

1 and manage pain appropriately and prescribe opiates responsibly. The guidelines
2 provide the Board a framework to assess physicians’ treatment of pain, and a
3 means to determine whether opiate medications are used in a manner that is
4 medically appropriate and in compliance with North Carolina State and federal
5 laws and regulations. Section 3 contains a glossary of terms.

6 In developing this updated policy the Board has relied heavily on the Federation of
7 State Medical Board’s 2013 Model Policy on the Use of Opioid Analgesics in the
8 Treatment of Chronic Pain. The Board also acknowledges the work of, and
9 extends its thanks to the Indiana Medical Licensing Board, and the efforts of the
10 State of Indiana’s Attorney General, the Indiana State Department of Health’s
11 Chief Medical Officer, and the Indiana Prescription Drug Abuse Task Force. As
12 the North Carolina Medical Board has developed this updated policy, it has
13 borrowed freely and taken material verbatim, with permission, from “*First Do No*
14 *Harm, The Indiana Healthcare Providers Guide to the Safe, Effective Management*
15 *of Chronic Non-Terminal Pain.*

16 The Board encourages all physicians to review the Federation of State Medical
17 Board’s 2013 Model Policy at http://www.fsmb.org/pdf/pain_policy_july2013.pdf,
18 and the State of Indiana’s “*First Do No Harm*” document at
19 http://www.in.gov/bitterpill/docs/First_Do_No_Harm_V_1_0.pdf for additional
20 helpful information.

21

22 **SECTION I - Preamble**

23

24 The North Carolina Medical Board is obligated under the laws of the State of
25 North Carolina to protect public health and safety. This obligation is reflected in the
26 Board’s mission statement to “...regulate the practice of medicine and surgery for the
27 benefit and protection of the people of North Carolina.” The Board believes that a
28 fundamental component of good medical practice includes the appropriate
29 evaluation and management of pain. Responsibly prescribed opiate medications
30 may help North Carolina physicians treat their patients’ pain safely and
31 effectively, and improve their quality of life. The Board is aware that the
32 undertreatment of pain is recognized as a serious public health problem that
33 compromises patients’ function and quality of life (2, 3).

34

1 However, it must be understood that chronic pain is often intractable, and that in
2 most cases the current state of medical knowledge and medical therapies, including
3 the use of opioid analgesics, does not provide for the complete elimination of
4 chronic pain (4, 5, 6). Furthermore, chronic pain and its attendant opioid use have
5 become an enormous burden to patients, medical institutions and our society.
6 There are over 50 million estimated chronic pain patients in the United States.
7 Medical expense data places the cost of chronic pain, including direct and indirect
8 costs, at well over \$100 billion per year. As many as 15-20% of primary care visits
9 result in a prescription being given for opioids. However, despite the increased use
10 of pain interventions, including opioids, many patients are dissatisfied and report
11 inadequate pain control. The aggressive use of pain intervention resources has not
12 been associated with commensurate clinical benefit. Robust increases in pain
13 expenditures from 1997 to 2005 did not translate into improvements in self-
14 assessed health status and pain (7).

15

16 Persistent pain, like all chronic illnesses, is managed optimally with a bio-
17 psychosocial model and not with the opio-centric practices of the past. Data from a
18 large population-based study suggests that those on chronic high-dose opioids may
19 fare worse over time than those on lower doses or none at all. Quality of life
20 measures for patients in the study using high-dose opioids were lower than those on
21 a low dose regimen, and patients were four times less likely to “recover”
22 significantly during the five years of the study (8).

23

24 Between 1997 and 2010, opioid use increased dramatically. However, increased
25 use of opioids has not been accompanied by adequate evidence to support the
26 effectiveness and safety of long-term opioid therapy, and has been complicated by opioid-
27 related overdoses, substance abuse, and prescription costs to society that have
28 escalated to unacceptable levels. Leonard J. Paulozzi, a medical epidemiologist at
29 the Center for Disease Control and Prevention (CDC), during congressional
30 testimony reported that “the number of deaths in the narcotics category that
31 involved prescription opioid analgesics increased from 2,900 in 1999 to at least
32 7,500 in 2004, an increase of 160% in just five years.” Accidental drug overdose is
33 currently the leading cause of injury-related death in the United States for people
34 between the ages of 35-54 (9). In addition to nearly 16,000 prescription opioid-
35 related deaths in 2010, the rise in opioid use has fueled a substantial increase in

1 substance use disorders. Approximately nine people are admitted for prescription
2 opioid abuse treatment for every one opioid prescription-related death (10).

3
4 An analysis on 2006 data related to the cost of nonmedical use of prescription
5 opioids placed the total at \$53.4 billion (11). The CDC's estimate on those same
6 costs in 2009 was over \$70 billion. Lost productivity was the largest single
7 contributing factor, contributing to 79% of this cost. Clearly, suboptimal risk
8 stratification and monitoring of patients prior to opioid therapy, combined with
9 current practices of prescription writing, are creating enormous emotional and
10 financial burdens on a national level.

11
12 In North Carolina, six-hundred and seventy three North Carolinians were reported
13 to have died in 2012 from unintentional poisoning by opioids other than opium and
14 heroin (12). Extrapolating data from the 2011 and 2012 National Survey on Drug
15 Use and Health suggests that as many as 70% of these opiate related deaths are
16 associated with a prescription medication shared by or stolen from the individual
17 for whom the drug was prescribed.

18
19 In presenting this Policy for the Use of Opiates for the Treatment of Pain, it is the
20 North Carolina Medical Board's goal to provide guidelines that may help to
21 improve the quality of life for those North Carolinians who suffer from pain, and
22 reduce the morbidity and mortality associated with the inappropriate use of opiates
23 and other controlled substances prescribed to treat pain.

24
25 ***Responsibility for Appropriate Pain Management and Opiate Prescribing:***

26 The evaluation and management of pain is integral to the practice of medicine. All
27 physicians should be knowledgeable about the process of evaluating their patients'
28 pain and function, and be familiar with methods of managing pain safely and
29 effectively. The process of evaluation and management of a patient's pain should
30 be based on an established physician-patient relationship. Patients with chronic
31 pain should be assessed for the potential for substance abuse and coexistent mental
32 health conditions. Objective and verifiable goals that incorporate physical,
33 functional and social domains should be prominent components of a patient's
34 treatment plan. Non- pharmacologic treatment interventions and use of non-opiate
35 pain medications should be explored before beginning opioid medications. When
36 controlled substances are to be used to treat chronic pain, their use should be
37 accompanied by informed consent and treatment agreements. If opiate

1 medications are part of a treatment plan, they should be prescribed or administered
2 in response to an identified medical condition that qualifies for treatment with a
3 controlled substance. Physicians should be aware that there is very little data to
4 support the use of long term opioid therapy for common causes of chronic pain
5 such as fibromyalgia, low back pain, pelvic pain, functional bowel disorders and
6 chronic headache. Physicians prescribing controlled substances should understand
7 and comply with applicable federal and North Carolina State requirements. Follow
8 up monitoring of a patient's response to treatment should include the patient's
9 progress in achieving objective and verifiable goals, and should insure that the
10 patient is using prescribed medications safely. Treatment plans and prescribed
11 medications should be adjusted as needed, and referral to consultants made when
12 necessary. Opioids should be tapered or discontinued when a patient's pain is poorly
13 controlled on appropriate doses of medication or if there is no physical, functional,
14 and psychosocial improvement with opioid treatment. The medical record should
15 provide documentation of all relevant aspects of the physician's evaluation and
16 management, including diagnoses and treatment plans, periodic assessment of the
17 patient's progress toward identified goals, medications prescribed and results of
18 medication monitoring, evidence of compliance with treatment agreements, and
19 pertinent results of laboratory, radiographic and ancillary services, including
20 consultations and referrals.

21

22 ***Preventing Opioid Diversion and Abuse:***

23 The Board recognizes that patients and other individuals who inappropriately use
24 opiates place their own health in jeopardy and create a public health problem
25 (13). Physicians who fail to prescribe opiates responsibly may contribute to
26 patients' and other individuals' drug misuse and diversion (14, 15, 16). The Board
27 expects physicians to incorporate safeguards into their practices to minimize the risk
28 of misuse and diversion of opiates as well as other controlled substances (17, 18, 19,
29 20, 21, 22, 23, 24).

30

31 The appropriate evaluation and management of a patient's pain, including the
32 prescribing of opiate medications is the treating physician's responsibility.
33 Physicians who prescribe, order, dispense, or administer controlled substances
34 using evidence based or current best clinical practices should not fear disciplinary
35 action from the Board. Conversely, the Board will consider the failure to prescribe
36 controlled substances responsibly to be a departure from the standards of practice
37 and will investigate such allegations, utilizing current clinical practice guidelines
38 and expert review in determining whether or not standards of care have been met.

39

1 Allegations of inappropriate pain management, including the failure to prescribe
2 controlled substances responsibly, will be evaluated on an individual basis. The Board
3 may use a variety of sources to determine the appropriateness of treatment
4 including prescribing information obtained from the North Carolina Controlled
5 Substance Reporting System (NCCSRS). The Board will not take disciplinary action
6 against a physician for deviating from this Policy when the physician can establish a
7 reasonable cause for the deviation.
8
9

10 The Board will judge the validity of the physician's treatment of a patient on the basis
11 of available documentation. Goals of treatment are the effective control of the
12 patient's pain using appropriate doses of medication, achieving improved physical,
13 functional, and psychosocial function, and mitigating risk of misuse, abuse, diversion,
14 and overdose (25, 26, 27).
15

16 The Board will consider the unsafe or otherwise inappropriate treatment of pain to
17 be a departure from best clinical practice, taking into account whether the treatment
18 is appropriate to the diagnosis and the patient's level of risk.
19

20 **SECTION II – Guideline**²⁸
21

22 **Overview:**

23 The guidelines in the North Carolina Medical Board's Policy on the Use of Opiates
24 for the Treatment of Pain are meant to help physicians evaluate and manage pain
25 appropriately, prescribe opiates responsibly, and prevent opioid diversion and
26 abuse. Incorporating the guidelines into best practices behavior will help
27 physicians mitigate some of the burdens that pain and its attendant opiate use place
28 on patients, physicians, medical institutions, and society. The Board recommends
29 the following as best practices behavior when using opiates to treat pain.
30

31 ***Patient Evaluation and Risk Stratification***

32 The physician should personally participate in the process of every patient's evaluation. The
33 nature and extent of the evaluation depends on the type of pain and the context in
34 which it occurs. For example, meaningful assessment of chronic pain demands a more
35 detailed evaluation than an assessment of acute pain. Assessment of a patient's pain
36 should include the nature and intensity of the pain, past and current treatments for

1 the pain, any underlying or co-occurring disorders and conditions, and the effect of
2 the pain on the patient's physical, functional and psychosocial activities (29).

3
4 For every patient with pain, the initial work-up should include a systems review and
5 relevant physical examination, and laboratory investigations as indicated (30, 31, 32,
6 33). Such investigations help the physician address the nature and intensity of the
7 pain, and its impact on the patient's physical, functional and psychosocial activities,
8 and alcohol and drug use.

9
10
11 Social and vocational assessment is useful in identifying supports and obstacles to
12 treatment and rehabilitation. For example, does the patient have good social
13 supports, housing, and meaningful work? Is the home environment stressful or
14 nurturing (34)? When applicable, the patient's evaluation should include
15 information from family members and/or significant others (35, 36, 37, 38).

16
17 Assessment of the patient's personal and family history of alcohol or drug abuse and
18 relative risk for medication misuse or abuse should be part of the initial evaluation (39,
19 40, 41, 42, 43, 44). These assessments, should ideally be completed prior to a decision
20 to prescribe opioid analgesics, and should inquire into any history of physical, emotional or sexual
21 abuse, which are risk factors for substance misuse (45, 46, 47, 48). Use of a validated screening
22 tool, such as the Screener and Opioid Assessment for Patients with Pain (SOAPP-R;
23 49) or the Opioid Risk Tool (ORT; 50) can save time in collecting and evaluating
24 information and determining the patient's level of risk.

25
26 Patients who have a history of substance use disorder (including alcohol) are at
27 elevated risk for failure of opioid analgesic therapy and are at high risk for
28 experiencing harm from this therapy, since exposure to addictive substances often
29 is a powerful trigger of relapse (51, 52, 53). Whenever possible treatment of a
30 patient who has a history of substance use disorder should involve consultation with
31 an addiction specialist before opioid therapy is initiated and include follow-up as
32 needed. Patients who have an active substance use disorder should not receive opioid
33 therapy until they are established in a treatment/recovery program (54), or alternatives
34 such as co-management with an addiction professional are established. Physicians who
35 treat patients with chronic pain are strongly encouraged to be knowledgeable

1 about addiction, including recognizing behaviors that indicate addiction, and how
2 and when to refer patients for addiction evaluation and treatment.

3
4 All patients should be screened for depression and other mental health disorders as
5 part of risk evaluation. There is a clear association between mental illness and
6 opioid related morbidity and mortality. Patients with untreated depression and other
7 mental health problems are at increased risk for misuse or abuse of controlled
8 medications, addiction, and overdose (55).

9
10 Information provided by the patient is a necessary but insufficient part of the
11 evaluation process. Reports of previous evaluations and treatments should be
12 confirmed by obtaining records from other providers. Patients occasionally provide
13 fraudulent records. If there is reason to question the truthfulness of a patient's report,
14 records should be requested directly from the patients other providers (56, 57).

15
16 Information from the North Carolina Controlled Substance Reporting System
17 (NCCSRS) should be part of every patient's initial evaluation and subsequent
18 monitoring program. Physicians should register with the NCCSRS and become
19 familiar with analyzing and using NCCSRS data. Information from the NCCSRS
20 should be used to help confirm each patient's compliance with treatment plans and
21 opiate medication agreements. Relevant information from the NCCSRS should
22 become part of the patient's medical record.

23
24 In dealing with a patient who is taking opioids prescribed by another physician—
25 particularly a patient on high doses - evaluation and risk stratification assume even
26 greater importance (58, 59, 60). As with all patients the physician's decision to
27 prescribe opioid analgesics should reflect the totality of the information collected, the
28 physician's own knowledge and comfort level in prescribing and the resources for
29 patient support that are available in the community (61, 62, 63).

30
31 ***Development of a Treatment Plan and Goals:***

32 In chronic pain the goals of treatment include reasonably attainable improvement in
33 pain and activity; improvement in pain-associated problems such as sleep disturbance,
34 depression, and anxiety; and avoidance of unnecessary or excessive use of medications
35 (64, 65). According to the International Association of the Study of Pain, activity goals should be
36 set in three separate domains. The physical domain is the exercise program the patient follows.
37 The functional domain involves tasks of everyday living. The social domain relates to pleasurable

1 social activities (66). Effective means of achieving treatment goals vary widely, depending
2 on the type and causes of the patient's pain, other concurrent issues, and the
3 preferences of the physician and the patient.

4
5 Early treatment with non-pharmacologic interventions including physical
6 therapy, exercise, and cognitive behavioral techniques, should be employed
7 whenever possible. First line pharmaco-therapy should be the appropriate use of
8 over the counter medications, non-steroidal anti-inflammatory drugs, and
9 acetaminophen. Other treatment modalities including minor interventions such
10 as anesthetic and steroid joint injections, cutaneous stimulators, topical
11 anesthetics, and local therapies employing heat, massage, and manipulations
12 should be considered before using opiates.

13
14 The treatment plan and goals should be established as early as possible in the
15 treatment process and revisited regularly. Clear-cut, individualized goals should be
16 set to help guide the choice and response to treatment (67). The treatment plan
17 should contain information supporting the selection of pharmacologic and
18 nonpharmacologic therapies. The plan should specify the objectives that will be used to
19 evaluate the control of pain and achievement of specific physical, functional and
20 psychosocial activity goals (68, 69, 70, 71). The plan should document any further
21 diagnostic evaluations, consultations or referrals, or additional therapies that have
22 been considered (72, 73, 74, 75).

23
24 ***Informed Consent and Treatment Agreement:***

25 The decision to initiate opioid therapy should be a shared decision between the
26 physician and the patient. The physician should discuss the risks and benefits of the
27 treatment plan (including any proposed use of opioid analgesics) with the patient,
28 with persons designated by the patient, or with the patient's surrogate or guardian if
29 the patient is without medical decision-making capacity (76, 77). If opioids are
30 prescribed, the patient (and possibly family members) should be counseled on safe
31 ways to store and dispose of medications (78, 79).

32
33 Use of a written informed consent, and a treatment agreement is recommended (80,
34 81, 82, 83, 84). They may be combined into one document for convenience.

35
36 *Informed consent* documents typically address:

- 1 • The potential risks and anticipated benefits of chronic opioid therapy.
- 2 • Potential side effects (both short- and long-term) of the medication, such as
- 3 constipation and cognitive impairment.
- 4 • The likelihood that tolerance to and physical dependence on the medication will
- 5 develop.
- 6 • The risk of drug interactions and over-sedation.
- 7 • The risk of impaired motor skills (affecting driving and other tasks).
- 8 • The risk of opioid misuse, dependence, addiction, and overdose.
- 9 • The limited evidence as to the benefit of long-term opioid therapy.
- 10 • The physician's prescribing policies and expectations, including the number and
- 11 frequency of prescription refills, as well as the physician's policy on early refills
- 12 and replacement of lost or stolen medications.
- 13 • Specific reasons for which drug therapy may be changed or discontinued
- 14 (including violation of the policies and agreements spelled out in the treatment
- 15 agreement).

16

17 *Treatment agreements* outline the joint responsibilities of physician and patient in the
18 management of chronic pain (85, 86, 87) and may be applicable in some cases of
19 acute pain. Treatment agreements are indicated when opioid or other abusable
20 medications are prescribed. Agreements typically discuss:

21

- 22 • The goals of treatment, in terms of pain management, restoration of activities,
- 23 and safety.
- 24 • The patient's responsibility for using medication safely (e.g., not using more
- 25 medication than prescribed, not using an opioid in combination with alcohol
- 26 or other potentially dangerous substances; storing medications in a secure
- 27 location; and safely disposing of unused medication).
- 28 • The patient's responsibility to obtain prescribed opioids from only one physician
- 29 or practice.
- 30 • The patient's agreement to periodic drug testing of blood, urine, hair, saliva, or
- 31 other body material.
- 32 • The physician's responsibility to be available or to have a covering physician be
- 33 available to care for unforeseen problems and to prescribe scheduled refills.

34

35

36

37

1 ***Initiating an Opioid Trial:***

2 Generally, safer alternative treatments including non-pharmacologic and minor
3 interventions and first line pharmaco-therapy with over the counter medications,
4 non-steroidal anti-inflammatory drugs and acetaminophen should be considered
5 before initiating opioid therapy. When the decision to use an opiate has been made,
6 it should be presented to the patient as a therapeutic trial or test for a defined period
7 of time (usually no more than 90 days) and with specified evaluation points. The
8 physician should explain that progress will be carefully monitored for benefit and
9 harm in terms of the effects of opioids on the patient's level of pain, and on the patient's
10 physical, functional and psychosocial activities. Attention will be focused on adverse
11 events and risks to safety (88). Patients at risk of an opiate overdose should be
12 identified. The Board endorses efforts to reduce the number of drug overdoses by
13 making opioid antagonists such as naloxone available to patients at risk of an
14 opiate overdose. Readers are referred to the Board's Position Statement, "Drug
15 overdose prevention."

16

17 When initiating opioid therapy, the lowest dose possible should be given to an
18 opioid naïve patient and titrated to affect. Opioid therapy should begin with a short
19 acting drug and rotate to a long acting/extended release if indicated. A decision to
20 continue opioid therapy beyond the trial period should reflect a careful evaluation of
21 benefits, adverse events, and potential risks (89).

22

23 ***Ongoing Monitoring and Adapting the Treatment Plan:***

24 The physician should regularly review the patient's progress, including any new
25 information about the etiology of the pain or the patient's overall health and level of
26 activities (90, 91, 92). When possible, collateral information about the patient's
27 response to opioid therapy should be obtained from family members or other close
28 contacts. The physician should regularly review North Carolina Controlled
29 Substance Reporting System data. The patient should be seen more frequently while
30 the treatment plan is being initiated and when the opioid dose is being adjusted (93 -
31 100). As the patient is stabilized in the treatment regimen, follow-up visits may be
32 scheduled less frequently.

33

1 At each visit, the results of chronic opioid therapy should be monitored by assessing
2 what have been called the “5As” of chronic pain management. These include a
3 determination of whether the patient has had a reduction in pain (Analgesia),
4 improved physical, functional and psychosocial Activity, the presence of Adverse
5 effects, evidence of Aberrant substance-related behaviors, and a change in Affect (101,
6 102). Validated brief assessment tools that measure pain and physical, functional and
7 psychosocial activities, such as the three- question “Pain, Enjoyment and General
8 Activity” (PEG) scale (103) may be helpful.

9
10 Continuation, modification or termination of opioid therapy for pain should be
11 contingent on the physician’s evaluation of the patient’s progress toward treatment goals
12 and assessment of substantial risks or adverse events (104, 105, 106, 107). A satisfactory
13 response to treatment would be indicated by a reduced level of pain, and improved
14 physical, functional and psychosocial activities (108, 109). Information
15 from family members or other caregivers should be considered in evaluating the
16 patient’s response to treatment (110, 111, 112). Use of measurement tools to assess
17 the patient’s level of pain, activity, and quality of life (such as a visual analog or
18 numerical scale) can be helpful in documenting therapeutic outcomes (113, 114).

19
20 Risks associated with opioids increase with escalating doses. The physician should avoid
21 opiate dose escalation without adequate attention to risks or alternative
22 treatments. The physician should be continuously attentive to the use of opiates
23 with other respiratory depressants such as benzodiazepines or alcohol, and using
24 opiates in the setting of other comorbidities such as mental illness, respiratory
25 disorders and sleep apnea, and a pre-existing substance use disorder.

26 27 ***Periodic Drug Testing:***

28 Periodic drug testing may be useful in monitoring adherence to the treatment plan, as
29 well as in detecting the use of non-prescribed drugs (115, 116). Drug testing is an
30 important monitoring tool because self-reports of medication use and behavioral
31 observations are not always reliable (117, 118, 119, 120, 121). Urine may be the
32 preferred biologic specimen for testing because of its ease of collection and storage
33 and the cost-effectiveness of such testing (122). When testing is conducted as part of
34 pain treatment, forensic standards are generally not employed. Sample collection may

1 not be not observed, and chain-of-custody protocols are not customarily followed.
2 Initial testing may be done using class-specific immunoassay drug panels (point-of-
3 care or laboratory-based), which typically do not identify particular drugs within a
4 class unless the immunoassay is specific for that drug. If necessary, initial testing can
5 be followed with more specific techniques, including gas chromatography/mass
6 spectrometry (GC/MS) or other chromatographic tests (123). In drug testing in a
7 pain practice, it is important to identify the specific drug not just the class of the
8 drug.

9
10 Physicians should be knowledgeable about the specific drug tests they order.
11 They should be aware of the limitations, sensitivity and specificity of the tests they
12 order, and take care to order tests appropriately (124). When a drug test is ordered, it
13 is important to specify that it include the opioid being prescribed (125). Because of
14 the complexities involved in interpreting drug test results appropriately, it is advisable
15 to confirm significant or unexpected results with the testing laboratory's toxicologist or
16 a clinical pathologist (126, 127).

17
18 While immunoassay, point of care (POC) testing has utility in the making of
19 temporary and "on the spot" changes in clinical management, its limitations with
20 regard to accuracy have recently been the subject of study. The use of point of care
21 testing for making long term and permanent changes in patient management may not
22 be justified until the results of confirmatory testing with more accurate methods such
23 as LC-MS/MS are obtained. A recent study on LC-MS/MS results following
24 immunoassay POC testing in addiction treatment settings found very high rates of
25 "false negatives and positives" (128, 129).

26
27 Test results that suggest opioid misuse should be discussed with the patient. The
28 discussion should occur in a positive, supportive fashion, to strengthen the
29 physician-patient relationship, encourage healthy behaviors, and produce behavioral
30 change when needed. Results of drug testing and subsequent discussion with the
31 patient should be documented in the medical record (130). Periodic pill counting is a
32 useful strategy to confirm medication adherence and minimize diversion. Data from the
33 North Carolina Controlled Substance Reporting System (NCCSRS) should be
34 reviewed before beginning opiates and as a routine part of monitoring and adapting
35 a patient's treatment plan. (131, 132, 133, 134, 135). If the patient's progress

1 is unsatisfactory, the physician must decide whether to revise or augment the
2 treatment plan, whether other treatment modalities should be added to or substituted
3 for the opioid therapy, or whether a different approach—possibly involving referral
4 to a pain specialist or other health professional—should be employed (136, 137,
5 138, 139, 140).

6
7 Evidence of misuse of prescribed opioids demands prompt intervention by the
8 physician (141, 142, 143, 144, 145, 146). Patient behaviors that require such
9 intervention typically involve recurrent early requests for refills, multiple reports of
10 lost or stolen prescriptions, obtaining controlled medications from multiple sources
11 without the physician's knowledge, intoxication or impairment (either observed or
12 reported), and pressuring or threatening behaviors (147). The presence of illicit or
13 unprescribed drugs, (drugs not prescribed by a physician) in drug tests requires action
14 on the part of the prescriber. Some aberrant behaviors are more closely associated with
15 medication misuse than others (148, 149). Most worrisome are patterns of behavior
16 that suggests recurring misuse, such as unsanctioned dose escalations, deteriorating
17 physical, functional or psychosocial activities, and failure to comply with a
18 treatment plan (150).

19
20 Documented drug diversion or prescription forgery, obvious impairment, and abusive
21 or assaultive behaviors require a firm, immediate response (151, 152, 153, 154).
22 Failure to respond can place the patient and others at significant risk of adverse
23 consequences, including accidental overdose, suicide attempt, arrest and
24 incarceration, or death (155, 156, 157, 158). For this reason, physicians who prescribe
25 chronic opioid therapy should be knowledgeable about substance use disorders and be
26 able to distinguish substance use disorders from physical dependence on opiates.

27
28 ***Tips on Diversion:***¹⁵⁹

29 One of the most difficult duties that a physician has as it relates to the prescribing
30 of opioids to patients with chronic pain is the issue of opioid diversion. Even in
31 light of a failed urine drug screen (UDS) with confirmation, an inconsistent
32 NCCSRS report, and or noncompliance (not attending physical therapy, failure to
33 obtain prescribed imaging, failure to attend appropriate interventional procedures,
34 etc.) it is difficult to know when a patient is diverting prescription
35 opioids. However, the prescriber may feel the patient is diverting after

1 ascertaining a history, or the medical office receives a phone call from an
2 anonymous source that the patient is selling his/her opioid medication. Perhaps the
3 most effective way to appropriately decide if the patient is diverting is the
4 combination of a random pill count and a concomitant UDS with a confirmation.

5
6 If you believe a patient may be diverting a medication, call them to come in to the
7 office between scheduled appointments. It is of vital importance that a random pill
8 count be part of the Physician-Patient Informed Consent and Treatment
9 Agreement. Random pill counts should not be part of Informed Consent and
10 Treatment Agreements but should be reviewed with the patient at the time the
11 agreement is signed. If a random pill count reveals medication quantities that fall
12 short of amounts expected from prescribing instructions, it is vital to perform at
13 that exact point in time a urine drug screen with confirmation. If the patient's UDS
14 confirmation is negative for the prescribed opioid, it is very strong evidence that
15 the patient is diverting, and it is safe to stop prescribing. If the UDS confirmation
16 comes back with the appropriate medication in the patient's urine, but the random
17 pill count is short, it is highly likely that the patient is either taking more
18 medication than prescribed, or the patient is taking some of the medication but is
19 diverting a portion of the prescription. At this point, a conversation with the
20 patient should occur. If the patient is over-taking the medication, it may be a good
21 idea to seek a pain management consultation to get a reassessment of the true pain
22 generator(s). If you believe the patient is diverting and/or abusing a referral to an
23 addiction specialist is in order.

24
25 A list of items that should raise the physician's awareness about the possibility that
26 a patient is diverting medications includes:

27
28 Suspicious history:

- 29
- 30 • Patient referred is already taking controlled substances; especially
 - 31 combinations of narcotics, muscle relaxants, use of sedative/hypnotics
 - 32 • Soft diagnosis – perhaps based solely on chief complaint
 - 33 • Multiple doctors and pain physicians in the past
 - 34 • Patient travelled out of the way to come to your clinic
 - 35 • Solicitous behavior frequently heard: "You're the best. I always
 - 36 wanted to come to you."
 - 37 • No past medical records; unable to obtain records from "referring
 - 38 doctor"

- 1 • Patient brings records that look old, tattered or suspicious in some
2 other way
- 3 • Patient asks for a specific controlled substance (example: prefers
4 Lortab® over Narco)

5
6 Suspicious physical exam:
7

- 8 • No abnormal findings
- 9 • Abnormal findings in exam room inconsistent with witnessed
10 behavior (patient has normal gait from car to office door, but limps
11 once inside door)
- 12 • Exaggerative behaviors, pain is always a 10 on a scale of 1 to 10.
- 13 • Unimpressive imaging
- 14 • Presence of needle “tracks”
- 15 • Patient smells like marijuana smoke

16
17 Equivocal compliance:
18

- 19 • NCCSRS shows multiple providers, multiple pharmacies,
20 prescriptions for multiple types and of medications, out of the area
21 doctors, etc.
- 22 • UDS is refused or abnormal; patient offers multiple excuses;
23 presence of any illegal substances (marijuana)
- 24 • Inconsistent test results over time
- 25 • Patient seeks early refills
- 26 • Patient has excuses for lost pills (lost my prescription, my dog ate my
27 pills, etc.)

28
29 Equivocal clinical improvement:
30

- 31 • Subjective improvement does not count
- 32 • Objective may include the following: is the patient going back
33 to work, attending appointments with a spouse (who can
34 confirm improvement), showing a need for less medication,
35 visiting emergency rooms less, etc.

36
37 What you should do when confronted by a suspected drug abuser:

- 38 • Request picture I.D. or other I.D. and a Social Security number.
39 Photocopy these documents and include in the patient’s record.
- 40 • Call a previous practitioner, pharmacist or hospital to confirm the
41 patient’s story.
- 42 • Confirm a telephone number, if provided by the patient.
- 43 • Confirm the current address at each visit.

- Write prescriptions for limited quantities.

Consultation and Referral:

The treating physician should seek a consultation with, or refer the patient to, a pain, psychiatry, addiction, or mental health specialist as needed (160, 161). For example, a patient who has a history of substance use disorder or a co-occurring mental health disorder may require specialized assessment and treatment (162, 163).

Physicians who prescribe chronic opioid therapy should be familiar with treatment options for opioid addiction (including those available in licensed opioid treatment programs [OTPs]) and those offered by an appropriately credentialed and experienced physician through office-based opioid treatment [OBOT]), so as to make appropriate referrals when needed (164, 165, 166, 167).

Discontinuing Opioid Therapy:

Throughout the course of opioid therapy, the physician and patient should regularly weigh the potential benefits and risks of continued treatment and determine whether such treatment remains appropriate (168). Opioids should be tapered or discontinued when a patient's pain is poorly controlled on appropriate doses of medication OR if there is no improvement in physical, functional or psychosocial activity with opioid treatment. Reasons for discontinuing opioid therapy include resolution of the underlying painful condition, emergence of intolerable side effects, inadequate analgesic effect, deteriorating physical, functional or psychosocial activities, or significant aberrant medication use (169, 170).

If opioid therapy is discontinued, the patient who has become physically dependent should be provided with a safely structured tapering regimen. Withdrawal can be managed either by the prescribing physician or by referring the patient to an addiction specialist (171). The termination of opioid therapy should not mark the end of treatment, which should continue with other modalities, either through direct care or referral to other health care specialists, as appropriate (172, 173, 174).

1 ***Medical Records:***

2 Every physician who treats patients for chronic pain must maintain accurate and
3 complete medical records. The medical record should include the following (175, 176,
4 177, 178):

- 5
- 6 • Copies of the signed informed consent and treatment agreement.
- 7 • The patient's medical history.
- 8 • Results of the physical examination and all laboratory tests.
- 9 • Results of the risk assessment, including results of any screening instruments
- 10 used.
- 11 • A description of the treatments provided, including all medications prescribed or
- 12 administered (including the date, type, dose and quantity).
- 13 • Instructions to the patient, including discussions of risks and benefits with the
- 14 patient and any significant others.
- 15 • Results of ongoing monitoring of patient progress (or lack of progress) in terms
- 16 of pain management and physician, functional and psychosocial improvement.
- 17 • Notes on evaluations by and consultations with specialists.
- 18 • Any other information used to support the initiation, continuation, revision, or
- 19 termination of treatment and the steps taken in response to any aberrant
- 20 medication use behaviors (179, 180, 181, 182, 183, 184, 185). These may
- 21 include actual copies of, or references to, medical records of past
- 22 hospitalizations or treatments by other providers.
- 23 • Authorization for release of information to other treatment providers.
- 24 • The medical record must include all prescription orders for opioid analgesics
- 25 and other controlled substances, whether written or telephoned. In addition,
- 26 written instructions for the use of all medications should be given to the
- 27 patient and documented in the record (186). The name, telephone number, and
- 28 address of the patient's pharmacy also should be recorded to facilitate contact as
- 29 needed (187). Records should be up-to-date and maintained in an accessible
- 30 manner so as to be readily available for review (188).
- 31
- 32 • Good records demonstrate that a service was provided to the patient and
- 33 establish that the service provided was medically necessary. Even if the outcome
- 34 is less than optimal, thorough records protect the physician as well as the
- 35 patient (189, 190, 191, 192).
- 36

1 *Assessing and Managing Pain in Primary Care*¹⁹³

2 Acute pain was once defined simply in terms of duration. It is now
3 viewed as a complex, unpleasant experience with emotional and cognitive, as
4 well as sensory features that occur in response to tissue trauma. In contrast to
5 chronic pain, relatively high levels of pathology usually accompany acute pain.
6 The pain resolves with healing of the underlying injury. Acute pain is usually
7 nociceptive, but may be neuropathic. Common sources of acute pain include
8 trauma, surgery, labor, medical and dental procedure and acute disease states.

9 Acute pain serves an important biological function, as it warns of the potential
10 for, or extent of, injury. A host of protective reflexes (e.g., withdrawal of a
11 damaged limb, muscle spasm, autonomic responses) often accompany it. Acute
12 pain might be mild and last just a moment, or it might be severe and more
13 prolonged. Acute pain, by definition, does not last longer than six months and it
14 resolves when the underlying cause of pain has been treated or has healed. An
15 accurate assessment of acute pain should be performed when a patient presents
16 with pain to the healthcare setting. A solid understanding of the person and the
17 etiology of the pain are essential for the development of an effective and
18 appropriate short-term pain management plan.

19

20 Recommendations For Primary Care

21

- 22 • Develop an office policy for opioid prescribing and have this clearly posted
23 and available for patients.
- 24 • Perform a thorough history and physical at the onset.
- 25
26 • Acute pain patients should be frequently evaluated for physical, functional
27 and psychosocial improvement, with adjustments to treatment as needed. It
28 is almost always contraindicated to include refills on opioid prescriptions for
29 acute pain.
- 30 • Educate your patients about pain and analgesia. Explain the underlying
31 diagnosis causing the pain, the natural history of the condition, and how your
32 patient can help the healing process.
- 33 • If medically possible, exhaust non-opioid medications and collaborate with
34 other professionals, including physical therapists and pain specialists.
35 Consider nontraditional therapies such as acupuncture and massage therapy.

- 1 • Opioids are often not required for acute pain. If you feel a brief course of
2 opioids are indicated and appropriate, be thoughtful and thorough in your
3 discussions and practice.
- 4 • Always prescribe a complete pain management program when an opioid is
5 used to treat acute pain:
- 6 - utilize NSAIDS
7 - develop and recommend specific exercises
8 - utilize other modalities (e.g. heat, ice, massage, topical medications)
9
- 10 • Prescribe opioids intentionally. With the first opioid prescription, set
11 patient responsibilities and the expectation that opioids will be
12 discontinued when the pain problem has resolved or is not responding to
13 what you are doing.
- 14 • Write the taper on the prescription (e.g. 1 po every 6 hours for 3 days, 1
15 po every 8-12 hr for 3 days, 1 po every 24 hr for 3 days, stop).
- 16 • Do not prescribe long-acting or controlled-release opioids (e.g., long-
17 acting oxycodone and oxymorphone, fentanyl patches, long-acting
18 hydromorphone and morphine or methadone) for acute pain.
- 19
- 20 • Consider performing risk stratification, urine drug monitoring and have a
21 low threshold for accessing and monitoring the NCCSRS at the onset of
22 pain care.
- 23
- 24 • Give clear instructions to take opiates only as prescribed, not more
25 frequently or in greater quantities. Educate your patients about the risks
26 of taking opioid analgesics, including, but not limited to: overdose that
27 can slow or stop their breathing and even lead to death; fractures from
28 falls, especially in patients aged 60 years and older; drowsiness leading
29 to injury, especially when driving or operating heavy or dangerous
30 equipment; and tolerance and addiction. Educate your patients about
31 acute pain – tell them it is likely that their acute pain will diminish and
32 resolve, and tell them that prolonged (several weeks of) scheduled
33 opioids may actually impair their ability to fully recover.

34

- 1 • Patients should be advised to avoid medications that are not part of their
2 treatment plan because they may worsen the side effects and increase
3 the risk of overdose from opiates.
4
- 5 • Prepare patients that it may be difficult to taper off opioids, particularly
6 from higher dose regimens, even when they are eager to do so.
7
- 8 • Consider referrals and consultations with a pain specialist if the patient is
9 not responding to your treatment plan. You may want to do this early in
10 the course of treatment if the patient does not respond to standard first line
11 medications and before you prescribe narcotics. Pain specialists may offer
12 procedures or other interventions that will help your patient improve and
13 avoid unnecessary opiate use.
14
- 15 • It is critical to assure that patients are provided with easy to follow
16 and graduated activity instructions that help them quickly improve
17 their quality of life in physical, functional and social domains.

18 19 Recommendations for Emergency Departments

- 20
21 • Emergency medical practitioners should not provide replacement
22 prescriptions for controlled substances that were lost, destroyed or stolen.
23
- 24 • Emergency medical providers should not provide replacement doses of
25 methadone for patients in a methadone treatment program.
26
- 27 • Long-acting or controlled-release opioids (such as OxyContin®,
28 fentanyl patches and methadone) should not be prescribed from the
29 ED.
30
- 31 • EDs are encouraged to use information from the NCCSRS before prescribing
32 opioids.
33
- 34 • Physicians who manage patients with chronic pain should be encouraged
35 to send patient pain agreements to local EDs for reference, and work to
36 develop appropriate plans for the evaluation and

1 management of their patients in the ED in conjunction
2 with emergency department practitioners.

- 3
- 4 • Whenever possible when evaluating a patient with an exacerbation of
5 chronic pain, the emergency medicine physician should contact the
6 patient's primary opioid prescriber and access the NCCSRS. If
7 analgesics are to be prescribed, only enough pills to last until the office of
8 the primary opioid prescriber's opens should be provided.
- 9
- 10 • Prescriptions for controlled substances from the ED should state the
11 patient is required to provide a government issued picture identification
12 (ID) to the pharmacy filling the prescription.
- 13
- 14 • Prescriptions for opioid pain medication from the ED for acute injuries,
15 such as fractured bones, in most cases should not exceed 30 pills.
- 16
- 17 • When appropriate, ED patients should be screened for substance abuse
18 prior to prescribing opioid medication for acute pain.
- 19

20 ***Compliance with Controlled Substance Laws and Regulations:***

21 To prescribe, dispense or administer controlled substances, the physician must be
22 registered with the DEA, licensed by the state in which he or she practices, and
23 complies with applicable federal and state regulations (194).

24 Physicians are referred to the *Physicians' Manual of the U.S. Drug Enforcement*
25 *Administration* for specific rules and regulations governing the use of controlled
26 substances. Additional resources are available on the DEA's website at
27 www.deadiversion.usdoj.gov,

28 **SECTION III: Definitions** ¹⁹⁵

29 For the purposes of these guidelines, the following terms are defined as follows:

30 **Aberrant drug-related behaviors:** Actions that indicate addiction, including the
31 following: rapidly escalating drug dosage, running out of prescriptions early,
32 acquiring prescription drugs from outside sources, inconsistent UDS, multi-
33 providers from NCCSRS data, stolen medications chewing/snorting/injecting
34 medications, and altering/stealing/selling prescriptions.

1 **Abuse:** A term with a wide array of definitions, depending on context. The
2 American Psychiatric Association defines drug abuse as “a maladaptive pattern of
3 substance use, leading to clinically significant impairment or distress, as
4 manifested by one or more behaviors.” DSM-V replaces the term “abuse” with
5 “misuse” (196) In addition; **Substance abuse (SA)** can mean the use of any
6 substance(s) for non-therapeutic purposes, or use of medication for purposes other
7 than those for which it is prescribed. The medical diagnosis of SA is defined by
8 any one of the following four criteria during a 12-month period: (1) failure to
9 fulfill major obligations at work, school, or home; (2) recurrent use in situations in
10 which it is physically hazardous; (3) recurrent substance-related legal problems;
11 (4) continued use despite persistent social or interpersonal problems (197).
12 Substance abuse can lead to substance dependence.
13

14 **Acupuncture:** An ancient oriental medical technique where needles are placed at
15 anatomic points along the 12 meridians of the body. Oriental medical theory,
16 passed down for thousands of years, states that vital energy (chi) flows through
17 the body along these 12 meridians. Although current medicine does not fully
18 understand how acupuncture works, we do know from functional MRI studies
19 that acupuncture activates/deactivates particular areas of the brain during
20 needling. In addition, it is known that endorphin (endogenous opioid) levels rise
21 during needling. Clinically, acupuncture has been successfully employed to treat a
22 variety of disorders including opioid addiction (198).
23

24 **Acute pain:** The normal, predicted physiological response to a noxious
25 chemical, thermal, or mechanical stimulus and typically is associated with
26 invasive procedures, trauma, and disease. Acute pain is generally time-limited.
27 Duration of acute pain generally coincides with the time frame of normal
28 healing, and serves to protect an injured body segment.
29

30 **Addiction:** A primary, chronic, neurobiologic disease with genetic, psychosocial,
31 and environmental factors influencing its development and manifestations.
32 Addiction is characterized by behaviors that include the following: impaired
33 control over drug use, craving, compulsive use, continued use despite harm.
34 Physical dependence and tolerance are normal physiological consequences of
35 extended opioid therapy for pain and are not the same as addiction (199).
36

37 **Adverse childhood events (ACE):** This refers to childhood abuse (physical,
38 emotional, or sexual), neglect, domestic violence, and household dysfunction.

1 ACE is a significant risk factor for alcohol and drug abuse. There is a linear
2 relationship between amount of ACEs and negative health outcomes (200).

3
4 **Biofeedback:** This behavioral therapy method can teach a person to gain
5 awareness and control over physiologic processes like blood pressure, skin
6 temperature, heart rate, and etc. via real-time feedback of said parameters to the
7 person. Biofeedback has been used to treat a wide variety of diseases, including
8 psychiatric disorders such as anxiety, attention-deficit hyperactivity disorder
9 (ADHD), and substance use disorders (SUD) (201).

10
11 **Change:** To make or become different. Major life changes, such as overcoming an
12 addiction, often occur in five stages, as follow: (1) pre-contemplation stage is when
13 a person has not yet considered making a change; (2) contemplation stage is when
14 a person thinks of making a change, but doesn't know how, or even if the change is
15 worth making; (3) preparation stage is when a person becomes ready to change and
16 makes change plans; (4) action stage occurs when people carry out their change
17 plans; (5) and finally, the maintenance stage occurs when a person tries to make the
18 change stick over time. Relapses sometimes occur, and can be a normal part of
19 change. A person may relapse several times before permanent change takes hold.
20 Research shows that skipping any one of the change stages often results in failure
21 of change to take hold (202).

22
23 **Childhood sexual abuse (CSA):** This is a strong predictor of psychopathologies
24 in adulthood, including a three-fold elevated risk for alcohol and drug
25 dependence (203).

26 **Chronic pain:** The state in which pain persists beyond the usual course of an
27 acute disease or healing of an injury or that may or may not be associated with
28 an acute or chronic pathologic process that causes continuous or intermittent pain
29 over months or years.

30
31 **Comorbidity:** The presence and effect of two illnesses occurring in the same
32 person simultaneously or sequentially. For example, there is significant
33 psychiatric comorbidity in persons with substance dependence. That is, many
34 individuals who abuse and depend on drugs or alcohol may have an underlying
35 psychiatric condition such as depression, bipolar disorder, post-traumatic stress
36 disorder (PTSD), anxiety disorder, obsessive-compulsive disorder (OCD), etc.
37 Other non-psychiatric comorbidities such as respiratory, cardiac, renal, or hepatic

1 disease, sleep apnea, or seizures are also important in the consideration of chronic
2 opiate therapy (204).

3
4 **Conversion:** A person is helped to see their addiction as a disorder which needs
5 treatment. Unfortunately, so many people lose nearly everything in their lives and
6 hit rock bottom before conversion is achieved (205).

7
8 **Counter-motivation:** Is resistance against change. The term includes the complex
9 biological, psychological, and social factors involved with resisting a change.
10 When asked about a making a change, a person may display counter-motivation
11 by interrupting, ignoring, arguing, denying, daydreaming, reminiscing, etc. (206).

12
13 **Dependence or Physical dependence:** A state of adaptation that is manifested
14 by drug class-specific signs and symptoms that can be produced by abrupt
15 cessation, rapid dose reduction, decreasing blood level of drug, and/or
16 administration of an antagonist. Physical dependence, by itself, does not equate
17 with addiction. The medical diagnosis of **Substance dependence (SD)** is defined
18 by any three of the following seven criteria during a 12-month period: (1)
19 tolerance; (2) withdrawal; (3) substance often taken in larger amounts or over
20 longer period than intended; (4) persistent desire or unsuccessful efforts to cut
21 down or control use; (5) great deal of time spent in activities necessary to obtain,
22 use, or recover from the substance; (6) important social, occupational, or
23 recreational activities given up or reduced; (7) continued use despite knowledge
24 of having persistent or recurrent physical or psychological problem likely to have
25 been caused or exacerbated by the substance (207).

26
27 **Detoxification (Detox) or medically supervised withdrawal:** Gradual reduction,
28 or tapering, of a medication dose over time, under the supervision of a physician,
29 to achieve elimination of tolerance and physical dependence [109].
30 Detoxification may be aided by medical intervention, or occur naturally via the
31 body's detoxification pathways. Detoxification is one of the first steps in the
32 treatment of addiction (208).

33
34 **Discrepancy:** This can refer to the difference between current situation and future
35 goals. A counselor may help a client develop this in order to incite a desire to
36 change (209). For example, a person is currently unemployed, living on the
37 streets, and using heroin which has caused poor health. This person has wanted
38 children and their own home since childhood, but now sees the discrepancy

1 between current situation and future dreams. Perhaps this person will gain new
2 motivation to change.

3
4 **Diversion:** The use of prescription drugs for recreational consumption, i.e.
5 diverting them from their original medical purpose (210). The Federal Controlled
6 Substances Act (CSA) establishes a closed system of distribution for drugs
7 classified as controlled substances. Records must be kept from the time a drug is
8 manufactured to the time it is dispensed. Any pharmaceutical which escapes the
9 closed system is said to have been “diverted” and is illegal. Those people who
10 “diverted” the drug are in violation of the law (211). Conversely, drug diversion
11 may also refer to legal programs which educate, rehabilitate, and “divert” first-
12 time drug offenders from jail and their original destructive life course (212).

13
14 **Guided Imagery:** This technique uses the imaginative capacity of one’s own
15 mind to create a relaxed state or, alternatively, to overcome some troubling aspect
16 of life. This method of therapy has been used with success as one treatment for
17 chronic pain (213).

18
19 **High:** Abused drugs (e.g. alcohol, nicotine, some prescription medications, and
20 opioids) raise dopamine levels in the limbic system faster, higher, and longer than
21 any natural reward (e.g. food and sex), causing a euphoric sensation (214).

22
23 **Hypnosis:** A procedure which alters one’s state of consciousness to a mode that is
24 more accepting of suggestion. This procedure is believed to create a way around
25 the typical evaluative, critical, conscious mind and communicate directly with
26 one’s subconscious. Hypnosis has been used for smoking cessation, but with
27 conflicting results (215).

28
29 **Lapse:** A brief episode of drug use after a period of abstinence which is usually
30 unexpected, of short duration, has relatively minor consequences, and is marked
31 by a patient’s desire to return to abstinence. A lapse can progress into a full-
32 blown relapse with sustained loss of control (216).

33
34 **Maintenance treatment:** Dispensing or administering an opioid medication (e.g.
35 methadone or buprenorphine) at a stable dose over 21 days or more for the
36 treatment of opioid addiction (217).

37
38 **Medication-assisted treatment (MAT):** Any treatment of opioid addiction that
39 includes a medication (i.e. methadone, buprenorphine, or naltrexone) and is
40 approved by the FDA for opioid detoxification or maintenance treatment (218)).

1 **Meditation:** The self-regulation of attention. During mindfulness meditation one
2 must focus their full attention on a designated object of meditation, like one's
3 breath. This exercise trains the mind and provides a person with relaxation,
4 metacognition, and the revelation of previously subconscious ideas. By focusing
5 the mind, one can work to reduce pain and change the negative mental/emotional
6 states involved with addiction (219).

7
8 **Misuse or non-medical use:** Incorporates all uses of a prescription medication
9 other than those that are directed by a physician and used by a patient within the
10 law and requirements of good medical practice (220).

11
12 **Motivation:** Complex mixture of biological, psychological, and social factors
13 that together drive a person (221).

14
15 **Motivational interviewing:** A directive, client-centered counseling style for
16 eliciting behavior change by helping clients to explore and resolve ambivalence
17 (222). Ambivalence is the conflict of opposing ideas and attitudes which the client
18 must articulate and resolve on his/her own, only guided by the counselor. For
19 example, a client must first ask, "Am I ready to quit?" honestly and then decide
20 within themselves which path to trod. It is the counselor's duty to lead them to this
21 question, guide the process, and instill within them the confidence to pursue a
22 change.

23
24 **Neuroplasticity:** The ability of the nervous system to adjust or compensate to an
25 injury or disease (223). Often neuroplasticity is a good thing, but with persistent
26 pain or chronic drug/alcohol use, these changes can make matters worse, or cause
27 new problems altogether (e.g. psychiatric disorders or opioid induced
28 hyperalgesia).

29
30 **Opioid abuse/dependence:** Repeated use of a drug while producing problems in
31 three or more areas over a 12-month period. Areas include tolerance, withdrawal,
32 overdose, and use despite impending adverse consequences. The most commonly
33 abused opioid is oxycodone from diverted prescriptions, followed by morphine,
34 meperidine, fentanyl, methadone, buprenorphine, butorphanol, tramadol and
35 pentazocine (224).

36
37 **Opioid Treatment Program (OTP), Methadone Clinic, or Narcotic**
38 **Treatment Program:** Any federally certified treatment program which provides
39 supervised assessment and medication-assisted treatment of patients who are
40 addicted to opioids (225).

41

1 **Pain:** An unpleasant sensory and emotional experience associated with actual
2 or potential tissue damage or described in terms of such damage. Pain is a
3 complex experience embracing physical, mental, social, and behavioral
4 processes, compromising the life of many individuals (226).
5

6 **Pseudoaddiction:** The iatrogenic syndrome resulting from the misinterpretation of
7 relief seeking behaviors as though they are drug-seeking behaviors that are
8 commonly seen with addiction. The relief seeking behaviors of pseudoaddiction
9 resolve upon institution of effective analgesic therapy. Addiction and
10 pseudoaddiction can both occur in the same person (227).
11

12 **Reciprocal risk factors:** One primary condition puts you at risk for a second
13 condition, but the second condition also can exacerbate symptoms of the first. For
14 example, bipolar disorder puts a person at risk for developing substance abuse or
15 addiction via cyclical mood changes. In return, substance abuse
16 exacerbates a person's bipolar disorder – creating a destructive cycle (228).
17

18 **Recovery:** A process of change through which individuals improve health and
19 wellness, live a self-directed life, and strive to reach full potential. Recovery must
20 arise from hope and is person-driven. Recovery occurs via many pathways; is
21 holistic; and must be supported by peers, allies, relationships, and social networks.
22 Recovery is culturally-based and influenced; is supported by addressing trauma;
23 involves individual, family, and community strengths and responsibility. Finally,
24 recovery must be based on respect (229).
25

26 **Rehabilitation (Rehab):** Rebuilding a person's life as a whole after addiction or
27 some other traumatic event. This process is complex and may involve a
28 combination of changes in the biological, psychological, and social aspects of a
29 person's life. This is often the most time intensive element of recovery and may
30 take months to years (230).
31

32 **Relapse:** A breakdown or setback in a person's attempt to change or modify any
33 target behavior. Relapse may also be defined as an unfolding process in which
34 resumption of substance misuse is the last event in a long series of maladaptive
35 responses to internal or external stressors or stimuli. Relapse may be influenced by
36 many aspects of life including physiologic and environmental factors (231).
37

38 **Self-efficacy:** A person's belief that change is possible and that they can
39 accomplish it (232). In general, a person must first believe that they are fully

1 capable before they undertake a change. For example, one must have confidence
2 and know they are strong enough to leave drugs/alcohol. During this process it is
3 important for both counselors and clients to remember that everyone has unused
4 potential and that everyone is capable of change.
5

6 **Self-medication:** The use of un-prescribed drugs to treat a medical problem.
7 Self-medication is sometimes used by individuals with mental disorders to
8 ameliorate the discomfort of their disease. However, these patients often become
9 addicted to their medications and thus comorbidity develops (233).
10

11 **Tolerance:** A physiologic state resulting from regular use of a drug in which an
12 increased dosage is needed to produce a specific effect. Or, a reduced effect is
13 observed with a constant dose over time. Tolerance may, or may not, be evident
14 during opioid treatment and does not equate with addiction. Tolerance can occur to
15 an opioid's analgesic effects and to its unwanted side effects, i.e. sedation, and
16 nausea (234). Physiologically, when using a drug like alcohol, nicotine, some
17 prescription medications, or opioids, changes take place in the brain. Over time,
18 these changes down-regulate natural dopamine production and reduce the brain's
19 ability to respond to dopamine. An addict will perceive this relative lack of
20 dopamine in the brain as increased tolerance, and he/she will often counter it with
21 increased drug use (235).
22

23 **Trial period:** The period of time when medication or other treatment efficacy is
24 tested to determine whether treatment goals can be met. If goals cannot be met, the
25 trial is discontinued and an alternate treatment may be considered (236).
26

27 **Waiver:** Documented authorization from Secretary of Health and Human
28 Services that exempts a qualified physician from rules applied to Opioid
29 Treatment Programs (OTPs) and allows him/her to use buprenorphine for
30 treating addiction in an office-based practice (237).
31

32 **Withdrawal:** If drug use is stopped abruptly, a withdrawal syndrome can occur
33 where adaptive body responses, originally present to counter and detoxify the drug,
34 become unopposed and often produce a painful experience for the drug user.
35 Withdrawal is the cardinal sign of physical dependence on a drug (238).

1 Drug Glossary

2 **Adderall (dextroamphetamine and amphetamine mixed salts, or amphetamine salts):** Are
3 amphetamine stimulants used to treat attention-deficit/hyperactivity disorder and
4 narcolepsy. Adderall has abuse potential and is a schedule II controlled substance in the
5 U.S.¹³

6 **Amphetamines:** A class of drugs derived from phenylethylamine that can be administered via
7 inhalation, injection, or “snorting” via nasal insufflation to produce stimulant and/or
8 hallucinogenic effects. These drugs have their effects via changing catecholamine levels;
9 catecholamine release may be enhanced, reuptake blocked, receptors stimulated directly by
10 drug, or breakdown inhibited (i.e. monoamine oxidase blockage). In addition, some
11 amphetamines stimulate release of serotonin and affect serotonin receptors directly, which
12 causes the hallucinogenic effect of designer amphetamines. Amphetamines include
13 methamphetamine as well as various medications for attention-deficit disorder, and various
14 designer drugs developed by illegal labs to give hallucinogenic effect.¹⁴ Amphetamine
15 overdose or abuse is life-threatening and can cause hypertension, cardiac arrhythmia/failure,
16 subarachnoid/intracerebral hemorrhage, stroke, convulsions, and/or coma.¹⁵

17 **Bath salts:** Refers to a new category of designer drugs whose exact chemical composition,
18 short-term effects, and long-term effects are not well known. Often, these products contain
19 amphetamine-like chemicals (e.g. methylenedioxypropylvaleron (MPDV), mephedrone, and
20 pyrovalerone) as their active ingredients which cause stimulant and hallucinogenic effects.
21 Mephedrone is known to trigger intense cravings on par with methamphetamine
22 dependence, which makes bath salts incredibly addictive. Bath salts go by the following
23 names: Ivory Wave, Purple Wave, Red Dove, Blue Silk, Zoom, Bloom, Cloud Nine,
24 Ocean Snow, Lunar Wave, Vanilla Sky, White Lightning, Scarface, and Hurricane
25 Charlie.¹⁶

26 **Cocaine (Coke):** A natural alkaloid extract of the Erythroxylon coca plant which is water
27 soluble and absorbed across any mucosal surface (e.g. oral, nasal, GI, vaginal, etc.) or
28 injected. This drug acts as a central nervous system stimulant and local anesthetic. Cocaine
29 acts as a stimulant by blocking reuptake of norepinephrine, dopamine, and serotonin at nerve
30 terminals leading to the buildup of neurotransmitters – causing euphoria among other effects.
31 Anesthetic action of cocaine is via blockage of fast sodium channels, and thus nerve
32 impulse conduction.¹⁴

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1 **Controlled Substance:** A drug that is subject to special requirements under the federal
2 Controlled Substances Act (CSA). Most opioids are Schedule II or III drugs under CSA,
3 meaning they have high potential for abuse, are medically acceptable treatments in the U.S.,
4 and that their abuse may lead to psychological or physical dependence. All controlled
5 substances have some potential for abuse.¹

6
7 **Crack cocaine (Crack):** Sodium bicarbonate is used with cocaine to make a stable
8 freebase “rock” form that is smoked with a characteristic “crackling” sound upon
9 burning.¹⁵

10
11 **Ecstasy (3, 4-methylenedioxymethamphetamine or MDMA):** Derived from
12 methamphetamine as a “designer drug,” ecstasy has typical amphetamine stimulant activity
13 with added vivid hallucinations. Typically MDMA is taken orally, but can be injected or
14 “snorted.” In addition to the risks of amphetamines, this drug can cause cognitive and
15 memory problems even after ending use.¹⁵

16 **Focalin (dexamethylphenidate):** A d-threo enantiomer of racemic methylphenidate
17 (Ritalin) and is used to treat attention-deficit/hyperactivity disorder. Like Ritalin, Focalin
18 has abuse potential and is a schedule II controlled substance in the U.S.¹³

19 **Heroin (diacetylmorphine):** Semisynthetic crystalline white powder opioid that is smoked,
20 injected, or “snorted” via nasal inhalation to produce an intense euphoria. Heroin may be
21 referred to on the streets as big H, blacktar, boy, brown sugar, dope, horse, junk, mud,
22 skag, or smack.¹⁷

23 **Methamphetamine (Meth):** A mixed-action monoamine with dopamine, serotonin, and
24 norepinephrine system activity. Although this drug gives euphoria and decreased fatigue, it
25 can also produce headache, diminished appetite, abdominal pain, vomiting/diarrhea, sleep
26 disorder, paranoid/aggressive behavior, and/or psychosis. Additionally, chronic use of
27 this drug can cause severe dental problems referred to at times as “meth mouth.” On the
28 streets, this drug may be referred to as speed, crank, chalk, ice, glass, or crystal.¹⁵

29 **Narcotic (Gr. *narkotikos*: “stupor”):** Legally, is any drug which is totally prohibited or
30 under strict government regulation (e.g. heroin and morphine) having abuse or addictive
31 potential. This is not a distinct drug class, and its use in medicine is discouraged.¹⁸ In
32 some settings, the term narcotic is specifically associated with opioids, but this is
33 imprecise. Historically, this term was used to describe any drug that induced sleep or
34 narcosis.¹⁹

35 **Opiate (Gr. *opion*: “poppy-juice”):** A compound structurally related to products found
36 in opium (*Papaver somniferum*), including natural plant alkaloids like morphine, codeine,
37 the baine, and other semisynthetic derivatives.¹⁹

38 **Opioid:** Any synthetic narcotic that has opiate-like activity but is not derived from opium
39 (heroin, methadone, hydrocodone, oxycodone). Any agent, regardless of structure, that

1 has the functional properties of an opiate.¹⁹ These drugs are psychoactive via binding
2 opioid receptors in the body, which can cause analgesia (unawareness of pain).
3 Endorphins, which occur naturally in your body, are endogenous opioids. Opioids include
4 naturally occurring, synthetic, or semi-synthetic opioid drugs and medications along with
5 endogenous opioid peptides.¹

6 **Opioid agonist:** Compounds that bind to the mu opioid receptors of the brain, producing a
7 response similar to that of the natural ligand. Full mu opioid agonists (e.g. morphine,
8 heroin, and methadone) produce increasingly intense opioid effects with higher dosage.¹

9 **Opioid antagonist:** Bind to and block opioid receptors preventing activation by opioid
10 agonists (e.g. naltrexone and naloxone).¹

11 **Opioid partial agonist:** Occupy and activate opioid receptors, but their activation reaches a
12 plateau beyond which more opioid does not increase effect (e.g. buprenorphine).¹

13

14 **Ritalin (methylphenidate):** A piperidine derivative structurally related to amphetamine is a
15 mild CNS stimulant with pharmacological properties similar to amphetamines. Ritalin has
16 abuse potential and is a schedule II controlled substance in the U.S.¹³

17

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Glossary References

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