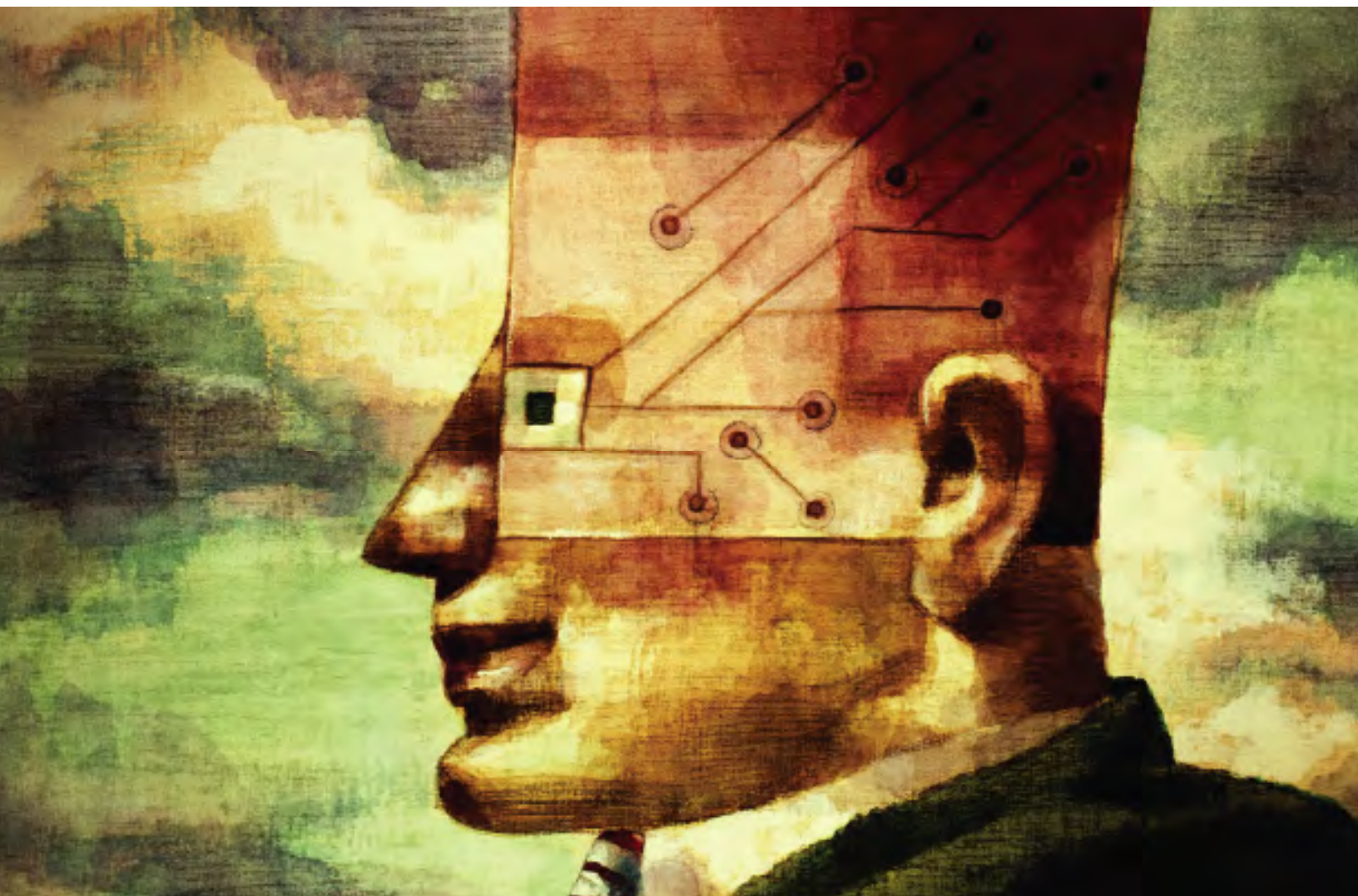


Psychological Assessment for the Prevention of Misuse in Opioid Therapy

BY GERALYN DATZ, PhD

It's a typically busy day in your practice. You get a call from your nurse: "Mr. Brown is calling about an early refill again. He said his MS Contin fell down the sink and now he's out. His next appointment with you is 2 weeks away. He wants a bridge prescription." You get a sense of queasiness in your stomach. Jim Brown hasn't been the best patient lately. In an instant, his medical history flashes through your mind: work-related, low back injury, 5 years ago now with

postlaminectomy syndrome. He is doing well in maintenance therapy, but it's not been without challenges. He "no-showed" an appointment with you recently, and this isn't the first time he's calling for medication ahead of schedule. However, he's still working and the only one supporting his family. You exhale loudly and glance at the clock: 15 patients still to see and you have a consult at the hospital. The nurse repeats: "What do you want me to do?"



Finding a Balance in Today's Environment

The reality of prescribing opioids to patients with chronic pain in today's healthcare environment is complex. As in the case above, the solutions aren't always clear-cut. It can be difficult to balance the risks of prescribing with the realities of refractory pain, personal comfort level, and patient behavior. Prescription drug abuse rates are on the rise, and the scrutiny on physician prescribing behavior is growing (1). Concurrently, the number of patients with chronic pain conditions is also increasing exponentially (2). This complex interaction is played out every day in pain management offices around the country. Many physicians are looking for guidance on the best approach to responsible prescribing for chronic pain patients. Psychological assessment offers one promising avenue to detecting and balancing these risks.

The Problem

For many patients, opioids are one means of reducing moderate-to-severe chronic pain, in both cancer and noncancer populations. As such, opioid prescribing rates are on the rise. In primary care settings, for example, opioids are prescribed quite commonly (3). Several investigators have questioned the use of opioid prescribing for chronic noncancer pain patients, citing insufficient data to justify the liberal practices we currently see (4,5).

Controlling prescription diversion is now a high federal priority. The DEA has asserted: "it is more important now than ever to be vigilant in preventing the diversion and abuse of controlled substances" (6). It is no surprise then that, warranted or not, fears of prosecution and regulatory scrutiny in the medical community are quite common (7). Clearly, prescribers need to identify ways to systematically reduce risk to themselves and their patients.

The Role of Psychological Assessment

The use of psychological assessment is emerging as an application of patient selection that is helpful in identifying patients most appropriate for opioid therapy. Several guidelines and esteemed investigators have recognized that a comprehensive, and thereby successful, opioid screening requires assessment of substance abuse, addiction potential, psychopathology, and medical compliance (8-10). In practice, this may be achieved through a combination approach including psychological assessment. Several leading researchers have recently

advocated for a "universal precautions" approach to risk assessment, where psychological assessment and subsequent risk stratification is a routine part of opioid screening (11,12).

Several epidemiological risk factors have been implicated as predictive of prescription opioid abuse. The most salient is personal or family history of alcohol or substance abuse (13-17). Other factors include cigarette smoking (17,18), younger age, and presence of psychiatric conditions (13-17). As in the case example above, patient behavior can also play a large role in determining risk. Some behaviors suggestive of misuse are (but not limited to) selling or forging prescriptions, concurrent alcohol or illicit drug use, multiple unsanctioned dose escalations, receiving opioids from multiple sources, repeated ER visits, or "doctor shopping" (19). Craving is also an aberrant behavior. Patients with chronic pain who use opioids for pain relief, and who admit to craving their medication, are at greater risk for aberrant drug-related behavior (20). One recent study of 613 pain outpatients (20) found that over half admitted craving their pain medication to some degree.

Pain patients are understood to be a diverse group. Care needs to be taken to uncover the reasons behind aberrant behavior, before simply classifying them as good/bad or addicted vs. not. For example, a patient who runs out of medications early due to working 12-hour shifts on certain days is putatively different than one who runs out early due to wanting to escape all feelings of pain on a regular basis. Since psychiatric comorbidities can also contribute to aberrant behaviors (20), psychological assessment can aid in making this distinction.

Rationale for Psychological Assessment in Opioid Therapy

Unrecognized and untreated psychopathology can interfere with successful rehabilitation (21). Psychopathology increases pain intensity and disability, contributing to a negative cycle that perpetuates functional limitations (22). Anxiety decreases pain thresholds and tolerances (23), and physical symptoms can result from chronic activation of the autonomic nervous system, hypervigilance, misinterpretation, and somatic amplification (24). Both anxiety and depression are associated with symptom magnification (25), and depression is linked to poor treatment outcomes with traditional medical approaches (26). Psychopathology also exacerbates treatment nonadherence. Depressed patients,

for example, are up to 3 times more likely to be nonadherent to physician recommendations than nondepressed patients (27).

Personality traits, such as histrionic or borderline tendencies, could result in unrealistic expectations for pain relief, which may exceed medication effectiveness. Narcissistic patients may behave impulsively and feel a sense of entitlement, as if rules do not apply to them. Foreseeably, this would cause problems in opioid treatment. In Gatchel's sample (28), 51% of the pain patients sample met criteria for at least one personality disorder. In the context of psychological assessment, these behaviors would be flagged as risk factors for abuse. As the presence of psychological factors can influence medication effectiveness, these findings have direct implications for chronic pain patients being considered for opioid therapy.

Psychological assessment ideally taps multiple domains: specific domains can include medical compliance, medical beliefs, cognitive styles, and opioid risk specific variables; and broad domains include those that measure personality, psychopathology, and substance use potential. The psychological evaluation: (a) identifies psychological comorbidities; (b) suggests specific treatments that may help resolve psychological risk factors and medical risk factors; (c) facilitates patient opioid selection by identifying compliance behavior, risks, and appropriateness; and (d) provides clues to a patient's potential treatment response. Taken together, these insights provide a much richer and complex picture of the individual pain patient, and can become a very useful backdrop for assessing risk and aberrant behaviors more effectively.

Brief Opioid Screeners

Brief opioid screeners are a good example of a specific assessment that should be conducted as part of any opioid assessment. There are several assessment tools that are effective in predicting prescription opioid abuse in chronic pain patients. Each tool classifies patients into low, medium, and high risk, and are designed to supplement interview or additional assessment.

The Screener and Opioid Assessment for Patients with Pain-Revised (SOAPP-R) is a 24-item questionnaire that helps clinicians determine how much monitoring a patient on long-term opioid therapy might require (29). It is an easy-to-use questionnaire that can be completed in less than 10 minutes. Patients respond on a scale of

0 "Never" to 4 "Very Often" about several questions that indicate an individual's relative risk for developing opioid problems. Recommendations are offered to providers at each level. A shorter, 14-item version of this measure also exists, which focuses on the items most predictive of aberrant behavior.

The Pain Medication Questionnaire (PMQ) (30) is a 26-item measure that is also scored on a 5-point likert scale of agreement. Research with the PMQ (31) indicates that higher PMQ scores correlate with higher levels of substance abuse, psychopathology, and physical/life functioning problems amongst patients.

The Opioid Risk Tool (ORT) (32) is a 5-item, yes/no self-report questionnaire to help measure and predict a patient's probability of displaying aberrant behaviors when prescribed opioids. The ORT assesses previous

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substance abuse history, family substance abuse history, age, history of sexual abuse, and a variety of psychological disorders. The ORT has a high degree of sensitivity and specificity for determining which patients are at risk for opioid abuse, misuse, and diversion (32).

Psychopathology Measures

Given the extensive literature that supports psychopathology, particularly depression and anxiety, as predictive of abuse, psychiatric comorbidity should be assessed prior to initiating opioid therapy.

Specific Measures of Psychopathology

In some settings, brief measures are a good choice for psychopathology screening prior to initiating opioid therapy. Lack of access to an experienced psychologist, time constraints, cost limitations, and staff availability to administer, score, and interpret results are all factors that may influence the use of brief psychological testing. For some practices, hand-scored, quick measurements are the

only option for assessing psychopathology. Several measures have been validated in both chronic pain and chemically dependent populations, and are useful for quick screening purposes.

The Beck Depression Inventory-2 (BDI-2) (33) is a brief 21-item self-report instrument that takes about 10 minutes to administer and score. It has been widely used to document the depressive symptoms and outcomes in samples of chronic pain patients (34). It is notable that several BDI items tap into somatic domains (sleep disturbance, fatigue), and since chronic pain may have similar somatic effects. Caution is needed when interpreting the significance of the total BDI score. As such, investigators have recommended a higher cutoff score

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when diagnosing chronic pain patients (35). The Center for Epidemiologic Studies Depression Scale (CES-D) (36) and the Zung Self Rating Depression Scale (37) are similar measures, which take little time and empirically measure depressive symptoms. A benefit of the CES-D is that it has been used to determine which chronic pain patients may abuse their prescription opioids (38).

A brief measure that combines assessment of both depression and anxiety is the Pain Patient Profile (P-3®) (39), a 44-item measure designed to quickly assess psychopathology. It is effective at measuring psychological distress in pain patients (40) and focuses on depression, anxiety, and somatization. The P-3 is designed for repeated assessment over time for a wide range of healthcare professionals, and provides tailored pharmacological and psychological management recommendations to providers. A helpful clinical feature of the P-3 is that it compares individual scores to both a normative sample of pain patients and a community

sample. As such, this test recognizes that the average pain patient is significantly more depressed, anxious, and somatically focused than non-pain counterparts. Manchikanti and colleagues (41) assessed a sample of chronic low back pain patients using the P-3 and found that significant proportions suffered with depression (30%), generalized anxiety (20%), and somatization (20%). In a later study, Manchikanti et al also demonstrated that psychological status was improved, as measured by the P-3, after utilizing cervical medial nerve branch blocks (42).

Broad Measures of Psychopathology

When possible, it is quite useful to have broad psychological testing conducted with potential opioid candidates. This is typically performed by a psychologist, preferably one specializing in health psychology, behavioral medicine, or rehabilitation. A comprehensive assessment that utilizes one or more measures of broad psychopathology can provide a wealth of additional and crucial information.

Minnesota Multiphasic Personality Inventory—2nd Edition (MMPI-2) is a 567-item self-report, true/false measure that provides tentative conclusions about a patient’s current level of adaptation, behavioral characteristics, and personality traits (43). This test can determine the individual’s severity of impairment, outlook on life, approaches to problem solving, typical mood states, likely diagnoses, and potential problems in treatment. The MMPI-2 contains validity scales and clinical scales that suggest the presence of emotional and behavioral characteristics. The MMPI-2 also contains supplementary scales, including the Addiction Admission and the Addiction Potential scales, which provide information about previous and current substance use. One strength of the MMPI-2 is the extensive information that it provides.

Being one of the oldest measures of personality, it also has a distinguished history and is well researched. Vendrig (44) asserts that, despite a history of controversy, the MMPI-2 is useful as a broad measure of psychopathology in chronic pain patients when used properly. The MMPI-2 is most effectively used for assessing comorbidity, building rapport, assessing disclosure, and case conceptualization. Recent research has shown that certain MMPI-2 profiles have been linked to treatment outcome in chronic pain patients. Gatchel and colleagues (45) identified a disability profile (DP) consisting of 4 or more

elevated scales in patients with chronic occupational spinal disorders, positively predicted the presence of psychopathology in musculoskeletal pain patients, which may in turn predict delayed recovery and can potentially negatively impact treatment.

Opioid Use, Personality, and MMPI Results

The MMPI-2 is one of the few personality measures with data pertaining to its use with opioid-using populations. Historically, data pertaining to MMPI/MMPI-2 and opioids has been conducted with drug-abusing individuals (“opioid addicts”) who are concurrently enrolled in methadone maintenance programs, and are not chronic pain patients per se. Belding and colleagues (46) prospectively studied 151 patients participating in methadone maintenance treatment. They discovered 4 distinct subtypes of methadone maintenance patients, each of which differed from each other and in their response to treatment, as measured by urinalysis results. Only 2 groups of patients (interestingly, the least and most psychologically disturbed as measured by MMPI) consistently improved their urinalysis results over time. These results suggest that the relationship between psychological distress and treatment outcome is probably quite complex.

Other investigators (47) have used the original version of the MMPI to assess the profiles of opioid users in a chronic pain program. Results showed that pain patients who used either opioids only or opioids and sedatives, had higher MMPI hypochondriasis and hysteria scores when compared to pain patients who didn’t use opioids at all. These 2 groups of patients also had more pain-related hospitalizations and surgeries than those patients not sustained on opioids, were more impaired and were more likely to report an increase in pain with time. The authors suggest that, for these individuals, various factors that are not related to nociception (secondary gain, attention, sympathy, avoidance of aversive activity financial compensation) typically are also present and may maintain pain and illness behavior.

The Personality Assessment Inventory™ (PAI®) is a 344-item, self-report inventory designed to provide information about psychopathology treatment planning, and clinical diagnosis (48). The PAI yields validity scales, clinical scales, treatment scales, and interpersonal scales. Clinical scales distinguish neurotic, psychotic, and impulse control disorders, and provide information about alcohol and drug problems. The PAI assesses for

problematic alcohol and drug use (both prescription and illicit), as well as features of alcohol and drug dependence. Specific scales are also included for borderline and antisocial traits, which can be particularly important during opioid assessment. The treatment scales provide the clinician with potential areas (e.g., stress, lack of support, self-harm potential, treatment motivation) that can lead to complications or interference during treatment. Similar to the MMPI-2, advantages of the PAI are its significantly shorter length, and less aversive item content. The PAI has been examined in a sample of chronic pain patients (49) and was determined to be an effective measure for this population. It is notable that the endorsement of somatic complaints does not automatically inflate scales of PAI, which is an advantage.

Millon™ Behavioral Medicine Diagnostic (MBMD™) is a 165-item, self-report inventory that assesses psychological and personality factors that contribute to positive or negative health outcomes (50). The authors assert that this measure can identify factors that contribute to recovery, relapse and progression of physical disease. A significant strength of the MBMD is that it is normed on 700 patients with various medical issues, including cancer, diabetes, organ transplant, and HIV/AIDS. This allows clinicians to gauge their patients’ performance relative to a cohort of their medical peers, which confers a greater specificity of assessment. The MBMD yields a validity index, psychiatric information, stress moderators, negative health habits, and potential treatment liabilities and assets. The Negative Health Habits indicators provide the clinician with a better understanding of health-compromising (e.g., substance use) and health-promoting (e.g., exercise) effects. Additionally, Treatment Prognostics help predict medication abuse versus medication conscientiousness, as well as surgical readiness versus interventional fragility. Compared to other personality assessments, the MBMD is shorter, easier, and offers a lot of clinically useful information. Patients tend to respond well to the MBMD because of its easy presentation style and face validity.

These data provide important milestones in the evolving literature in this fascinating area of research. Further prospective research is clearly needed to determine if there are specific subtypes of personality profiles that apply to chronic pain patients who do and do not display aberrant behaviors with respect to their opioid use.

Clinical Interview and Corroboration

As discussed, a thorough opioid assessment includes both broad and specific factors, assessed by psychological instruments. Testing results should be discussed within the context of a thorough clinical interview, which

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corroborates clinicians’ experience of the pain patient with the psychological assessment data. In turn, tailored treatment recommendations can be made to the prescribing physician. It is notable that clinical interviews must be comprehensive, take into consideration the “whole person,” and incorporate materials from several sources, including reports from the patient, his or her family, the prescribing provider (if conducted outside the practice environment), and medical records. Suggested domains that comprise a psychological interview include: behavioral observations, pain history, sleep disturbance medication history, compliance history, substance abuse history, legal history, psychological/psychiatric history, motivational issues, and relevant personal history. Subjective and objective assessment of multiple areas of functioning assures convergence of impressions.

What are the benefits of psychological assessment?

When patients are properly screened, both providers and patients benefit (Table 1). Providers benefit because they are in a position to improve opioid outcomes. Psychological screening offers the advantage of empirical data on which to base decisions, rather than relying on subjective judgment, which has been repeatedly shown to be fairly inaccurate (51). Psychological assessment enables providers to stratify risk more effectively, and conduct the recommended “benefit to harm” evaluation (11,12) for opioid candidacy.

Risk for opioid misuse can also be attenuated with psychological assessment. With early identification of compliance risks (e.g., prn rather than by-the-clock dosing, erroneous medical beliefs, and fear of pain), providers are in a position to proactively address these issues through patient education, referral to specialists, and adjunctive nonpharmacologic treatments. This is preferable to acting in a reactive fashion and attempting to resolve problems after opioid therapy has already been initiated. Frequently, a combination of nonpharmacologic and pharmacologic therapies is effective in managing chronic pain and any related physical and psychosocial impairments (49).

From a practical standpoint, “problem patients” can be identified at an early stage. Depending on the measures and interview used, Axis and Axis II psychopathology, including bipolar, borderline, posttraumatic, and antisocial tendencies can be identified. High utilizers of treatment, and even patients who are likely to role reverse and be pain sensitive, can also be recognized. This information can be invaluable to physicians at the early stages of treatment planning.

Patients also benefit from psychological assessment. A comprehensive evaluation treats them as a “whole person,” not simply a person with a physical pain

Table 1: Why use psychological screening?

When patients are properly screened, both providers and patients benefit.

Provider Benefits

- Balance is achieved between relieving patient suffering and identifying risk of addiction
- Risk of regulatory scrutiny is reduced
- “Problem patients” are identified at an early stage
- Compliance issues are identified
- Demands on providers and support staff are frequently reduced

Patient Benefits

- Become aware of risks and benefits of treatment with opioids
- Expectations are clarified
- Become active partners in their pain management
- Comorbid psychopathology, which can hinder treatment success, and/or exacerbate baseline levels of pain, are identified and treated
- Receive pain management treatments that are “tailored” to their needs and goals

problem. Comorbid psychopathology, which can hinder treatment success and/or exacerbate baseline levels of pain, is identified and treated. Patients receive pain management plans that are “tailored” to their individual needs and goals. Education about the risks and benefits of treatment with opioids occurs, and expectations are clarified. In short, patients become active partners in their pain management program rather than passive recipients. Psychological assessment can also contribute to patient safety by increasing awareness of potential overuse or impulsive use of medications, suicidal ideation, or co-occurring (but untreated) psychopathology.

It is worth mentioning that some providers resist referring to a psychologist. Their fears may mirror their patient’s concerns, as discussed below. Lack of understanding of how psychologists can augment physician practice, and bias against, or ignorance of, nonpharmacologic pain interventions can contribute to this behavior. However, consultation with a psychologist can be very beneficial to physicians for practical reasons.

Psychologists have fewer time limitations than physicians. It is not unusual for a psychologist to spend 60 to 90 minutes in a face-to-face interview with the patient, in addition to having the patient spend 1 to 3 hours completing pain specific and health behavior based questionnaires. Psychologists are reimbursed appropriately for this time investment while most physicians are not. Similarly, psychologists have the time and experience to discuss potentially uncomfortable topics, including drug abuse. Over 40% of physicians in primary care admit they have difficulty discussing substance abuse, including abuse of prescription drugs, with their patients (50). In contrast, less than 20% of physicians report difficulty discussing less sensitive topics such as depression. Direct and open questioning is needed for assessment of medical compliance and substance abuse history. By training, psychologists receive this. Finally, psychologists are important treatment allies. Psychological interventions for chronic pain are important adjuvants to other medical pain interventions. Cognitive behavioral interventions are empirically supported treatments for chronic pain and are quite effective (52).

How to Overcome Patient Resistance to Referral

“You’re sending me to a psychologist? I’m not crazy! My pain is REAL.” It’s not unusual for patients to be resistant about seeing a psychologist. Patients may think that they are being referred because the physician doubts the validity or the extent of their pain report. While this is certainly one reason

for psychological referral, in the case of opioid assessment, it is rarely the primary referral question. Patients should be informed that psychological assessment is a recommended part of opioid prescribing (8-10) and is designed to reduce their risk during treatment as well as yours.

In this author’s experience, patients may also be concerned that they will be sent to an inpatient unit (“the hospital”) or that they are being punished or discharged from the physician’s practice. Other patients may fear their pain report is being questioned by the physician because of potential financial or other type of secondary gain (e.g., malingering); that their physician believes their pain is “made up” in response to some other psychological or traumatic issue (e.g., conversion symptom); or that their pain is simply made up altogether (e.g., factitious disorder). These fears should be addressed directly through dialogue with the patient. The prescribing physician should emphasize that the psychological referral is part of the multidisciplinary nature of the patient’s care, and is designed to assess all of the variables that may be influencing his or her pain. The physician can also emphasize that the psychologist will likely have recommendations that will be incorporated into the patient’s treatment plan.

Closing and Recommendations

Olson and colleagues (53) outlined several key factors that influence opioid prescribing in primary care. These included time pressures, fears of creating “addicts,” and lack of knowledge in effective risk assessment, pharmaceutical pressure, and lack of effective pain assessment. It is notable that psychological assessment helps resolve the first 3 out of these 5 concerns.

Today it is understood that no one modality alone is sufficient to manage chronic pain. Multimodal treatments include several complementary approaches, such as pharmacotherapy, psychotherapy, physical therapy, and interventional strategies. Just as we do not suggest one treatment for chronic pain, it should not be suggested that only one type of assessment is sufficient for determining opioid risk. Chronic pain requires multimodal assessment just as it requires multimodal treatment. Comprehensive opioid screenings benefit from psychological assessments that include assessment of substance abuse, addiction potential, psychopathology, personality, and medical compliance. This can be achieved through brief or more comprehensive measures, and is strongly recommended as part of responsible opioid prescribing. By using a comprehensive approach to assessing opioid risk, safety to both patients and providers is maximized. ■