PAINWEEK®

The Dog Ate My Homework: A Guide to Avoiding Relapse and Maintaining Adherence

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Disclosure

Dr. Cosio is speaking today based on his experiences as a psychologist employed by the Veterans Administration. He is not speaking as a representatives of or as an agent of the VA, and the views expressed are his own.

Learning Objectives

- Describe how noncompliance and nonadherence continue to be a serious healthcare concern
- Differentiate between the terms noncompliance, nonadherence, and relapse
- Review how to maintain long-term gains using motivational interviewing and health coaching

Statistics Underscore the Need

- Approximately 125,000 people with treatable diseases die each year in US because they do not take their medication as prescribed
- 10% to 25% of hospital & nursing home admissions result from uninitiated or incomplete prescribed treatment plans
- Clinical trials report average non-adherence rates of 43% to 78% among patients receiving medication for chronic conditions
- Behavioral change interventions related to obesity, substance abuse, smoking cessation, and chronic pain have shown similar relapse rates following completion of treatment
- These statistics underscore need for a continued understanding of factors that impact treatment compliance, or adherence, & relapse in individuals with chronic pain

Sabate E. Adherence to Long-term Therapies: Evidence for Action. Geneva, Switzerland: World Health Organization; 2003.
American College of Preventive Medicine. Medication adherence clinical reference. 2011.Available at: www.acpm.org/?MedAdherTT_ClinRef. Accessed: July 11, 2016.
Claxton AJ, Cramer J, Pierce C. A systematic review of the associations between dose regimens and medication compliance. *Clin Ther.* 2001 Aug;23(8):1296-1310.
Brownell KD, Marlatt GA, Lichtenstein E, Wilson GT. Understanding and preventing relapse. *Am Psychol.* 1986 Jul;41(7):765-782.

Defining the Terms: Compliance

- Compliance- acting in accordance with advice of a treatment provider
- Historical use of term compliance has been criticized for its perceived unilateral demands on patient *to comply* or *to obey*
- Other experts recommend term “adherence” as an alternative

Aronson J. Compliance, concordance, and adherence. *Br J Clin Pharmacol.* 2007; 63(4):383-384.

Lutfey KE, Wishner WJ. Beyond "compliance" is "adherence". Improving the prospect of diabetes care. *Diabetes Care.* 1999 Apr;22(4):635-639.

Wahl C, Gregoire JP, Teo K, et al. Concordance, compliance and adherence in healthcare: closing gaps and improving outcomes. *Healthc Q.* 2005;8(1):65-70.

Keep Your Boat Afloat!

Defining the Terms: Adherence

- Adherence- degree to which one consistently follows treatment plan over time
- Nonadherence would then describe a patient who discontinued a prescribed treatment program or medication prematurely
- Terms noncompliance & nonadherence, unfortunately, continue to be used interchangeably in literature
- However, in this presenation, we will proceed only using term '*adherence'*

Variable Related to Nonadherence

- Past research has identified variables related to nonadherence, including:
  - demographic variables
  - cultural issues
  - incentives
  - attitudes (denial)
  - psychological variables (depression, dementia, & substance abuse)
  - social support
- To date, researchers have not identified a key, single variable related to treatment adherence

Dimatteo R. Social support and patient adherence to medical treatment: A meta-analysis. *Health Psychol*. 2004;23(2):207-218.

Painter J, Seres J, Newman R. Assessing benefits of the pain center: Why some patients regress, Pain. 1980;8:101-113.

Block A, Kremer E, Gaylor M. Behavioral treatment of chronic pain: Variables affecting treatment efficacy, Pain. 1980; 8:367-375.

Matsuzawa Y, Lee Y, Fraser F, et al. Barriers to behavioral treatment adherence for headache: An examination of attitudes, beliefs, and psychiatric factors. J Head Face Pain. 2018;59(1):19-31.

A Multivariate Approach

- A multivariate approach is recommended with following factors in mind:
  - *Patient–provider relationship*
    - including approachability, shared medical decision making, & amount of provider supervision, trust, & mutual respect
  - *Inherent features of treatment regimen*
    - including complexity (treatment costs), intrusiveness (unpleasant side effects), duration, & patient knowledge of their condition
  - *Therapeutic environment*
    - including organizational structure, scheduling of appointments, continuity of care, and length of referral and wait times
  - *Characteristics of disease or injury*
    - such as recognizability of illness & unpleasantness of symptoms

Meichenbaum D, Tur, D. Facilitating Treatment Adherence: A Practitioner's Guidebook. New York, NY: Plenum;1987.

A Multivariate Approach

- *Client beliefs*
  - such as believed credibility of the treatment, pain beliefs, & attitudes toward pain
- *Characteristics of patient*
  - including prior experiences, identification of triggers, feelings of uncertainty, inconvenience, pessimism, motivation, & self-efficacy
- *Social support*
  - including qualities of patient social support system & degree of family conflict/cohesion

Dimatteo R. Social support and patient adherence to medical treatment: A meta-analysis. *Health Psychol*. 2004;23(2):207-218.

Matsuzawa Y, Lee Y, Fraser F, et al. Barriers to behavioral treatment adherence for headache: An examination of attitudes, beliefs, and psychiatric factors. *J Head Face Pain. 2018;59*(1):19-31.

Meichenbaum D, Tur, D. *Facilitating Treatment Adherence: A Practitioner's Guidebook*. New York, NY: Plenum;1987.

Hofkamp S, Buenaver M, Smith M, et al. Assessing willingness to try pharmacological versus nonpharmacological treatments for pain in patients with temporomandibular disorders. *J Pain. 2008;9*:372.

Williams D Thorn B. An empirical assessment of pain beliefs. *Pain. 1989;36*(3):351-358.

Sale JE, Gignac M, Hawker G. How "bad" does the pain have to be? A qualitative study examining adherence to pain medication in older adults with osteoarthritis. *Arthritis Rheum.* 2006 Apr 15;55(2):272-278.

Fishbain D, Burns D, Diorbio, J, et al. Variable associated with self-prediction of psychopharmacological treatment adherence in acute and chronic pain. *Pain Practice*. 2010;10(6): 508.

How to Assess Adherence

- There have been many measures developed & criteria employed to assess patient adherence to a treatment plan
- One criterion proposed is that a minimum standard is necessary to be set to achieve a desired health benefit
- Adherence is generally measured as a continuum & should not be considered all-or-nothing
- Investigators have recommended use of multiple indicators of adherence

Gordis L. Methodological issues in the measurement of patient compliance. In: Sackett D, Haynes R, eds. *Compliance with Therapeutic Regimens*. Baltimore, MD: Johns Hopkins University Press; 1976.

Indicators of Adherence

- Self-report measures
  - may be easiest to obtain
  - most frequently used
  - easy to implement (interviews and self-monitoring)
- Behavioral measures
  - most common method is medication adherence (pill counts or refills)
  - activity levels (pedometers and actometers)
  - attendance of sessions
- Biochemical indices
  - may be less subject to bias
  - more expensive
  - not available
  - vulnerable to metabolic conditions
- Clinical outcomes
  - suggested to be the best way
  - there is no linear association
  - may also involve independent observers (family and friends)

How to Assess Adherence

- Frontline providers can formulate specific procedures for improving their own patients' participation:
  - proactively assessing risk of nonadherence
  - improving patient-provider relationship
  - educating the patient on their condition
  - educating on effectiveness of treatment
  - Educating about side effects
- It is important to customize treatment, enlist social support, and make use of other healthcare providers via referral or multidisciplinary care.
- For medication adherence, it is important to ensure patient understands medication & its side effects thoroughly

Meichenbaum D, Tur, D. *Facilitating Treatment Adherence: A Practitioner's Guidebook*. New York, NY: Plenum;1987.
Haynes R, Ackloo E, Sahota N, et al. Interventions for enhancing medication adherence. *Cochrane Database Syst Rev*. 2008;16.

When Relapse Occurs

- Relapse- a loss of treatment gains or regression to pre-treatment baselines
- One criterion for treatment program success is requirement that 30% to 70% of patients maintain gains, usually over 1-5 years
- 70% to 30% of patients will *not* meet criteria for long term improvement from ‘successful,’ perhaps best practices, gold-standard, treatment

Keefe F, Gil K, Rose S. Behavioral approaches in the multidisciplinary management of chronic pain: Programs and issues, *Clin. Psychol. Rev.* 1986;6:87-113.

When Relapse Occurs

- Approximately 1/3 of originally successful patients will relapse and return to pre-treatment levels or worse
- There is interest in better understanding variables related to treatment success & treatment relapse
- Some teams have identified:
  - importance of long-term maintenance or skills
  - experimented with length of treatment
  - booster sessions
  - assessing and addressing high-risk situations that foster decline
- These strategies do not appear to resolve issue of relapse
- Chance for a relapse can be reduced if skills learned are generalizable, translatable to patient's life, & continuously reinforced
- Its valuable to develop & use treatments that enhance generalization of gains to interdependent aspects of wellness

Shealy C, Shealy M. Behavioral techniques in the control of pain: A case for health maintenance vs. disease treatment. In: Weisenberg M, Tursky B, eds. *Pain: New Perspectives in Therapy and Research.* New York NY: Plenum; 1975.
Dolce J, Cracker M, Doleya D. Prediction of outcome among chronic pain patients. *Behav. Res. Ther.* 1986.24:313-319.
Brownell K, Marlatt, G, Lichtenstein E, Wilson G. Understanding and preventing relapse. *Am. Psychol,* 1986;41:765-782.
Marlatt G, Gordon J. *Relapse Prevention: Maintenance Strategies in the Treatment of Addictive Behaviors*. New York, NY: Guilford Press; 1985.
Dolce J, Cracker M, Molettetre C, Doleys D. Exercise quotas, anticipatory concern and self-efficacy expectancies in chronic pain: A preliminary report, *Pain.* 1986;24:365-312.
Cairns D, Pasino J. Comparison of verbal reinforcement and feedback in the operant treatment of disability of chronic low back pain. *Behav. Ther.* 1977;8,:621-630.
Doleys D, Cracker M, Patton D. Response of patients with chronic pain to exercise quotas. Phys. Ther. 1982;62:1111-1115.

How to Keep Patients Moving Forward

- There are evidence-based strategies providers can use to help maintain long-term gains in their pain management care:
  - building therapeutic relationship
  - motivational interviewing
  - health coaching interventions
- Traditionally, a hierarchical, authoritarian approach was used in medicine
- It has since been evolving toward a more collaborative partnership between patient & provider
- It is based on mutual goals & a shared understanding of importance of medical problem
- Factored in are discussions around availability of effective treatments & risks if condition remains untreated or undertreated

Therapeutic Relationship

- Therapeutic relationship, or therapeutic alliance, is a psychotherapeutic common factor identified by Grencavage and Norcross
- It has been utilized in a recent meta-analysis as a factor that impacts behavioral treatment adherence in chronic headache patients
- Therapeutic relationship factors are characteristics of provider & patient that facilitate change
- Are considered a common factor across treatment types
- One must keep in mind that government health programs & private payers have adopted various reforms that fundamentally transform this relationship
  - For example, public reporting and payment reforms incentivize providers to improve quality & efficiency of care they provide to patients but may also induce providers to reject high-risk, treatment-resistant patients

Grencavage L,Norcross J. Where are the commonalities among the therapeutic common factors? *Prof Psychol ResPract*. 1990;21:372–378.

Mantel J. Refusing to treat noncompliant patients is bad medicine. *Cardozo Law Review*. 2018;39:127. Available at: http://cardozolawreview.com/wp-content/uploads/2018/08/MANTEL.39.1.pdf. Accessed October 1, 2020.

Therapeutic Relationship

- Despite these barriers, frontline providers can build their patient relationships by employing:
  - Empathy
  - Warmth
  - Respect
  - Genuineness
  - Acceptance
  - Encouragement
  - Instruction
  - Communication
- For example, communication skills that reflect a nonjudgmental attitude, with an openness to explore patient's beliefs & concerns, enable clinicians to collaboratively negotiate treatment plans that will improve patient outcomes
- Research has shown that providers participating in brief communication skills training has improved outcomes in primary care settings for patients with fibromyalgia & acute pain

Butow P,Sharpe L. The impact of communication on adherence in pain management. *Pain*. 2013;154:S101-S107.

Motivational Interviewing

- Frontline practitioners may also want to be trained in & employ motivational interviewing (MI)
- MI was developed in early 1980s in treatment of alcohol & substance abuse
- MI is a patient-centered, directive technique, aimed at improving motivation & commitment of patients who may be ambivalent to achieve behavioral changes
- MI principles now applied to management of chronic conditions, such chronic pain
- It promotes patient's physical & psychological functions & maintains their compliance with exercise for coping with pain

Miller WR, Rollnick S. Motivational interviewing: preparing people to change addictive behavior. New York, NY: Guilford Press. 1991.

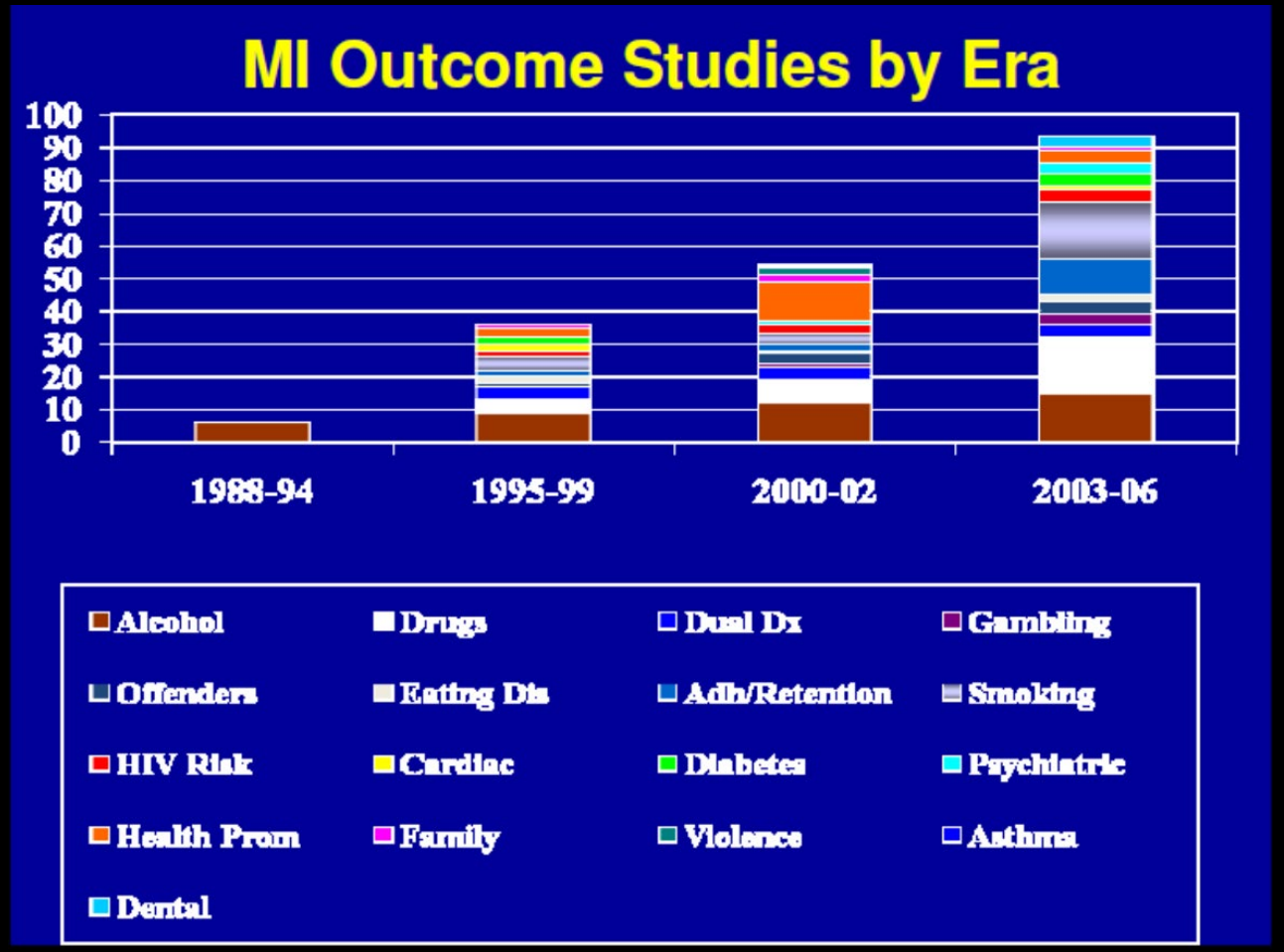
Jensen MP, Nielson WR, Kerns RD. Toward the development of a motivational model of pain self-management. J Pain. 2003;4(9):477-492.

Ang D, Kesavalu R, Lydon JR, Lane KA, Bigatti S. Exercise-based motivational interviewing for female patients with fibromyalgia: a case series. Clin Rheumatol. 2007;26(11):1843-1849.

Habib S, Morrissey S, Helmes E. Preparing for pain management: a pilot study to enhance engagement. J Pain. 2005;6(1):48-54.

Vong SK, Cheing GL, Chan F, So EM, Chan CC. Motivational enhancement therapy in addition to physical therapy improves motivational factors and treatment outcomes in people with low back pain: a randomized controlled trial. Arch Phys Med Rehabil. 2011;92(2):176-183.

MI Research


MI Outcome Studies by Era
100
90
80
70
60
50
40
30
20
10
0
1988-94
1995-99
2000-02
2003-06
Alcohol
Drugs
Dual Dx
Gambling
Offenders
Eating Dis
Adh/Retention
Smoking
HIV Risk
Cardiac
Diabetes
Psychiatric
Health Prom
Family
Violence
Asthma
Dental

Motivational Interviewing

- The approach aims to influences people in their initiation, intensity, and performance of a behavior, such as self-management skills for pain reduction
- This technique promotes physical and psychological function, and helps maintain compliance with exercise for coping with pain
- Shown to affect treatment outcomes such as in functional improvement and motivation to receive treatment

Geen RG. Introduction to the study of motivation. In: Human motivation: a social psychological approach. Pacific Grove, CA: Brooks/Cole Publishing. 1995.

Jensen MP, Nielson WR, Kerns RD. Toward the development of a motivational model of pain self-management. J Pain. 2003;4(9):477-492.

Vong SK, Cheing GL, Chan F, So EM, Chan CC. Motivational enhancement therapy in addition to physical therapy improves motivational factors and treatment outcomes in people with low back pain: a randomized controlled trial. Arch Phys Med Rehabil. 2011;92(2):176-183.

What Makes It Motivational Interviewing?

1. Is a conversation about change
2. Has a particular purpose
3. Is collaborative
4. Honors autonomy and self-determination
5. Is evocative
6. Uses specific skills
7. Is goal-oriented
8. Attends to specific forms of speech
9. Responds to change-talk in specific ways
10. Responds to resistance

Readiness to Change

- Ambivalence is normal
- Change is nonlinear
- Readiness is not static
- Attend to readiness in work

Elements of MI

- MI Principles
- MI Strategies
  - OARS
    - Open-ended questions
    - Affirmations
    - Reflective listening
    - Summaries
  - Eliciting Change Talk
- MI Spirit

MI Principles

- There are four main principles to use when applying MI:

1. Expressing accurate empathy
2. Developing discrepancy
3. Avoiding argumentation and rolling with resistance
4. Supporting self-efficacy

Jensen MP. Enhancing motivation to change in pain treatment. In: Turk DC, Gatchel RJ, eds. Psychological approaches to pain management: a practitioner's handbook. New York, NY: Guilford Press. 2002:71-93.

OARS: Affirmations

- Affirmations are statements that recognize patient's strengths
- They assist in building rapport and in helping patient see themselves in a different, more positive light
- To be effective they must be congruent and genuine
- The use of affirmations can help patients feel that change is possible even when previous efforts have been unsuccessful
- Affirmations often involve reframing behaviors or concerns as evidence of positive patient qualities
- Affirmations are a key element in supporting self-efficacy

Sample Affirmations

Commenting positively on an attribute

- *"You are determined to get your health back."*

A statement of appreciation

- *"One can appreciate your efforts despite the discomfort you're in."*

A compliment

- *"Thank you for all your hard work today."*

Recognizing patient strengths and countering a defeatist attitude

- *"It's impressive that you have been trying to quit despite all the stress you are going through."*

Affirmation Pitfalls

- Focus on specific behaviors instead of attitudes, decisions, and goals
- Avoid using the word “I”
- Focus on descriptions and not evaluations
- Attend to non-problem areas rather then problems
- Think of affirmations as attributing interesting qualities to patients
- Nurture a competent instead of a deficit worldview of patient

What is Change Talk?

- Change talk is defined as statements by the patient revealing consideration of, motivation for, or commitment to change
- In MI, the provider seeks to guide the patient to expressions of change talk as the pathway to change
- Research shows that the more someone talks about change, the more likely they are to change
- There are different types of change talk

Recognizing & Reinforcing Change

Preparatory Language

- Desire to change
  - *"This is not the person I want to be."*
- Ability to change
  - *"I know what I have to do--I just need to do it."*
- Reasons for change
  - *"It would be nice if I didn't have to worry so much."*
- Need to change
  - *"I've got to make things better."*

Mobilizing Language

- Commitment
  - *"I will make (specific) changes."*
- Activation
  - *"I am prepared and willing to make changes."*
- Taking steps
  - *"I went to the store, bought some vegetables, cleaned and cut them up, and have them in my fridge for snacks."*

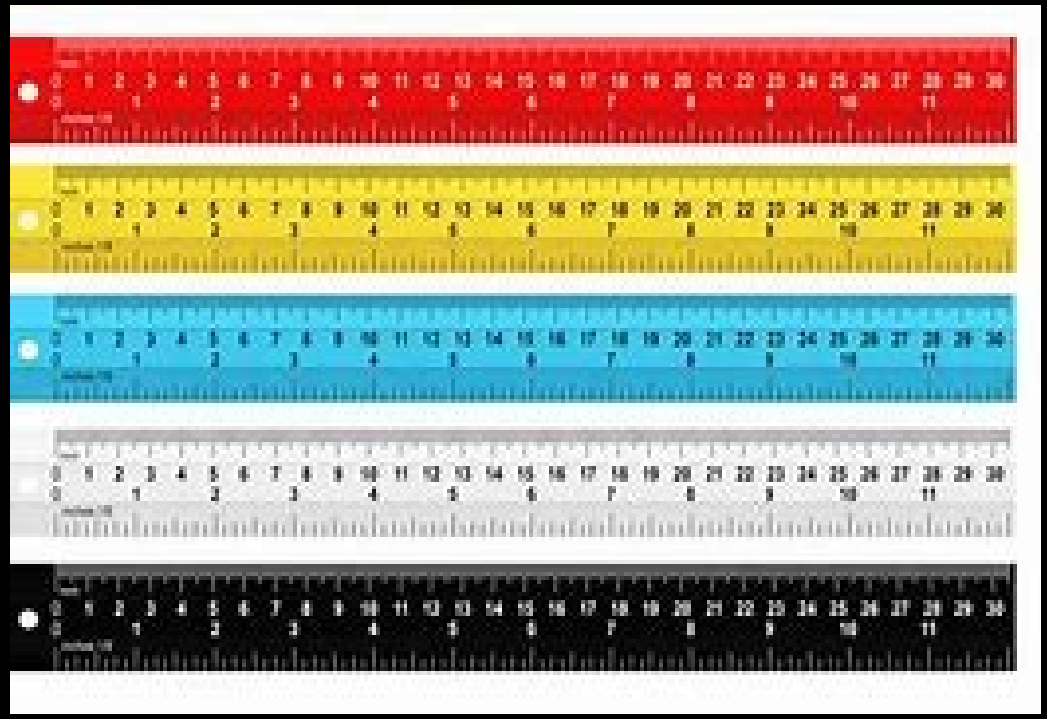
Eliciting & Strengthening Change

1. Ask evocative questions
   - an open-ended question, answer to which is likely to be change talk
2. Ask for elaboration
   - ask for more details when change talk is present
3. Use extremes
   - what are worst/best things that might happen if they don't make this change?
4. Looking back
   - ask about a time before target behavior emerged and how different
5. Looking forward
   - ask what may happen if things continue as they are
6. Exploring goals
   - ask patient what they want in life. Ask how continuation of target behavior fits in with patient's goals.

Assessment/Feedback of Change

Readiness Rulers:

- "On a scale from 1 to 10, how important is it to you to change (specific behavior), where 1 is not important and 10 is very important?"
- "And why are you at ___ and not ___ (a lower #)?"
- "How confident are you that you could make the change if you decided to do it?"
- "And why are you at ___ and not ___ (a lower #)?"

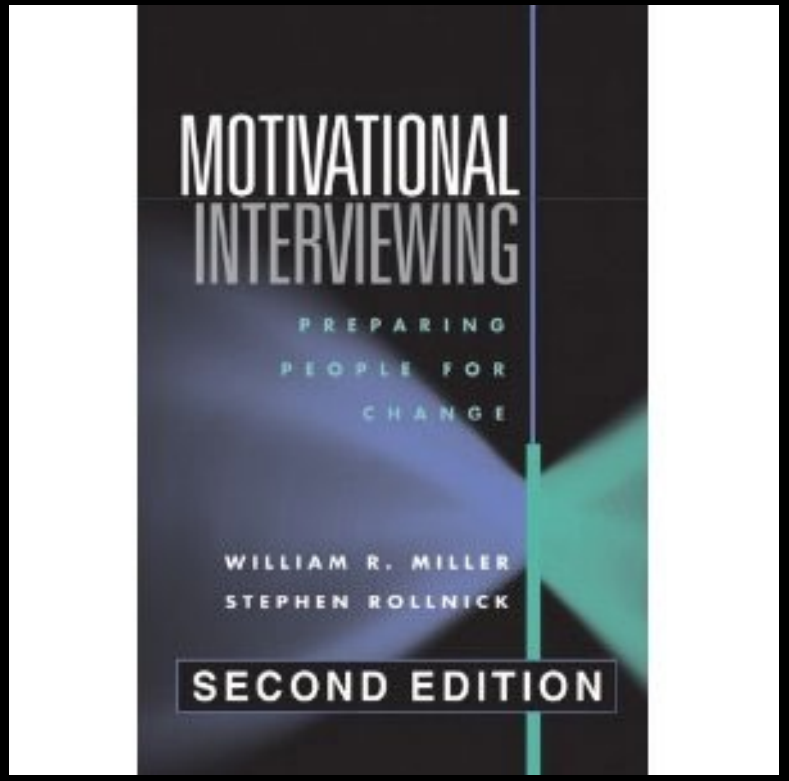


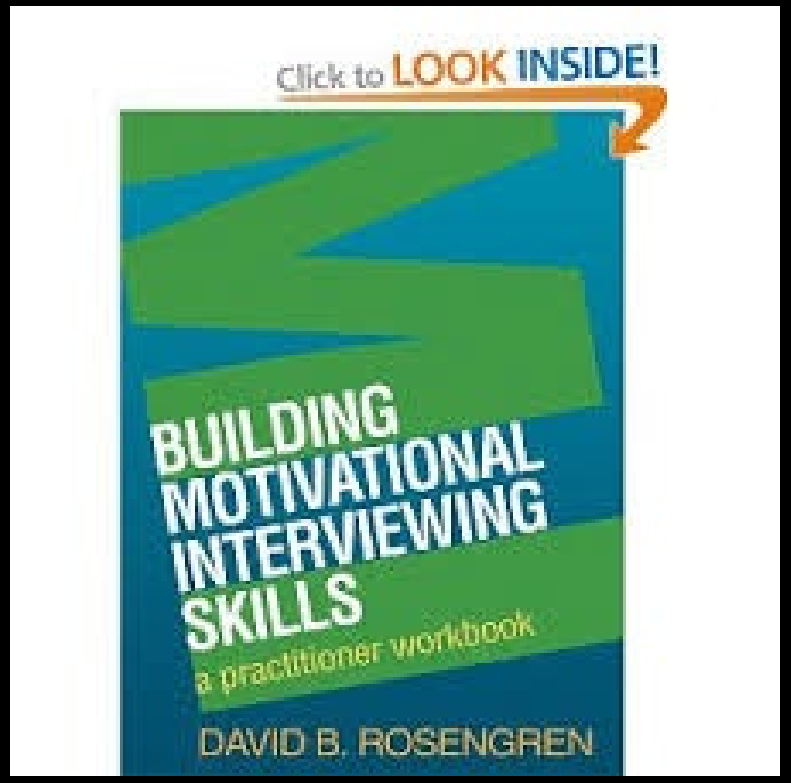
The Key Question

What is next?

- “Given what you told me, what do you think you will do next?”
- “Where do you think you would like to go from here?”
- “What’s your next step?”

MI Resources





Health Coaching

- Health coaching interventions have also been reported to improve health outcomes for individuals with chronic diseases, including chronic pain
- These interventions, commonly referred to as ‘life coaching’ or ‘wellness coaching,’ typically lack definitional clarity, which has made it difficult to study or compare coaching interventions
- Health coaching is a patient-centered approach where patients use self-discovery combined with educational content to work toward their desired goals & self-monitor their behaviors to increase accountability with their coach
- Most forms of coaching build solutions, focus on goal attainment, and are based on core assumption that people have an innate capacity to grow

Rethorn Z, Pettitt R, Dykstra E, Pettitt C. Health and wellness coaching positively impacts individuals with chronic pain and pain-related interference. *PLoS ONE.* 2020;15(7).

Boehmer K, Barakat S, Ahn S, et al. Health coaching interventions for persons with chronic conditions: A systematic review and meta-analysis protocol. *Syst Rev.* 2016;5:146.

Wolever R, Simmons L, Sforzo G, et al. A systematic review of the literature on health and wellness coaching: Defining a Key behavioral intervention in healthcare. *Glob Adv Health Med.* 2013; 2(4):38–57.

Ammentorp J, Uhrenfeldt L, Angel F, et al. Can life coaching improve health outcomes? A systematic review of intervention studies. *BMC Health Serv Res.* 2013;Oct 22;13:428.

What Does a Health Coach Do?

Health coaches:

- partner with clients seeking self-directed, lasting changes, aligned with their values, which promote health & wellness
- enhance well-being
- display unconditional positive regard for their clients & a belief in their capacity for change
- honor that each client is an expert on their life
- ensure that all interactions are respectful & non-judgmental

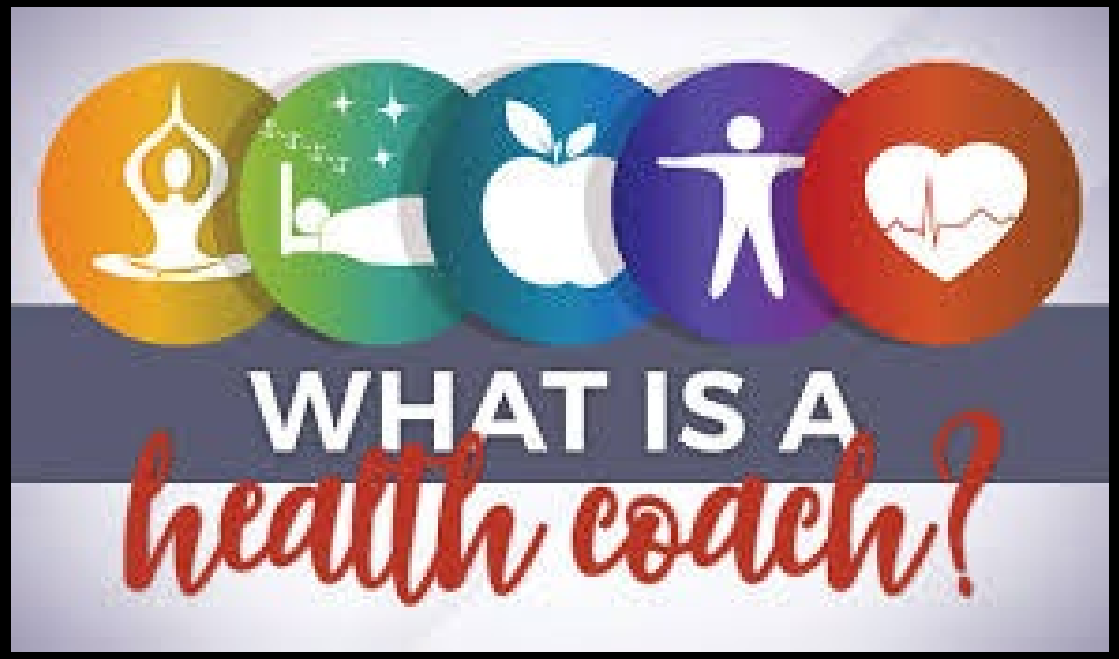
Curtis, B. & Abney, L. (2017). How Pain Management Coaching Impacts Pain Outcomes. Presented at PainWeek 2017.

International Consortium of Health & Wellness Coaches (ICHWC). Available at: https://www.nshcoa.com/international-consortium

Health Coaching

Health coaching is designed to:

- help clients thrive despite physical & emotional challenges
- stop something that may be harmful
- start something that can improve health
- offer a stimulus that is often impossible for client to acquire by themself
- help individuals who get stuck in unhealthy ways of thinking and doing
- provide support that eventually improves motivation



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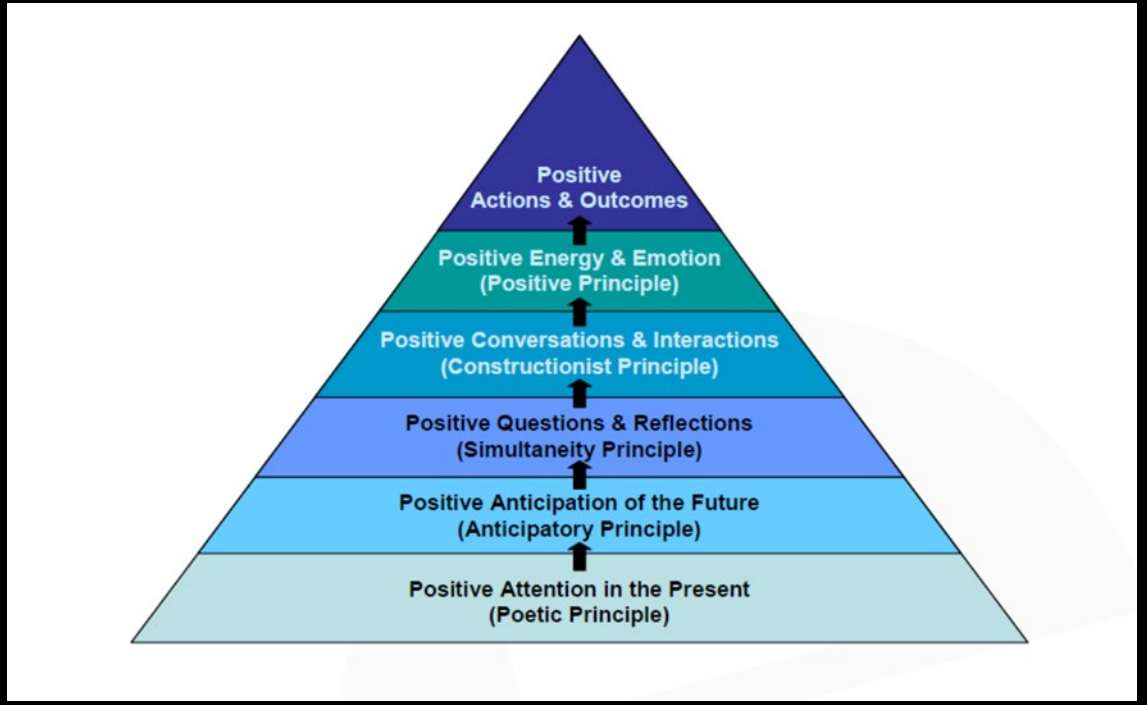
International Consortium of Health & Wellness Coaches (ICHWC). Available at: https://www.nshcoa.com/international-consortium

Based on Evidence

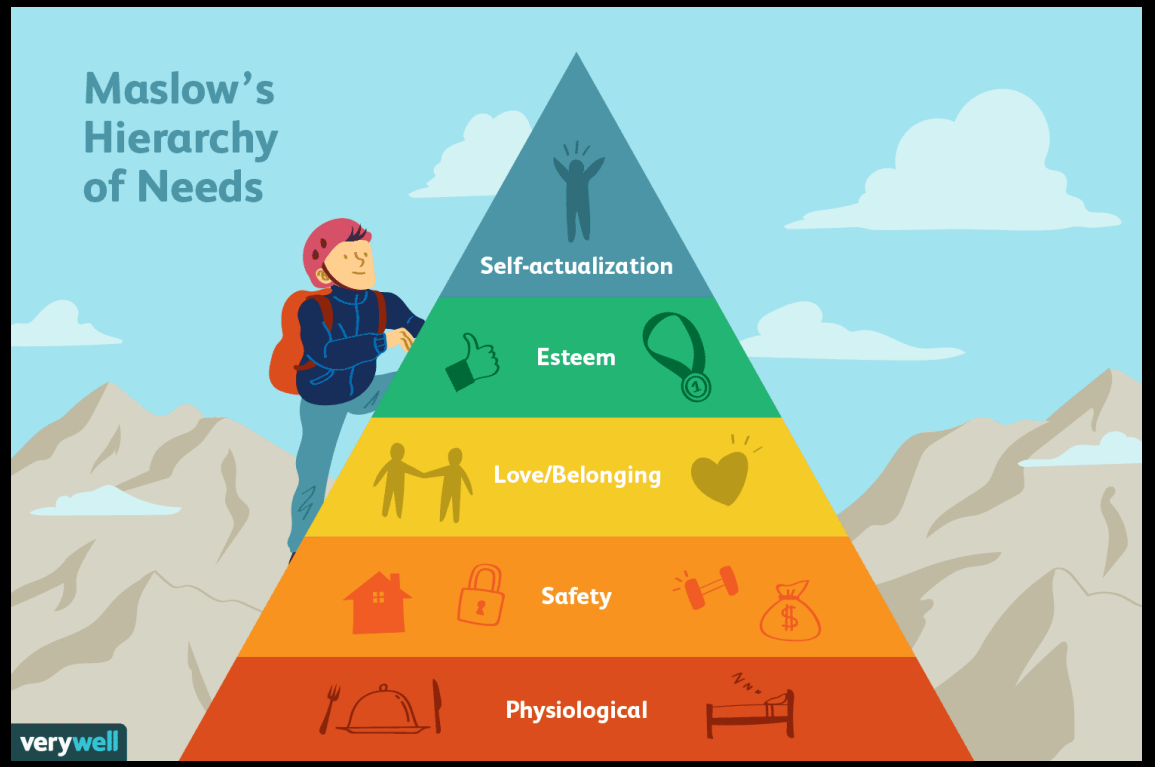
- Motivational Interviewing
- Transtheoretical Model of Change
- Appreciative Inquiry
  - a philosophy & an approach for motivating change that focuses on exploring & amplifying strengths
  - Has 5 guiding principles
    1. Positive Principle
    2. Constructionist Principle
    3. Simultaneity Principle
    4. Anticipatory Principle
    5. Poetic Principle



WellCoaches. (2008). Chapter 4: Appreciative Inquiry in Coaching. Available at: https://www.wellcoach.com/newsletters/images/Chapter-4.pdf.

Based on Evidence

- Maslow Hierarchy of Need
- Self Regulation Theory
  - a complex & dynamic set of processes involved in setting & pursuing goals
  - feedback & self-monitoring play a critical role in self-regulatory processes
  - goals are arranged hierarchically in a series of means-ends relationships
- Self Determination Theory
  - represents a broad framework for study of human motivation & personality
  - an organismic dialectical approach with assumption that people are active organisms, with evolved tendencies toward growing, mastering ambient challenges, & integrating new experiences into a coherent sense of self



Curtis, B. & Abney, L. (2017). How Pain Management Coaching Impacts Pain Outcomes. Presented at PainWeek 2017.

Conclusion

- Pain practitioners often face challenges related to noncompliance & nonadherence to treatment plans & medication regimens
- Relapse may be expected in some patients
- Long-term gains can be made by strengthening patient-provider relationship & using patient-centered education tools such as motivational interviewing & health coaching

Practical Takeaways

- Noncompliance & nonadherence continue to be an important concern in field of pain management, with many factors at play
- Approximately 1/3 of originally successful patients will relapse & return to pre-treatment levels or worse
- Adherence can be improved with patient education about:
  - their condition
  - effectiveness of treatment
  - side effects
  - importance of treatment plan for specific condition

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