Introduction

For the Fall 2003 issue of The Permanente Journal,¹ I wrote an article entitled “Understanding Noncompliant Behavior: Definitions and Causes” (xnet.kp.org/permanentejournal/fall03/behavior.html). It discussed the various underlying causes of more seriously noncompliant behavior (NCB) with the goal of understanding that noncompliance is not a unitary entity but has a differential diagnosis. Use of this differential diagnosis, it was stated, could lead to more effectively working with the noncompliant patient. The goal of this article is to offer the practicing clinician tools for working with the noncompliant patient.

Background

The initial article treated NCB as an aberration in the physician–patient alliance. In the few years since the publication of that article, there has been increased attention in the medical literature to this problem. The publications on this topic largely fall into two groups: articles on medication noncompliance, often dealing with related issues such as causes of noncompliance, and articles on disease-specific noncompliance, such as noncompliance in chronic pulmonary obstructive disease or asthma² or noncompliance in patients with diabetes.³ What is apparent in most of these articles is that NCB is much more widespread than it was thought to be and that it has a serious, deleterious effect on health outcomes and medical costs.

Osterberg and Blaschke⁴ wrote that “even clinical trials report average adherence rates of only 43 to 78 percent among patients receiving medication for chronic conditions” and that “all medication-related hospital admissions in the United States, 33 to 69 percent are due to poor medication adherence, with a resultant cost of approximately $100 billion per year.” Cramer et al,⁵ reporting on a meta-analysis of compliance in diabetes, hypertension, and dyslipidemia, noted that “only 59% of patients [take] medication for more than 80% of the [prescribed doses] in a year.” Even in the case of serious and symptomatic disorders, such as acute myocardial infarction, a study⁶ has shown that as many as one in eight patients discontinue all three medications of the commonly prescribed combination of β-blocker plus aspirin plus statin within one month of hospital discharge. These patients have an 80% higher chance of dying within the first year after discharge compared with patients taking all three classes of medication.

It is apparent from these studies that NCB is epidemic and not just an aberration. NCB is likely one of the most common causes of treatment failure for chronic conditions, though this is not widely or consistently recognized.

Noncompliance names a series of behaviors that fall on a continuum of severity, ranging from the trivial to the catastrophic. It would be a mistake to lump these together. Because I was unable to find a noncompliance rating scale in my literature review, I am proposing the tool shown in Table 1 to allow us to identify and compare differing intensities of NCB.

My goal in this article is to focus on individual clinicians and their relationship with the noncompliant patients of greater degrees of severity (stages 2 and 3) in their clinical practice. Lesser degrees of NCB are more common and also detrimental to effective medical care. Given their frequency, these may require a systems approach rather than relying on the individual clinician. A detailed discussion of these approaches is beyond the scope of this article,⁷ but at least in terms of medication compliance, certain simple tools have been shown to be effective. These include simplifying medication regimens, using once-a-day dosing whenever possible, providing pillboxes for patients, using combination tablets when possible and appropriate, and using computerized tracking systems for prescription refills.

The most effective systematic interventions that have been studied are multifaceted⁸ and of real but limited efficacy. McDonald et al conclude that “current methods of improving adherence for chronic health problems are mostly complex and not very effective, so that the full benefits of treatment cannot be realized.”⁹ Few

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articles in the literature deal with helping the physician with noncompliance. One useful article by Haynes et al.10 makes a number of practical suggestions, including simplifying medication regimens, providing rewards and recognition for the patient’s efforts, and enlisting social support from family and friends.

The same physician tools described in the following sections that are useful in more severe cases of NCB are also relevant to the milder degrees (stage 1 and early stage 2). Because so many of our patients are in this category, it can be difficult for the busy clinician to find time to deal with these issues. For some of these patients, however, identifying and countering a single and simple barrier to compliance can be readily accomplished.

Dealing with Noncompliance

General Principles

In the modern clinical era, there has been a change in modes of physician–patient interaction and agreement. The more traditional authoritarian approach is transforming toward a collaborative partnership between patient and physician that is based on mutual goals and a shared understanding of problems and their potential solutions. A widely used current model is *shared decision making,*11 in which physician and patient, after discussion, agree on the nature of the problem in question and proposed steps toward its management. In a case discussion, Bodenheimer12 wrote, “A participatory relationship between patient and physician appears to be the most important factor promoting medication adherence” and that “the more actively the patient is involved, the higher the level of adherence and the greater the chance that the patient engages in healthy diet and exercise behaviors.”

Trust between physician and patient is also a factor. Greater trust facilitates improved compliance.13 NCB can be understood as a breakdown in the physician–patient alliance and the implied or explicit contract between physician and patient. Understanding that this is a common phenomenon, and being aware of its possibility in a given clinical situation, is the first step toward dealing with this.

The physician must realize the possibility that NCB is occurring in the given context with the particular patient—Sometimes this is apparent, as in the case of the patient who misses multiple appointments and who does not fill or refill prescriptions. Occasionally the patient will bring this up, but more often it requires a high index of suspicion and some detective work on the part of the physician. Given how common NCB is, it should be looked for in most cases of failure to meet treatment goals. How often do we add a third antihypertension medication when the patient in reality is not taking the first two regularly?

The physician should raise this question with the patient in a problem-solving and nonjudgmental manner—“I see you haven’t refilled your antihypertension medication for a third time. Have you been filling the medication in the past? Do you have it at home? Are you using it?” This question can be repeated weekly with the same patient. When the patient answers, “I just haven’t felt well this week,” the physician should respond, “I see. I hear your concern. Is there a medication you might like to take that might make you feel better?”

Noncompliance Versus Nonadherence: What’s in a Name?

In my first article, I chose to use the term noncompliance instead of nonadherence for a number of reasons, principally because noncompliance is the term used most widely by physicians, the primary audience for this article. Many current articles on this topic use the terms as synonyms. Compliance has pejorative overtones, as it historically has referred to compliance with physician decrees rather than to shared agreements between physician and patient. As shared decision making has become a standard of practice since the 1990s, we can now see compliance as referring to the mutually negotiated physician–patient agreement or contract, which rehabilitates the term from its previous negative associations.

<p>| Table 1. Proposed staging for noncompliance in patients with chronic medical conditions |</p>
<table>
<thead>
<tr>
<th>Stage number</th>
<th>Stage name</th>
<th>Stage description</th>
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<tbody>
<tr>
<td>0</td>
<td>None to minimal</td>
<td>Takes 80%+ of regular medications for condition, most monitoring parameters indicate acceptable control, and makes and keeps regular appointments</td>
</tr>
<tr>
<td>1</td>
<td>Mild</td>
<td>Takes 60%–80% of medication doses, is seen at least twice yearly, and monitoring parameters indicate acceptable control</td>
</tr>
<tr>
<td>2</td>
<td>Moderate</td>
<td>&lt;80% medication compliance with unsatisfactory control of at least one monitoring parameter; regularly misses or fails to keep appointments</td>
</tr>
<tr>
<td>3</td>
<td>Severe</td>
<td>Erratic medication compliance and/or visit compliance, highly unsatisfactory control of one or more monitoring parameters for the given condition, and/or does not comply with minimal standards of monitoring</td>
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Monitoring parameters:

For hypertension: blood-pressure control within desirable limits based on comorbidities such as diabetes or congestive heart failure
For diabetes: satisfactory glycosylated hemoglobin control and low-density lipoprotein control
For coronary artery disease: satisfactory blood pressure control and low-density lipoprotein control
sion medication in six months. Are you having some problem with taking this medication?” Open-ended questions are best at first.

Make sure that the physician and the patient have a common understanding of the importance of the medical problem in question, of the availability of effective treatments for this problem, and of the risks if the problem remains untreated or undertreated—This shared understanding is the foundation on which all treatment contracts are based. Start by asking how the patient understands the medical condition and why it needs treatment. Ask if the patient has any concerns or questions about the recommended treatments, lifestyle modifications, diagnostic tests, or follow-up and monitoring plans. Ask if there is an alternative approach that the patient has been using or considering. Allow time for this process, because whatever the patient tells you can be invaluable for tailoring your approach to improving compliance.

It is sometimes hard for the physician to realize that there is an inherent power imbalance in the dynamic between physicians and patients. Physicians are comfortable in the world of medicine, whereas patients are often insecure and anxious in it. Physicians are at work, using professional training and experience to deal with other people’s problems, whereas patients are often worried about a problem that affects them immediately and personally. The medical profession enjoys high status, which can be intimidating.

For these reasons and others, if physicians do not work hard to be open and accessible to their patients’ ideas and thoughts, important information can be lost, handicapping our ability to understand what may be triggering noncompliance.

Develop a shared understanding that the NCB itself is a mutual problem whose solution is vital to effective treatment—“I see that what we’ve been trying hasn’t worked that well. I’m concerned that this puts your health at risk. What do you think?” We want to avoid the power struggle that can develop when one party attempts to impose a viewpoint on another party. Reframing the noncompliance as a shared problem changes this dynamic.

Build a more effective partnership (or therapeutic alliance) with the patient—Ask the patient for his or her analysis of the roots of the NCB. Ask what strategies the patient might suggest for addressing the problem. Again, open-ended, nonjudgmental questions can be very effective:

- “What could I do differently to help you with this?”
- “How could we approach this problem more effectively?”
- “What are the obstacles that have prevented our dealing with this more successfully?”

The very act of asking these questions can help reframe the situation from a more combative one to a more collaborative one. Be aware that guilt, shame, or a sense of failure is common when NCB is seriously threatening the patient’s health. Your open, nonaccusatory, and problem-solving stance will help defuse these negative emotions.

### Table 2. Checklist: tools for working with noncompliant patients

<table>
<thead>
<tr>
<th>1. Establish that noncompliance is present</th>
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<tr>
<td>• Ask patient about compliance</td>
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<tr>
<td>• Use prescription refill data</td>
</tr>
<tr>
<td>• Review visit frequency, missed appointments, monitoring parameters</td>
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<tr>
<th>2. Review the patient’s understanding and agreement with diagnoses and treatment goals and recommendations</th>
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<tr>
<td>• Ask the patient to describe how s/he understands his or her medical disorder in his or her own words</td>
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<tr>
<td>• Ask if the patient understands the purpose of treatment and the consequences of ineffective treatment</td>
</tr>
<tr>
<td>• Have the patient explain the specific treatment recommendations you are agreeing on in detail</td>
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<tr>
<td>• Using open-ended questions, ask if the patient feels confident in following the treatment recommendations and if the patient sees any problems</td>
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<tr>
<td>• Work to mutually find solutions to any problems with compliance that are identified</td>
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<th>3. When discordance or disagreement is evident, use physician–patient conflict-resolution tools to clarify and resolve the disparities</th>
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<tr>
<td>• Use mirroring and “I” statements to identify and defuse conflicts</td>
</tr>
<tr>
<td>• Work to make noncompliance a mutual problem, not a power struggle</td>
</tr>
<tr>
<td>• Build patient self-esteem and self-efficacy by using an incremental approach, with interim goals</td>
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<th>4. When causes of noncompliance are not apparent:</th>
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<tbody>
<tr>
<td>• Screen for the four D’s:</td>
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<tr>
<td>- Denial</td>
</tr>
<tr>
<td>- Depression</td>
</tr>
<tr>
<td>- Dependence (alcohol and drug)</td>
</tr>
<tr>
<td>- Dementia</td>
</tr>
<tr>
<td>• Look for cultural issues that may affect care</td>
</tr>
<tr>
<td>• Ask if cost of treatment is a problem</td>
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<th>5. Enlist support from:</th>
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<tbody>
<tr>
<td>• The patient’s family and friends</td>
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<tr>
<td>• Colleagues</td>
</tr>
<tr>
<td>• Case managers</td>
</tr>
<tr>
<td>• Behaviorists</td>
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<td>• Outside agencies</td>
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be very useful in working with NCB. These tools have been developed primarily in nonmedical settings but can be very readily adapted for clinical use.

**Mirroring**—Sometimes the simple act of mirroring what the patient says to you can defuse a difficult situation, even when you do not agree with the position the patient is taking. It also helps ensure that you correctly understand what your patient is telling you. By mirroring, I mean primarily verbal mirroring, in which the physician repeats back to the patient a summary or even a paraphrase of what the patient has been saying:

**Patient:** I think this is all a waste of time. I’ll never lose weight, I hate sticking my finger all the time, and I’m too busy and stressed to eat the way I know I should be.

**Physician:** I see that you’re very frustrated with how hard it’s been to live with your diabetes and that you feel that it’s been hard to do the finger sticks and to follow your diabetic diet. Did I get this right?

Try to be as nonjudgmental and empathic as possible in your mirroring statement. Successful mirroring shows patients that they have been heard and understood, which is a prerequisite to moving toward new solutions.

**“I” Statements**—Contrast in your mind the impact on the patient of the following two approaches to the same problem:

**Physician:** You’re doing a very poor job controlling your diabetes. Don’t you know this could lead to serious complications?

**Physician:** I’m worried that if your diabetes isn’t better controlled, you could develop some serious complications.

Using statements that start with the word “I” and that express your genuine positions and concerns are much easier to hear and accept and foster a problem-solving versus a critical and blaming tone. Patients already often feel self-conscious and defensive when they are noncompliant. We want to break this cycle, and the physician’s working to sound more human and less noncompliant. We want to break this cycle, and the physician repeats back to the patient a summary or even a paraphrase of what the patient has been saying:

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**Developing and Reinforcing Self-Efficacy**—Many noncompliant patients have tried the best they can and feel like failures. Failure begets failure (just as success begets success) and stimulates feelings of despondency, depression, and denial. Breaking complex problems down into simpler components and then working on them one at a time and slowly can help combat this cycle of failure and defeat and encourages self-esteem and self-efficacy.

**Enlisting Support**—Most of our patients do not exist in a vacuum. They have their own formal and informal networks of support, including family, friends, associates, and other health care professionals. In many cases it can be helpful and appropriate for physicians to encourage patients to use other people in their lives to help improve compliance and self-care.

In refractory cases of noncompliance, family members and friends can be enlisted in the campaign for better health. Patients can be asked, “Is there anyone in your life who could help you with this?” Could a spouse or partner or an adult child remind them to take their medications or to keep their appointments—without creating problems or tension in the relationship? This process must be with the consent of and under the control of patients; otherwise, we risk setting up a conflictual or codependent relationship. Patients can be asked to bring pertinent family members or friends to the medical appointment to discuss these issues. Sometimes these individuals will also have additional insights into the nature of the noncompliance problem that were not otherwise discoverable.

In some health care settings, the physician has other colleagues who can be called on for assistance, including chronic-disease managers, case managers, nurse practitioners, and behavioral-medicine specialists. These individuals may have more time available per encounter than the physician, and their motivational and teaching skills can be extremely helpful in complementing the physician’s approach.
Physicians themselves often feel stymied and frustrated in working with highly noncompliant patients and can benefit from discussions with colleagues, consultation with behavioral-medicine specialists, or by making use of a variety of practice-support settings such as Balint groups, should these be available.

**Approaches to Specific Causes of Noncompliant Behavior**

In the first section of this article, I described and identified specific causes that sometimes underlie NCB. There are targeted approaches to NCB that are based on the suspected etiology of these behaviors that can supplement the more general approaches just described.

**Denial**

Denial, as a defense from the stress and worry of living with a chronic condition, can have a positive value. However, when denial interferes with getting necessary care, it can become a common cause of NCB. Fear often underlies more pronounced forms of denial. Gently inquiring how the patient understands his or her illness, its likely course, its possible complications, or the effects of treatment can lead to a beneficial discussion in which the concept of denial can be introduced if it seems relevant.

In my experience, talking about denial in a nonjudgmental way often leads to a useful and clarifying discussion. Enlist patients’ support in working with their denial. Most patients have heard of the term *denial* and can be asked if they think this is playing a role in how they are dealing with their disorder. Frontal assaults on denial, however (“You’ll die if you don’t take better care of yourself”), feed and strengthen the denial. Feeling overwhelmed also breeds denial. Identifying these feelings and simplifying medical regimens whenever possible (see the “Developing and Reinforcing Self-Efficacy” section earlier in this article) can lessen the impetus to denial as well.

**Depression**

Part of the experience of being depressed is the loss of optimism, of self-worth and self-efficacy, and a lowering of energy. These can all interfere with chronic illness care and lead to NCB. Depressed patients are three times more likely to be noncompliant with medical treatment recommendations than are nondepressed patients.\(^{18}\) Because depression itself is common, especially among the chronically ill, the clinician should be alert to this possibility and use depression screening tools such as the nine-item depression scale of the Patient Health Questionnaire (PHQ9) (Pfizer, Inc, New York) (and others) readily with noncompliant patients. Treatment of depression may well facilitate medical compliance.

**Dementia**

Dementia, especially early in its onset, can both be nonapparent to the clinician and yet subtly impair the skills needed for medical compliance.\(^{19-21}\) In select patients with NCB, use of dementia screens like the Mini-Mental Status Exam (Psychological Assessment Resources, Lutz, FL) may reveal unsuspected subtle cognitive impairments that interfere with compliance. When this is recognized, the clinician, in collaboration with the patient, can seek the assistance of other persons or agencies that can assist with care, as well as with undertaking the evaluation and potential treatment of the cognitive decline.

**Cultural Issues**

The greater the discrepancy between the cultural background of the physician and the patient (and the patient’s family), the greater the likelihood for miscommunication and NCB. Cultural differences can affect more than the understanding of the meaning and causes of illness. They also affect one’s understanding of how symptoms or illnesses should be managed and how physician and patient should communicate. Dealing with these crosscultural issues is beyond the scope of this article, but the issue has been widely discussed in the medical literature. Recommended general approaches include:

- Being aware of the potential impact of cultural issues on the treatment process.
- Being willing to engage the patient in a collaborative and nonjudgmental manner regarding these issues.
- Seeking clarification regarding these issues from the medical literature, from programs aimed at understanding cultural diversity in medicine, and from colleagues with expertise in these issues.

**Drug or Alcohol Dependence**

Misure of alcohol or recreational drugs impairs compliance.\(^ {22,23}\) Screening for these problems is advisable for patients with NCB and can be rapidly accomplished using the CAGE tool for alcohol abuse and by asking the patient about drug use. Asking, “What drugs have you ever used occasionally?” may be helpful. Remember that alcohol and drug abuse is found in all sectors of the population. Whether identifying and treating substance abuse improves compliance has not been
thoroughly studied. Because uncovering substance abuse is generally considered to be beneficial in its own right, it certainly makes sense to do this when evaluating NCB even if we cannot prove its benefits in this arena at present. Counseling the patient regarding these disorders and making appropriate referrals to chemical-dependence programs may affect NCB and is worth doing for many other reasons.

Cost of Treatment

When patients cannot afford their medical care, as is all too common in the US given our lack of universal health care and the high costs of treatment, this is not, technically, noncompliance. The economic barriers to medical care are the primary factor here, not the actions or inactions of a given patient.

Having stated this, I must add that there are also many cases in which the relative affordability of treatment affects degrees of compliance in patients who are able to pay at least some of their medical expenses. In a study of Medicare enrollees completed before Medicare Part D was implemented, 13% of Medicare patients (and 29% of disabled Medicare patients) reported cost-related noncompliance.21 Asking patients if the cost of treatment is a problem for them should be done widely in evaluating NCB. If this proves to be the case, strategies include using generic and less-expensive medications when possible and reducing visit frequency for patients with stable diseases. Patients can be referred for various forms of financial assistance that may be available as well.

Summary and Conclusions

Using the diagnostic and therapeutic approaches outlined in this article, reviewed in Table 2, can improve your success rate in dealing with NCB and can reduce both your and your patients’ tension and frustrations. It can help align you and your patient toward a shared framework and collaboration rather than blaming and mistrust. Being open, nonjudgmental, and inquisitive can only be beneficial here and may well reveal causes of noncompliance that are not mentioned in this article. A sample dialog with a stage 2 noncompliant patient using communication tools described here may be viewed on The Permanente Journal Web site at: http://xnet.kp.org/permanentejournal/spr10/appendix/WorkingWithTheNoncompliantPatient.pdf

Taking a holistic and strategic approach to NCB can also help the physician reframe these encounters, so that they become a stimulating therapeutic challenge. Being thoughtful, patient, and believing yourself in the possibility of long-term incremental change in NCB can help develop your own self-esteem and self-efficacy in working with these challenging and difficult patients.

Disclosure Statement

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References

Divergent Aims

The ordinary patient goes to his doctor because he is in pain or some other discomfort and wants to be comfortable again; he is not in pursuit of the ideal of health in any direct sense. The doctor on the other hand wants to discover the pathological condition and control it if he can. The two are thus to some degree at cross purposes from the first, and unless the affair is brought to an early and happy conclusion this divergence of aims is likely to become more and more serious as the case goes on.

— Art and Science in Medicine, Wilfred Batten Lewis Trotter, 1872-1939, British surgeon and sociologist