CHAPTER 1 PATIENT ASSESSMENT AND DIAGNOSIS

Authors: Ling, W. & Stephenson, D.

1.1. Diagnosis of Substance-Related and Addictive Disorders

1.1.1. Diagnosis and Terminology

The regulatory term "opioid dependence" (addiction) is characterized by compulsive drug seeking and use with loss of the ability to control the drug use despite adverse consequences. This must be distinguished from the usage of this same term "opioid dependence" in general medical settings, where it often refers only to physical dependence (tolerance, withdrawal). These two uses of the word "dependence" may be confusing. In general medicine, physical dependence with continued use despite adverse consequences is often diagnosed as "addiction."

1.1.2. DSM IV vs. DSM-5

Limitations of DSM IV

When these guidelines were last published in 2008, what we now refer to as Substance Use Disorders (SUDs) were designated as Substance-Related Disorders in DSM IV, divided into two groups: Substance Use Disorders and Substance-Induced Disorders. SUDs consisted of Substance Abuse and Substance Dependence; Substance-Induced Disorders included substance intoxication, substance withdrawal, and Substance-Induced Mental Disorders included elsewhere in the Manual, such as anxiety and mood disorders, sexual disorders and dementia, and so on.

The diagnostic criteria for Substance Abuse in DSM-IV consisted of a maladaptive pattern of substance use, within a 12-month period, leading to clinically significant distress or impairment in one or more life domains—physical, social, legal—and failure to fulfill major role obligations [1].

The diagnosis Substance Dependence was meant to correspond with what was previously called addiction, a term thought by then to be pejorative or, more accurately, politically incorrect [1]. Its use led to a great deal of confusion between the behavioral disorder of addiction—acting like an "addict" as Alan Leshner, then director of NIDA, put it—and physiological dependence, which is entirely separate from addiction. Most people link dependence with "addiction" when in fact dependence can be no more than physiology.

The basic diagnostic approach taken in DSM-IV was categorical. This method employed a threshold approach that designated an individual as either diagnosed or not diagnosed with a disorder. This "yes/no" approach conferred validity and reliability, and was advantageous for the purpose of communication for researchers, which was a central goal in the early development of the DSM. However, for the members of the American Psychiatric Association (APA) who use the DSM to diagnose and classify mental disorders and who saw patients' disease manifestation as a continuum, the categorical approach was a problem.

DSM-5 - Opioid Use Disorder

The new DSM (DSM-5) ^[2] uses different terminology from the regulations and from the prior edition, combining the DSM IV-TR categories of "Opioid Abuse" and "Opioid Dependence" into a single category called "Opioid Use Disorder" (OUD) with a continuum from mild to severe. OUD is characterized by a

group of behavioral, cognitive and physiological symptoms occurring within a specific time frame (12 months) due to problematic use of opioids.

There are 11 criteria; patients with 2-3 of the criteria have "mild" OUD;" 4-5 criteria is "moderate" OUD, and 6 or more is severe OUD. DSM criteria include physical dependence, but also include other behaviors, notably continued use despite adverse consequences. Other specifiers include: in early remission, in sustained remission, in a controlled environment, and for opioid use disorder, being on maintenance therapy (where methadone, buprenorphine, or naltrexone is specified). Please see Table 1.1 – Worksheet for DSM-5 criteria for diagnosis of opioid use disorder.

An extensive body of literature has supported combining abuse and dependence, as both sets of criteria indicate the same underlying condition. The exception is the legal criterion for substance abuse (i.e., arrest or legal problems), which is problematic due to the unfair ways individuals become justice-involved, and so this was removed from DSM-5. Since craving is central to diagnosis and treatment in many areas of the field, and is included in coding definitions for ICD-10, it was added to the list.

Removal of Polysubstance Dependence Diagnosis

The DSM-5 eliminates poly-substance dependence because of the new threshold to use of each substance. In practice poly-substance use continues. The DSM-5 has added cannabis withdrawal disorder with criteria, specifies criteria for

cannabis use disorder, and aligns tobacco use disorder with criteria for other SUDs, as well as gambling disorder.

Users of the DSM-5 who are familiar with DSM-IV will have little difficulty adjusting to the changes because, except for the deletion of the legal criterion and the addition of craving to the list, the criteria used to make the diagnoses in DSM-5 are the same ones used in DSM-IV. Each specific substance, except for caffeine, receives a separate disorder designation.

1.1.3. Treating Patients

The primary purpose of the clinician's admission assessment is to confirm and document current opioid use disorder and to determine whether the patient is fit for pharmacotherapy through a comprehensive history and physical examination and appropriate laboratory tests. Sample forms for recording the intake history and physical examination can be found here.

The Effective Clinician's Approach to Patients

Although healthcare providers understand that examining, diagnosing, and treating patients in a non-judgmental, empathetic way is both morally correct and ethically required, it can be challenging because of the highly stigmatized nature of substance use disorders. Repeated studies have now shown that when terms such as "abuse" or "addict" are used, instead of medically precise terms like "person with opioid use disorder," a provider is more likely to blame the patient and take an approach involving punishment as opposed to

Figure 1.1

DSM-IV and DSM-5 Criteria for Substance Use Disorders

	DSM-IV Abuse ^a		DSM-IV Dependence ^b		DSM-5 Substance Use Disorders ^c	
Hazardous use	X	1	-		x	1
Social/interpersonal problems related to use	X	21			x	
Neglected major roles to use	X	criterion	-		x	
Legal problems	х		-		-	
Withdrawald	170		x	1	x	
Tolerance	*		X		×	≥2
Used larger amounts/longer			X		x	criteri
Repeated attempts to quit/control use	*		X	}≥3 criteria	x	
Much time spent using			X	Criteria	x	
Physical/psychological problems related to use	181		X		×	
Activities given up to use	180		X	J	X	
Craving	-				x	J

- a. One or more abuse criteria within a 12-month period and no dependence diagnosis; applicable to all substances except nicotine, for which DSM-IV abuse criteria were not given.
- b. Three or more dependence criteria within a 12-month period.
- c. Two or more substance use disorder criteria within a 12-month period.
- d. Withdrawal not included for cannabis, inhalant, and hallucinogen disorders in DSM-IV. Cannabis withdrawal added in DSM-5 [8]

Worksheet for DSM-5 criteria for diagnosis of opioid use disorder.

Patient's Name:		Date of I	Birth:	
Diagnostic Criteria*	Meets	criteria	Notes/supporting	
(Opioid Use Disorder requires at least 2 within 12-month period)	Yes	No	information	
Opioids are often taken in larger amounts or over a longer period of time than intended.				
2. There is a persistent desire or unsuccessful efforts to cut down or control opioid use.				
3. A great deal of time is spent in activities necessary to obtain the opioid, use the opioid, or recover from its effects.				
4. Craving, or a strong desire to use opioids.				
5. Recurrent opioid use resulting in failure to fulfill major role obligations at work, school or home.				
Continued opioid use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of opioids.				
7. Important social, occupational or recreational activities are given up or reduced because of opioid use.				
8. Recurrent opioid use in situations in which it is physically hazardous.				
9. Continued use despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by opioids.				
10. *Tolerance, as defined by either of the following: (a) a need for markedly increased amounts of opioids to achieve intoxication or desired effect (b) markedly diminished effect with continued use of the same amount of an opioid.				
11. *Withdrawal, as manifested by either of the following: (a) the characteristic opioid withdrawal syndrome (b) the same (or a closely related) substance are taken to relieve or avoid withdrawal symptoms.				
*This criterion is not considered to be met for those individuals takin	ng opioids so	lely under ap	propriate medical supervision.	
Severity: Mild: 2-3 symptoms, Moderate: 4-5 symptoms. Severe: 6 or more symptoms.				
Signed	Date_			

Criteria from American Psychiatric Association (2013). <u>Diagnostic and Statistical Manual of Mental Disorders</u>, <u>Fifth Edition</u>, Washington, DC, American Psychiatric Association, page 541. It is possible to meet the DSM-5 criteria for an "Opioid Use Disorder" without having tolerance or physical dependence (withdrawal upon abrupt cessation of use.)

invoking the disease model and prescribing treatment. This has led to calls made by professional organizations and leaders in the field to change the language we use when describing the patients we care for [4-6].

These principles are particularly important at the bedside when evaluating a person. We must be aware that our attitudes can greatly influence the quality of information gathered. We must exhibit extra understanding since many individuals struggling with SUD, even when they are willing to be open, may feel shame related to their behavior and obscure parts of the history. Others may also refrain from disclosing all aspect of their history because of fear of losing a job or professional licensure. A warm, non-judgmental attitude encourages self-disclosure and facilitates the establishment of a good working relationship. Using the skills from motivational interviewing can be helpful, including asking open-ended questions, providing the patient with affirmations, using reflective listening, and summarizing the content of the conversation. These practices can help with eliciting a thorough history from the patient. It is also worth noting that there are times in which a full history cannot be obtained because the individual has suffered severe drug effects, co-morbid mental illness, or the possibility that the person is under the influence of a substance.

Patient Intake and History - Best Practices

Dedicate your time exclusively and conduct the interview in private. Put away your phone, electronic devices, etc., and avoid all forms of interruption. Many individuals with a substance use disorder have not received the same consideration we often give to other patients. Giving exclusive attention to your patient shows respect and sensitivity, which are essential for rapport.

Begin by assuring patients that the information they give is confidential. Information regarding SUD treatment is protected under federal law (42 CFR Part 2) [7] and that information—excluding emergency situations—can only be shared with a signed Release of Information. With widespread use of electronic medical records (EMR), it can be helpful to assure the patient of the separate EMR used in SUD treatment settings.

While the approach needs to be empathetic and supportive, the questioning itself should be direct and straightforward:

- Use simple language.
- Ask open-ended questions about the patient's type of substance used, quantity, and mode of use. Because concurrent use of multiple substances is highly prevalent, patients should be screened for all types of substance use. Include questions about prescribed substances such as prescription opioids, benzodiazepines, and buprenorphine.
- Motivating Events may be the basis for a person seeking treatment. It is important to elicit that history (i.e., if a woman lost custody of her child), while not making promises to resolve any of these conflicts for the person.
- Stay neutral. Do not contradict or endorse their claims. For personal and/or psychosocial reasons, patients may minimize and/or exaggerate the breadth and severity of their actions.

Patient Assessment – Exhaustive Drug Use History

The cornerstone of patient evaluation is the history. Begin with what brings them to medical attention and explore systematically, one at a time, the common drugs of abuse. Obtaining a complete substance use history will allow the provider to identify patients who need detoxification from another, non-opioid substance, most commonly alcohol and/ or benzodiazepine. Knowing this history allows the treatment team to address a patient's recovery from OUD as well as his/her overall health and wellness. Other substances to explore include stimulants (methamphetamine, cocaine, nicotine), sedatives (barbiturates, benzodiazepine, alcohol, muscle relaxants/OTC sleep preparations), cannabis, PCP, designer drugs (e.g., MDMA), other OTC or prescription medications taken inappropriately.

For each drug, determine age of first use, first regular use or use to intoxication, presence of withdrawal on cessation of use, amount of time and money spent, neglect of personal and social responsibilities, and continuous use despite health and social harm. Most substance use disorders begin in adolescence; later adult onset may suggest co-occurring psychiatric disorders, especially affective disorders, or a prescription opioid use disorder that began because of treatment of chronic pain [8].

Explore past periods of abstinence and heavy use, and the surrounding life circumstances; these may suggest motivations to quit, or triggers to relapse. Pay special attention to the pattern of use in recent weeks. The information is crucial to treatment planning, and may help decide whether a period of hospitalization is necessary. Screening tests and questionnaires exist such as the DAST, AUDIT, and CAGE, but they lack the flexibility and rapport-building of a life interview. If needed, a summary of various screening tools can be found on the National Institute of Drug Abuse (NIDA) resource page.

Patient Assessment - Mental Illness

The patient's behavior and responses to questioning during history taking and physical examination usually provide sufficient clues to his or her mental status. Sometimes it may be useful to use a standardized cognitive screening test like the Mini-Mental Status Examination, or the Mini-Cog, but recall that these screening tests may be inaccurate in low-literacy populations Many patients with opioid use disorder have untreated mental health problems, most commonly major depressive disorder, anxietyspectrum disorders, and bipolar disorder. If mental health problems are not addressed, a patient may have difficulty achieving and maintaining abstinence from substances of abuse. A mental health history including past and current mental health problems and diagnoses, past and current medications, current symptoms, overdose events, suicide attempts, involuntary commitments ("5150"), and the family history will allow triage and follow-up as appropriate. It is helpful, and sometimes essential, to coordinate with the mental health provider. The patient must sign a release of information prior to communication. Federal regulations governing the confidentiality of patient information when the patient is in treatment for substance use disorders are

found in 42 CFR Part 2 ^[7]. A general medical consent form is not adequate. See Table 1.2 or refer to SAMHSA the specific requirements and a sample consent form. See also Co-Occurring Psychiatric Illness.

Patient Assessment – Concurrent Medical Conditions

A review of past and current medical diagnoses and current medical concerns/symptoms allows the physician to triage for conditions that need prompt attention and to arrange for evaluation and follow-up prior to or concurrent with opioid use disorder treatment. Questions regarding past hospitalizations, accidents/injuries, surgeries and medications being taken may elucidate conditions the patient does not immediately remember or volunteer. See also Concurrent Medical Conditions.

Patient Assessment - Physical Examination

Physical examination at admission is a regulatory requirement. California regulations specify inclusion of the following components:

- vital signs
- head, eyes, ears, nose, and throat (HEENT)
- neck (including thyroid)
- chest (including heart, lungs and breasts)
- abdomen
- skin
- extremities
- neurological screening

Observe patients carefully throughout history-taking and conduct a thorough physical examination. Look for fresh needle marks (some needle-related conditions might require urgent care), old scars, thrombosed veins, congested nasal mucosa, abscesses, and enlarged liver and local lymph

nodes. Cardiac arrhythmia and murmur suggest cocaine, methamphetamine, and other stimulant misuse, whereas gynecomastia and spider nevi point to alcoholism.

While it is not a regulatory requirement, including height and weight allows calculation of a body/mass index (BMI), which may be useful in the course of treatment as many patients have problems maintaining ideal body weight. Pelvic exams and rectal exams may be included if the clinic is set up to accommodate them, there is a clear indication to do so, and the patient consents.

Patient Assessment – Other Important Information.

A brief social history, a review of patient's current living and transportation arrangements, as well as past and present involvement with criminal justice is helpful for identifying barriers to successful treatment.

Patient Assessment – Verification and Documentation

Supplement the current illness with a careful review of patient records, Controlled Substance Utilization Review and Evaluation System (CURES) database, past medical history, family, social and occupational history. Confirm the information obtained with an independent source whenever possible.

Patient Assessment — Screening for Communicable Disease

Screening for symptoms of communicable disease is an important component of this section of the interview. The most commonly encountered communicable diseases are tuberculosis (TB), hepatitis, sexually transmitted diseases and HIV. Several screening tests are required in narcotic treatment programs – commonly, tuberculosis and syphilis, but offering more extensive services is optimal. Ensure

Table 1.2

Summary of 42 CFR part 2 requirements for release of information forms

Disclosure under these regulations must include:

- The specific name or general designation of the program or person permitted to make the disclosure.
- 2. The name or title of the individual or the name of the organization receiving the disclosure.
- 3. The name of the patient.
- 4. The purpose of the disclosure.
- 5. Scope and type of information to be disclosed.
- 6. The signature of the patient and, when required for a patient who is a minor, the signature of a person authorized to give consent under § 2.14; or, when required for a patient who is incompetent or deceased, the signature of a person authorized to sign under § 2.15 in lieu of the patient.
- 7. The date of signed consent.
- A statement that the consent is subject to revocation at any time except to the extent that the program or person which is to make the disclosure has already acted in reliance on it.
- The date, event, or condition upon which the consent will expire if not revoked beforehand, to ensure that the consent will last no longer than reasonably necessary to serve the purpose for which it is given.

Medical syndromes associated with opiate use: Anticipatory, early, and fully-developed symptoms and signs of opiate withdrawal

Syndrome (Onset and Duration)	Characteristics	
Opioid intoxication	Conscious, sedated, "nodding" Mood normal to euphoric	Pinpoint pupilsRecent history of opioid use
Acute overdose	UnconsciousPinpoint pupils	■ Slow, shallow respirations
Opiate withdrawal:		
Anticipatory (3-4 hours after last use)*	Fear of withdrawal Drug-seeking behavior	■ Anxiety
Early (8-10 hours after last use)	AnxietyRestlessnessYawningNauseaSweatingNasal stuffiness	RhinorrheaLacrimationDilated pupilsStomach crampsDrug-seeking behavior
Fully developed (1-3 days after last use)	 Severe anxiety Tremor Restlessness Piloerection** Vomiting, diarrhea Muscle pain 	 Muscle spasm*** Increased blood pressure Tachycardia Fever, chills Impulsive drug-seeking
Protracted abstinence (Indefinite duration)	HypotensionBradycardiaInsomnia	Loss of energy, appetiteOpiate cravings

^{*} Anticipatory symptoms occur as the acute effects of opioids begin to subside.

patient is current in their vaccinations. It is very helpful, and sometimes essential, that patients sign a release to all treating physicians to allow coordination.

Patient Assessment - Opioid Withdrawal

The physical examination provides an opportunity to observe for signs of opioid withdrawal (see Table 1.3). The presence of signs of withdrawal establishes the diagnosis of physical dependence. However, it should be noted that symptoms and signs of opioid withdrawal are subject to the effects of environment (less intense in controlled settings) and dependent on the amount and timing of the last use. Severity of withdrawal does not necessarily correlate with high tolerance and does not reliably establish need for a high opioid medication dose. The earliest manifestations of opioid withdrawal are usually subjective, and include anxiety and insomnia. Table 1.3 shows anticipatory, early, and fully-developed symptoms and signs of opioid withdrawal. The physician should expect to see at least

early signs of withdrawal. The Clinical Institute Narcotic Assessment (CINA) Scale (Table 1.4) measures 11 signs and symptoms commonly seen in patients during opioid withdrawal. This can help to gauge the severity of a patient's withdrawal and to monitor changes in the clinical status over time. The Clinical Opiate Withdrawal Scale (COWS) (Table 1.5) can also be used to document the presence of and to quantify https://www.naabt.org/documents/cows_induction_flow_sheet.pdf the severity of opioid withdrawal.

Patient Assessment - Initial Laboratory Tests

Laboratory evaluation should be individualized, but hepatitis serology, liver function tests, metabolic panel, and screening for STIs, and HIV are highly advisable for all patients in this population. Female patients should be screened for pregnancy. California and Federal regulations require screening for tuberculosis and syphilis.

^{**} The piloerection has given rise to the term "cold turkey."

^{***} The sudden muscle spasms in the legs have given rise to the term "kicking the habit."

The Clinical Institute Narcotic Assessment (CINA) Scale for Withdrawal Symptoms

Based on Questions and Observation:

Pa	rameters	Pts.	Findings	
1.	Abdominal Changes:	0	No abdominal complaints; normal bowel sounds	
	Do you have any pains in	1	Reports waves of crampy abdominal pain	
	your abdomen?		Crampy abdominal pain; diarrhea; active bowel sounds	
2.	Changes in		None reported	
	Temperature:	1	Reports feeling cold; hands cold and clammy to touch	
	Do you feel hot or cold?		Uncontrolled shivering	
3.	Do you feel sick to your 2 M stomach? Have you 4 In		No nausea or vomiting	
			Mild nausea; no retching or vomiting	
			Intermittent nausea with dry heaves	
	vomited?	6	Constant nausea; frequent dry heaves and/or vomiting	
4.	4. Muscle Aches:		No muscle aching reported; arm and neck muscles soft at rest	
	Do you have any muscle	1	Mild muscle pains	
	cramps?		Reports severe muscle pains; muscles in legs, arms, or neck in constant state of contraction	

Based on Observation Alone:

None visible Occasional goose flesh but not elicited by touch; not permanent Prominent goose flesh in waves and elicited by touch Constant goose flesh over face and arms No nasal congestion or sniffling Frequent sniffling Constant sniffling; watery discharge Normal activity Somewhat more than normal activity; moves legs up and down; shifts position occasionally Moderately fidgety and restless; shifting position frequently Gross movement most of the time or constantly thrashes about None Not visible but can be felt fingertip to fingertip Moderate with patient's arm extended Severe even if arms not extended None Eyes watering; tears at corners of eyes
Prominent goose flesh in waves and elicited by touch Constant goose flesh over face and arms No nasal congestion or sniffling Frequent sniffling Constant sniffling; watery discharge Normal activity Somewhat more than normal activity; moves legs up and down; shifts position occasionally Moderately fidgety and restless; shifting position frequently Gross movement most of the time or constantly thrashes about None Not visible but can be felt fingertip to fingertip Moderate with patient's arm extended Severe even if arms not extended None
Constant goose flesh over face and arms No nasal congestion or sniffling Frequent sniffling Constant sniffling; watery discharge Normal activity Somewhat more than normal activity; moves legs up and down; shifts position occasionally Moderately fidgety and restless; shifting position frequently Gross movement most of the time or constantly thrashes about None Not visible but can be felt fingertip to fingertip Moderate with patient's arm extended Severe even if arms not extended None
No nasal congestion or sniffling Frequent sniffling Constant sniffling; watery discharge Normal activity Somewhat more than normal activity; moves legs up and down; shifts position occasionally Moderately fidgety and restless; shifting position frequently Gross movement most of the time or constantly thrashes about None Not visible but can be felt fingertip to fingertip Moderate with patient's arm extended Severe even if arms not extended None
Frequent sniffling Constant sniffling; watery discharge Normal activity Somewhat more than normal activity; moves legs up and down; shifts position occasionally Moderately fidgety and restless; shifting position frequently Gross movement most of the time or constantly thrashes about None Not visible but can be felt fingertip to fingertip Moderate with patient's arm extended Severe even if arms not extended None
Constant sniffling; watery discharge Normal activity Somewhat more than normal activity; moves legs up and down; shifts position occasionally Moderately fidgety and restless; shifting position frequently Gross movement most of the time or constantly thrashes about None Not visible but can be felt fingertip to fingertip Moderate with patient's arm extended Severe even if arms not extended None
Normal activity Somewhat more than normal activity; moves legs up and down; shifts position occasionally Moderately fidgety and restless; shifting position frequently Gross movement most of the time or constantly thrashes about None Not visible but can be felt fingertip to fingertip Moderate with patient's arm extended Severe even if arms not extended None
Somewhat more than normal activity; moves legs up and down; shifts position occasionall Moderately fidgety and restless; shifting position frequently Gross movement most of the time or constantly thrashes about None Not visible but can be felt fingertip to fingertip Moderate with patient's arm extended Severe even if arms not extended None
Moderately fidgety and restless; shifting position frequently Gross movement most of the time or constantly thrashes about None Not visible but can be felt fingertip to fingertip Moderate with patient's arm extended Severe even if arms not extended None
Gross movement most of the time or constantly thrashes about None Not visible but can be felt fingertip to fingertip Moderate with patient's arm extended Severe even if arms not extended None
None Not visible but can be felt fingertip to fingertip Moderate with patient's arm extended Severe even if arms not extended None
Not visible but can be felt fingertip to fingertip Moderate with patient's arm extended Severe even if arms not extended None
Moderate with patient's arm extended Severe even if arms not extended None
Severe even if arms not extended None
None
Eyes watering; tears at corners of eyes
Profuse tearing from eyes over face
No sweat visible
Barely perceptible sweating; palms moist
Beads of sweat obvious on forehead
Drenching sweats over face and chest
None
Frequent yawning
Constant uncontrolled yawning
Percent of maximal withdrawal symptoms = total score/31) x 100% =/31 x 100%
= Summary:% Number of Absent Signs and Symptoms: out of 11
Number of Maximal Signs and Symptoms: out of 11
Minimum score = 0, Maximum score = 31. The higher the score, the more severe the withdrawal syndrome.

The Clinical Opiate Withdrawal Scale (COWS) [11]

Instructions: For each item, circle the number that best describes the patient's signs or symptoms. Rate on just the apparent relationship to opioid withdrawal. For example, if heart rate is increased because the patient was jogging just prior to assessment, the increased pulse rate would not add to the score.

Patient's Name:	Date and Time/ :
Reason for this assessment:	
Resting Pulse Rate:beats/min. Measured after patient is sitting or lying for one minute 0 pulse rate 80 or below 1 pulse rate 81-100 2 pulse rate 101-120 4 pulse rate greater than 120	GI Upset: over last ½ hour 0 no GI symptoms 1 stomach cramps 2 nausea or loose stool 3 vomiting or diarrhea 5 Multiple episodes of diarrhea or vomiting
Sweating: over past ½ hour not accounted for by room temperature or patient activity. 0 no report of chills or flushing 1 subjective report of chills or flushing 2 flushed or observable moistness on face 3 beads of sweat on brow or face 4 sweat streaming off face	Tremor observation of outstretched hands 0 No tremor 1 tremor can be felt, but not observed 2 slight tremor observable 4 gross tremor or muscle twitching
Restlessness Observation during assessment 0 able to sit still 1 reports difficulty sitting still, but is able to do so 3 frequent shifting or extraneous movements of legs/arms 5 Unable to sit still for more than a few seconds	Yawning Observation during assessment 0 no yawning 1 yawning once or twice during assessment 2 yawning three or more times during assessment 4 yawning several times/minute
Pupil size 0 pupils pinned or normal size for room light 1 pupils possibly larger than normal for room light 2 pupils moderately dilated 5 pupils so dilated that only the rim of the iris is visible	Anxiety or Irritability 0 none 1 patient reports increasing irritability or anxiousness 2 patient obviously irritable/anxious 4 patient so irritable or anxious that participation in the assessment is difficult
Bone or Joint aches If patient was having pain previously, only the additional component attributed to opiates withdrawal is scored 0 not present 1 mild diffuse discomfort 2 patient reports severe diffuse aching of joints/ muscles 4 patient is rubbing joints or muscles and is unable to sit still because of discomfort	Gooseflesh skin 0 skin is smooth 3 piloerection of skin can be felt or hairs standing up on arms 5 prominent piloerection
Runny nose or tearing Not accounted for by cold symptoms or allergies 0 not present 1 nasal stuffiness or unusually moist eyes 2 nose running or tearing 4 nose constantly running or tears streaming down cheeks	Total Score The total score is the sum of all 11 items Initials of person completing assessment:
Score: 5-12 = mild; 13-24 = moderate; 25-36 = moderately se	vere; more than 36 = severe withdrawal.