ORIGINAL ARTICLE

When Information Is Insufficient: Inspiring Patients for Medication Adherence and the Role of Social Support Networking

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Background: A report presented by the RAND Corporation for the Agency for Healthcare Research and Quality recommends that patient self-management programs should include supportive coaching, and the World Health Organization has suggested that the enhancement of patient motivation and behavioral skills is crucial to increasing patient care adherence. The US healthcare reform legislation also provides incentives for evidence-based activities (e.g., coaching) that promote healthy behaviors.

Objectives: To review the current research on evidence-based coaching methods and their impact on medication adherence, as well as offer practical applications for such coaching interventions.

Discussion: The authors review the role of medication adherence in reducing the burden of chronic diseases, using the definitions of coaching and Network Coaching as a starting point for interventions that can enhance providers’ skills in motivating patients to improve their treatment adherence. Practical examples are included throughout the article to illustrate the benefits of these coaching methods for patients and providers. The mnemonic COPE is used to assist providers in the recall of 4 significant coaching and Network Coaching concepts—connectedness and collaboration, open-ended questions, positive attitude, and encourage support. Following COPE can reinforce physicians and pharmacists in their attempt to improve patient medication adherence.

Conclusion: The article presents healthcare providers, including physicians and pharmacists, with a rationale for developing evidence-based coaching skills and offers suggestions for the application of key coaching concepts.
healthcare illiteracy, a lack of motivation for medication persistence, and wavering confidence or self-efficacy in one’s abilities to manage a chronic condition.

All these factors create powerful cognitive, emotional, and spiritual disincentives that sap the willpower of individuals to adhere to treatment recommendations.

Recognizing that successful behavior change is not simply a cognitive decision to get healthy, the WHO declared that, “information is a prerequisite for changing behavior, but in itself is insufficient to achieve this change. Motivation and behavioral skills are critical determinants.”

Clearly, from the viewpoint of an organization that assists the most challenging health populations around the world, “information alone is not enough”; motivating or inspiring the individual to change his or her behavior is also needed.

Research further confirms that improved medication adherence reduces the financial burden of illness. In their analysis of the costs of medication adherence, Sokol and colleagues have concluded that, “For some chronic conditions, increased drug utilization can provide a net economic return when it is driven by improved adherence with guidelines-based therapy.”

RAND Health has called for programs that strike a balance between customized, patient-specific variables and population-based programs. Gellad and colleagues at RAND advocate the development of programs for large groups or classes of patients that identify “unique” barriers among patients as individuals and customized interventions for patients based on those barriers.

Coaching Interventions

Disease management programs have responded to this call for individualized, motivational interventions, and Geyman has commented on their emerging availability not only to patients served by commercial, employer-sponsored health plans but to patients served by Medicare and Medicaid plans as well. Interest in individualized, motivational change has grown to the extent that the Agency for Healthcare Research and Quality commissioned a report from RAND regarding patient self-management support programs. The report recommended that programs include “both supportive coaching interventions and educational interventions as part of the program content.” This is not surprising, because multiple studies have associated coaching with improved health behaviors.

Coaching interventions address unhealthy behaviors associated with health and behavioral health disparities; these can be employed across the plethora of healthcare delivery systems, such as disease management programs, medical care homes, home healthcare, pharmacy adherence programs, and peer coaching networks that have been promoted to enhance patient self-care, as described below.

The 2010 Patient Protection and Affordable Care Act (ACA) for healthcare reform also provides financial incentives for health coaching. Specifically, according to the ACA, health plans will be permitted to include expenditures for healthcare quality improvement, including those that “increase wellness and promote health,” such as coaching programs, in the calculations of their 2011 medical loss ratios.

Nevertheless, many clinicians still receive little, if any, training in coaching and motivational techniques for treatment adherence. RAND Health has commented on the lack of professional school training to support patient self-management and has called for coaching interventions that are “patient-centered and tailored to the needs and concerns defined by the patient and his or her situation.” Some clinicians have opined that not only professional clinicians but also paraprofessionals in networking or supervisory relationships with clinicians could benefit from coaching skills training.

This article provides clinicians and paraprofessionals with some practical coaching suggestions to promote patient motivation for adherence improvement. The article will focus on some leading-edge concepts such as connectedness, and will describe key coaching concepts that can be used when speaking with patients to promote motivation for medication adherence and to minimize other factors impinging on adherence.

Definitions: Coaching Concepts

For the purposes of this article, “coaching” is defined as “a collaborative process of self-discovery, support,
inspiration, and confidence building. Coaching motivates participants to use information for realistic goal setting, to identify their motivations for change, and to develop and maintain personalized strategies based on individual strengths. The coaching process may be applied in multiple contexts, including health, business, professional development, sports, and other life spheres. This article focuses on the application of coaching concepts to enhance medication and treatment adherence for health improvement.

Network Coaching integrates coaching with social networking concepts by recognizing that all individuals and families have complementary team and network participating strengths whose successful use is essential to personal values of self-worth.

Clinicians seeking to enhance patient adherence through improved motivation may be helped by remembering the mnemonic COPE (Figure) that assists in the recall of these 4 significant coaching concepts that help inspire patients for medication persistence:

- Connectedness and collaboration
- Open-ended questions
- Positive attitude
- Encourage support

**Connectedness and Collaboration**

Connectedness, connectivity, or the quality of the personal relationship between patient and physician has been found to be an important determinate factor in the quality of care received by a patient. This study from Harvard researchers showed that people who felt connected to a specific doctor were more likely to complete recommended testing for prevention and care of chronic illness. In another recent study, Schoenthaler and colleagues found that collaborative communication between provider and patient was associated with improved medication adherence. These 2 studies suggest that connectivity and collaborative communication may indeed be connected.

Travaline and colleagues have written about the importance of collaboration in furthering connectivity or close physician–patient relationships. They cited a physician's empathy and sensitivity to a patient's nonverbal signals as key factors in encouraging a collaborative sense of teamwork in their care.

In addition, Rollnick and colleagues indicate that the directive, authoritative communication style frequently practiced in healthcare may actually discourage patient–clinician collaboration. The authors advise that a collegial, inclusive style promotes patient participation. Patients respond more favorably when clinicians adopt a collaborative tone that conveys, “I’m here to assist you in solving your health-related problems.”

The patient motivation problems associated with adherence to care widen the treatment playing field to include not just the traditional clinical, multidisciplinary team but also patients and healthcare professionals and paraprofessionals, serving as coaches and participating team members. Research indicates that this
inclusion strategically shifts the care to favor the importance of connectivity and collaboration.12,26

Open-Ended Questions

Open-ended questions inviting self-reflections as in the example above establish a more personal exchange of information conducive to furthering clinician–patient relationships.24 Frequently, these self-reflections will involve feelings that reveal personal incentives and avoidances. These patient reports on emotional states are useful in expediting the development of individualized interventions.

As diagnosticians, clinicians often use a criteria-driven, deductive approach as an efficient method for narrowing diagnostic possibilities. But efficiency may be gained at a price costly to the emotional nuances involved in individual motivation and treatment adherence. The medical criteria and processes used in making an accurate diagnosis are not the same as the personal information needed to coax a unique individual’s adherence to care. Open-ended questions help bridge the chasm between clinician and coach.

EXAMPLE Asking a patient with asthma a question such as “How do you feel when you forget your medicine?” helps the patient to identify his/her personal, intrinsic motivations for medication adherence. A question such as “How are you feeling since you began taking this medicine?” can open the door to discussing therapy-related factors, such as living with a particular medication’s side effects.

Positive Attitude

A positive attitude or a belief in one’s self and the confidence to make self-care decisions can greatly impact treatment efficacy.13 Philosopher coach Reginald Gant compared his management of 2 chronic, life-threatening conditions (diabetes and atherosclerosis) to “running a marathon—small strides are still steps in the right direction, pacing is more important than sprinting, expect setbacks with equanimity, and the water bottle is always half full.”23 Just as a positive mental attitude fosters optimal marathon performance,29 it can foster optimal condition self-management. Not surprisingly, Matthews found a correlation between positive patient attitude and glycemic control among adults with diabetes.30

Yet, the changes required for successful self-care can be daunting. Negative thoughts learned from childhood become formative in adulthood, stymieing a positive outlook. Psychologist coach Anthony Grant31 and colleague Jane Greene summarized more than 6000 research articles and concluded that performance-enhancing thoughts can effectively alter ingrained, negative thought patterns if they are short, specific, and simple.32 They encourage readers to minimize doubts during problem planning and resolution stages by repeatedly substituting debilitating thoughts with simple, short, and specific positive thoughts.10

EXAMPLE When a patient with diabetes is discouraged, being mindful of short, specific, simple performance-enhancing thoughts, such as “I feel empowered when I exercise,” “With portion control I can still eat many foods I’ve previously enjoyed,” and “Insulin injections are not nearly as evil as they look,” can effectively counter negative, self-defeating thoughts.

Another enhancement to positive or confident thinking is devising personalized, problem-surmounting strategies that emphasize and use our personal strengths.33 In a study of care management recipients, Brun and Rapp found that reinforcing what patients believed were their personal strengths contributed to positive care-management relationships.33 Although many clinicians report a methodological dissonance in reconciling an emphasis on patient strengths when their formal training dwells on human pathologies, they are gradually recognizing the coaching logic of using personal strengths to reinforce the confidence of patients in sustaining healthy changes.

EXAMPLE A grandmother who has infinite patience with her grandchildren can be encouraged to use that strength when coping with chronic illness; an accountant can use his attention to detail for better medication tracking; and an imaginative writer can devise novel ways to remind herself to take her medication regularly.

Encourage Support: Social Support Networks

There is strong evidence that when clinicians focus on issues of patient support they and their patients are rewarded with improved outcomes. Several studies have suggested that social and support networks have significant impact on healthy behaviors.34-36 The experience of chronic disease often includes traumatic experiences for the patient and the family, and research indicates that network support is one of the key factors in motivating growth and resilient coping.17

Interventions to change unhealthy behaviors, such as overeating, smoking, and alcohol abuse, are more suc-
cessful when they offer peer support. When patients adopt healthier habits, their untreated family members often emulate them and improve as well. Data culled from studies such as the Framingham Heart Study suggest that healthy and unhealthy behaviors pass like contagions among networks of peers. Furthermore, Christakis and Fowler found that these contagions or behaviors may even spread among people who have no contact with each other.

When patients lose weight, their weight loss may positively influence the weight of their spouse, their spouse’s friend, and their friend’s coworker. The authors conclude that this kind of behavioral change typically has 3 degrees of influence, including people unknown to the initial subject of change. Additional analyses have shown subtle factors, such as type of behavior problem and type of relationship (eg, friend or spouse), influencing the spread of behavioral contagions. For example, men in the Framingham Heart Study doubled their risks for obesity if a male friend became obese, but their risk increased only 37% if their wives became obese. Smoking cessation by one spouse decreased the other spouse’s chance of smoking by an impressive 67%, whereas smoking cessation by a friend only decreased smoking by 36%.

**Social Networking Research**

Social networking research introduces novel approaches to notions of disease and population management in healthcare. In the future, clinicians who understand the subtle interplay of social networks may find innovative ways of seeding a patient’s support network with beneficial influences; pair the treatment of patients with either spouses, family, friends, or selected unknowns; and weigh how cultural and psychosocial factors beyond the interpersonal differentially reinforce the success or failure of behavioral change. For example, Excel Venture Management is investing in the future of social networking to improve health. They recently bankrolled MedNetworks, a startup firm offering services derived from Nicholas Christakis’ work. The company intends to sell its services to entities such as health plans, disease management companies, and wellness programs. They will use MedNetworks’ services and software to identify key connectors within networks who may potentially promote behavior change for healthier lifestyles within individuals and populations.

**Conclusion**

COPE represents just some of the elements from the coaching “playbook” that facilitate adherence to clinical care and medication management. At its highest and most visible levels in professional and collegiate sports, coaches routinely exact the highest levels of motivation and performance from their athletes. As we launch this era of healthcare reform, there has never been a more promising time for healthcare professionals and paraprofessionals to adopt coaching methods that inspire effective performances from patients facing challenges with care and medication adherence.

**Author Disclosure Statement**

Dr Hennessey and Dr Heryer have reported no conflicts of interest in relation to this article.

**References**

16. Lee JK, Grace KA, Taylor AJ. Effect of a pharmacy care program on medication adherence and persistence, blood pressure, and low-density lipoprotein cholesterol: a

**EXAMPLE** One day a clinician may have data regarding whether a large condition-management class that offers more potential network influences is more effective than a much smaller condition-management class that offers more personal time with the instructor.

**Health Plans Must “COPE” with Chronic Diseases**

According to studies cited in the report, only about 50% of American patients “typically take their medicines as prescribed, resulting in approximately $177 billion annually in direct and indirect costs to the U.S. economy. Besides an estimated $47 billion each year for drug-related hospitalizations, not taking medicines as prescribed has been associated with as many as 40 percent of admissions to nursing homes and with an additional $2,000 a year per patient in medical costs for visits to physicians’ offices.”

The magnitude of this problem—especially the annual $2000 per patient additional cost of nonadherence—is certainly enough to grab the attention of any medical director. Yet, as managed care professionals, we fully understand that we have much to learn about patient nonadherence. According to a 2003 article, thousands of articles written over more than 2 decades failed to reach conclusions about the optimum way to manage medication compliance.

In the present article, Drs Hennessy and Heryer explore a novel approach to evidence-based coaching,
and how it can potentially impact medication adherence. The authors recommend a coaching approach to address unhealthy behaviors. In this case, coaching is defined as a “collaborative process of self-discovery, support, inspiration, and confidence building.” They recommend the combination of individualized intervention and population-based strategies to improve adherence. Furthermore, they offer a mnemonic, COPE, to summarize the 4 essential concepts that can be developed and applied across the delivery system.

Essentially, this is a system to better understand patients’ motivation and to motivate them to take control of their healthcare. Embedded in this article are a few key examples of these principles that clinicians can use immediately. They close by encouraging professionals to take a “page from the playbook” of coaches to motivate patients to achieve higher performance in their care.

POLICYMAKERS: Regardless of whether this approach can be universally applied to all or even to most patients, certainly innovative approaches such as this one must be tried out. Ultimately, our healthcare system must fund the development and the measurement of clinical and economic outcomes and the application of such systems. By such rigorous analysis, we can learn what works and what doesn’t, and on whom different techniques are effective.

Only by using scientific measurement methodologies of behavioral interventions will we begin to better understand the complex world of patient adherence. Technology alone cannot solve either the clinical issues or the cost-related issues of chronic illness. For it is only when we can apply technology to people based on a better understanding of human behavior that the system will learn to “COPE” with the growing population of patients with chronic illness.


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