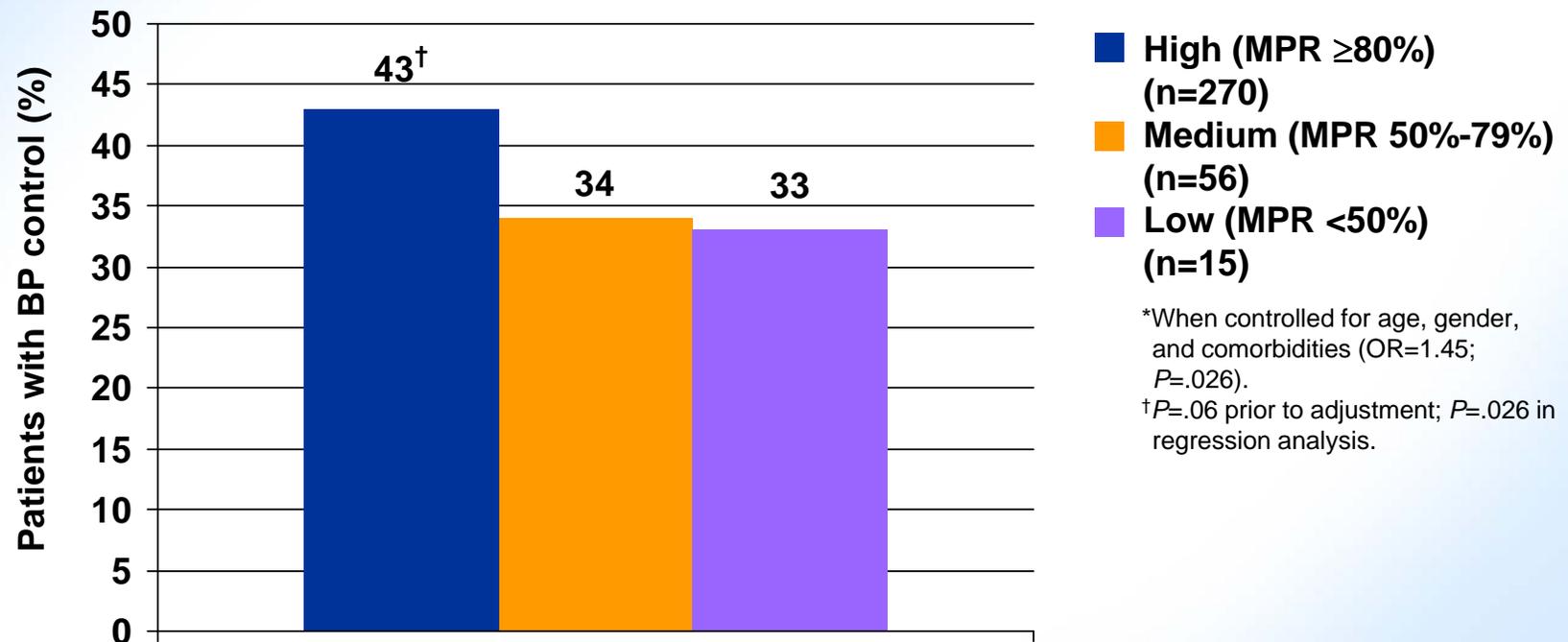
# Impact of medication adherence on hospitalization risk



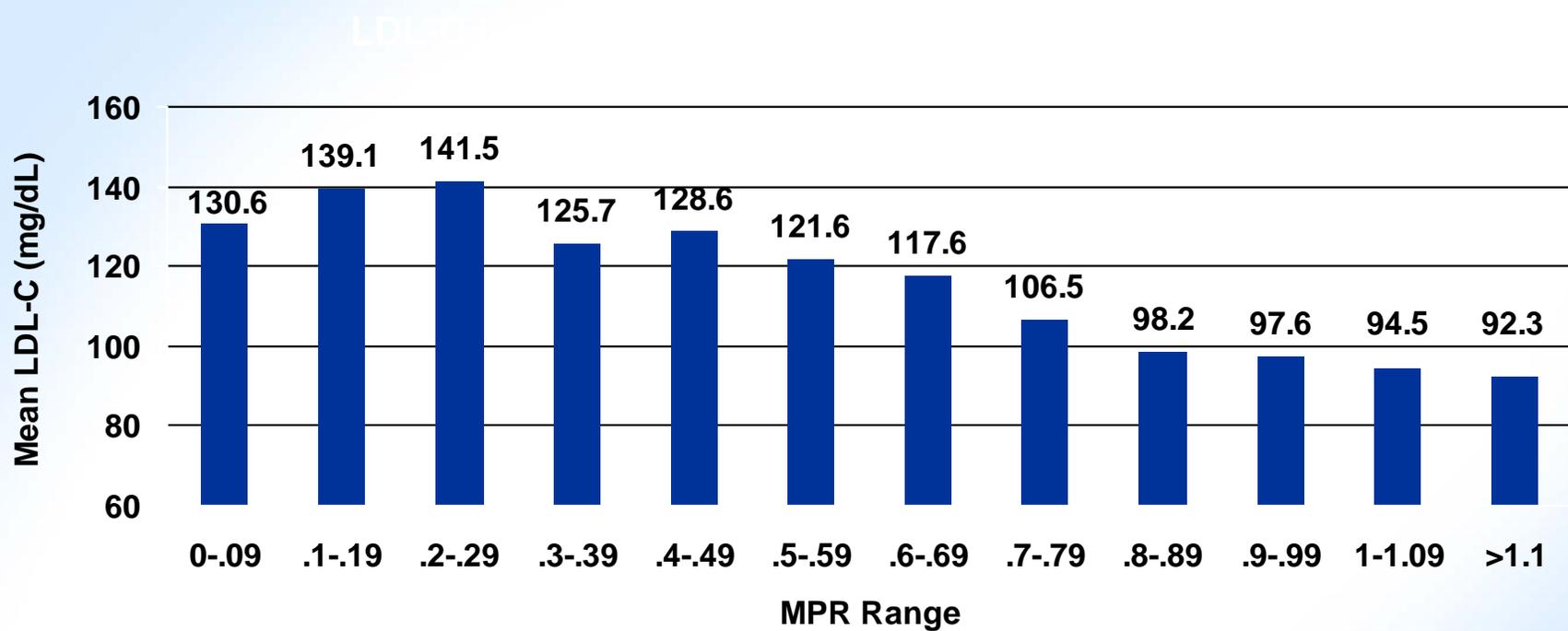
\* $P < 0.05$  vs. 80%-100% group.  
Sokol MC, et al. *Med Care.* 2005;43:521-530.

## Low adherence to antihypertensive therapy was associated with worse BP control

- Highly adherent patients were 45% more likely to achieve blood pressure control than patients with medium or low adherence\*



# Lower adherence to statin therapy was associated with worse LDL-C control in patients with diabetes and dyslipidemia



Parris ES, et al. *Diabetes Care*. 2005;28:595-599.



## The case for improving adherence

- Improved adherence is associated with:
  - ◆ Reduced overall health care costs
  - ◆ Decreased risk of hospitalization
  - ◆ Improved clinical outcomes

Sokol MC, et al. *Med Care*. 2005;43:521-530  
Bramley TJ, . *J Managed Care Pharm*. 2006;12:239-245.  
Parris ES, et al. *Diabetes Care*. 2005;28:595-599.

# The traditional biomedical method of patient counseling

- Patient education materials provided to patient, often when they are leaving the doctor's office or at the pharmacy when they pick up the prescription
- Auxiliary Rx bottle labels as the primary form of communication
- Limited to no discussion regarding
  - ◆ Medication's value
  - ◆ Patient's understanding of disease
  - ◆ Patient's understanding of therapy
  - ◆ Patient's readiness to accept treatment
- Assumes the patient will follow the doctor's orders
- Interventions following this model are unlikely to cause sustained changes in adherence



WHO. *Adherence to Long-Term Therapies: Evidence for Action*. WHO; 2003:135-149.

Berger BA. *Case Manager*. 2004:15:46-50.

Miller WR, et al. *Motivational Interviewing*. 2002:217-250.

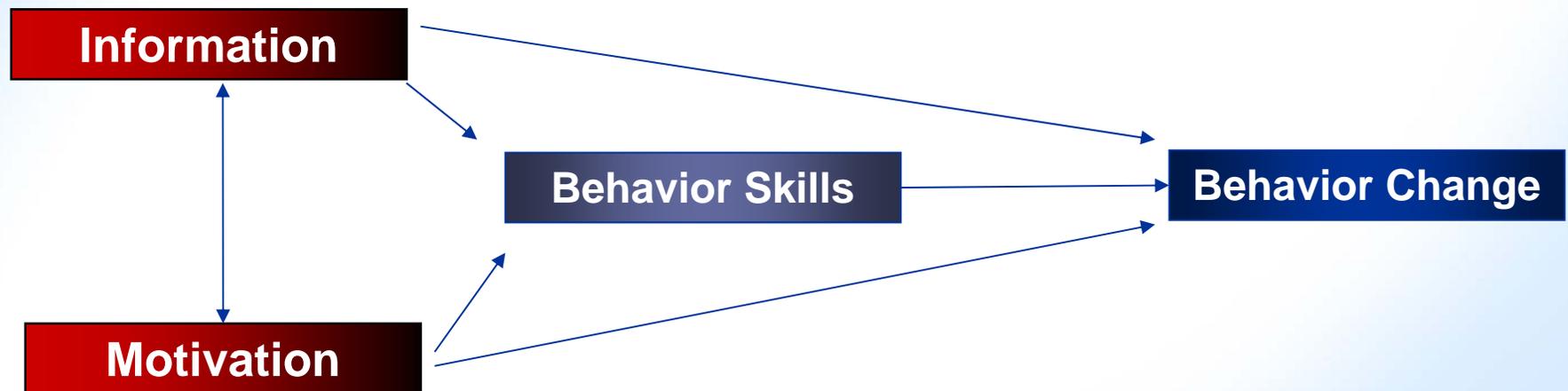
# Let's look at a patient counseling session

## Note the following during the video:

- Eye contact
- Body language
- Signs of respect
- Signs of empathy

# Behavioral model: Information-motivation-behavioral skills model

- Presence of both information and motivation increase the likelihood of adherence
- Interventions based on this model have been effective in influencing behavioral change in a variety of clinical applications



# The case for Health Behavior Change

Health Behavior  
Change

Concepts

- Managing an illness requires behavior modification
- To effectively change behavior, a patient must be ready to make the necessary changes
- Resistance can be turned into motivation
- Helps build the patient's confidence for success
- Improves patient–provider relationships, which leads to better adherence
- When this model has been used in smoking cessation, alcohol/drug rehabilitation, and medication nonadherence, positive behavior changes occurred

A strategy and collection of methods geared to the brief patient-centered consultation based on:

- Motivational Interviewing
- Stages of Change Model

It is a method of communication that is:

- Patient-centered
- Directive
- Effective and enhancing motivation to change by exploring and resolving **ambivalence**



## The spirit of Health Behavior Change

- Collaborate with patients
- Evocate their readiness to take action
- Develop patients' autonomy so they take responsibility for their own health

# Let's compare the 2 models of care:

## Biomedical

## Behavioral

Practitioner centered	Patient centered
Information giving	Information exchange
"Save" the patient	Patient "saves" self
Dictate behavior	Negotiate behavior
Compliance	Adherence
Authoritarian (Parent-Child)	Servant
Motivate the patient	Assess motivation
Persuade, manipulate	Understand, accept
Resistance is bad	Resistance is information
Argue	Confront
Respect expected	Respect earned

## Resistance can be bad or good

- Resistance can be a sign of a patient's internal conflict between their current behavior and their desired behavior
- Resistance can disrupt and impact the rapport between the patient and health care provider
  - ◆ Signal of a disturbance in the relationship

## Four categories of resistance behavior

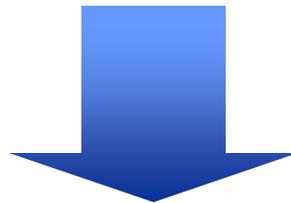
- Negating
  - ◆ blaming, disagreeing, excusing, minimizing, claiming impunity, pessimism, reluctance, unwillingness to change
- Arguing
  - ◆ challenging, discounting, hostility
- Interrupting
- Ignoring

# Working with the resistant patient

Health Behavior  
Change

Resistance

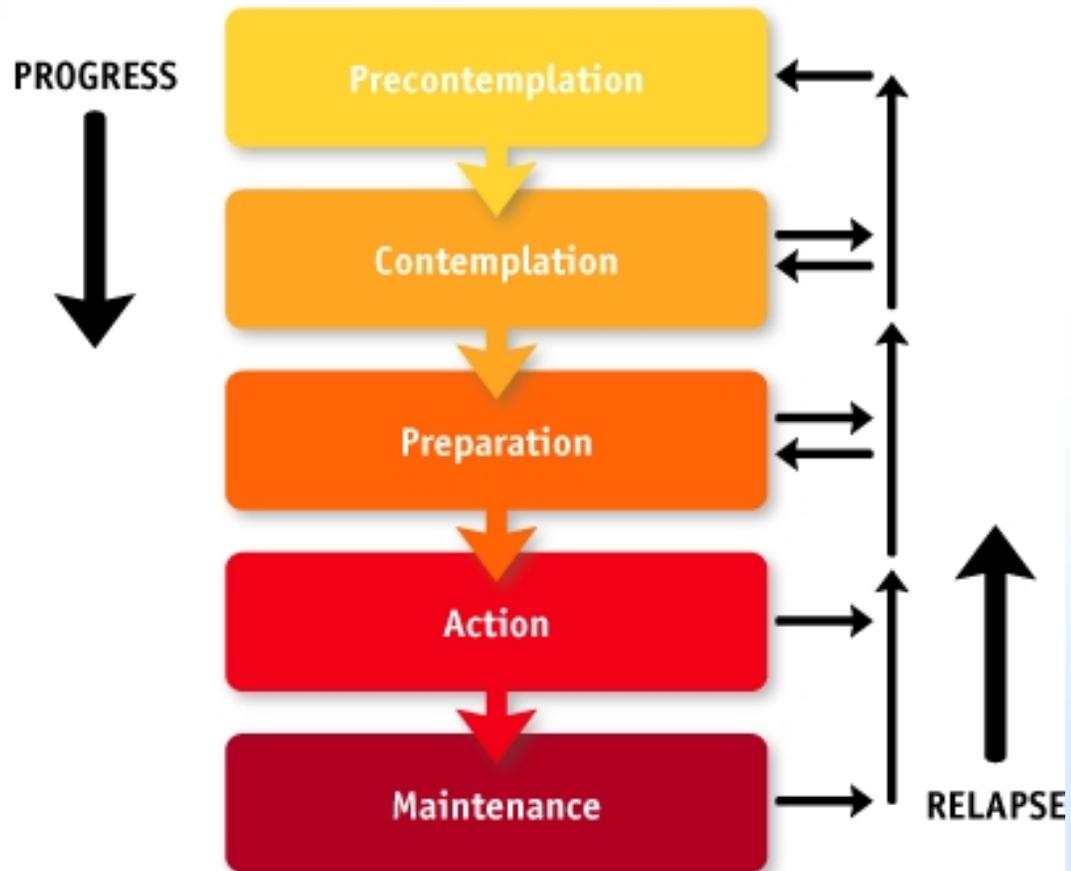
**YES, BUT, and Persuasive  
Communication are NOT the  
solution to resistance**



**Understanding, exploration,  
and patience are the  
solution**

# Stages of change model

- 5 stages of change
- By identifying patient's position in the change process, health care providers can tailor intervention, usually with skills they already possess
- Focus is not to convince patient to change behavior but to help patient move along stages of change



## Precontemplation stage

### ■ Characteristics

- ◆ Patient not even considering changing
- ◆ May be in denial or not consider problem serious
- ◆ May have tried to change and failed so many times they have given up

### ■ Strategies

- ◆ Educate on risks benefits
- ◆ Highlight the positive outcomes related to the change

### ■ Example

- ◆ Smoker is in denial of health risks: “heart attack won’t happen to me, my father smoked for 92 years”

## Contemplation stage

### ■ Characteristics

- ◆ Person is ambivalent about changing
- ◆ During this stage the person weighs benefits costs or barriers of the change including time, expense, fear

### ■ Strategies

- ◆ Identify barriers and misconceptions the patient has
- ◆ Address their concerns and identify appropriate support systems

### ■ Example

- ◆ A patient with high cholesterol recognizing need to change: “I know I need to change my diet, but I don’t want to give up the foods I like”

## Preparation stage

- Characteristics
  - ◆ The person is prepared to experiment with small changes
- Strategies
  - ◆ Develop realistic goals and timelines for the change
  - ◆ Don't try too many changes or too much change all at once
  - ◆ Provide positive reinforcement about patient's willingness to change
- Example
  - ◆ Overweight patient preparing to exercise by identifying exercise facilities in their area and planning on how to fit this into their schedule

## Action stage

### ■ Characteristics

- ◆ The person takes definitive action to change their behavior

### ■ Strategies

- ◆ Provide positive reinforcement
- ◆ Remind them of the positive benefits of the change
- ◆ Verify their support system

### ■ Example

- ◆ Patient with high blood pressure fills medication, self-monitors BP daily, and continuously takes medication. They use reminder system to help them not forget to take medication

## Maintenance and relapse prevention stage

### ■ Characteristics

- ◆ The person strives to maintain the new behavior over the long term

### ■ Strategies

- ◆ Provide encouragement and support
- ◆ Identify any potential barriers that may sideline them from their goals

### ■ Example

- ◆ Patient refills their medication regularly, continues to follow their diet, and incorporates daily visits to the gym

# The 4 general principles of Health Behavior Change

Health Behavior  
Change

REDS

## ■ R E D S

1. R Roll with resistance
2. E Express empathy
3. D Develop discrepancy
4. S Support self-efficacy

# The principles of Health Behavior Change

## 1. Roll with resistance

- Use understanding, empathy
- Get clarification
- New perspectives are invited, not imposed
- Resistance is not directly opposed
- Resistance is a signal to respond differently
- Repeat your understanding
- The patient is primary resource in finding answers and solutions

# The principles of Health Behavior Change

## 1. Roll with resistance

If a 50-year old patient with hypertension says: “I just don’t like the idea of taking a medicine every day,” what is an appropriate response?

- ◆ “Well, if you want to get your blood pressure under control, you need to take the medicine every day”
- ◆ “High blood pressure is a chronic illness and you have to take your medication every day”
- ◆ “What in particular don’t you like about taking your medication every day?”
- ◆ “Having to take medicine every day concerns you?”

# The principles of Health Behavior Change

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# The principles of Health Behavior Change

## 2. Express empathy

Health Behavior  
Change

REDS

- Acceptance facilitates change
- Skillful reflective listening is fundamental
- Identify and understand resistance and reasons for unhealthy behaviors without judgment
- Empathy creates a climate for change through trust and must be shown throughout the process

## Listening skills are important when expressing empathy

### What is not listening:

- Ordering, directing, commanding
- Warning or threatening
- Giving advice, suggestions, solutions
- Persuading or lecturing
- Moralizing, preaching (fixing, healing, and converting)
- Disagreeing, judging, criticizing, or blaming
- Agreeing, approving, or praising
- Shaming, ridiculing, or labeling
- Reassuring, sympathizing, or consoling
- Questioning or probing

# The principles of Health Behavior Change

## 3. Develop discrepancy

- Discrepancy = dissonance
- Point out the good things and bad things about change, the pros and cons
- Discrepancy throws the patient's system out of kilter
- Restate the discrepancies heard
- The patient should identify the arguments for change
- Change is motivated by a perceived discrepancy between present behavior and important personal goals or values

# The principles of Health Behavior Change

## 3. Develop discrepancy

Health Behavior  
Change

REDS

If a patient who has a child with severe asthma continues to smoke, what is an appropriate response?

- ◆ “What you are doing is harmful to your child and you need to stop”
- ◆ “I know that you don’t want to do anything to make your child’s asthma worse. On the other hand, we know that the tars and nicotine which get on your hands can trigger her asthma, since she is very sensitive to these things. What are your thoughts about this?”
- ◆ “Cigarette smoke on your clothes can make your child’s asthma worse even if you smoke outside. You must stop smoking”

# The principles of Health Behavior Change

## 3. Develop discrepancy

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# The principles of Health Behavior Change

## 4. Support self-efficacy

- A person's belief in the possibility of change is an important motivator
- The person, not the counselor, is responsible for choosing and carrying out change
- Notice the positive, including statements, not just behaviors
- Let the person know you've noticed
- Let them know how you feel
- Praise the behavior, not the person
- Continue to support self-efficacy throughout the process

# The principles of Health Behavior Change

## 4. Support self-efficacy

During his last visit a patient with diabetes is told he needs to start exercising as part of his treatment. You have earlier rolled with resistance and empathized with him. To support his self-efficacy, what is an appropriate response?

- ◆ “What are your thoughts about your exercise program?”
- ◆ “You really need to do it, not just think about it”
- ◆ “Getting into a regular exercise routine will help you”
- ◆ “Good. What kind of exercise have you thought about?”

# The principles of Health Behavior Change

## 4. Support self-efficacy

Health Behavior  
Change

REDS

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- Opening strategy: elicit information about patient's lifestyle, how does the patient view it
- Ask about a typical day: what is the patient's routine?
  - ◆ Needed for tailoring medication schedule
  - ◆ Helps identify dietary needs/problems
  - ◆ Patient's exercise activity

- Elicit patient's thoughts on the good things and bad things
  - ◆ What do they like and dislike about the proposed therapy and lifestyle changes?
  - ◆ What is their understanding of the illness and its treatment?
  - ◆ Do they agree with the MD's assessment?
  - ◆ Do they believe they can do what is asked? What will help?
  - ◆ What are the barriers to change?

- Providing information — is the patient ready for information?
- Provide patient with all appropriate information
  - ◆ Dosage – how much to take and when to take it
  - ◆ When the expected onset of action is
  - ◆ Most common side effects and what to do if any occur
  - ◆ What to do if there are problems
  - ◆ Ask if patient has any further questions

- After you have provided patient with information, elicit any additional concerns they may have
  - ◆ “What are your thoughts now about managing your...”
  - ◆ “Where does this leave you now?”
  - ◆ “Do you anticipate needing any help?”
  
- ELICIT → PROVIDE → ELICIT

# The ingredients of readiness to change

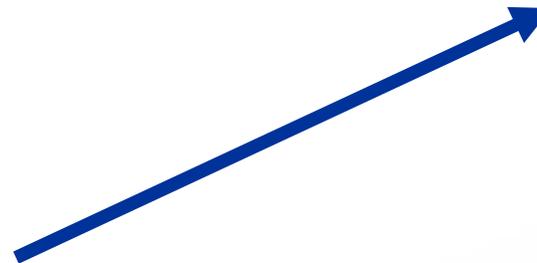
Health Behavior  
Change

Importance &  
Confidence

**Importance** (*Why* should I change?)  
(personal values and expectations  
of the importance of change)



**Confidence**  
(*How* will I do it?)  
(self-efficacy)



Readiness

## Explore importance Menu of strategies

- Scaling questions
- Examine the pros and cons
- Explore concerns about the behavior
- A hypothetical look over the fence
- Do little more

# Building confidence

## Menu of strategies

Health Behavior  
Change

Importance &  
Confidence

- Scaling questions
- Brainstorm solutions
- Past efforts – success and failures
- Reassess confidence
- Do little more

# Scaling questions

## The Readiness Ruler

Health Behavior  
Change

Importance &  
Confidence

- Useful tool when you encounter resistance
- Goal is to get the patient talking about potential changes in behavior
- Scale from 1 to 7
- Used to evaluate 2 concepts
  - ◆ Importance
  - ◆ Confidence

Zimmerman GL, et al. *Am Fam Physician*. 2000;61:1409-1416.

Rollnick S, et al. *Health Behavior Change: A Guide For Practitioners*. 2003:73-104.



# Scaling questions

## The Readiness Ruler questions

Health Behavior  
Change

Importance &  
Confidence

- Initial question
  - ◆ “How important is this change for you?”
  - ◆ “How confident are you that you can make this change if you want to?”
  
- Follow-up questions
  - ◆ “Why did you choose a \_\_\_\_\_, not a 1?”
  - ◆ “What would have to happen for it to be a \_\_\_\_\_?”  
(next highest number from what they stated)

# The Envelope

Health Behavior  
Change

Importance &  
Confidence

- Elicits change talk
- “If I handed you an envelope, what would the message inside have to say to get you to \_\_\_\_\_?”
- Useful when there is ambivalence

## Examine the pros and cons

Health Behavior  
Change

Importance &  
Confidence

- Useful when there is ambivalence
- Many patients are uncertain about change
- Variation exists in people's *awareness* of their internal conflict
- Patient's have unique perceptions and contradictions about change which should be explored

# Examine the pros and cons

Health Behavior  
Change

Importance &  
Confidence

- Ask a question like:
  - ◆ “What are the good things about change?”
  
- Then ask:
  - ◆ “What are the less good things about change?”
  
- Practitioner Role
  - ◆ Listen carefully and summarize both sides using the patient’s own terminology
  - ◆ Be careful not to start TELLING the patient about advantages of change during this discussion which may give the patient a reason to resist more

## Explore concerns about the behavior

Health Behavior  
Change

Importance &  
Confidence

- Strategy which focuses upon the costs of the current behavior or situation
- One can only use this strategy with the emphasis on the word 'concern' if the patient *appears* concerned
- Overestimating the patient's concern may lead to resistance

## Explore concerns about the behavior

Health Behavior  
Change

Importance &  
Confidence

Questions to ask the concerned patient:

- What concerns you the most about [your behavior]?
- What concerns do you have about [the behavior]?

## A hypothetical look over the fence

- Strategy used to examine the implications of behavior change
- Best utilized with patients who perceive the high level of importance of changing in a change
- Useful for dealing with both importance and confidence issues

### How to introduce it:

- Why don't we imagine for a moment that you did make this change. How would you feel?

## Brainstorm solutions

- Encourage patients to select goals and determine strategies to achieve them
- Practitioner can offer a range of options for the patient:
  - ◆ *“There is usually many possible courses of action”*
  - ◆ *“I can tell you about what’s worked for other people, you will be the best judge of what works for you”*
  - ◆ *“Let’s go through some options together”*
- Help the patient set small, achievable targets
- Establish a realistic timeframe

## Past efforts – success and failures

- Expectations are frequently related to past experiences
- Confidence can be undermined by perceived repeated failure
- Help patient to see the past as a valuable resource in planning for a success
- Guide conversation toward talk about strengths and solutions
  - ◆ Ask patient about their most successful attempt to date, what made it different from other attempts
  - ◆ Are any of these differences things that can be built into the current plan?

## Health Behavior Change summary

- REDS
- Elicit – Provide – Elicit
- Scaling Questions / The Envelope
- Brainstorm Solutions
- Past Efforts – Success and Failures
- Reassess Confidence
- Examine the pros and cons
- Explore concerns about the behavior
- A hypothetical look over the fence
- Do Little More

## Helpful resources

Rollnick S, Mason P, Butler C. *Health Behavior Change: A Guide For Practitioners*. Edinburgh, Scotland: Churchill Livingstone; 2003.

Miller WR, Rollnick S. *Motivational Interviewing*. 2nd ed. New York, NY: Guilford Press; 2002.

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Miller NH, Hill M, Kottke T, Ockene I. The multilevel compliance challenge: recommendations for a call to action. *Circulation*. 1997;95:1085-1090.

Berger BA. *Case Manager*. 2004;15:Sept-Oct and Nov-Dec.

CMAG-2 – Guidelines from the Case Management Society of America for improving patient adherence to medication therapies Case Management Society of America. Available at: [www.cmsa.org/CMAG](http://www.cmsa.org/CMAG). Accessed October 30, 2004.

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- Zimmerman GL, Olsen CG, Bosworth MF. A 'stages of change' approach to helping patients change behavior. *Am Fam Physician*. 2000;61:1409-1416.



# Final Questions