Guideline for Physicians Working in California Opioid Treatment Programs

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for the CSAM Committee on Treatment of Opioid Dependence

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Guideline for Physicians
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PREAMBLE

This monograph was developed by the Committee on Treatment of Opioid Dependence of the California Society of Addiction Medicine to provide an overview and discussion of the matters of clinical care that fall under the responsibility of the Opioid Treatment Program (OTP) Medical Director and Program Physicians. It was prepared and distributed first in 1998 and updated in 2004.

OTP is the term used by federal and state regulating agencies to refer to clinics that are specially licensed to provide opioid pharmacotherapy for addiction treatment. OTPs are commonly known as methadone clinics. OTPs are regulated by both the federal and state governments. Federal regulations are found in 42 CFR Part 8, and California’s regulations are found in Chapter 4, Division 4, Title 9 of the California Code. This document will reference these regulations, but it is not designed to summarize all of them. Rather, this monograph is meant to serve as a reference offering practical clinical information and suggestions for the physician working in an OTP. While this document is intended to assist physicians in making clinical decisions, it does not represent regulations or standards of care. Ultimately clinical decisions are made based on the patient’s situation, the available resources and a physician’s best clinical judgment.

Federal regulations require that OTPs be accredited by an agency approved by the Center for Substance Abuse Treatment (CSAT.) At this time, in California, the approved agencies are the Joint Commission on Accreditation of Health Organizations (JCAHO) and the Commission on Accreditation of Rehabilitation Facilities (CARF.) The CARF standards say that each OTP must have a medical director who is responsible for:

a. Administering or supervising all medical services.

b. Ensuring that the program is in conformance with all applicable local, state, and federal regulations regarding the medical treatment of opioid addiction.

CARF Standards go on to say that, in order to serve as the Medical Director of an OTP, a physician must have either:

a. Demonstrated experience in opioid treatment, or

b. Developed a written plan to attain competence in opioid treatment within twelve months (to include continuing medical education in addiction medicine), and be monitored by the designated authority.

Although the Medical Director of an OTP has administrative responsibilities in addition to the medical/clinical ones, they are a separate issue. This monograph’s focus is on the medical piece.
This monograph was circulated for review to interested parties, including representatives of:

- Center for Substance Abuse Treatment
- American Association on the Treatment of Opioid Dependence
- California Organization of Methadone Providers
- American Society of Addiction Medicine Sub-Work-Group on Opioid Agonist Treatment
- California Department of Alcohol and Drug Programs
- County Alcohol and Drug Program Administrators Association of California

The Committee considered all comments received and made several additions and/or changes based on the information submitted in the comments.

The document was adopted by the CSAM Executive Council on April 4, 2005.

Guidelines discussing clinical practice are subject to periodic review and revision to incorporate new developments. The CSAM Committee plans to review this document two years after its publication to determine if revisions may be appropriate. If the document is revised, it will be circulated for comment again and published with a new date. The latest revision is posted on the CSAM website: www.csam-asam.org

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INTRODUCTION

The physician in an opioid treatment program (OTP) practices in a uniquely challenging medical environment, responding to a diverse array of medical, psychiatric, and social problems in a largely indigent population with limited access to health care. In addition, the past experiences of opioid dependent patients in medical settings often result in mistrust, and even hostility, toward mainstream medical providers, which discourages them from seeking even the limited care available.

Characteristically, addicted patients receive high-cost crisis care in Emergency Departments and hospitals. After discharge there is little to no follow-up. The physician in the OTP is often the first medical provider with whom these patients establish a long-term therapeutic relationship. The OTP physician can be an important, even lifesaving, resource for patients enrolled in treatment, identifying the multiple medical problems that characterize heroin and opioid addiction and providing treatment or referrals to address these problems. The OTP physician is also in a position to positively impact the public health of the community by screening for and treating communicable disease and offering other preventive health services.

OBJECTIVE

This document is intended to assist OTP physicians in understanding their role and responsibilities in treatment, including those areas governed by state or federal regulation. It describes the role of the physician in an Opioid Treatment Program and the clinical judgment involved in the development of an appropriate treatment plan for the delivery of patient care. It describes responsibilities that should be carried out by the physician or the physician's designee. It does not describe a standard of care. It does not prescribe specific treatment choices. Judgment regarding specific clinical situations must be made on the basis of the clinical information available and on the treatment options available.
Section on DIAGNOSIS OF OPIOID DEPENDENCE

Criteria for making the diagnosis of opioid dependence are found in The Diagnostic and Statistical Manual, Fourth Edition Text Revision (DSM-IV-TR) under Substance Related Disorders in three related diagnostic categories:

1) The "generic" diagnosis of substance use and substance dependence disorders
2) Clinical syndromes related to intoxication and withdrawal: substance-induced disorders and
3) Drug-induced psychiatric disorders: substance-induced mental disorders

Both substance use disorder and substance dependence are characterized by a group of behavioral, cognitive and physiological symptoms occurring within a specific time frame (12 months). DSM-IV distinguishes "abuse" from "dependence." Dependence is characterized by compulsive drug seeking and use with loss of the ability to control the drug use despite adverse consequences, whether or not physical manifestations of tolerance or withdrawal occur. This definition is distinguished from the usage in general medical care, where the designation “opioid dependence” often refers only to physical dependence (tolerance, withdrawal). These two uses of the word “dependence” may be confusing to physicians who are not psychiatrists or addiction specialists. DSM criteria for dependence include physical dependence, but also include other behavior, notably continued use despite adverse consequences. In general medicine, physical dependence and continued use despite adverse consequences is often diagnosed as “addiction.” Abuse is characterized by repeated drug use under hazardous conditions and/or use despite harmful consequences.

The diagnosis of abuse can be made only if the patient has never met the criteria for dependence. The salient features of the DSM-IV-TR diagnostic criteria for substance dependence and substance abuse are listed in Table I.

Patients who meet the DSM diagnosis of Opioid Abuse but do not meet the DSM diagnosis of Dependence are not eligible for opioid agonist treatment. For each patient who requests admission to treatment, the physician should document the presence of opioid dependence by recording the patient’s history and the results of a physical examination and laboratory tests. Once the formal diagnosis of opioid dependence (addiction) is made, the physician should determine the suitability of the patient for treatment in an opioid treatment program. The physician should then determine whether the patient is a candidate for opioid detoxification or opioid maintenance treatment. The ASAM Patient Placement Criteria (Mee-Lee et al. 2001) for opioid detoxification and opioid maintenance treatment may be a helpful resource. Federal regulations concerning admission criteria are found in 42 CFR Part 8; California regulations are in Title 9, Section 10270 (Criteria for Patient Selection.) Federal and California admission criteria will be summarized later in this monograph.
### TABLE 1 ~ DSM-IV-TR CRITERIA FOR SUBSTANCE DEPENDENCE AND SUBSTANCE USE

<table>
<thead>
<tr>
<th>Dependence</th>
<th>Abuse</th>
</tr>
</thead>
<tbody>
<tr>
<td>(3 or more in a 12-month period)</td>
<td>(1 or more in a 12-month period)</td>
</tr>
<tr>
<td>Symptoms must never have met criteria for substance dependence for this class of substance.</td>
<td></td>
</tr>
</tbody>
</table>

A maladaptive pattern of substance use, leading to clinically significant impairment or distress, as manifested by **three** (or more) of the following, occurring at any time in the same 12-month period:

- Tolerance (marked increase in amount; marked decrease in effect)
- Characteristic withdrawal symptoms; substance taken to relieve withdrawal
- Substance taken in larger amount and for longer period than intended
- Persistent desire or repeated unsuccessful attempt to quit
- Much time/activity to obtain, use, recover
- Important social, occupational, or recreational activities given up or reduced
- Use continues despite knowledge of adverse consequences (e.g., failure to fulfill role obligation, use when physically hazardous)

A maladaptive pattern of substance use, leading to clinically significant impairment or distress, as manifested by **one** (or more) of the following, occurring at any time in the same 12-month period:

- Recurrent use resulting in failure to fulfill major role obligation at work, home or school
- Recurrent use in physically hazardous situations
- Recurrent substance related legal problems
- Continued use despite persistent or recurrent social or interpersonal problems caused or exacerbated by substance
Section OPIOID MAINTENANCE TREATMENT

As of April 2005, there are two medications available and approved for use in opioid maintenance treatment: methadone and sublingual formulations of buprenorphine. This document focuses primarily on treatment with methadone and gives a more brief review of treatment with buprenorphine in Appendix B.

Methadone maintenance treatment (MMT) offers major pharmacologic benefits, such as the alleviation of the symptoms of physical withdrawal, the reduction or elimination of opioid craving and partial or complete blockade of the euphoric effects of outside opioids. All of these help to support the patient’s efforts to achieve and sustain abstinence. However the benefits of MMT extend beyond pharmacologic ones. Retention in treatment is essential so that medical and psychosocial issues may be addressed. MMT allows patients to receive consistent and ongoing counseling to support the lifestyle changes necessary to progress in recovery. Medical and counseling interventions help patients to reduce needle sharing and unprotected/risky sexual behaviors associated with drug use. Ultimately long term goals include improved family stability, decreased hospital admissions, regular medical and dental care, decreased criminal activity and incarceration, and vocational rehabilitation. It is helpful for OTP personnel to have a basic understanding of 12 Step programs and of all elements of recovery to assist patients toward long-term goals. Achieving these goals benefits society as well as the individual patient.

Criteria for admission for MMT

Current federal regulations consider the diagnosis of opioid dependence and documentation of at least a one-year history of addiction to opiates to be sufficient evidence for admission to MMT. California regulations require physical dependence, a two-year addiction history and at least two failed attempts at detoxification. Waivers are needed for situations in which the physician determines that admission to MMT is indicated for a patient who does not meet these criteria. Most programs have a permanent California waiver to allow admission of patients with a one-year history of addiction. Often a failed detoxification provides the necessary documentation. OTPs can apply for a program-wide waiver that allows for admission to MMT of intravenous drug-using patients who meet the federal regulations without meeting the two-year plus two-detoxification failure requirement.

Even without such a program-wide waiver, a program can apply for an exception (or waiver) for an individual patient. Public health considerations provide a strong argument in favor of beginning treatment as early as possible in the course of a patient's drug use to reduce the likelihood of HIV and HCV infection and transmission. Clinical experience shows that 80% of injection drug users will acquire HCV antibodies within a year of beginning injection drug use. (Garfein et al. 1996)

Regulations also require that patients enter opioid maintenance treatment voluntarily. When determining whether a patient is suitable for MMT, the physician should assess the risks and
benefits of starting methadone. Factors for the patient and OTP physician to consider are the physical dependence-maintaining properties of the medication, the required clinic visits and required counseling, the long-term nature of the treatment, the exposure to a large number of addicted persons congregated at the clinic, the restriction on travel and the requirement for random urine testing or toxicology screening. The physician should assure that there is documentation that the patient was informed and has consented to treatment.

For patients under eighteen years of age, federal regulation requires documented parental consent before the patient begins treatment with pharmacotherapy. In California, approval of the Department of Alcohol and Drug Programs (ADP) Narcotic Treatment Program Licensing Branch is also required. (Anyone aged 12 or older may consent for psychosocial treatment of addiction in California.)

There are patients who are not currently physically dependent, but who have a past history of opioid dependence and whose current situation puts them at high risk of relapse. The physician should carefully evaluate and consider these patients for admission to MMT to prevent relapse. Prior to admission the physician must carefully review federal and California regulations and obtain exception waiver(s) if necessary.

Federal and California regulations do make specific provision for the admission of certain patients who meet the criteria for opioid dependence but are not currently physically dependent. Federal and California regulations differ. Federal Regulations (42CFR8.12.e.3) specify the following exceptions to the general requirement that the patient be “currently addicted to an opioid drug”:

- patients released from a penal institution, within 6 months of release,
- pregnant patients,
- former MMT patients, within 2 years of discharge.

California’s regulations (Title 9, section 10270, D5, A and B.) are more restrictive than the federal regulations, but do allow the following two exceptions to the requirement for physical dependence at intake:

- patients who would have qualified for maintenance before incarceration, and who have been incarcerated for at least a month, may be admitted within a month of release,
- patients who have been on maintenance treatment for at least six months, and who voluntarily left treatment, may be admitted within six months of discharge.

Note: No exception is mentioned in Title 9 to the requirement of physical dependence for pregnant women. A state exception may be requested on a case-by-case basis.

The physician should balance the risks and benefits of medication-assisted treatment against the risk of non-treatment or other forms of addiction treatment, especially in cases where there is a medical indication for treatment but uncertainty about the length of time of addiction or when documentation of the patient's history is not readily available. In such cases in California, the
physician should apply for prior approval from the Narcotic Treatment Licensing Branch. (ADP Form 8045)

MMT must be viewed as a long-term treatment commitment that will include medication and psychosocial intervention. The goal of MMT is complete and ongoing abstinence from abuse of opioids. Evidence to date has shown that the benefit of treatment is directly proportionate to the length of treatment and the adequacy of the maintenance dose. Given the danger of HIV, hepatitis and other infectious diseases, in addition to the other risks associated with heroin and needle use, it is better for patients to remain in MMT and delay consideration of a tapering off methadone until they are at lower risk of relapse to opioid use. It is important to stress to incoming patients the benefits of long-term opioid maintenance treatment. However, patients are always free to choose the length of time they will remain in MMT.

MMT is suitable for any adult with a history of opiate dependence of sufficient severity and length for whom detoxification has not succeeded or can not reasonably be expected to succeed and who is willing and able to commit to the long term, physical dependence-sustaining nature of pharmacologic treatment and the encumbrances of opioid maintenance treatment.

MMT in the United States is a regulated, comprehensive treatment with mandated observed dosing, testing and counseling requirements.

Although there is strong evidence that retention in treatment is associated with longevity and other positive outcomes, there is less reliable evidence to help determine the appropriate level of care needed. There are several studies that demonstrate the benefit of enhanced psychosocial support during the first six months of care. There are multiple studies showing that continuing medication treatment without psychosocial treatment (“medical maintenance”) is good treatment for patients who have achieved a track record of stability.

The intensity of intervention is determined by patient need. Usually more intense intervention is necessary at the beginning of treatment. The length and frequency of counseling may decrease as a patient stabilizes.

In countries outside the US, methadone maintenance treatment is offered in office- based settings, at the discretion of individual physicians. This is not available in the United States as of this writing.

Patients who do not meet the criteria for MMT as described above may be considered for methadone detoxification. In addition there are patients who are eligible for MMT, but request detoxification treatment instead. See Appendix A regarding methadone detoxification.

**In summary, the role of the physician in selecting a patient for methadone maintenance treatment is:**

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1) To assure that the patient has a documented history of opioid dependence of sufficient severity and duration.
2) To assure that the patient is currently opioid dependent or meets federal and state exception criteria.
3) To determine that previous attempts at withdrawal have not been successful and that maintenance treatment is the appropriate treatment option.
4) To assure that there are no medical, psychological or cognitive contraindications to MMT.
5) To answer patients’ questions regarding MMT and obtain informed consent for treatment.
6) To apply for federal and/or state admission waivers if MMT is medically indicated and the patient does not meet regulatory requirements. (Federal form SMA 168; California form ADP 8045)

Section on INITIAL HISTORY AND PHYSICAL EXAM

The primary purpose of the physician’s admission assessment is to confirm and document current opioid dependence and to determine whether the patient is fit for methadone treatment through a comprehensive history and physical examination and appropriate laboratory tests. Appendix D provides examples of forms for recording the Intake History and Physical Examination.

At admission, most of the patients are uncomfortable due to symptoms of opiate withdrawal, guilt and shame associated with the lack of control over drug use, and past experiences in medical settings. A caring, respectful and non-judgmental manner helps to establish a therapeutic relationship with the patient and makes it more likely that the patient will disclose important information about his or her substance abuse history.

Since opioid addiction is the patient’s presenting complaint, often the assessment begins with the opioid history including the age at initiation of use, age when first opioid dependent, route(s) of administration, prior treatment episodes (type and outcome), periods of sustained abstinence, current pattern of use (frequency, quantity and duration of the current period of use), and current symptoms of withdrawal.

It should be noted that symptoms and signs of opiate withdrawal are subject to the effects of environment (less intense in controlled settings) and dependent on the amount and timing of the last use prior to evaluation. Severity of withdrawal does not necessarily correlate with high tolerance, and does not reliably establish need for a high maintenance dose. The earliest manifestations of opioid withdrawal are often subjective. Table 2 shows anticipatory, early, and full-blown symptoms and signs of opiate withdrawal. The physician should expect to see early signs of withdrawal. The Clinical Institute Narcotic Assessment (CINA) Scale (Table 3) measures 11 signs and symptoms commonly seen in patients during narcotic withdrawal. This can help to gauge the severity of the symptoms and to monitor changes in the clinical status over time. The Clinical Opiate Withdrawal Scale (COWS) (Table 4) can be used to document the presence of and to quantify the severity of opioid withdrawal.
TABLE 2 ~ MEDICAL SYNDROMES ASSOCIATED WITH OPIATE USE: ANTICIPATORY, EARLY, AND FULL-BLOWN SYMPTOMS AND SIGNS OF OPIATE WITHDRAWAL

<table>
<thead>
<tr>
<th>Syndrome (Onset and Duration)</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opiate intoxication</td>
<td>Conscious, sedated, &quot;nodding&quot;</td>
</tr>
<tr>
<td></td>
<td>Mood normal to euphoric</td>
</tr>
<tr>
<td></td>
<td>Pinpoint pupils</td>
</tr>
<tr>
<td></td>
<td>History of recent opiate use</td>
</tr>
<tr>
<td>Acute overdose</td>
<td>Unconscious</td>
</tr>
<tr>
<td></td>
<td>Pinpoint pupils</td>
</tr>
<tr>
<td></td>
<td>Slow, shallow respirations</td>
</tr>
<tr>
<td>Opiate withdrawal:</td>
<td>Fear of withdrawal</td>
</tr>
<tr>
<td>Anticipatory* (3-4 hours after last use)</td>
<td>Anxiety</td>
</tr>
<tr>
<td></td>
<td>Drug seeking behavior</td>
</tr>
<tr>
<td>Early (8-10 hours after last use)</td>
<td>Anxiety</td>
</tr>
<tr>
<td></td>
<td>Restlessness</td>
</tr>
<tr>
<td></td>
<td>Yawning</td>
</tr>
<tr>
<td></td>
<td>Nausea</td>
</tr>
<tr>
<td></td>
<td>Sweating</td>
</tr>
<tr>
<td></td>
<td>Nasal stuffiness</td>
</tr>
<tr>
<td></td>
<td>Rhinorhea</td>
</tr>
<tr>
<td></td>
<td>Lacrimation</td>
</tr>
<tr>
<td></td>
<td>Dilated pupils</td>
</tr>
<tr>
<td></td>
<td>Stomach cramps</td>
</tr>
<tr>
<td></td>
<td>Drug-seeking behavior</td>
</tr>
<tr>
<td>Fully developed (1-3 days after last use)</td>
<td>Severe anxiety</td>
</tr>
<tr>
<td></td>
<td>Tremor</td>
</tr>
<tr>
<td></td>
<td>Restlessness</td>
</tr>
<tr>
<td></td>
<td>Piloerection**</td>
</tr>
<tr>
<td></td>
<td>Vomiting, diarrhea</td>
</tr>
<tr>
<td></td>
<td>Muscle spasm***</td>
</tr>
<tr>
<td></td>
<td>Muscle pain</td>
</tr>
<tr>
<td></td>
<td>Increased blood pressure; tachycardia</td>
</tr>
<tr>
<td></td>
<td>Fever, chills</td>
</tr>
<tr>
<td></td>
<td>Impulse-driven drug-seeking behavior</td>
</tr>
<tr>
<td>Protracted abstinence (Indefinite duration)</td>
<td>Hypotension</td>
</tr>
<tr>
<td></td>
<td>Bradycardia</td>
</tr>
<tr>
<td></td>
<td>Insomnia</td>
</tr>
<tr>
<td></td>
<td>Loss of energy, appetite</td>
</tr>
<tr>
<td></td>
<td>Opiate cravings</td>
</tr>
</tbody>
</table>

* Anticipatory symptoms occur as the acute effects of opioids begin to subside.
** 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."
TABLE 3 ~ THE CLINICAL INSTITUTE NARCOTIC ASSESSMENT (CINA) SCALE FOR WITHDRAWAL SYMPTOMS

<table>
<thead>
<tr>
<th>PARAMETERS</th>
<th>POINTS</th>
<th>FINDINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parameters Based on Questions and Observation:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) Abdominal Changes:</td>
<td>0</td>
<td>No abdominal complaints; normal bowel sounds</td>
</tr>
<tr>
<td>Do you have any pains in your abdomen?</td>
<td>1</td>
<td>Reports waves of crampy abdominal pain</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Crampy abdominal pain; diarrhea; active bowel sounds</td>
</tr>
<tr>
<td>(2) Changes In Temperature:</td>
<td>0</td>
<td>None reported</td>
</tr>
<tr>
<td>Do you feel hot or cold?</td>
<td>1</td>
<td>Reports feeling cold; hands cold and clammy to touch</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Uncontrolled shivering</td>
</tr>
<tr>
<td>(3) Nausea And Vomiting:</td>
<td>0</td>
<td>No nausea or vomiting</td>
</tr>
<tr>
<td>Do you feel sick in your stomach?</td>
<td>1</td>
<td>Mild nausea; no retching or vomiting</td>
</tr>
<tr>
<td>Have you vomited?</td>
<td>2</td>
<td>Intermittent nausea with dry heaves</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Constant nausea; frequent dry heaves and/or vomiting</td>
</tr>
<tr>
<td>(4) Muscle Aches:</td>
<td>0</td>
<td>No muscle aching reported; arm and neck muscles soft at rest</td>
</tr>
<tr>
<td>Do you have any muscle cramps?</td>
<td>1</td>
<td>Mild muscle pains</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Reports severe muscle pains; muscles in legs arms or neck in constant state of contraction</td>
</tr>
<tr>
<td><strong>Parameters Based on Observation Alone:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(5) Goose Flesh</td>
<td>0</td>
<td>None visible</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Occasional goose flesh but not elicited by touch; not permanent</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Prominent goose flesh in waves and elicited by touch</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Constant goose flesh over face and arms</td>
</tr>
<tr>
<td>(6) Nasal Congestion</td>
<td>0</td>
<td>No nasal congestion or sniffling</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Frequent sniffing</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Constant sniffing watery discharge</td>
</tr>
<tr>
<td>(7) Restlessness</td>
<td>0</td>
<td>Normal activity</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Somewhat more than normal activity; moves legs up and down; shifts position occasionally</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Moderately fidgety and restless; shifting position frequently</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Gross movement most of the time or constantly thrashes about</td>
</tr>
<tr>
<td>(8) Tremor</td>
<td>0</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Not visible but can be felt fingertip to fingertip</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Moderate with patient's arm extended</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Severe even if arms not extended</td>
</tr>
<tr>
<td>(9) Lacrimation</td>
<td>0</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Eyes watering; tears at corners of eyes</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Profuse tearing from eyes over face</td>
</tr>
<tr>
<td>(10) Sweating</td>
<td>0</td>
<td>No sweat visible</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Barely perceptible sweating; palms moist</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Beads of sweat obvious on forehead</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Drenching sweats over face and chest</td>
</tr>
<tr>
<td>(11) Yawning</td>
<td>0</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Frequent yawning</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Constant uncontrolled yawning</td>
</tr>
<tr>
<td><strong>TOTAL SCORE:</strong></td>
<td></td>
<td>Summary of maximal withdrawal symptoms:</td>
</tr>
<tr>
<td><strong>Date:</strong></td>
<td></td>
<td>Percent of maximal withdrawal symptoms:</td>
</tr>
<tr>
<td><strong>Time:</strong></td>
<td>= (total score/31) x 100% =</td>
<td>Number of Absent Signs and Symptoms: ___ out of 11</td>
</tr>
<tr>
<td><strong>Patient Name:</strong></td>
<td></td>
<td>Number of Maximal Signs and Symptoms ___ out of 11</td>
</tr>
</tbody>
</table>

Minimum score = 0, Maximum score = 31.
The higher the score, the more severe the withdrawal syndrome.
TABLE 4 ~ CLINICAL OPIATE WITHDRAWAL SCALE (COWS)


For each item, circle the number that best describes the patient’s signs or symptom. 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.

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

Score: 5-12 = mild; 13-24 = moderate; 25-36 = moderately severe; more than 36 = severe withdrawal
The assessment continues by exploring patient’s use of other substances. Obtaining a complete substance abuse history will allow the physician to identify patients who need detoxification from another, non-opioid substance, most commonly alcohol and/or benzodiazepines. Knowing this history allows the treatment team to address a patient’s overall addiction problems, not just the opioid one. Other substances to explore include stimulants (methamphetamine, cocaine, nicotine), sedatives (barbiturates, muscle relaxants/OTC sleep preparations), marijuana, PCP, designer drugs (ecstasy, etc), other OTC or prescription medications taken inappropriately. In Appendix D, there is a form from the California Department of Justice that may be used by a physician to request a report of the prescriptions for controlled substances filled for a particular patient. Consent from the patient is not required. Physicians may request this information only for patients in their care. The form can be downloaded from website of the California Attorney General: http://caag.state.ca.us/bne/pdfs/BNE1176.pdf.

A brief social history may help to elucidate the severity of addiction and to identify barriers to daily dosing. Consider asking about past and present involvement with criminal justice and current living and transportation arrangements.

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 methadone treatment. Some needle-related conditions may require urgent care (see the Section on Concurrent Medical Conditions.) Questions regarding past hospitalizations, accidents/injuries, surgeries and medications being taken help to bring to light conditions the patient does not immediately remember or volunteer. Screening for symptoms of communicable disease is an important component of this section of the interview. The most commonly encountered communicable diseases are TB, hepatitis, sexually transmitted diseases and HIV. Many patients are due for a tetanus booster. It is very helpful and sometimes essential that patients sign a release to all treating physicians allowing coordination.

Many opioid dependent patients have untreated mental health problems, most commonly major depression, anxiety and bi-polar 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, and the family history will allow triage and follow-up as appropriate. It is helpful and sometimes essential to coordinate with any physician providing mental health care. The patient must sign a release prior to communication. Federal regulations governing the confidentiality of patient information when the patient is in treatment for addiction are found in 42 CFR Part 2. A general medical consent form is not adequate. See Appendix D for a sample consent form that meets the federal requirements.
The physical examination is a regulatory requirement. California regulations specify inclusion of the following components:

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

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 and the patient consents.

The physical examination provides an opportunity to observe for signs of opioid withdrawal (see Table 2). The presence of signs of withdrawal establishes the diagnosis of physical dependence. California regulations require that the physician document the presence of physical dependence on opioids prior to admission to methadone treatment. (Exceptions to this requirement are listed in the Section on Criteria for Admission.) The patient should be in at least mild withdrawal prior to the first dose of methadone.

Laboratory evaluation should be individualized, but hepatitis serology, liver function tests, and HIV screening are highly advisable for all patients in this population. Female patients should be screened for pregnancy. Screening for tuberculosis and syphilis are required by California regulation.

Addiction affects every aspect of a patient’s life, and addiction treatment is holistic in its approach. The eventual care includes attention to the disruption in family and friendship networks, and personal growth of the patient. The initial history and physical exam provides the opportunity to collect information necessary for development of the treatment plan and to build a rapport with the patient that can make a positive contribution to the patient’s chances of succeeding in treatment.
In summary, the role of the physician in conducting the initial history and physical examination is:

1) To document the patient’s drug history, including opioids and other drugs of abuse.
2) To identify patients needing medical detoxification from alcohol, benzodiazepines or other sedatives and to determine where and when this is to be accomplished.
3) To identify acute medical conditions, including mental health issues, and to determine how, when and where they will be addressed.
4) To screen for communicable disease and address as appropriate.
5) To confirm the presence of withdrawal by physical exam.
6) To assess patient’s suitability for participation in an outpatient program requiring daily attendance.

Section on DETERMINING AND ADJUSTING THE DOSE

Once the patient has been found medically fit and appropriate for opiate agonist therapy, the physician is responsible for determining the initial dose of medication and all subsequent adjustments.

Two medications may be used in OTPs: methadone and the sublingual forms of buprenorphine. The body of this document focuses on methadone; buprenorphine is reviewed in Appendix B.

Methadone is a synthetic opioid drug, which acts as a full agonist at the mu receptor. This drug’s long half-life, (13-47 hours), has rendered it a very useful drug for the treatment of opioid dependence. In most cases, methadone can be used on a once a day basis with safety and efficacy. Methadone’s onset of action is 30-60 minutes. The peak effect of any one dose is achieved in two to four hours. Tissue stores build up over time, and steady state will not be achieved for 5-7 days. This gradual buildup of tissue stores is part of methadone’s effectiveness through long-term suppression of withdrawal and craving. This buildup of tissue levels produces daily increases in the medication’s impact on the patient in the first week of treatment, so patients should be carefully assessed daily during this crucial time. Documented daily assessment of the response to the previous day’s dose is a guide to determination of subsequent doses. Careful observation and regular evaluation are imperative until steady state has been achieved. More detailed information on methadone’s pharmacology, dosing and safety is available in the references listed in the appendix.

In maintenance treatment (methadone or buprenorphine), the proper dose, once steady state has been achieved, should accomplish the following clinical objectives:

1) Control of physical signs and symptoms of opioid withdrawal.
2) Control of opioid craving (e.g., intrusive thoughts and dreams of usage, urges to use.)
3) Blockade of the usual “high” or euphoric effects of opioids.
4) Avoidance of sedative side effects.
5) Minimization of other side effects, such as sweating, constipation, decreased libido.
6) The first dose should NOT be expected to achieve all these objectives, and may actually be too high if it does so.
Induction: The Initial Dose and Establishing Tissue Stores Safely

The physician’s determination of the initial dose is based on the following factors:

- The patient’s current level of opioid dependence (tolerance) as estimated by the quantity of the drug used daily, presence of withdrawal, and, if available, recent responses to methadone itself.
  - Note that there is no direct way to measure tolerance.
  - **The presence of withdrawal confirms the diagnosis of physical dependence; however the severity of withdrawal does not establish the level of tolerance. In other words severe withdrawal at intake does not necessitate a higher starting dose.**
- A knowledge of methadone’s pharmacology, the individual patient’s characteristics, and the patient’s current medications
- Knowledge of California and federal regulations that limit the size of the initial dose.

Selecting a starting dose is particularly challenging when the patient has been using prescription opiates or smoking opium. Use of an opioid conversion table is not recommended. **The “equivalent” dose given for methadone in the table may be too high when given as a daily dose.**

The conversion table gives the dose of various opioids that will have the same effect as a given dose of morphine when given in the acute setting for treatment of pain. It compares the effect of one dose of a given opioid with one dose of morphine without taking into account the effect of accumulation before steady state is reached.

If there is any question as to the level of the patient’s tolerance, an initial dose of 5 - 15 mgs maybe safely given, and follow up doses may be provided every 3 to 5 hours as clinically indicated. Indeed, this may be the preferred course for hospitalized patients receiving 24-hour care and for pregnant patients (See Section on Pregnancy). **By regulation, the maximum initial dose cannot exceed 30 mg, but a follow up dose may be given on the same day after observation for a period of time determined by the physician.**

**The total dose allowed on the first day may not exceed 40 mg** unless the physician clearly documents in the chart why he or she believes that 40 mg will be insufficient to control withdrawal. Typically, patients start at 20-40 mg of methadone on the first day in the outpatient setting.

The next few days are critical. Patients are uncomfortable; it may be hard for them to avoid using heroin or other opioids, and they are at risk for overdosing if they do.

Although “start low and go slow” reflects safety concerns in early methadone treatment, most patients in the United States ultimately require daily doses between 80 and 120 mg to achieve stability. A very timid approach to induction (for example, 10 mg every 5 days or so) can delay relief to the point that patients will continue to use, putting them at risk of overdose and delaying stabilization as their tolerance increases faster than the dose. A balance between safety and efficacy concerns is best served by daily evaluation during the induction period as the dose builds to therapeutic levels. Daily
evaluation will allow the physician to address the patient’s discomfort. If the patient did not experience complete suppression of withdrawal within 2-4 hours of dosing, it is reasonable to increase the dose by 5-10 mg. However, if the patient did experience suppression of withdrawal in 4 hours but symptoms re-emerge before 24 hours, any increase should be delayed for another day or two, while observing the patient, to allow for the accumulation of the stores, with the expectation that the dose will cover a little longer each day. Suppression of severe physical withdrawal is usually accomplished over a week or two, concluding the first phase of treatment induction.

The goal is to achieve methadone levels that will prevent craving and withdrawal as quickly as can be done safely.

**Stabilizing on a Therapeutic Dose**

A dose that only suppresses physical withdrawal is not the same as a therapeutic dose. A therapeutic dose will also take away the urge to use or unwanted thoughts about using (cravings). In order to reach stabilization, some patients need a dose that will block their ability to feel euphoria from opioids of abuse. A therapeutic dose provides suppression of withdrawal for the entire interval between doses without sedation.

Outcomes are better when a therapeutic dose is achieved, so frequent check-ins with the patient about dose adequacy are important early in treatment, during stabilization. In some OTPs, the counselors are specifically trained to interview the patient about symptoms of withdrawal, cravings and adequacy of dose and to pass on information to clinical staff when patients are still symptomatic. This integration of care - where counselor, dispensing nurse, and clinician are all alert to the need for therapeutic doses – supports the patient’s compliance in treatment. The physician working closely with a well-trained staff must always be mindful of the patient’s potential for concomitant drug and alcohol use, and of prescribed medications that can act to enhance the sedative effects of methadone by additive or synergistic CNS effects, or by increasing its effective plasma level. There are other prescription medications that can raise or lower the methadone plasma level. (A publication of Addiction Treatment Forum: “Methadone-Drug Interactions” lists medications that affect methadone plasma levels and increase or decrease methadone effects. A copy is available from the ATF website: [http://www.atforum.com/SiteRoot/pages/addiction_resources/Drug_Interactions.pdf](http://www.atforum.com/SiteRoot/pages/addiction_resources/Drug_Interactions.pdf). Underlying medical conditions, such as chronic obstructive pulmonary disease, cirrhosis, etc., must also be considered when assessing dose adjustments and safety.

In general, it takes 4 - 5 half-lives (~ 5 days) to reach steady state. After an initial buildup, dosage adjustments of 5 - 10 mgs every 3 - 5 days are usually adequate. For example, a symptom-triggered protocol can be used which gives 5 mgs for drug craving or up to 10 mg for physical symptoms (i.e. runny nose, cramps, etc.) Essentially, each clinician must use his or her clinical judgment based on the unique characteristics of the individual patient. During this early period of stabilization, it is more helpful to ask the patient whether the dose completely controlled symptoms of withdrawal 2 - 4 hours after dosing than whether the dose “held” for the full 24 hours. A new dose that completely suppresses withdrawal 2 - 4 hours after it is taken, that is, at peak plasma level, may cover for the full
24 hours after it has been taken for a few days and a stable blood level has been reached. This is because of the build-up of tissue stores.

This initial stabilization period is one of the hardest to manage, clinically, because patients are fearful of being sick, and they are tempted to supplement their dose with outside opiates to alleviate the symptoms. The physician should inform patients that the methadone dose is expected to allow them to stop heroin use completely and should caution them against on-going use of heroin, explaining that using heroin on top of the methadone increases their tolerance and makes it more difficult to achieve a stable dose. The physician should also encourage patients to avoid people, places and situations where opiates are available because such situations can intensify craving and trigger symptoms of withdrawal.

Utilizing this “start low, go-slow” approach, patients generally reach 24-hour coverage of physical symptoms within the first few weeks of treatment. Complete suppression of craving and abstinence may take longer and may necessitate doses in the 80 - 120 mg range (or higher) as clinically indicated.

In California, the 180 mg dose cap was removed from the Health and Safety Code in 2002. However doses above this level are unusual and exceptional. California regulations require that a dose above 100 mg be justified by the physician in the patient’s record.

Every effort should be made to individualize the patient’s dose. The objective is to achieve a stable maintenance dose that allows the patient to conduct activities of daily life without sedation or withdrawal.

Plasma levels of methadone (i.e., trough and peak levels) can be utilized as an adjunct to clinical evaluation, to evaluate the safety and adequacy of a patient’s dose. Some clinicians obtain methadone quantitative blood levels when a patient’s dose exceeds 100mg per day. Payte (Payte & Zweben 1998) notes that absolute numbers in evaluating trough levels are less useful than a comparison between peak and trough levels. The peak level is generally less than twice the trough level in a patient with a normal methadone metabolic rate. Comparing a patient’s peak and trough levels can give the clinician a sense of a patient’s rate of methadone metabolism. Although blood levels should not replace good clinical judgment, they can provide a point of reference. Payte notes that adequate trough levels in the highly tolerant opioid dependent patient are in the 400 to 600ng/ml range. Other patients may stabilize at trough levels of 100 to 200ng/ml. Whether the patient has high or low trough levels, peak levels of more than twice the trough level suggest a rapid metabolic rate of methadone, and such patients may not stabilize on a single daily dose of medication.

**Procedures for using blood levels**

After the patient has taken a given daily dose for 5-7 days (ie, steady state would be expected), the ‘trough’ level is drawn 24 hours after taking the dose. Then a new dose is ingested, and another level, “the peak,” is drawn 2-4 hours after ingestion. The patient is usually asked to remain at the clinic for those three hours, to preclude other methadone ingestion in the interim. For example, a patient who usually comes in to dose at 7AM is observed to take 120mg of methadone for seven days at the
dispensing window. On the 8th day he or she goes to the lab, has the trough level drawn, then proceeds to the dosing window and takes the usual dose of 120mg. At 10AM he or she goes back to the lab, and has the second level drawn. An appointment is made to review the results with the physician the following week. If the 10AM level is more than twice the 7AM level, and if the patient is stable enough to handle a daily take-home bottle of methadone, the patient and physician may decide to split the dose, taking 60mg at 7AM, and another 60mg at 7PM. An important caveat is that the readily available serum levels do not distinguish active and inactive isomers of methadone.

While most patients can be stabilized on a single daily dose, rapid metabolism of methadone may make it impossible to stabilize some patients on a single daily dose. In this situation, split dosing may be necessary to alleviate withdrawal. A patient’s perception of stability is based on the relative rate of decline of the methadone blood level. As methadone peak to trough ratios increase, say from 2:1 to 4:1, the patient is more likely to feel the variation as symptoms of withdrawal. Split dosing usually requires that the patient be given a daily take home dose. The physician must weigh the risk of diversion against the benefit to the patient. In cases where the patient has not been in treatment long enough (270 days) for the regulations to allow seven take-homes per week, a waiver from CSAT is needed prior to initiating split dosing. (Form SMA 168). In addition, the patient must meet the other state and federal regulatory criteria in the sections on Take Home Medications.

Split doses are recommended in pregnancy. See the Section on Treatment of Pregnant Women.

**Maintaining Stability, or Re-evaluating the dose in the event that the clinical picture changes**

Once a patient has stabilized on a therapeutic dose, it can still be clinically challenging to aid the patient to maintain stability on that dose. Should the clinical picture change, it behooves the physician to reassess the patient. The patient may be complaining of sedation, new side effects or re-emerging withdrawal. A discussion with the counselor and nursing staff may be helpful. Often it is necessary to meet with the patient to evaluate.

Relapse should always be ruled out as a reason for loss of stability. The physician should also consider other possible reasons. Non-specific stress can result in patients’ experiencing withdrawal symptoms. Addicted patients may suffer from deficits in the stress response system. In the event of a re-emergence of withdrawal due to increased life stressors, an increase in the daily methadone dose may be indicated. Conversely, when patients achieve stability in their life and are no longer confronted with daily “triggers,” they may no longer need a “blocking” dose, and may do well at a lower dose than that which was initially indicated.

Medications such as anti-convulsants (carbamazepine, phenytoin, etc..) some antibiotics (rifampin) and some anti-virals can all increase metabolism and reduce the effective blood level of methadone; while other drugs (such as macrolide antibiotics, Luvox®, etc..) may decrease metabolism and require a decrease in the methadone dose. (See the list of medications that change the effective methadone

Partial opioid agonists or antagonists can acutely precipitate withdrawal in patients maintained on methadone. Precipitated withdrawal has a sudden onset and is more severe than naturally occurring withdrawal, and in some cases may be hazardous. Patients should be educated and warned about the more common of these drugs, such as Talwin®, Narcan®, Nubain®, or Suboxone®. Some programs have them listed on the patient identification cards.

Continued or resumed use of short-acting opioids during methadone maintenance treatment may increase tolerance and render the current dose inadequate. In this situation, efforts to encourage abstinence by medical and counseling staff are indicated. If the short-acting opioid of abuse is still producing euphoria, a methadone dose increase to block this effect may be offered. A methadone dose increase may also help to suppress drug cravings. Coordination with prescribing physicians to limit the number of short-acting opioids obtained by prescription may also be helpful. (See Section on Chronic Pain.)

Continued abuse of non-opioid substances is addressed vigorously in counseling sessions, and does not necessarily lead to discharge from treatment. Use of some drugs such as alcohol and benzodiazepines may require methadone dose reductions to counter over-sedation, and this can significantly interfere with adequate control of opioid craving. If the patient is using a sedative known to produce a medically significant withdrawal syndrome, such as benzodiazepines or alcohol, the physician will need to determine whether a medically supervised withdrawal from the sedative is necessary and where and how such detoxification treatment is to be accomplished. Withholding or reducing the methadone dose may help prevent over-sedation, but will not solve this difficult problem. (See Section on Management of Co-Morbid Poly Substance Use.)

Intercurrent medical or psychiatric conditions can sometimes explain new onset of withdrawal in a previously stable patient. Other conditions may actually change the metabolic rate of methadone, or mimic symptoms of withdrawal, or carry a burden of stress and worry than triggers craving. Minor colds and flu may “feel like” withdrawal; patients need reassurance and suggestions for symptomatic relief. New medication or changes in the dose of an existing medication may precipitate sedation or withdrawal, depending on the medication. Although withdrawal affects mood, and mood is improved with adequate dosing, anxiety that is related to depression or an underlying anxiety disorder will not respond to a higher dose of methadone; rather the underlying condition must be treated with appropriate psychotropic medications or counseling.

In a patient who has been in treatment beyond the induction phase, changes of 5 or 10 mg at a time are generally used to adjust the dose up or down when indicated. A five milligram change may be adequate if the current dose is 40 mg or less. For patients on doses greater than 40 mg, it is reasonable to change the dose by 10 mg and re-evaluate frequently. Payte notes that it takes 4 to 5 half-lives to achieve a new steady state, which could be 4 to 5 days. Further changes in 5-10 mg increments every 4-5 days may be made until the symptoms resolve.
In the case of insomnia it may be hard to tell whether the dose should go up, down or stay the same. Many opioid dependent patients have sleep disorders that need non-opioid specific treatment. On the other hand, if the maintenance dose is too low, methadone blood levels may be dropping to sub-therapeutic values during the night, producing withdrawal-mediated insomnia. In a case where the patient has been unable to rest during the night because of withdrawal, he or she may fall asleep during the daytime when blood levels are adequate and thus may appear to be over-sedated by his or her dose, when, in fact, the dose is actually too low to maintain steady blood levels through the night. Careful interviewing and monitoring may help distinguish the proper clinical choice in these cases.

There are some situations, most notably pregnancy or the initiation of prescription anti-convulsants or rifampin, which do not respond to the incremental dose increases described above. In these situations, patients may need a split dose to re-stabilize. Split dosing is discussed earlier in the document in the Section on Determining and Adjusting the Dose.

This review of maintaining stability is not intended to be exhaustive, but rather to address some of the more common dosing issues. Carefully and respectfully listening to the patient’s specific concern often helps to clarify the nature of the problem, so that the discomfort can be addressed whether it involves changing the methadone dose or some other intervention.
**Section on ADVERSE REACTIONS**

When properly used for the treatment of opioid withdrawal, methadone is a medication with an excellent safety record. Adverse (i.e. unwanted or unfavorable) reactions have been described in the Physicians Desk Reference and are summarized in Table 5. Many of the listed effects are general opioid effects and would be expected to lessen when switching from a short (heroin) to a long acting opioid (methadone). One notable exception is constipation; it is worse with long-acting opioids.

<table>
<thead>
<tr>
<th>TABLE 5 ~ ADVERSE REACTIONS AS LISTED IN THE 1999 PHYSICIANS DESK REFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Central Nervous System</strong></td>
</tr>
<tr>
<td>1. Euphoria</td>
</tr>
<tr>
<td>2. Dysphoria</td>
</tr>
<tr>
<td>3. Weakness</td>
</tr>
<tr>
<td>4. Headache</td>
</tr>
<tr>
<td>5. Insomnia</td>
</tr>
<tr>
<td>6. Disorientation</td>
</tr>
<tr>
<td><strong>Genito-urinary</strong></td>
</tr>
<tr>
<td>1. Urinary Retention</td>
</tr>
<tr>
<td>2. Hesitancy</td>
</tr>
<tr>
<td>3. Antidiuretic</td>
</tr>
<tr>
<td>4. Reduced Libido</td>
</tr>
<tr>
<td>5. Reduced Potency</td>
</tr>
<tr>
<td><strong>Gastrointestinal</strong></td>
</tr>
<tr>
<td>1. Dry Mouth</td>
</tr>
<tr>
<td>2. Anorexia</td>
</tr>
<tr>
<td>3. Constipation</td>
</tr>
<tr>
<td>4. Biliary Tract System</td>
</tr>
<tr>
<td><strong>Allergic</strong></td>
</tr>
<tr>
<td>1. Pruritis</td>
</tr>
<tr>
<td>2. Urticaria</td>
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<tr>
<td>3. Rash</td>
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<tr>
<td>4. Edema</td>
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<tr>
<td><strong>Cardiovascular</strong></td>
</tr>
<tr>
<td>1. Bradycardia</td>
</tr>
<tr>
<td>2. Palpitation</td>
</tr>
<tr>
<td>3. Faintness</td>
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<tr>
<td>4. Syncope</td>
</tr>
</tbody>
</table>

Note: the 1999 PDR is referenced because subsequent editions either do not address adverse reactions as clearly and concisely or do not include full prescribing information for methadone.
The most frequently observed adverse reactions in methadone maintenance patients are sweating, sedation, constipation and decreased libido. Many patients gain weight when they achieve abstinence from heroin use and they attribute it to methadone. Often patients' eating habits change dramatically when they stop using heroin, so it is unclear whether methadone plays a role in the weight gain.

Although opioids in general may be stimulating, sedating or both, and some patients may find methadone to be more sedating than their opioid of abuse, patients generally develop tolerance to sedation. Dose reductions may be needed until tolerance to sedation occurs. Interaction of methadone and other CNS depressants (i.e., alcohol, narcotic analgesics, tranquilizers and tricyclics, etc.), is of particular concern since this can lead to hypotension, profound sedation or coma. Patients with respiratory, cardiovascular, or other compromising conditions are particularly vulnerable to these mishaps. Narcan® (naloxone) is the usual choice for the immediate treatment of the respiratory depression that may accompany the profound sedation. Emergency transport to a hospital in this situation is mandatory. A dramatic reaction to naloxone injection should be anticipated in any methadone patient, and treatment should be started with low doses of naloxone, watching for vomiting, aspiration and agitation. Repeated administration of naloxone may be necessary. Medical surveillance may be necessary for 24 hours or more, due to methadone’s long half-life and naloxone’s short duration of action. Consideration of repeated dose administration is particularly necessary if the patient has concurrently ingested another long-acting sedative.

Tolerance to sweating and constipation is not likely to occur, but can be managed clinically using anticholinergics for sweating. Methscopolamine 2.5 mg tid may be used as a ‘drying’ agent in cases of severe sweating, but is not useful if patients have high blood pressure or urinary retention. Stool softeners or osmotic cathartics may be used for constipation. Decreased libido in men is also common, but treatable. This may be due to lower testosterone levels. In some cases it improves in time, without treatment.

Cardiovascular side effects of methadone have been the subject of attention due in part to the association between LAAM and prolonged QT intervals and Torsade des Pointes, a potentially fatal arrhythmia. Small increases in QT interval (10.8 milliseconds) have been observed after stabilization on MMT at usual therapeutic doses of 30 to 150 mg. These increases were not clinically significant. There is a published case series of patients who experienced TdP at high doses of methadone, above 200mg per day. There are currently no standards for assessing risks of QTc prolongation with higher doses of methadone. Some OTPs have instituted EKG screening at doses over 180 mg and/or trough levels over 500 ng/ml as a safety precaution, especially if the patient is at risk for QT prolongation for other reasons, due to other medications for a cardiac condition. For a more complete and well-referenced summary see the AT Forum web site at www.ATForum.com.
Section on MANAGING MAINTENANCE TREATMENT

After admission and after stabilization of the patient’s methadone dose, physicians provide ongoing medical oversight to the patient’s overall treatment. OTP physicians evaluate patients who appear sick or intoxicated when they present for dosing or who have missed multiple doses.

Federal regulations indicate that it is the physician’s responsibility to assure that patients receive adequate counseling. Psychosocial treatment is a vital component of MMT and has been shown to increase the efficacy of MMT when compared to treatment with medication alone, especially in the first six months of treatment. The physician reviews and signs each patient’s treatment plan every 90 days by California regulation. California regulations are very detailed in describing what must be in the treatment plan. In addition, accrediting bodies such as JCAHO and CARF have their own standards for treatment planning. Treatment planning in the OTP is multidisciplinary; the treatment plan is usually written by the patient’s counselor. In this guideline, we address only the part of treatment plan that demands physician input.

California regulations require that current medications, including the methadone dose, be listed on the treatment plan and that the frequency of clinic attendance for dosing (i.e., the take-home step), and the frequency of urine testing and counseling be specified. OTP physicians work with counselors to include medical problems on the treatment plan, as a mechanism to assist patients to follow through with referrals for evaluation and treatment of new medical problems and routine follow-up of chronic medical problems.

It is the physician’s responsibility to review prescription medications and coordinate with prescribing physicians when necessary and possible. This must be done with the patient’s consent. Some patients are reluctant to divulge their addiction treatment to physicians outside the OTP. The OTP physician is often called upon to determine whether substances appearing in a patient’s urine are explained by legitimate prescription medications or represent substance abuse. The physician has a responsibility to ensure that patients are being tested for the relevant substances of abuse.

There are times when patients on MMT are denied medical treatments that are necessary and appropriate because of a lack of information or due to prejudice about methadone. For example, a common misconception is that patients on MMT do not require pain medication to manage acute traumatic dental or post-operative pain. Another is that patients on MMT are not apt to benefit from treatment for hepatitis C. Frequently patients on MMT are pressured to taper off methadone in order to qualify for treatment for hepatitis. The OTP physician is in a position to intervene in many such situations, preventing unnecessary suffering.

When a patient on MMT is hospitalized or incarcerated, the OTP physician coordinates with the treating physician at the hospital or the jail medical unit as necessary.

In summary, the role of the physician in managing maintenance treatment is to:

1) Review each patient’s treatment plan to assure that treatment is appropriate to the patient’s needs.
2) Review the methadone dose to assure that it is adequate and safe.
3) Review the toxicology testing order to be sure the relevant drugs of abuse are included and the frequency of testing is adequate.
4) Assure that the patient is receiving adequate counseling.
5) Review drug screening results to assure accurate assessment of the information, and respond if medical evaluation is needed.
6) Encourage and support the patient in following up on new referrals and with in seeing his/her regular physician for chronic conditions.
7) Review and track the patient’s prescription medications, intervening with the patient if use appears problematic.
8) Advocate on the patient’s behalf regarding issues such as pain management, treatment for hepatitis C, and the necessity and legitimacy of ongoing methadone treatment.

Section on MANAGEMENT OF CO-MORBID POLY SUBSTANCE USE

Some patients will continue pretreatment patterns of drug abuse despite methadone treatment. Increasing the methadone dose will often stabilize patients who are still abusing opioids. However, polysubstance use is a common problem in the opioid-dependent population. When patients are using alcohol, stimulants and/or other non-opioid drugs instead of or in addition to opioids, other interventions will be needed to help the patient achieve abstinence. The physician and/or other clinical staff members should meet with the patient to determine whether there are unaddressed medical issues, such as pain, insomnia, psychiatric illness or physical dependence on a non-opioid drug which may be contributing to the ongoing use. The physician and the counselor should work with the patient to determine whether social/lifestyle issues can be addressed on an outpatient basis. Transfer to a more intense level of care (e.g., increasing counseling, groups, day treatment, or residential treatment) may be needed.

Stimulants

A patient’s use of cocaine and/or methamphetamine should be addressed in the treatment plan. Signs and symptoms of stimulant intoxication include euphoria, paranoia, anxiety, agitation, irritability, and suicidal states. Withdrawal includes anxiety, depression, fatigue, and possibly increased risk of suicidality. This withdrawal or “crash” period may last three to five days and may contribute to clinic absences. Patients may feel they are “not addicted” because the withdrawal is less obvious than opioid withdrawal symptoms, although craving is severe.

It is important to recognize cocaine or methamphetamine abuse as early as possible. The initial history, physical, and UA screen will usually identify a stimulant-abusing patient and the initial treatment plan should address this problem as a treatment issue. Medical and psychiatric conditions should be explored as possible influences on stimulant use. Proper evaluations may require some period of abstinence from stimulant use. This may require stimulant-specific program interventions, such as mandated treatment in groups that focus specifically on stimulant use.

Ongoing stimulant abuse is an indication that the patient is unstable and in need of a higher intensity of care. When possible, more intensive outpatient or residential treatment should be recommended and arranged while the patient remains on MMT. Discharge should be avoided unless the patient
declines to enter an appropriate level of care. Whether MMT patients are discharged for ongoing stimulant abuse depends on a program’s philosophy of care. If the opioid abuse is improved, some clinics continue to work with stimulant-abusing patients, addressing such abuse aggressively in counseling, but not discharging the patient unless methadone treatment is actually compromised, such as with absence from the clinic.

**Alcohol**

Alcohol use/abuse/dependence is not only a common problem among opiate dependent patients but also contributes to the high mortality rate in this population. Hepatitis C infection is almost universal among heroin-injecting patients, and the combination of active hepatitis C and alcohol abuse will accelerate the progression to cirrhosis and liver failure.

Alcohol abuse impacts methadone in two other substantial ways. Acute use, especially when combined with methadone, leads to synergistic sedative effects. Chronic use stimulates the metabolic activity of the P450 enzymes leading to greater methadone metabolism and thus a reduced methadone blood level. Achieving a stabilized methadone dose may be complicated by the concomitant use of alcohol.

Early screening, intervention and treatment planning are essential to effect change in this potentially lethal behavior. An alcohol history should be part of the initial admission evaluation; standardized screening instruments, such as the CAGE or AUDIT may be used. Alcohol breathalizers can be used to identify patients who are unable to control their drinking. Breathalyzer testing may help to clarify a patient’s drinking pattern, daily versus weekend or holiday binges. Some patients are able to titrate their alcohol consumption to avoid a positive breath test when they come to clinic to dose. Urine alcohol screens may be helpful in this situation, as the urine will remain positive longer than the Breathalyzer indicates.

The patient who presents for dosing with a positive Breathalyzer test poses a clinical dilemma. Safety is the issue. A dose of methadone on top of an unknown quantity of alcohol puts the patient at risk for sedation or overdose. Missing a dose of methadone increases the likelihood that the patient will use heroin in addition to alcohol. Serial Breathalyzer tests (i.e. two tests about 30 minutes apart) may be used to determine whether the patient’s serum alcohol level is on the way up or down. The physician’s role is to determine whether it is safe for the patient to receive his/her regular dose of methadone or some portion of it.

 Physicians’ practices vary. Some decline to administer a dose of methadone to a patient who has any positive Breathalyzer score. A more common approach is to withhold the dose if the patient appears under the influence (UTI) or has a Breathalyzer >.04. Intoxicated patients should relinquish their car keys and arrange other transportation home. Patients with a positive Breathalyzer <.04 may be given a partial dose (e.g., half) provided they do not appear under the influence. When the Breathalyzer is <.02, it may be reasonable to continue the regular dose. These protocols depend partly on clinic
philosophy. Because of the high prevalence of hepatitis C, some clinics have a lower threshold for holding the dose, to discourage alcohol use in this group.

In the alcohol-tolerant patient, blood alcohol levels do not necessarily correlate with functional impairment. Even if the patient is alert with alcohol “on board,” the effect of methadone in synergism with the alcohol may significantly reduce alertness after dosing.

When alcohol use is identified, the patient’s treatment plan should reflect it and include approaches to address it. Frequent follow-ups may be offered in order to provide brief interventions (see CSAT Tip 34) and possibly pharmacotherapy. Withdrawal from alcohol can be medically dangerous. Patients whose Breathalyzer results are positive on more than one occasion should be evaluated for the presence of physical dependence and assisted to obtain medical detoxification from alcohol when needed. Some programs offer outpatient detoxification from alcohol with phenobarbital or benzodiazepines. Patients whose past history includes severe alcohol withdrawal, such as seizures (patients may refer to “DTs”), or patients who are medically fragile or pregnant require hospitalization for detoxification from alcohol use. (ASAM Principles of Addiction Medicine) (2004) In some communities the prevalent stigma associated with MMT, even in some addiction treatment programs, makes it difficult to place methadone maintained patients in inpatient alcohol treatment facilities.

When physical dependence is not, or no longer, an issue, pharmacotherapy with disulfiram (Antabuse®) may be considered. The typical dose is 250mg to 500mg per day, and the first dose should not be given until the patient has been alcohol free for at least 48 hours. Patients receive information about inadvertent alcohol ingestion in mouthwash, marinades, etc, and sign a consent that explains the potential violent physical reaction to alcohol exposure while on disulfiram. The physician ascertains that the patient does indeed understand the purpose and effects of the medication before prescribing or dispensing. Dispensing the medication at the clinic’s dosing window increases the likelihood of compliance. The disulfiram can be mixed with the liquid methadone once the patient earns take-home privileges. The use of this deterrent medicine has been shown to be effective in several studies with methadone patients. It is explained more fully in Chapter 6 of the textbook, Methadone Treatment for Opioid Dependence (Stitzer 1999) The chapter title is “Other substance use disorders in methadone treatment: prevalence, consequences, detection and management.”

Acamprosate (Camprol®) is another pharmacotherapeutic agent that has been approved by the FDA for the treatment of alcohol addiction. The usual dose is 666 mg t.i.d. Treatment is delayed until the patient is abstinent from alcohol and neither experiencing or at risk for alcohol withdrawal. The purpose is to assist the patient to maintain abstinence. There are no known drug interactions, but “the efficacy in promoting abstinence from alcohol in polysubstance abusers has not been adequately assessed.” (PDR 2005)

**Benzodiazepine**

Abuse of benzodiazepine (particularly clonazepam (Klonopin®) and alprazolam (Xanax®)) is common amongst opioid addicted patients and is noteworthy because benzodiazepine produces
synergistic sedative effects with opioids such as methadone. Patients may use benzodiazepines to suppress the agitation produced by stimulant abuse or to potentiate an opioid high. (Patients may say they abuse benzodiazepines because “it makes the methadone feel like heroin.”) Abuse of this class of drugs is often implicated in polysubstance overdose deaths. Due to the frequency of abuse and patients’ inconsistent reporting at admission, it may be worthwhile to add benzodiazepine to the admission drug screen and to subsequent screens in patients whose history is suggestive or who screen positive at admission. Note that testing for clonazepam (Klonopin®) and lorazepam (Ativan®) requires special assays; routine benzodiazepine screens will not detect them.

Patients may obtain benzodiazepines illicitly or by prescription from a physician. Patients taking prescription benzodiazepine should sign a release to allow the OTP physician to communicate with the prescribing physician. Because of the potential for overdose when mixing benzodiazepine with other sedatives, the prescribing physician should be aware of patient’s methadone treatment. Careful tracking of prescription records and urine screening tests provide information that can alert both the OTP physician and the prescribing physician to prescription abuse.

Withdrawal from long-term use of benzodiazepine can be challenging. It tends to be a slow process, and symptoms may emerge which require treatment with ancillary medications. Patients may require residential care to comply with the supervised withdrawal. Protocols exist which can provide a safe reduction and cessation of the drug if clinically warranted. Coordination with the patient’s mental health and/or primary care provider is essential.

Carisoprodol (Soma®), a non-benzodiazepine sedative-hypnotic drug, is a frequently found, concomitantly abused drug. Its use in the context of a maintenance program should be strongly discouraged. Routine drug screenings do not identify carisoprodol; special testing is required to detect it.

**Nicotine**

The majority of patients in methadone treatment smoke cigarettes. As in the general population of smokers, most opioid addicted patients started in their teens. Although the high morbidity and mortality of smoking is generally understood, many patients do not recognize the specific impact that smoking is already having on their own health, nor are they aware of the inevitability of lung disease in everyone who smokes for 30-40 years. Many patients express an interest in quitting and find the recovery skills they are learning for their opioid addiction are useful in addressing their nicotine addiction. Patients may have cut down or temporarily quit, or repeatedly tried to quit, and may be discouraged about their inability to stop smoking. Pharmacotherapy (buproprion, nicotine patches or gum) may be very helpful, particularly for patients who are heavy smokers. The efficacy of pharmacotherapy increases when patients attend a cessation support group. The OTP can encourage smoking cessation by having cessation support groups on site and by prohibiting smoking on clinic premises, so that patients do not have to see and smell cigarettes when they come to the clinic. Some patients report smoking more when they are ‘high’ and might smoke right after taking their methadone dose. Consistently addressing smoking behavior in treatment plans and at annual examinations and offering smoking cessation interventions on-site does encourage patients to cut down and eventually quit smoking.
Co-existing depression is a factor that reduces success in smoking cessation. It is advisable to assess for depression before the patient launches the attempt to quit. Those already on antidepressants may require a dose adjustment once they quit.

Section on CO-MORBID PSYCHIATRIC CONDITIONS

Numerous studies have documented the high incidence of psychiatric disorders in opiate addicted populations – disorders that often preceded the substance abuse. It is important to diagnose and treat psychotic, mood, and anxiety disorders (Axis I disorders) because of the significant degree of impairment associated with them and because substance use is likely to continue when symptoms remain untreated. Mood disturbances may also be a sign of withdrawal and may respond to even small dose adjustments in some patients. If mood problems disappear at peak blood levels and recur at trough, this is suggestive of withdrawal-mediated mood disturbance, perhaps related to rate of drop in the blood level. (Dyer et al. 2001) It is also important to be alert for personality disorders (Axis II) because they are fairly common in opioid addicted patients. Some behaviors that are associated with drug abuse, such as stealing or lying, may disappear after the addiction comes under control, and should not be confused with antisocial personality disorder. An Axis II disorder is a label that may carry additional stigma for an already stigmatized patient. Professionals outside the addiction field are especially likely to miss important distinctions, and then the patient carries a diagnosis with a poor prognosis (See the Section on Personality Disorders).

The physician should be especially aware of the high incidence of physical and sexual abuse and post-traumatic stress disorder among opiate dependent patients.

Axis I Disorders

There are three service delivery models for managing co-occurring substance abuse and mental illness: integrated, parallel, and sequential. In an integrated model the same staff provides both substance abuse and mental health services, usually in the same facility, increasing the likelihood of compliance with a consistent treatment plan. In a parallel model different agencies provide treatment independently. This model suffers from difficulties with coordination of care and sharing of information, but it is likely the most common model. The final model withholds one treatment, usually mental health care, until what is considered the primary problem is addressed. This model may avoid unnecessary treatment when psychiatric symptoms are drug related and clear rapidly. However, severe psychiatric symptoms, such as suicidal depressions, psychotic or bi-polar disorders, and severe anxiety disorders, must be evaluated and treated psychiatrically even if they are drug-related. Sequential treatment where no mental health care is provided until there is recovery from substance abuse is impractical and unethical in cases of severe mental illness.

The OTP is responsible for screening for mental health disorders and for developing a treatment plan for care, when present. If the patient already has access to ongoing mental health care, it may at times be important for the physician in the opioid treatment program to establish a liaison with the therapist.
Otherwise, mental health providers may not be aware of substance abuse or of the patient’s participation in opioid addiction treatment. Active substance use is not a contraindication to the use of anti-psychotics, mood stabilizers, antidepressants, or even judicious use of anti-anxiety agents. Appropriate psychiatric treatment can be critical to the patient’s ability to participate in a recovery plan. Dispensing psychiatric medications with methadone may improve compliance and control misuse. For example, the OTP may store non-opioid medication for the patient and assist the patient to take it on a regular schedule by observing him/her taking it at the same time that the patient takes the methadone. Some DEA and California auditors have recommended a written release from the patient allowing the OTP to store and dispense the medication in such situations.

OTP physicians should develop the expertise to diagnose and treat uncomplicated Axis I disorders such as dysthymia, major depression, and anxiety spectrum disease. If time does not permit or if the psychiatric condition is severe, the physician should refer to a psychiatrist. The physician should help establish a supportive mental health referral source for OTP patients. Supportive linkages are especially important in programs with limited or no psychiatric resources.

**Personality Disorders**

The diagnosis of personality disorders in substance abuse disorders is fraught with pitfalls. The most common problem is the use of this diagnosis as a statement of dislike of the patient, harkening back to an outdated moral model of addiction as ‘character flaw’. Diagnostic reliability is less with personality than with Axis I diagnoses. This may be especially true of substance users with co-occurring mental illness. And patients often have traits from different personality disorders. Opioid addicted patients may present with traits clustering in the anti-social, borderline, and histrionic group (cluster A disorders), the passive, dependent, avoidant group (cluster B), and paranoid and schizotypal group (cluster C). It is not always clear if these character traits are primary or secondary to the substance abuse. For example, much anti-social behavior associated with heroin addiction is a direct result of its illegality, and the need to associate with the deviant element that controls the illegal drug trade. Some have considered this to result in a ‘secondary’ anti-social disorder that is milder and more correctable. Addressing only the drug use may not suffice. It is important to address the antisocial or criminal thinking habits in counseling.

Whatever role personality disorders play in addiction, their role is neither exclusive nor essential. And the good news is that there is clear evidence that personality disordered patients can respond well to treatment. Some of these patients, however, may require specific psychiatric treatment programs to address problematic behaviors.

The incidence of personality disorders is reported to be high in addicted patients, in particular antisocial personality disorder (APD). Some argue that behavior associated with APD, such as lying and stealing, is part of the addiction and that the Axis II diagnosis is redundant because the same behavior can be explained by the Axis I diagnosis of drug dependence. Addiction treatment specialists point out that patients with drug dependence can and frequently do experience and express remorse for their antisocial behavior and that such behavior may clear completely when the addiction is treated.
Regardless of the source or underlying diagnosis, aberrant behavior is frequently seen in the OTP and is best addressed by a well-defined structure of treatment, with clear rules of behavior and clear consequences for undesired behavior. Structure creates safety for the patient in early treatment, during periods of instability.

Summary
The frequent overlap between psychiatric illness and substance abuse disorders demands specific efforts at integrating services. These two disorders share many characteristics, yet historically different funding mechanisms have created a system where it is very difficult to provide appropriate care for both conditions. Lack of cross training of substance abuse and mental health service providers further interferes with patients’ getting the benefits of complementary care. The physician in an OTP must provide staff education and guidance in assuring treatment of co-occurring disorders.

Section on CONCURRENT MEDICAL CONDITIONS
Medical co-morbidity seen in the OTP is rarely due directly to the opioid, but rather to the method of ingestion, or to high-risk activities related to obtaining the drug. Medical complications of other drugs of abuse, such as cirrhosis, dementia or GI bleed from alcoholism, stroke and tachycardia from stimulant abuse, or chronic lung disease from cigarettes also may be present at intake or in patients who do not achieve abstinence. Urgent medical conditions may be partly masked by the sedating and analgesic properties of the opioid of abuse at the intake encounter. After abstinence is achieved during treatment, chronic conditions often require continued attention.

Urgent conditions

Abscess and cellulitis
Needle-related skin infection may become an abscess that needs to be incised and drained. Those skin infections that have been neglected may have spread to the surrounding tissues, requiring aggressive antibiotic treatment.

Necrotizing fasciitis
A special case of the spread of needle-related (usually, but not always streptococcus group A) infection occurs horizontally under the superficial layers and has the potential to lead rapidly to severe destruction of tissue and to death. (Karch & Stephens 2000)

It may present as areas that are painful beyond what would be expected of their clinical appearance on the skin. The clinician might misinterpret a patient’s report of severe pain as drug-seeking behavior, especially in a new patient who is in withdrawal. Prompt intravenous antibiotics and debridement may be life saving. (Smolyakov et al. 2002)
Botulism
The neurotoxin produced by anaerobic growth of clostridium botulinum produces descending paralysis. The early symptoms of botulism, sometimes called ‘bobbing head’ may be misinterpreted by the clinician as opioid intoxication. Patients may also present with complaints of double vision, other vision changes, and difficulty speaking or swallowing. During the 1990s cases of botulism began to appear in heroin users who injected the Mexican ‘black tar’ heroin, and the epidemiology suggests that the toxin is already present in the heroin itself (Anderson, Sharma & Feeney 1997; Jensen et al. 1998; McGarrity 2002; Werner et al. 2000). The treatment requires use of an antitoxin, usually several vials. If there is an identifiable site of infection, it is usually debrided as well, after the antitoxin is administered. Respiratory paralysis threatens if botulism is not treated promptly. When a patient is treated for botulism and is not responding, the possibility of “body packing” (a reservoir of heroin hidden in a body cavity) should be considered.

Infectious endocarditis
Injection drug abusers with a murmur should be evaluated for endocarditis. This is particularly true if they have a fever.

Trauma
The OTP physician may encounter patients who have been in accidents or fights, and who are reluctant to get care elsewhere. Sometimes pain from even severe injuries may be partially masked by drugs of abuse.

Public Health
STDs
OTPs are mandated to do syphilis serology on intake. Screening for HIV, Hepatitis B and C allows the OTP to identify, treat and/or prevent life-threatening disease. Although not all OTPs are set up to do complete genital examination on site, drug abuse may be associated with frequent anonymous sexual encounters, and other STDs should be considered, particularly in cases with symptoms of dysuria, dyspareunia, genital discharge, or abnormal urinalysis on intake. Perhaps the advent of urine testing for chlamydia and gonorrhea will provide easier access to diagnosis and treatment for some patients.

Tuberculosis
OTPs are mandated to screen for TB. Injection drug users are considered to be at high risk for tuberculosis, for this reason all staff and patients should have periodic screening PPD skin tests. If the PPD is positive, chest X-rays are needed to rule out active disease. If negative, the chest X-ray should be repeated periodically, at least every five years. In the event of documented conversion from negative to positive skin test, even with normal chest X-ray, prophylaxis with isoniazid is recommended for nine months for any adult, regardless of age. County public health departments may have local guidelines beyond these general procedures. TB is spread by coughing, and OTP staff should be instructed to be alert to coughing patients. The patient may be handed a mask, and asked to wear it until he or she can be seen by a practitioner, and/or asked to sit in open, ventilated areas, such as a large waiting room.
Chronic medical conditions

Lung Disease
Many OTP patients are cigarette smokers and are at risk for various lung problems. Some OTP patients already have smoke-related lung disease and may have frequent admissions to the hospital in respiratory failure or with pneumonitis. Some patients may be dependent on steroids or on oxygen to control their lung disease. Methadone and other opioids in high doses have the potential to suppress respiration, and although tolerance to this effect is expected during methadone maintenance, during acute exacerbations of underlying lung disease, the opioid may be temporarily reduced by hospital physicians.

TABLE 6 ~ NATURAL HISTORY OF HIV INFECTION

Natural History of HIV Infection

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Group 2 or 3</th>
<th>Group 4</th>
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</thead>
<tbody>
<tr>
<td>Primary HIV</td>
<td>Asymptomatic</td>
<td>Symptomatic/AIDS</td>
</tr>
</tbody>
</table>

0 12 weeks 10 years

Time after HIV infection

- - - Viral load
- - - CD4 lymphocyte levels
HIV
Needle-related HIV may be seen in up to 25% of patients in the OTP, with some regional variation in the incidence. The OTP clinician’s support of the HIV-positive patient will depend on the stage of the illness.

Testing
Since the advent of effective treatment in the mid-1990’s, persons who are HIV positive and don’t know it are the highest risk subgroup among HIV positive persons. Testing should be encouraged, and offered on-site if possible. Some counties have outreach teams that might come to the OTP and perform anonymous testing by oral swab. Pre- and post-test counseling is required for HIV testing.

Primary HIV infection
In the first 12 weeks after exposure to the virus, the acute seroconversion or primary HIV infection may present as fever, malaise and adenopathy. This syndrome is not frequently seen because of its short duration. Also, a patient who is experiencing daily opioid withdrawal may not differentiate the symptoms of primary HIV infection from withdrawal.

Latent phase
After seroconversion there may be a long symptom-free period. The focus of care is to support ongoing monitoring and self-care.

Treatment
Onset of symptoms, drop in CD4 count, and/or rise in viral load are the usual indications for instituting treatment. This is usually triple therapy, with three drugs chosen from among the five classes of available anti-virals. This long-term treatment is called Highly Active Antiretroviral Treatment (HAART), and the OTP clinicians may be helpful in encouraging compliance with this difficult regimen. Discontinuation of the antivirals usually results in resistance to them, so efforts are made to reduce or treat side effects and train patients in regular ingestion of the medications. The OTP may offer observed dosing at the dispensing window. Some of the antivirals share cytochrome P450 3A4 metabolism with methadone, and patients should be monitored for increased withdrawal symptoms. Methadone doses frequently have to be adjusted, but adjustments should be tailored to the particular patient’s reaction.

Opportunistic infections
If stabilization fails and the disease progresses, the patient’s immunity to infection gradually disappears, and medications to prevent pneumocystis carinii, toxoplasmosis, and mycobacterium avium may be instituted.

End of life care
Worsening AIDS may include loss of vision, dementia, loss of balance with frequent falls, weakness, weight loss, etc. Patients who have been doing well and have take-home privileges in the OTP may be at risk of losing their medication, or making mistakes in their ingestion of take-home methadone. On the other hand, disability may make it impossible to stand at the window or to come in daily. Depending on the home situation and availability of hospice or home nursing care, medical exception take-homes may be indicated. Hospice physicians may take over the methadone prescription from the OTP.
Hepatitis
Injection drug use is associated with higher incidence of hepatitis B and C. Those who are susceptible to hepatitis B should be encouraged to undergo immunization. Patients with hepatitis C are at higher risk of an adverse outcome if they contract hepatitis A, so vaccination for hepatitis A is recommended as a liver-protective strategy, particularly for patients who travel to areas where hepatitis is endemic, such as Mexico.

Hepatitis C prevalence in IDUs is 60 to 90% in the OTP. As with HIV, the OTP clinician’s intervention depends on the extent of disease. See Table 7 – Hepatitis C Evaluation Flowsheet

Testing for hepatitis C
Testing for hepatitis C has two phases. The first phase is a test that screens for the presence of hepatitis C antibody that indicates exposure to the virus. This test is relatively inexpensive and is frequently offered as a fingerstick by county agencies. If this test is positive, the more expensive test (phase two) for viral RNA and type is performed to see if exposure resulted in ongoing infection. Of those with ongoing infection, a minority will develop cirrhosis if untreated. The evaluation of patients with ongoing infection is complex, and may involve periodic liver enzyme testing and liver biopsy. Patients are frequently confused about their status.

Alcohol abuse accelerates hepatitis C liver disease. A primary goal in liver disease management is the detection and prevention of alcohol abuse. Periodic breath, saliva, or urine testing for alcohol abuse should be done.

Treatment for hepatitis C
Pegylated interferon, injected weekly, and ribavirin ingested twice daily is the current treatment of choice for hepatitis C, yielding up to 60% sustained viral suppression after treatment. Length of treatment depends on viral genotype, with most IDUs needing a year of this treatment. The side effects of interferon include a flu-like syndrome, or the more serious problems of depression and anemia. The OTP physician will be monitoring the patient for these effects. Small increases in methadone dose are sometimes required during treatment. Even when treatment does not result in sustained viral response, disease progression is delayed significantly.

If the patient has been identified as having a current alcohol problem, the problem should be addressed prior to providing the treatment for hepatitis C.

Transplant advocacy
Some patients do not respond to treatment or have contraindications to treatment and may develop end stage liver disease. Although there are patients in OTPs who have had liver transplantation, some transplant lists do not accept methadone maintained patients, and the OTP clinician may be in the role of advocate.

Cirrhosis
The patient with cirrhosis may be greatly debilitated and suffer effects on multiple systems. Possible symptoms include anorexia, fatigue, muscle wasting, ascites and edema, and bleeding diathesis. In patients known to be active GI bleeders, opioid withdrawal with onset of nausea becomes potentially life threatening, and sudden dose drops should be avoided. Diuretics are frequently a necessity. Males with
cirrhosis may also experience impotence, gynecomastia, and testicular atrophy. High ammonia levels result in an organic brain syndrome, and the patient may have confusion and memory loss and may demonstrate erratic behavior. In end stage liver disease, the liver cannot adequately metabolize methadone and the usual maintenance dose may require marked reduction. In these cases, a significantly lower daily dosage may be sufficient for maintenance. Methadone blood levels and clinical observation assist in establishing the correct dose.
### TABLE 7 - HEPATITIS C EVALUATION FLOWSHEET

<table>
<thead>
<tr>
<th>HCV Antibody Screening, EIA</th>
<th>Antibody Negative: Not exposed or recently exposed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antibody Positive: Exposed to HCV. 80-96% of MMT patients.</td>
<td>Retest 6 wks and regularly if still using drugs; counsel regarding prevention</td>
</tr>
<tr>
<td>Test for presence of virus: PCR, TMA.</td>
<td>No detectable virus: spontaneously cleared HCV. (15-40% of antibody positive pts.)</td>
</tr>
<tr>
<td>Virus detectable means: active disease, regardless of count.</td>
<td>Consider retest in 6-12 mo.</td>
</tr>
<tr>
<td></td>
<td>More extensive evaluation of status: liver biopsy, viral genotype, evidence or history of already advanced liver disease, ability to withstand treatment (depression, anemia, autoimmune illness), ability to comply with treatment, acceptability for transplant lists.</td>
</tr>
<tr>
<td>No fibrosis or very mild fibrosis on biopsy: monitor status regularly.</td>
<td>Severe cirrhosis, or treatment contraindicated: consider transplant list referral, follow and treat liver disease.</td>
</tr>
<tr>
<td>Moderate fibrosis, early cirrhosis: Interferon and ribavirin treatment for 6 months to one year, length of treatment depends on viral genotype.</td>
<td></td>
</tr>
</tbody>
</table>
**Chronic pain**

Some patients in methadone maintenance treatment suffer from chronic pain. Some will experience acute pain as a result of either expected events, such as planned surgery or dental work, or unplanned events, such as emergency surgery or accidents. The methadone they receive in their daily maintenance dose is not sufficient to control such pain; separate pain management approaches are required. Use of opioids for management of acute pain for a patient in methadone maintenance treatment can be safe and effective. In cases of acute severe pain, short acting opioids are often indicated. Because tolerance is higher, the doses will be at the upper end of the therapeutic range and the lower end of the dosing frequency range. If the patient is unable to take methadone by mouth, it may be given IV. The IV dose of methadone is one-half of the oral dose. “When administered orally, methadone is approximately one-half as potent as when given parenterally. Oral administration results in a delay of the onset, a lowering of the peak, and an increase in the duration of analgesic effect.” (PDR)

For chronic pain, treatment should be managed by the patient’s primary care physicians or a pain specialist and coordinated with the OTP physician and clinical staff. If opioids or other CNS depressants are prescribed, coordination is a high priority to avoid over-sedation or overdose. If the patient is unwilling to sign releases to the prescribing physician, it may be necessary to withdraw the patient from methadone maintenance.
TABLE 8 ~ SAMPLE LETTER TO PHYSICIANS AND DENTISTS ABOUT MMT

To Whom It May Concern:

The bearer of this letter is a patient in an opioid treatment program (OTP). Methadone is the medication most commonly used in treatment, however buprenorphine is also approved for this purpose. Methadone-maintained patients often need treatment for medical, psychiatric, surgical, and dental conditions. Health care professionals are not always familiar with addictive disease and the various forms of treatment, including methadone. Many patients are reluctant to provide information to health professionals about their addiction and treatment with methadone because of previous bad experiences. The purpose of this letter is to describe the most common problems encountered and to offer any assistance we might be able to provide.

Addiction is widely accepted to be a disease or a group of diseases. Addictive disease can be characterized as a chronic, progressive, probably incurable, and often fatal disorder. The principal diagnostic features are obsession, compulsion, and continued use despite adverse consequences. Our program provides counseling, education, medication, structure and accountability services to help the patient make the life-style changes needed to address the many dimensions of this disorder.

Methadone has been used in the treatment of opioid dependence for about 50 years. Its long-term administration has been found to be both effective and safe. Methadone-maintained patients develop nearly complete tolerance to the analgesic, sedative, and euphorigenic effects of methadone at an established maintenance dose. Methadone has a half-life in excess of 24 hours. It has a relatively flat blood plasma level curve that will prevent the onset of the abstinence syndrome for more than 24 hours without causing any sedation, euphoria, or impairment of function.

The management of pain in a methadone-maintained patient is a common problem. Because the patient is fully tolerant to the maintenance dose of methadone, no analgesia is realized from the regular daily dose of methadone. Relief of pain depends on maintaining the established tolerance threshold with methadone and then providing additional analgesia. Non-narcotic analgesics should be used when pain is not severe. In the event of more severe pain, the use of opioid-agonist drugs is appropriate. The dose of an opioid-agonist drug may need to be increased because of the cross-tolerance to methadone. Also, the duration of analgesia may be less than usual. Opioid-agonist/antagonist drugs such as pentazocine (Talwin®), butorphanol tartrate (Stadol®), and nalbuphine hydrochloride (Nubain®) should never be used in a methadone-tolerant person. Severe opiate abstinence syndrome can be precipitated by drugs of this type.

The administration of opioid-agonist medications should be closely supervised in terms of quantities and duration. Similar precautions are indicated in the prescribing of sedative-hypnotic and central nervous system-stimulating drugs. The abuse potential of all benzodiazepines is high.

At times, admitting physicians are tempted to treat the opioid dependence itself. This is usually attempted by doing a graded reduction of methadone dose. If successful, the graded reduction may result in a reduction or elimination of the physiologic dependence, but has no effect on the disease itself. Even after the methadone treatment is discontinued, significant signs and symptoms of abstinence may persist for several weeks. The relapse rate associated with detoxification alone approaches 100%. A relapse to street or illicit drugs increases the risk of overdose, hepatitis, AIDS, and a host of other biomedical, psychosocial, and legal complications.

If you have any questions or concerns about our mutual patient in relation to methadone or drug dependence, please call us. We would be delighted to hear from you.

###
### TABLE 9 ~ MEDICAL COMPLICATIONS IN PARENTERAL DRUG ABUSE

<table>
<thead>
<tr>
<th>Infectious</th>
<th>Hepatic</th>
<th>Neuromuscular</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arthritis, septic</td>
<td>Acute hepatitis</td>
<td>Stroke</td>
</tr>
<tr>
<td>Aspergillosis</td>
<td>Fulminant hepatic failure</td>
<td>Epidural abscess</td>
</tr>
<tr>
<td>Botulism</td>
<td>Chronic hepatitis</td>
<td>Subdural abscess</td>
</tr>
<tr>
<td>Candidiasis</td>
<td>Cirrhosis</td>
<td>Brain abscess</td>
</tr>
<tr>
<td>Cellulitis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central nervous system infections</td>
<td>Renal</td>
<td>Transverse myelitis</td>
</tr>
<tr>
<td>Choriorentinitis</td>
<td>Nephrotic syndrome</td>
<td>Anoxic encephalopathy</td>
</tr>
<tr>
<td>Endocarditis</td>
<td>Glomerulonephritis</td>
<td>Peripheral neuropathy</td>
</tr>
<tr>
<td>Endophthalmitis</td>
<td>Renal failure</td>
<td>Horner’s syndrome</td>
</tr>
<tr>
<td>Episcleritis</td>
<td>Rhabdomyolysis</td>
<td>Myositis</td>
</tr>
<tr>
<td>Fasciitis, flesh-eating infections</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gastroenteritis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatitis</td>
<td></td>
<td>Miscellaneous</td>
</tr>
<tr>
<td>HTLV-1 and HTLV-2 infections</td>
<td></td>
<td>Overdose</td>
</tr>
<tr>
<td>Infected pseudoaneurysms</td>
<td></td>
<td>Allergic reaction</td>
</tr>
<tr>
<td>Leishmaniasis</td>
<td></td>
<td>Pyrogenic reaction</td>
</tr>
<tr>
<td>Louse-borne infections</td>
<td></td>
<td>Trauma</td>
</tr>
<tr>
<td>Malaria</td>
<td></td>
<td>Needle embolus</td>
</tr>
<tr>
<td>Mucormycosis</td>
<td></td>
<td>Necrotizing angiitis</td>
</tr>
<tr>
<td>Nocardiosis</td>
<td></td>
<td>Amenorrhea</td>
</tr>
<tr>
<td>Osteomyelitis</td>
<td></td>
<td>Hormonal abnormalities</td>
</tr>
<tr>
<td>Peptic ulcer disease</td>
<td></td>
<td>Thrombocytopenia</td>
</tr>
<tr>
<td>Pneumonia</td>
<td></td>
<td>Osteosclerosis</td>
</tr>
<tr>
<td>Pyomyositis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexually transmitted diseases, i.e., chancroid, gonorrhea, HIV, syphilis</td>
<td>Pulmonary edema</td>
<td></td>
</tr>
<tr>
<td>Tetanus</td>
<td>Pneumothorax</td>
<td></td>
</tr>
<tr>
<td>Tick-borne infections</td>
<td>Pneumonmediastinum</td>
<td></td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>Pulmonary fibrosis</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pulmonary hypertension</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gastrointestinal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Motility disorders</td>
<td>Constipation</td>
</tr>
</tbody>
</table>

| Hepatic                                        |                                      |                                      |
| Renal                                          |                                      |                                      |
| Cardiovascular                                 |                                      |                                      |
| Renal                                          |                                      |                                      |
| Pulmonary                                      |                                      |                                      |
| Gastrointestinal                               |                                      |                                      |

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Section on LABORATORY DATA

Addiction specialists rely on urine drug tests to screen for drug use and verify that methadone and its metabolite are present. Under current California regulations, random toxicology screens are required once a month for patients in an OTP and are required once a week for pregnant patients. Federal regulations require 8 drug tests per year but do not specify which drugs must be included, other than methadone. Most urine drug testing provides only positive or negative results that do not differentiate between low dose and high dose use. In California, testing done to comply with state regulation must be sent to a State-approved laboratory. Since, in most cases, such a laboratory is off-site, the results are not available for use in immediate clinical intervention with the patient. Some OTPs utilize additional on-site testing which allows a prompt evaluation of acute clinical situations as they present. This “non-title 9” testing is used for in-house decisions, and for medical-exception take-home decisions, but not for the state specified ‘regular’ take-home criteria.

Many state-approved laboratories have a standard panel of drugs for which they routinely screen. This list is based on the tests required by OTP regulation. These panels often do not include tests for alcohol, marijuana, some benzodiazepines (notably clonazepam (Klonopin®) and lorazepam (Ativan®)) and other sedatives such as muscle relaxants. Drug tests need to be tailored to the individual patient.

Patients may attempt to avoid testing positive for drugs of abuse by tampering with the urine sample. Many methods have been used, including substituting someone else’s urine or a sample of their own urine collected earlier, adding various substances to the urine or by diluting the specimen. Some patients consume copious quantities of water in order to decrease the concentration of drug in their urine. To discourage tampering, programs may require observed collection or specimen temperature testing. Programs may monitor urine creatinine levels to screen for dilution. If the urine creatinine level is below 20, the specimen is considered to be dilute urine and the sensitivity of the test is diminished. If the creatinine is below 5, the specimen is considered to be substituted, meaning it is not consistent with human urine.

There are different drug testing technologies available. Most programs use thin layer chromatography (TLC) or EMIT (Enzyme Multiplied Immunoassay Test) as the screening instrument. Because these are screening instruments and not specific, a confirmatory test is done when there is a positive result – that is, when drugs of abuse are present or methadone and/or metabolite is absent. When a urine drug screen is negative for methadone or metabolite, further investigation is necessary to determine whether there is a reasonable and legitimate explanation or whether this result indicates diversion of the methadone or urine tampering. Confirmatory testing with GC/MS will clarify whether methadone and metabolite are in fact present, but below the threshold for reporting on the screening test. Rapid metabolizers or patients on very low doses (< 10 mg) may legitimately present with a negative screen. Patients who have missed one or more doses prior to testing may be negative for methadone after a day or two and negative for methadone and metabolite after a more prolonged absence. Patients who are positive for methadone but negative for metabolite need careful evaluation; this result is consistent with a tampered specimen: a completely negative urine from someone not on methadone with some methadone added to avoid detection.
The sensitivity of an immunoassay like EMIT is 200-300 ng. Newer technologies, such as fluorescent polarization immunoassay (FPIA), give semi-quantitative results, which allow detection of high dose use, as well as monitoring of prescribed drugs, such as benzodiazepines, to insure compliance with therapeutic regimens. Gas chromatography/mass spectrometry (GC/MS), although costly, is the standard confirmatory test because of its high specificity.

Laboratory data should be used therapeutically, as clinical data to support treatment objectives, not forensically to activate penalties or punishment. Testing should serve the clinical purpose of identifying ongoing or sporadic drug use, identifying safety issues and assisting the patient to progress in recovery. California regulations dictate that patients with urine tests positive for illicit drugs lose take home privileges unless the physician deems that the results do not accurately reflect illicit drug use. Restriction beyond this in the form of dose reductions or discharge from treatment is usually inappropriate. In some cases, urine cannot be easily obtained for random testing as required by state regulation. Some clinics use saliva tests for patients who cannot urinate on demand, such as dialysis patients or paraplegic patients. Saliva tests are not approved for regular use under title 9, so such testing is only used for in-house decisions, and not for title 9 specifically designated take-home decisions.
TABLE 10 ~ HOW LONG AFTER USE WILL A DRUG RETURN A POSITIVE URINE TEST?
(Bi-Valley Medical Clinic, Inc., Sacramento, CA; 1998)

<table>
<thead>
<tr>
<th>Drug</th>
<th>Detection period</th>
</tr>
</thead>
<tbody>
<tr>
<td>amphetamine</td>
<td>2-4 days</td>
</tr>
<tr>
<td>Methamphetamine</td>
<td>2-4 days</td>
</tr>
<tr>
<td>barbiturates: amobarbital</td>
<td>2-4 days</td>
</tr>
<tr>
<td>butalbital</td>
<td></td>
</tr>
<tr>
<td>pentobarbital</td>
<td></td>
</tr>
<tr>
<td>secobarbital</td>
<td></td>
</tr>
<tr>
<td>phenobarbital</td>
<td>up to 30 days</td>
</tr>
<tr>
<td>benzodiazepines</td>
<td>Chronic Use: up to 30 days</td>
</tr>
<tr>
<td>diazepam (Valium®) – 20-50 hours</td>
<td></td>
</tr>
<tr>
<td>chlordiazepoxide (Librium®) – 5-30 hours</td>
<td></td>
</tr>
<tr>
<td>clonazepam (Klonopin®)</td>
<td></td>
</tr>
<tr>
<td>lorazepam (Ativan®)</td>
<td></td>
</tr>
<tr>
<td>alprazolam (Xanax®)</td>
<td></td>
</tr>
<tr>
<td>Cocaine</td>
<td>12-72 hours</td>
</tr>
<tr>
<td>cannabinoids (marijuana)</td>
<td></td>
</tr>
<tr>
<td>casual use</td>
<td>2-7 days</td>
</tr>
<tr>
<td>chronic use</td>
<td>up to 30 days</td>
</tr>
<tr>
<td>Ethanol</td>
<td>12-24 hours</td>
</tr>
<tr>
<td>opiates</td>
<td></td>
</tr>
<tr>
<td>codeine</td>
<td>2-4 days</td>
</tr>
<tr>
<td>hydromorphone (Dilaudid)</td>
<td></td>
</tr>
<tr>
<td>morphine (for heroin)</td>
<td></td>
</tr>
<tr>
<td>methaqualone (Quaalude)</td>
<td>2-4 days</td>
</tr>
<tr>
<td>phencyclidine (PCP)</td>
<td></td>
</tr>
<tr>
<td>casual use</td>
<td>2-7 days</td>
</tr>
<tr>
<td>chronic use</td>
<td>up to 30 days</td>
</tr>
</tbody>
</table>

Detection periods vary; rates of metabolism and exertion are different for each drug and each user. Detection periods should be viewed as estimates. Individual cases can always be found to contradict the approximations.
Section on TAKE-HOME PRIVILEGES

Treatment staff, state and federal drug enforcement agencies, and the patient may view take-home medications very differently. Treatment staff may use the granting of take-home privileges as a reward for patient's compliance with program rules or reduction in drug use. Controlled clinical trials provide evidence that granting take-home privileges as a contingency of drug free urines is efficacious in reducing drug use – in other words, as part of a therapeutic structure to support behavior change. (Iguchi, Stitzer et al. 1988; Stitzer, Iguchi et al. 1992). Conversely, revocation of take-home privileges may be used to discourage patients' illicit drug use or their failure to comply with clinic rules. State and federal drug enforcement agencies view take-homes as a potential hazard because patients may sell or otherwise divert part or all of their medication to the illicit drug market. Patients experience the restrictions on take-home doses as an unreasonable requirement that interferes with their work, travel and other activities.

The OTP physician must view take home doses from a safety perspective, considering the patient’s ability to safely transport, store and take them as prescribed, while safe-guarding them from theft or accidental ingestion by a child or other non-opioid dependent person. Take home medications can support a patient’s progress in recovery by facilitating the patient’s ability to pursue vocational training, employment, drug-free activities with family and friends and by minimizing the patient’s contact with unstable patients who are still using and dosing in the clinic every day.

One public health concern with take-home medication is the potential for overdose. The daily dose of methadone dispensed for the treatment of opiate dependence could be lethal to a child or a non-opioid tolerant adult if inadvertently ingested. The physician should assess the level of responsibility of patients who are eligible for take-home medications prior to granting them take-home privileges.

Because of concerns about diversion and overdose, federal and California regulations restrict who is eligible for take-home privileges. However, there are provisions within state and federal regulations for granting exceptions to take home regulations where there is compelling need and the physician attests to the responsibility of the patient. This system tries to support and encourage abstinence by allowing patients who test negative to move through a graduated take home schedule from Step 1 (one take home per week) to Step 6 (6 take homes per week). Relapses require a reduction of take-home privileges.

Both federal and California regulations tie take-home privileges to patient’s participation in other activities in addition to negative drug screens and compliance with clinic rules. To qualify for take-home medication, California regulation (Section 10370) requires that patients be participating in educational, vocational and/or responsible homemaking activity and that daily attendance at the program would be incompatible with such activity. Vocational status is considered in federal regulations and accreditation standards for take-homes as well. Physicians do have the authority to grant exceptions to the restrictions governing take-home privileges, based on appropriate clinical judgment. For example, disabled patients who are in recovery but who do not meet the requirements for work or homemaking may merit exceptions. Program physicians are responsible for certifying the appropriateness for take homes for each patient. An example of a useful checklist for assessing each patient is given in Table 11.
TABLE 11 ~ EIGHT POINT CHECKLIST FOR CONSIDERING ELIGIBILITY FOR TAKE-HOME PRIVILEGES
(Information from federal and state regulations, list prepared by Bi-Valley Medical Clinic, Inc., Sacramento, CA; 1998)

- Absence of recent abuse of drugs (opioid or non-narcotic) including alcohol.
- Regularity of clinic attendance.
- Absence of serious behavioral problems at clinic.
- Absence of known recent criminal activity, e.g. drug dealing.
- Stability of the home environment and social relationships.
- Length of time in comprehensive maintenance treatment.
- Assurance that the take home medication can be safely stored within the home.
- Determination that the rehabilitative benefit to the patient derived from decreasing frequency of clinic attendance outweighs the potential risk of diversion.

California regulations are very detailed and specific about the amount of time a person must have been in treatment and have tested negative to be eligible for take homes doses.

Federal regulations have permitted up to one month of take-home medication since 2001, and in 2002 California regulations established criteria for what are called ‘extended take homes’ whereby patients who meet certain criteria may take up to a month’s supply of methadone from the clinic. Each program must submit a protocol to ADP outlining how such take-homes will be handled. This new flexibility in the regulations also makes provisions for using a tablet form of methadone. Prior to granting extended take-homes to a specific patient, California regulations require the Medical Director or program physician to obtain pre-approval from ADP. In addition to the program-wide protocol approval, each patient moving to extended take-home status requires a separate waiver to Title 9. The request for a waiver is submitted by faxing “Physician Request for Temporary Exception to Regulations” (ASD Form 8045) to the Sacramento office of ADP. A separate waiver form (ADP 8045) must be submitted and approved for each patient selected.

Examples of protocol elements that are required by programs in California for take-homes beyond six days per week include:

1) Patients must have been at a Step 6, i.e. once a week clinic attendance successfully, for 6 months
2) The patient’s last 6 months of toxicology testing must have been negative for illicit drugs and positive for methadone and metabolite of methadone.
3) The patient must have a working, updated phone number and must agree to comply with call back procedures designed to check on proper use of medications.

4) The program must have procedures for collecting 8 samples for toxicology testing per year.

5) The program must have in place a call back procedure, such as pill counts, to check on compliance with medications and possible diversion.

6) The program must have proper procedures for handling and labeling take home bottles of solid medications.

7) The program must have procedures in place to restrict the take homes of patients who relapse.

For vacations or other out of town travel, the state regulations require that the OTP arrange courtesy dosing by another OTP, if possible, rather than granting take home doses. In the event that take home doses are granted for exceptional circumstances, the patient record must document the reason that courtesy dosing could not be arranged. In some situations, in particular for newly-admitted patients who have been in treatment less than three months, a federal and/or state exception waiver must be on file before take home doses are granted. These regulations are subject to revision and should be reviewed carefully prior to granting take home doses.

The physician should be familiar with regulatory criteria for take homes, as it is the physician who specifically authorizes take home schedules and who specifically requests exceptions for extended take homes. Most of the documentation will be handled by the counseling staff, and the physician must feel confident of accurate information on which to make a decision.

TABLE 12 ~ SUMMARIZING REGULATIONS GOVERNING TAKE HOME MEDICATION

California regulations require at least 90 days of daily observed dosing prior to granting any take-home medication for unsupervised dosing.

Take-home eligibility is defined in federal and state regulations (eight point criteria)

Medical exceptions allowing early take-homes may require federal approval, and must be documented in the chart.

Regular take-homes of more than six days worth of methadone, usually in solid form, are allowed with specific protocols and waivers.

Travel beyond regular take-home privileges may require courtesy dosing or waivers.

In cases of split doses, taking home the second daily dose may require federal waivers if the patient has been in treatment less than 270 days.
Section on DISCHARGE FROM TREATMENT and TAPERING OFF METHADONE

The physician’s role is first to determine the appropriateness of discharge for a patient, and then to determine an appropriate withdrawal plan and assure proper referrals.

Patients leave methadone treatment for a variety of non-therapeutic reasons: incarceration or hospitalization, loss of benefits, unpaid OTP fees, disrupted dosing due to problems with transportation or with showing up under the influence (unsafe to dose), or discharge for threatening staff or other patients. Discharge is not the result of planned withdrawal in any of these situations. A small number of patients leave OTPs after a carefully planned and closely monitored taper. Few patients are able to maintain abstinence from opioids after tapering off methadone.

Success must be defined as ongoing, sustained abstinence from illicit opioid use, whether the patient is able to discontinue methadone or not. A process of tapering off methadone cannot be considered “successful” even if the patient was comfortable during the tapering process. If the patient returns to illicit opioid use, the taper cannot be considered successful.

During the taper, the patient and clinic staff should accept as a possible outcome that the patient may need or want to remain on or return to methadone maintenance. Issues concerning taper reversal are an important part of counseling sessions, which should monitor progress or relapses. The taper reversal should be done without imparting a sense of failure, shame or guilt. Since the goal of methadone treatment is for the patient to remain free of illicit opiates, rather than to become methadone free, the patient should know that he/she is welcome to come back into treatment and that he/she will be given preferential treatment on waiting lists for readmission.

Comfortable methadone tapers are done slowly and are largely guided by the patient’s ability to manage withdrawal symptoms. A comfortable taper will rarely take less than six to eight weeks, and more often take months or years. Tapers are more likely to be completed successfully when there is stability of physical health, mental health, and social environment.

Early studies suggested that therapeutic taper rates are best determined by percent of dose, rather than number of milligrams. For example, at 100 mg of methadone a day, a five mg drop is a 5% reduction; however a five mg drop from 15 to ten mg is a 33% reduction of the dose and is more likely to result in symptoms. When three percent versus ten percent incremental drops were compared, the three percent drop was better tolerated. Later studies showed no benefit of proportional over linear taper schedules. Either way, the eventual relapse rates approach 100 percent, so the focus should be on maintaining a therapeutic relationship with the patient that allows future treatment when needed.

Therapeutic tapering schedules should incorporate frequent monitoring with rate adjustment or plateau whenever necessary. There may be specific dosage levels in the taper at which more intense physical withdrawal symptoms develop (“brick walls.”). These dosage levels vary significantly from patient to patient and from one time to another. For example, a patient may develop discomfort at 70 mg during one taper and 20 mg at another time. As patients meet and pass these thresholds, they may need extra support from clinic staff, or
they may need to halt the taper temporarily or increase the dose to a more comfortable level and, once stable, restart the taper more slowly.

Clonidine, an alpha-adrenergic blocker, may be useful at the end of a methadone taper to control discomfort. Although not an opiate, it is effective at specifically relieving opiate withdrawal symptoms that are of a mild nature, such as insomnia as a protracted withdrawal symptom. There is no evidence that ancillary medications improve chances for sustained abstinence post-discharge, so use should be limited to 1-2 weeks. If troublesome symptoms persist, re-induction on methadone and another attempt at slower taper could be considered. Drug screens throughout the therapeutic taper continue to be monitored for illicit opioids and other drugs of abuse, including alcohol. If they positive, the patient should be advised to discontinue the taper, and an effort made to stabilize the patient on a therapeutic dose of methadone.

The psychological state of the patient should be monitored throughout treatment, including throughout the period of taper and optimally through a drug free period. Any escalation or reemergence of psychological symptoms should be appropriately managed or referred prior to discharge. Opioid withdrawal can destabilize mental illness and poses a special risk the physician needs to monitor. Mental health providers need to be appraised of the withdrawal. Psychotic or depressive symptoms may emerge. Relapse into depression carries a risk of relapse to drug use. Suicides have occurred as a result of the severe loss of hope and self esteem accompanying a relapse after a long period of abstinence. This psychological crisis has been called the "abstinence violation effect."

Another potential danger of tapering off of medication is loss of opioid tolerance with a prolonged taper. Subsequent relapse could result in inadvertent overdose.

**Indications for discharge from OMT**

Discharging a patient from MMT is clinically appropriate in some situations. Appropriate indications for discharging a patient (tapering a patient off methadone) include the following:

1) The patient has requested and completed medically supervised taper from methadone. The patient has made appropriate plans for post-treatment life, including other support, family, job, financial, housing, social, etc.

2) In the judgment of the physician, the patient is too medically ill to receive his or her methadone dose; e.g., a patient with an end stage illness, such as AIDS, cancer, or advanced liver disease. When illicit use is no longer a practical possibility, the patient’s care may be transferred to the hospice physician.

3) The patient is diagnosed as having active tuberculosis and is unwilling to comply with recommended treatment. (This is a public health issue within the clinic.) In this case, the appropriate health officer should be notified, and the patient may be impounded.

4) The patient is diagnosed as psychotic or as having another psychiatric illness that prevents successful participation in clinic and is unwilling to follow through with psychiatric care.

5) The patient is unable or unwilling to cooperate with treatment protocols in spite of staff efforts to work with him or her.

6) The patient continually comes to the clinic too intoxicated (with alcohol, benzodiazepines, stimulants, etc.) to allow safe administration of the methadone dose.
7) The patient misses his/her dose so frequently that he/she is unable to achieve a stable blood level. Patients who miss 4-5 days of methadone need to be re-induced as if a new patient. Blood levels take about 5 days of consistent dosing to stabilize. Patients who miss so frequently that they do not stabilize are not getting the benefits of ‘maintenance’ and should be considered for taper and referral to another form of therapy. Continued intermittent methadone dosing becomes a part of a polydrug abuse regimen/lifestyle and is not treatment.

8) The patient takes other prescription opioids or is found to be obtaining methadone from other sources and is unwilling to undergo dose evaluation or adjustment to achieve a sustained abstinence. In this situation, continued methadone maintenance is not meaningful.

9) Complete incapacitation of patient (e.g. coma) of extended duration such that withdrawal symptoms would not be an issue.

10) Violence or threat of violence to staff or other patients. In this case, the patient may be summarily discharged with no taper, although efforts may be made to transfer the patient to another clinic, for example by faxing the records promptly.

11) Anticipated incarceration in prison where methadone treatment will be discontinued without taper. Patients should be advised that they may return to MMT without using opioids within one month of release (provided they have been incarcerated for at least one month.)

No matter what the reason for the discharge, planning should include referral to appropriate aftercare. Aftercare from MMT may include psychosocial services, symptomatic treatment for withdrawal symptoms, or treatment with opioid antagonist (naltrexone). Discharge planning should also include identification of sources of support for the patient, especially community recovery groups, that will help the patient maintain the commitment to recovery.

**Section on TREATMENT OF PREGNANT WOMEN**

The most important point about the treatment of opioid-dependent pregnant women is that withdrawal puts the woman, the pregnancy and the baby at risk for adverse outcomes. In view of this risk, methadone maintenance is the treatment of choice for opioid addiction during pregnancy, and the methadone dose must completely suppress symptoms of opioid withdrawal.

**Admission Criteria**

Under current federal and California regulations, any pregnant woman with a past history of opioid addiction who is determined by the admitting physician to be physically dependent on opiates is qualified for methadone maintenance. Federal regulations also allow for maintenance of a pregnant woman who is not currently physically dependent, if she has a past history of opioid dependence and is at risk for relapse to opioid use. However, in California, an exception waiver must be submitted to ADP prior to admitting a pregnant woman who is not currently physically dependent.

A history and physical exam along with any records documenting prior treatment episodes or documentation of opiate dependence while hospitalized or incarcerated are sufficient to comply with these regulations. Observation of objective signs of opiate withdrawal is the usual way of documenting physical dependence.
However, withdrawal is best avoided during pregnancy because of the risk of precipitating premature labor, so women should be told that they should be neither intoxicated nor in withdrawal when they present for treatment. Physical evidence of current and past use (e.g., tracks) documents IV use that is normally associated with physical dependence. The use of an antagonist challenge test to document opiate dependence is absolutely contraindicated in a pregnant woman.

Pregnant women who are also physically dependent on alcohol, benzodiazepines or barbiturates must be evaluated by the admitting physician to determine whether inpatient detoxification with fetal monitoring is necessary. Methadone treatment should be initiated so that opiate withdrawal does not complicate the sedative detoxification.

**Explaining about methadone’s use in pregnancy**

Many pregnant women seeking methadone maintenance treatment for opiate dependence feel badly about it. These feelings stem from a variety of beliefs and misconceptions, many promoted and endorsed by society or medical providers unfamiliar with addiction issues and treatment. Patients may believe that they cannot really be in recovery while on methadone, that they should be able to achieve and maintain abstinence on their own, that friends, family and society will not accept them if they are on methadone, that methadone is bad for their health or bad for the baby, and that withdrawing from methadone is worse than withdrawing from heroin. Additionally, the pregnant woman often feels extremely guilty about using heroin while pregnant and wishes to be medication-free to relieve this guilt.

A pregnant woman may present for admission to methadone maintenance after being advised that detoxification is contraindicated during pregnancy, yet she may feel guilty that she is pursuing a mode of treatment that will ensure her own comfort, assuming that it is at the baby's expense. The physician should take time to explore the patient's beliefs and concerns about methadone and to address them. If the patient doesn’t feel comfortable about being on methadone, she may be reluctant to volunteer information about symptoms of withdrawal because she may think she should avoid dose increases. She may seek to withdraw from treatment prematurely or she may miss doses on purpose, thinking it is beneficial to minimize her methadone exposure.

On the other hand, there are women who seek admission to the program in order to show Child Protective Services (CPS) they are in treatment, but do not truly desire to be on methadone maintenance. They may miss many doses and generally present compliance problems. The physician and staff should make all attempts to engage them. It may help to point out that CPS will be seeking information regarding attendance and urine test results and that the program staff are mandated CPS reporters. Patients should be warned that they will be drug tested at the time of delivery by all hospitals and that participation in treatment is seen as a favorable sign of attempt to get help. Women who are not in treatment and test positive will normally lose custody of their children. The physician may also need to deal directly with CPS staff who may not understand methadone or have biases against this treatment. Methadone maintenance is fully compatible with parenting and the support of treatment staff can assist the patient in her parenting role. The physician should assure the patient of assistance in dealing with CPS if necessary.

The admitting physician should explain the risks of continued use of heroin during pregnancy, including small-for-gestational-age infants, increased incidence of SIDS, prematurity and low birth weight. If needles are shared, the risks expand to include infection with HIV, HTLV I/II and hepatitis. The consequences of opiate
withdrawal during pregnancy should also be discussed: the baby experiences the stress of cyclical withdrawal states which compromises growth; the uterus (a muscle) may become hyperactive resulting in miscarriage or pre-term labor and delivery; hunger for heroin may make it extremely difficult for the woman to avoid heroin use; nausea may suppress the appetite resulting in malnourishment and maternal depletion; vomiting and diarrhea may lead to dehydration. The lifestyle associated with drug use increases the risk of trauma, STDs, lack of prenatal care and loss of custody of the baby.

The admitting physician should be familiar with the literature documenting methadone’s safety and efficacy in pregnancy. He/she should be able to discuss with the patient the research that indicates that infants exposed to methadone in utero have normal physical and mental development as children (Kaltenbach & Finnegan 1987; Kaltenbach & Finnegan 1984; Kaltenbach, Graziani & Finnegan 1979; Kaltenbach & Finnegan 1989). Importantly, patients should be advised of the risks of neo-natal abstinence syndrome (NAS) that in various studies ranges from 50-80%. (Berghella et al. 2003) However, patients need to understand that risk of NAS is unavoidable, although its intensity varies, and that NAS is treatable in the hospital nursery with expected good outcomes. There is a spectrum from mild symptoms resolved with supportive environment to very severe symptoms that can be serious, even fatal, if untreated.

Symptoms of withdrawal may be present at birth or may emerge in the first two weeks of life. Symptoms should be evaluated in person by an experienced neonatologist or pediatrician.

Patients should also understand that the baby has been experiencing repeated episodes of withdrawal during the mother’s periods of abuse of short-acting opioids, and that a proper dose of methadone for the mother during pregnancy will eliminate this fetal intrauterine withdrawal. Risks of NAS may be reduced by cessation of smoking and by recovery from illicit drug use, especially stimulant drug use, as these are factors that may increase risks for more severe NAS.

**What about Detoxification?**

Many patients are eager to get off methadone as soon as possible. Often they are motivated by guilt, external pressure from family members or friends, or misconceptions about methadone. The physician should help patients to understand that the primary goal is to achieve complete and sustained abstinence from illicit opioids. Tapering from methadone must be seen as secondary. The physician should educate patients about the high risk of relapse associated with withdrawal from methadone (80% within the first year) (Ball & Ross 1991). Further, the patient needs to be fully aware that NAS will occur in utero if they attempt to withdraw while pregnant. While gross measures of fetal distress may not accompany slow tapers off methadone, these measures are not sensitive to more subtle stress symptoms, such as hyperadrenergic states the baby may suffer during in-utero tapering. NAS is far better treated, if it occurs, in an intensive care nursery with appropriate pharmacologic agents (methadone, paregoric, morphine and/or phenobarbital) than allowing the baby to withdraw under somewhat blind conditions in utero by trying to taper the mother while pregnant However, it is ultimately the patient’s choice about how and when to withdraw from methadone. If the patient is adamant, the physician should help her to plan a very slow taper with obstetrical monitoring, preferably in the second trimester.
The Initial Assessment

The physician's most important task during the admission interview is to establish rapport with the patient. If this is not accomplished, the patient may not be forthcoming with information that is vital when planning treatment and may not be willing to follow through with future appointments or treatment recommendations. The physician should be non-judgmental and supportive of the decision to enter treatment.

The physician should review the patient’s substance use history, including alcohol, over the counter medications, and nicotine. Mental health problems are a special area for inquiry as mental illness is especially prevalent in opiate addiction. Women with opiate addiction in particular have a very high incidence of both childhood and adult traumas, including molestation, rapes, and physical violence. PTSD is common and other axis I mental health diagnoses must be assessed; untreated they are risk factors for continued drug use. Medically, special focus on addiction related diseases, such as HIV, hepatitis B and C, and STDs is warranted.

If medications are being prescribed by another physician, the OTP physician must assure that those medications are indicated and are compatible with both pregnancy and with methadone stabilization. For example lithium and valproate are contraindicated in pregnancy because of the risks of birth defects, and carbamazepine will severely complicate methadone stabilization. The OTP physician should make it clear to the patient that communication with the prescribing physician is necessary to ensure her baby’s safety and comfort and that consent for such communication may be a condition of methadone treatment.

Women who are HIV positive can reduce the incidence of HIV in the infant by taking antivirals during pregnancy. The OTP physician and staff are in a position to support compliance with this prophylaxis and may even be able to dispense the medications at the dosing window.

An obstetrical history should note the patient's use of alcohol and other drugs during previous pregnancies, the outcome of each pregnancy, complications occurring during pregnancy or at delivery. The ages and custody status of previous children should be obtained. The physician should find out whether the current pregnancy was planned and what the patient's feelings are about it, and if the father is involved and supportive. If the patient is ambivalent, she should be referred for counseling to help her to look at all of her options and make a decision she feels comfortable with. Patients who express the intention of terminating the pregnancy should be provided with support, and appropriate referrals. Until reliable documentation has been obtained that the pregnancy has been terminated, the patient must continue to receive the same care as other pregnant women. Some women express a desire to terminate the pregnancy, but do not follow through. The physician must assure that the patient has a regular prenatal care provider, and written consent should be sought to communicate with the provider. Regular prenatal care has been shown to improve outcomes of methadone maintained pregnant patients and barriers to keeping appointments, i.e. transportation, need to be addressed. Nutritional counseling specific to a pregnant woman, including the role of prenatal vitamins and iron, should be made available.

In addition to the usual complete physical examination, PAP and pelvic along with screening for sexually transmitted diseases should be performed or arranged via the physician providing obstetrical care. Recommended admission lab studies include a complete blood count, chemistries, electrolytes, liver panel and screen for HIV, hepatitis B and hepatitis C, syphilis, medical urinalysis toxicology screen, and a serum or urine pregnancy test. Some of these tests may be omitted if they have already been done or are routinely done by the obstetrician following the patient.
If a woman is hepatitis C positive, there may be up to a 5% risk of transmission of the virus to the child. Pregnant women who screen positive for hepatitis C should be counseled about this risk and advised to make sure their child's pediatrician is aware so that the child may be screened for hepatitis C at one year of age, and sooner if there are any indications of illness. Antibody in the child prior to one year of age may be maternal. The natural history of perinatally acquired hepatitis C virus is not completely known, but disease appears to be less severe with slower and less frequent progression to cirrhosis. Hepatitis B screening provides the opportunity to offer immunization to women not already immune and to protect the infants of women who are hepatitis B carriers. HIV counseling should be given to all patients and an HIV test offered. The physician should encourage all pregnant women to be tested for HIV in view of the data that treatment with AZT during pregnancy has been shown to reduce the risk of perinatal HIV transmission (European Collaborative Study 2005; McGowan & Shah 2000; Taylor et al. 1999; Wilkinson, Karim & Coovadia 1999).

A PPD skin test should be placed unless the patient has a history of a prior positive result, in which case the physician should conduct a symptom review and consider a chest x-ray. If the patient is asymptomatic and low risk, the chest x-ray may be delayed until the second trimester. The patient should be given a tetanus shot if she has not received a booster in the last 10 years, or 5 years if she has an abscess or unclean wound.

**Dose Determination**

Methadone dosing is an area of continued controversy, with some obstetricians calling for low doses or even methadone tapers to avoid the risks of NAS (Dashe 2003). However, the literature on the relationship of dose to withdrawal is inconclusive. Two recent studies of ‘high dose’ treatment, up to 200mg/day, have shown no association between methadone dose or maternal serum level to the severity of neonatal withdrawal. (Berghella et al. 2003) (McCarthy et al. in press) Clinical experience has shown that many women require dose increases as pregnancy progresses after they have appeared to be stabilized due to the re-emergence of signs and symptoms of withdrawal. There are several possible explanations. During pregnancy, there is an increasing volume of distribution. There is significant individual variability in the metabolism of methadone to its inactive metabolite. Furthermore, accelerated metabolism and decreases in methadone bioavailability have been documented, which may precipitate withdrawal. The current recommendations are to treat pregnant women according to the same dosing guidelines as non-pregnant patients, and that is to use a dose sufficient to eliminate withdrawal, drug use, and drug cravings, without arbitrary limits on dose.

The physician's objective should be to stabilize the pregnant woman on a therapeutic dose of methadone as quickly, but as safely, as possible in order to decrease the risk of withdrawal or ongoing heroin use. In the ideal situation, a patient would receive an initial methadone dose and remain on the premises to be re-evaluated 4 hours later so that if withdrawal symptoms persist, additional methadone may be given. This cycle should be repeated every 3-4 hours until the patient no longer demonstrates any symptoms of withdrawal. Many programs are unable to provide this level of care, and daily re-assessments of dosing adequacy and safety are indicated during the first week of treatment.

A usual starting dose for a woman who reports using a "1/2 gram" of heroin or more per day is 30 to 40 mg. Under state regulation, no more than 30 mg may legally be administered at one time on the first dosing day. Additional methadone may be given on the first day, but must be administered only after a physician-specified observation period, and the physician must note the rationale for first day’s doses above 40 mg. The patient
should be advised that not all symptoms will be relieved by the first day’s dose. Symptoms that begin as the methadone blood level falls (about 5 hours after dosing) may subside after the blood level of methadone has stabilized (about 5 days). If there is any question about the adequacy of the dose, the physician should evaluate the woman for signs of withdrawal prior to dosing. If any symptoms persist after 5 days, the dose must be raised. Dilated pupils (> 4 mm) are one specific and reliable indicator of opiate withdrawal. The dose should also be raised if the woman complains of cravings or ongoing use of heroin or other drugs. Peak and trough methadone blood levels may be helpful in determining a therapeutic dosing schedule. (See Section on Stabilizing on a Therapeutic Dose.)

Some programs monitor at least one serum level after the woman has been stabilized to more accurately assess fetal exposure. Fetal cord blood has about half the concentration of methadone as maternal blood. For women who have difficulty stabilizing on even high doses, peak and trough serum levels may give information about the rapidity of methadone clearing. The peak should be below two times the trough. When the peak is twice or more than twice the trough, the woman may require a split dose to stabilize. Serum levels can be of considerable help in reassuring the mother about the amount of methadone exposure. Mothers need to understand it is not the oral methadone dose that determines fetal exposure; it is the mother’s serum level.

**Split dose**

Split doses can be of great help in stabilization. The physician must obtain pre-approval from CSAT in order to provide the patient with a split dose if the patient has not been in treatment long enough to qualify for seven take-homes per week. A split dose means that, every day, the patient will take the morning dose in the clinic under observation and receive a take home dose for the late afternoon or evening. There may be particular rationale for splitting the dose during pregnancy. Split dosing provides a more even blood methadone level for mother and fetus and may allow patients to stabilize on a lower methadone dose than they would with one daily dose. In one study [Whitmann, 1991 #8238], blinded radiologists were able to identify pregnant patients on single daily methadone doses based on reduced fetal movements in the hours following dosing and increased fetal movements in the evening, suggesting over sedation of the baby at peak blood levels and some withdrawal hyperactivity as the blood levels fall in the evening. Split dose patients had ultrasound exams with fetal movements similar to controls. For this reason, there are some physicians who routinely give all pregnant patients a split dose, at times allowing for 3 times a day dosing to achieve better stability. For all patients, the physician must weigh the clinical benefits and the risks of take-home privileges, especially for unstable patients who may have small children at home.

As pregnancy progresses, some women will begin experiencing withdrawal in the late evening or early morning despite complete abstinence from illicit opiate use. In fact, the urine drug screen could on rare occasions become negative for methadone or methadone metabolite, reflecting rapid clearance of methadone. The physician must review the situation to determine whether the most likely explanation is a low blood methadone level or diversion. The methadone dose should be re-evaluated after delivery as some women will become sedated as the metabolic changes of pregnancy reverse and the blood level rises.

Common misconceptions that patients may have about methadone treatment during pregnancy include projecting addictive traits onto the fetus (“My baby is eating up my methadone” when she requires higher doses during pregnancy, or “my baby was born addicted to methadone” referring to NAS.) Blood volume changes and dilution effect should be explained, and physical dependence differentiated from addiction. Another
misconception may be that discomforts of late pregnancy, such as Braxton Hicks contractions, are actually withdrawal symptoms. It may require interviewing the patient to differentiate them.

**Monthly follow-up appointments with the physician**

Under California regulation, the physician must meet with each pregnant woman at least once a month during the pregnancy. The first follow-up visit with the physician should be scheduled within a few days of the pregnant woman's admission because of the high likelihood that she will have questions and that the methadone dose will need to be raised. The physician will need to arrange a mechanism for dose adjustments between scheduled appointments. Weekly visits should occur until the patient is stabilized on a therapeutic dose of methadone. It may be very helpful to have a specifically trained pregnancy counselor with whom the physician can have close consultation about the status of all pregnant and early post-partum women. This counselor can also monitor obstetrical appointments and report on problems in patient access and participation in obstetrical care. General methadone maintenance counselors may not be versed in the special issues of pregnancy and should be trained not to give conflicting or inappropriate recommendations to pregnant patients about dosing.

At the first follow-up visit, the physician should keep in mind that the patient may have been sufficiently uncomfortable during the admission interview that she may remember little. It is important to review the basic information about methadone use during pregnancy and to allow the woman to ask any questions she may have.

While this discussion may emphasize substances the patient is known to have used, all of the substances of abuse should be touched on. It is not unusual to learn during this discussion that the woman is using substances not disclosed at admission. Tobacco should be included in this part of the discussion. The risks of second-hand smoke to the infant, including SIDS, should be reviewed. This assessment must be done in such a way that the patient does not feel that she is being accused of being bad if she reports ongoing use. The physician should provide assurance that abstinence is achievable and remind the patient of prior successes and point out progress she has made.
TABLE 13 -- CALIFORNIA REGULATIONS LIST SPECIFIC TOPICS TO BE ADDRESSED WITH FEMALE PATIENTS OF CHILDBEARING AGE

California Code of Regulation, Section 10285

Each program shall provide the following orientation to female patients of childbearing age:

1) Knowledge of the effects of medications used in replacement narcotic therapy on pregnant women and their unborn children is presently inadequate to guarantee that these medications may not produce significant or serious side effects.

2) Abrupt withdrawal from these medications may adversely affect the unborn child.

3) The use of other medications or illicit drugs in addition to medications used in replacement narcotic therapy may harm the patient and/or unborn child.

4) The patient should consult with a physician before nursing.

5) The child may show irritability or other ill effects from the patient's use of these medications for a brief period following birth.

6) Provisions for patient acknowledgement or orientation shall be a part of the patient record.

Coordination with OB Providers

Many OB providers are unfamiliar with issues surrounding addiction, with methadone maintenance treatment during pregnancy, and with proper doses of methadone during pregnancy. The physician should provide the OB provider with basic information about methadone dosage so that he/she will be supportive of the patient’s treatment. In addition, the physician should discuss the use of analgesia during and after delivery, so that the OB provider is aware that the maintenance dose of methadone provides no analgesia and poses no barrier to use of additional analgesia as is appropriate for any woman (except partial agonists such as nalbuphine, see below). Whether the delivery is vaginal or by cesarean section the maintenance dose of methadone should be continued and other medications added as needed to control pain. If IV dosing is required, half the oral dose is equivalent.

It is especially important to alert both the patient and the obstetrician about mixed agonist/antagonist analgesics, especially about the absolute contraindication to the use of Nubain® (nalbuphine) as an analgesic. Nubain is a very commonly used obstetrical analgesic because it causes less respiratory depression in the baby than morphine. It will precipitate severe immediate withdrawal in both the methadone dependent mother and the baby that will require high doses of pure opiate agonists to reverse. Patients must be specifically educated about Nubain and told that they have a right to question every medication they are given. Some providers have suggested women say they are allergic to Nubain and have this posted on their chart, as mistaken use of Nubain in methadone patients creates an immediate obstetrical crisis.

The hospital of delivery should be noted in the chart. The physician should verify that the hospital is familiar with the management of methadone maintained women and methadone exposed newborns and provide consultation when needed or referral to a facility familiar with perinatal methadone issues.

As the woman enters the third trimester of pregnancy, contraceptive options should be reviewed and the patient encouraged to decide upon a method of contraception prior to delivery.
Postpartum changes
After delivery many women find they are exhausted and achy, easily upset and emotional. Some experience frequent and severe episodes of diaphoresis. These symptoms remind many opiate-dependent women of opiate withdrawal. Preparing a woman for these changes can prevent her from becoming anxious and using the symptoms as a reason for relapsing. For some women, the baby's being inside of them provides strong motivation to avoid use; post-delivery, these women often experience a return of cravings that may be aggravated by coping with a demanding infant. Discussing these issues prior to delivery is vital, so that each woman has a chance to think through how she will handle them in a healthy way. Post-partum depression also puts a woman at risk of relapse. Women should be counseled regarding the symptoms and provided early assessment and treatment if depressive symptoms occur. Because of the many changes going on in a woman's body after delivery, it is best to avoid tapering the methadone dose during the first 6 weeks postpartum, unless the patient finds she is sleepy on her dose. Split dosing may need to continue for 6 weeks postpartum until normal methadone metabolism is resumed. Some women may be rapid metabolizers even when not pregnant and will require on-going split dosing to remain stable.

Breast feeding
The amount of methadone passed in the breast milk is negligible, (McCarthy & Posey 2000) so a woman's methadone dose should not be used as a contraindication to nursing. The American Academy of Pediatrics has recently changed its longstanding recommendations against nursing on doses over 20mg/day, and has now determined that methadone is compatible with nursing with no dose restrictions. (Philipp, Merewood & O'Brien 2003) In addition to other well-documented benefits, nursing may provide some protection against SIDS, which is more prevalent in drug-exposed infants. [Jansson, 2004 #8239] The improved bonding that accompanies nursing may also help the baby and reinforce the mother’s recovery. However, any abuse of drugs is a contraindication to nursing. Any woman whose risk factors for HIV are recent (within the past year) should be advised of the risk of transmission of HIV to the baby through nursing if she is in fact carrying the infection. The Center for Disease Control has concluded that HCV infection is not a contraindication to nursing as there is no evidence to date of HCV infection in nursing infants (CDC). A woman who is infected with hepatitis C should be counseled to pump and discard if she experiences nipple trauma (until she has healed) based on concerns about the baby ingesting HCV infected blood. A woman who decides to breastfeed should ideally be smoke-free. (Cunningham 1997) Patients on MMT who plan to breastfeed often request that the OTP physician talk with the Prenatal Care and Pediatric Care provider regarding methadone and nursing.

Discharge During Pregnancy
Methadone withdrawal during pregnancy should be avoided unless there is an irresolvable indication for it. Such indications are rare but include the situation when a woman is missing so many doses that it is impossible to achieve a stable blood level. Every effort should be made to ascertain and alleviate barriers to regular dosing prior to withdrawing her from methadone. In some cases, the woman is missing doses due to a chaotic home environment, transportation problems, or ongoing drug use. These patients may benefit from residential treatment, provided methadone dosing can continue while the patient is in the facility. A patient who is violent toward program staff or other patients or makes a threat of violence may need to be withdrawn from methadone if transfer to another program is not possible.
Pregnant women should not be withdrawn from methadone maintenance for issues such as sporadic attendance at program services (other than dosing), or failure to remain free of illicit drug use, provided her use is not putting her at high risk of overdose. Methadone maintenance is associated with a significant reduction in drug use and high-risk behavior and an increased likelihood of receiving prenatal care, even when some illicit drug use continues. These benefits provide significant protection to the fetus. Pregnancy and delivery can be life-changing experiences, so that ongoing attempts to engage a woman in treatment are often successful. Programs that provide parent education, childcare and transportation facilitate participation, especially when a woman has young children.

**The Post-delivery visit**

According to California Regulation, each woman who qualified for methadone maintenance treatment due to pregnancy must be seen within 60 days of delivery or termination of pregnancy to determine whether she remains an appropriate candidate for continued methadone maintenance treatment. Post delivery, some women report sleepiness on a dose that was therapeutic during the pregnancy. A reduction of the methadone dose by 5-10% (depending on the severity and duration of drowsiness) may be made immediately. The patient should be re-evaluated within 5-7 days to determine whether further dose adjustment is needed.

Because of the post-partum hormonal changes and fatigue associated with the delivery process and caring for a new baby, a woman may experience a constellation of symptoms that reminds her of opioid withdrawal. These symptoms may include sweats, myalgias and arthralgias, mood swings and irritability. A careful history focusing on the nature of the symptoms, the time of onset of symptoms and whether they are relieved by the morning methadone dose will help to clarify the source. Reassurance should be provided that symptoms associated with hormonal changes will resolve in about 6 weeks.

Contraceptive choices should be reviewed and the physician should assure that follow-up OB care occurs and that the baby has pediatric care following discharge from the hospital. On very rare occasions NAS can be delayed and occur 3-4 weeks post partum. The reasons are not clear but may relate to unusually slow infant clearing of methadone. The baby’s pediatrician needs to monitor and be prepared to treat the baby in this unusual event.

The physician should explore the patient's progress in recovery. A dose increase may be necessary if the patient is experiencing increased cravings or fears relapse. Patients should be counseled concerning the benefits of remaining in treatment. Treatment is the best assurance that relapse will not compromise a mother’s ability to provide appropriate care for her new baby.

**Conceiving on Methadone**

Many women of childbearing age will conceive on methadone. While it is not an ideal situation for a pregnancy to be complicated by opiate dependence, outcomes with methadone maintained pregnancies are good, and there are no known long-term negative consequences to children exposed to methadone. Contraceptive counseling should be provided to all women on methadone. Women can be encouraged to plan a methadone withdrawal prior to a planned pregnancy to see if such a plan can successfully avoid the complication of methadone dependence without jeopardizing the woman’s recovery. But the reality is that pregnancies will occur on methadone. In a recent study of 83 women who delivered babies in a Sacramento methadone program with a
special pregnancy program, 26 (31%) were in treatment at the time of conception (McCarthy, in press). These 26 women had the best drug treatment and obstetrical outcomes, with lower levels of drug use, higher birth weights, and lower rates of treatable NAS (40%) than those admitted to the program acutely addicted. The importance of this observation is that in spite of a much greater total methadone exposure during the whole pregnancy, there were better outcomes and less risk for NAS. This information should be part of the information conveyed to women to relieve some of the concerns about conceiving on methadone.

If methadone treatment is not available

If a pregnant woman lives in an area where there are no opioid treatment programs, the available options may be limited to referral or detoxification, or treatment with sublingual forms of buprenorphine. The treatment of pregnant women with buprenorphine is discussed in Appendix C. Buprenorphine is a Category C medication and, as such, is not the treatment of choice, but may be preferable to illicit opioid use.

Methadone maintenance is the treatment of choice for opioid addiction during pregnancy, so every effort should be made to encourage and assist the patient to relocate to an area where methadone maintenance is available. In the event that the patient declines or that relocation is logistically impossible, non-opiate medications may be used to provide symptomatic relief for withdrawal in conjunction with close, obstetrical monitoring during the withdrawal. The patient's informed consent for the procedure must be obtained. In the event that the patient requires hospitalization for another diagnosis, methadone may be used to prevent withdrawal while the primary medical condition is treated. Fetal distress responsive only to opioids may be considered a separate indication for administration of methadone to the mother. And one can certainly argue that in cases of severe withdrawal, that hospitalization and treatment with methadone is both medically appropriate, and at times necessary, to protect both fetus and mother. The withdrawal experienced by the fetus is arguably the ‘other diagnosis’ required by regulations to legally use methadone to treat addiction in a medical hospital. Methadone detoxification may be considered if the patient will be in the hospital long enough to accomplish detoxification. It is strongly recommended that state and federal methadone authorities be contacted for guidance in cases of regulatory impediments to proper care. We are in an era where regulatory barriers to addiction treatment are being removed and authorities are far more willing and able to make exceptions to allow proper medical care to occur.
APPENDIX A -- Opioid Detoxification

Detoxification is not complete treatment for opioid dependence. The objectives of detoxification are short term and limited; they are to alleviate discomfort during opioid withdrawal and to allow the physician to identify concurrent medical disease and to refer for other forms of treatment. Clinical consensus and available research data suggest that the majority of patients do not complete detoxification or relapse shortly after its completion. Nonetheless, detoxification has been accepted as an appropriate strategy in view of the danger of the spread of HIV and other infectious diseases associated with intravenous (IV) drug use. Potential patients should be informed of the high rate of relapse and its accompanying danger and should receive information about additional or alternative treatment for opioid dependence, including Narcotics Anonymous and Other 12 Step programs, and where these alternative treatments are available. Patients should not be denied detoxification if they refuse other treatment.

Federal regulations, as well as some state regulations, define the duration of detoxification. In California the length of time is 21 days, which also parallels the Medi-Cal financial coverage. However, as of 9/21/01, the California Department of Alcohol and Drug Programs (ADP) has “determined that long-term detoxification (up to 180 days) will be allowed for patients who meet specific criteria.” (See ADP web site at www.adp.ca.gov.) This was done in response to the federal regulations that allow 180-day detoxification. Such treatment is not currently covered by Drug-MediCal benefits.

Federal and state regulations regarding detoxification treatment differ. Federal regulation allows for detoxification of up to six months. Federal regulations call for a minimum of 7 days between a patient’s admissions for detoxification. In addition, no patient may be admitted to the same detox program more than twice in a one year period without a specific federal waiver for that patient. California regulations have no limit on the number of admissions for detoxification, however the duration of the treatment is limited to 21 days. The 21-day limit can be waived on a case-by-case basis.

Criteria for admission to detoxification treatment

The purpose of opioid detoxification is to allow a person who is physically dependent on an opioid to stop using without experiencing acute symptoms of withdrawal. Hence verifying the presence of withdrawal is essential in the decision to offer this form of treatment. A positive initial urine toxicology screen is good evidence of recent opiate use but is neither sufficient nor necessary in itself to determine whether detoxification is indicated. To verify opioid dependence, the physician must observe physical signs of opioid withdrawal.

It should be noted that symptoms and signs of opiate withdrawal are subject to the effects of environment (less intense in controlled settings). The earliest manifestations of opioid withdrawal are often subjective and dependent on the amount and timing of the last use prior to evaluation. Table 2 shows the anticipatory, early, and full-blown symptoms and signs of opiate withdrawal. The physician should expect to see the early signs of withdrawal. The Clinical Opiate Withdrawal Scale (COWS, see Table 4)
is easily administered and can be used to quantify and document the presence and severity of opiate withdrawal.

The physician should assure that the patient agrees to detoxification by obtaining written consent for treatment. The physician should assure that patients under eighteen years of age have written consent from their parents or guardians prior to initial dosing.

Although detoxification rarely produces a sustained abstinence from opioids, detoxification can be a first step toward recovery from opioid addiction. Detoxification treatment may delay or prevent a patient from resuming heroin use with the associated risks and harms to the patient, family and society. It may reduce the patient’s tolerance to opiates. It introduces the patient to the treatment setting in a non-threatening way and thus may facilitate the patient's entry into maintenance therapy. It gives the OTP physician an opportunity to establish rapport with the patient, to diagnose and treat infectious diseases and other medical complications, to counsel regarding healthy nutrition and to work with the patient to develop a long-term treatment strategy.

Several detoxification protocols exist (see Table 14). For short-term detoxification, withdrawal must be concluded within 21 days, so the initial dose should not be so high as to make the ensuing reductions steep enough to bring on withdrawal symptoms. Longer periods of detoxification may seem more logical, and indeed at times indicated, but they should not be construed as having better long-term outcomes. (Sees, K et. al.). Longer detoxification schedules allow some months of stabilization at a therapeutic dose (Table 14), and the patient may realize that maintenance treatment works best. Retention in treatment is still the mainstay of any effort to treat a chronic disorder, such as opioid dependence. By the same token, detoxification treatment (of any length) should not be viewed as futile, but rather as an opportunity to meet and engage a patient who might otherwise continue to incur further harm.
### TABLE 14 ~ TWO PROTOCOLS FOR DETOXIFICATION

**Pattern of typical short-term detoxification on methadone**

![Diagram of short-term detoxification on methadone](image)

**Detoxification with methadone: long-term**

![Diagram of long-term detoxification with methadone](image)
Contraindications to opioid detoxification

Patients who have complicated medical conditions should be encouraged to seek maintenance treatment if they are able to cooperate and participate in treatment. If they cannot, the physician can consider detoxification treatment.

Methadone maintenance is the treatment of choice for the pregnant opioid-dependent woman. The physician should screen for pregnancy at admission and if positive refer for methadone maintenance treatment due to the risk of miscarriage or preterm labor and delivery associated with precipitous opioid withdrawal. Pregnant women should also be assisted to obtain prenatal care. (See also the section on Treatment of Pregnant Women.)

In summary, the role of the physician in opioid detoxification is:

1) To assure that the patient's history, physical and laboratory findings are consistent with the diagnosis of opiate dependence and to assure the historical, physical and laboratory findings are documented.
2) To assure that there is no medical contraindication to opiate detoxification, such as pregnancy (Refer to the section on Treatment of Pregnant Women) or another medical condition.
3) To assure that the patient understands the advantages and disadvantages of detoxification compared to opioid maintenance or other treatment alternatives that are available.
4) To assure that the patient agrees to detoxification by obtaining written consent for treatment and to assure that patients under eighteen years of age have written consent from their parents or guardians. Written consents must be obtained prior to the initial dose.
5) To assure that the patient meets the admission criteria specified by federal and state regulations or that appropriate waiver(s) are on file.


APPENDIX B -- Sublingual Buprenorphine

Where buprenorphine fits

The regulations governing how OTPs can use buprenorphine allow for two approaches.

1) with the same restrictions that apply to methadone: federal regulations (42CFR Part 8) list buprenorphine as a medication that can be used in OTPs and the Interim Final Rule of 2003 approved buprenorphine to be used under the same regulations that govern use of methadone (e.g., no take home doses until criteria have been met; no limit on the number of patients who can be treated with buprenorphine in an OTP.) In California, a regulatory exemption allowing OTPs to use buprenorphine as authorized by federal regulations became effective on January 1, 2005. (Buprenorphine is not covered under Drug MediCal benefits as of this writing.)

2) with the authorization and restrictions under the Drug Addiction Treatment Act of 2000: OTP physicians, as individuals, can get the waiver available under the Drug Addiction Treatment Act of 2000 and can treat up to 30 of their own patients with buprenorphine under the authorization and controls of DATA 2000. Some sites with an OTP license also offer “other services”, and buprenorphine treatment according to DATA 2000 restrictions could be offered as one of these additional, non-OTP services, sometimes taking advantage of the skill and experience of clinicians who know about opioid addiction and who work in the OTP at the same site.

Admission criteria / Patient selection for treatment with buprenorphine

Patients dependent on heroin or opioids such as oxycodone, hydrocodone, hydromorphone, etc, are appropriate candidates for treatment with buprenorphine.

Patients with a history of dependence at risk for relapse to abuse/dependence, such as those patients released from controlled environments who may start to use again, may also be good candidates for buprenorphine treatment.

Contraindications

- Patients whose level of dependence is such that a full agonist would be needed. (It may be difficult to determine this ahead of time, as there is no direct measure of tolerance, so a therapeutic trial with buprenorphine may be indicated even in heavy users.)

- Patients abusing alcohol or sedative hypnotics. Use/abuse of alcohol or sedative hypnotics in combination with buprenorphine increases risk and may compromise the safety of buprenorphine treatment. Continuing abuse or dependence on CNS depressants (alcohol, sedative-hypnotics) should be considered a relative contraindication to buprenorphine treatment. There are reports of deaths associated with the combination of buprenorphine and benzodiazepines. The reports may be of cases limited to IV use of buprenorphine and benzodiazepines, and no reports of deaths have come from the US studies. However, caution is warranted. (Brooner et al. 1997)
• Patients who are physically dependent on alcohol or sedative hypnotics may not be appropriate for treatment with buprenorphine because medical detoxification from these substances often includes the use of benzodiazepine.

• Patients who are pregnant. Methadone is the treatment of choice for pregnant, opioid dependent women. (See Section on Treatment of Pregnant Women.)

For pregnant women
If a specialized treatment program for opioid dependent pregnant women is available and you are seeing a new patient who qualifies for that program (i.e., she is pregnant and opioid dependent), refer her to that program immediately. Refer to a prenatal care provider immediately if there is any delay in access to the specialized treatment program, or if no such program is available.

If you have a patient you have been following for some time who is maintained on buprenorphine/naloxone and becomes pregnant, switch her to buprenorphine only (i.e., buprenorphine monotherapy) to minimize risk of naloxone exposure. While teratogenic effects of naloxone are not known, exposure of the fetus to naloxone should be minimized to avoid risk not known at present. Give strong consideration to referring the patient to the specialized treatment program; if your program does not provide integrated prenatal care, and refer her to a prenatal care provider as well.

Under most circumstances, the pregnant patient should be referred to a methadone clinic program since buprenorphine is not approved for use in pregnant women. If methadone treatment is not available for some reason, a careful discussion with the patient about the risks and benefits of continued buprenorphine monotherapy treatment should be conducted and documented. The patient should also be referred to appropriate prenatal care services.

Buprenorphine is labeled as pregnancy category C because of lack of adequate evidence of use in humans. The few case studies and ongoing small research studies do not show any adverse effects, and it is possible that in future, buprenorphine will be useful in pregnancy. (Johnson, Jones & Fischer 2003) (Lacroix et al. 2004)(Johnson, Jones et al, 2003, Lacroix, Berrebi et al, 2003)

Notes on Dosing with Suboxone® and Subutex® in Treatment of Opiate Dependence
The goal of induction is to suppress inter-dose opiate withdrawal safely and as rapidly as possible with adequate doses of buprenorphine. The same induction procedures for sublingual buprenorphine tablets are applicable for detoxification or initiating maintenance.

Because buprenorphine is a partial agonist with a ceiling opiate effect, a buprenorphine induction regimen can be more aggressive than induction with a full agonist such as methadone. The risk of serious adverse effects such as an overdose or treatment dropout is greater if patient is under-treated with buprenorphine and continues to self-medicate symptoms with opiates, alcohol, or other sedative-hypnotics. Overdose risk is particularly high if the patient uses benzodiazepines. Deaths have been reported in Europe and are most commonly associated with injectable buprenorphine taken with injectable benzodiazepines such as flunitrazepam. (Gueye et al. 2002) (Kintz 2002)
In the US, the practice of observing the first induction dose of Suboxone® or Subutex® evolved from the clinical trials. There is no specific requirement in law or clinical practice to administer the first dose in the office. Advantages of observing the first dose include increased assurance that the first dose is taken when the patient is in documented opioid withdrawal. Observed dosing also provides an opportunity to instruct the patient in taking the sublingual tablet. Most patients can master the sublingual ingestion, but may need coaching at first, with instructions such as ‘don’t talk, don’t swallow’ during the ten to twenty minutes it may take to dissolve the tablet sublingually. Disadvantages include getting the patient in the office while in opiate withdrawal, having a patient arrange transportation to avoid driving after the first dose, etc.

Currently there is neither adequate research nor complete consensus among experienced clinicians on the choice of Subutex® and Suboxone® for the first dose(s) in the induction process. The initial clinical trials used the mono-product (Subutex®) during induction, and then switched to the combination product (Suboxone®) for more take-home dosing. Some experienced clinicians believe that Suboxone® can be used when inducting patients. Several studies have used exclusively Suboxone® with documented safety and efficacy. (Fudala et al. 2003) (Stoller et al. 2001) Others point out that if the patient develops precipitated withdrawal following the first dose of Suboxone®, it will be impossible to know whether emergent opiate withdrawal are caused by opiate antagonist effects of the naloxone in Suboxone® or displacement of a full agonist by a partial agonist.

The observation from the US office-based study concluding that most patients can be started on Suboxone® without precipitating withdrawal does not establish that naloxone didn’t precipitate withdrawal in some patients or that the use of Suboxone® is best practice.

Steps for buprenorphine induction from short-acting opiates (e.g., heroin, oxycodone)

- Instruct patient on how to take a sublingual tablet and provide patient information sheet about induction
- For patients who are physically dependent on short-acting opiates, the first dose should usually be 4 mg of Subutex®/Suboxone®.
- The dose should be taken after moderate opiate withdrawal symptoms have developed. Consider use of opiate withdrawal scales for patient assessment. Remind patients that opiate withdrawal symptoms are usually alleviated in 20-40 minutes following the first dose of buprenorphine.
- Dispense or prescribe an additional 3 doses of Subutex®/Suboxone® (2mg tablets are usually used on the first day) to be taken later in the day and at bedtime and the following morning. (Re-caution the patient that use of opiates during buprenorphine induction may make opiate withdrawal symptoms more protracted). Some patients may be too unstable to manage a take-home dose safely, and some clinics require that the patient come to the clinic for observed ingestion for the first three days, with no take-homes.
- Note that the TIP 40 CSAT guidelines recommend no higher than 8mg for the first day’s dose.
- Assess patient’s response to first day’s dosing. If opiate withdrawal symptoms were fully suppressed and patient is feeling no withdrawal between doses, then keep dose at 8-12 mg/day otherwise increase to 16 mg on day 2 (At higher doses, the 8mg tablets are more convenient).
- Assess patient’s response to second day’s dosing. If opiate withdrawal symptoms were fully suppressed and patient is feeling no withdrawal between doses, then keep dose at day two level; otherwise increase from 16 to 24 mg on day 3.
• If patient is stable after day three, then switch to Suboxone® if Subutex® was used for induction (same total buprenorphine dose). If patient is still experiencing opiate withdrawal symptoms or is using opiates, re-evaluate. Is the patient actually letting the tablet dissolve? Is there a measurable effect after the dose? In some cases, you may decide to continue dosing with Subutex® until withdrawal symptoms are eliminated. The reason to switch to the combination product (Suboxone®) is to discourage injection abuse and further instability. If the patient is correctly ingesting 24 mg and still in documented opioid withdrawal, consider increasing the dose to the maximum recommended of 32 mg and re-evaluating.

Transfer to buprenorphine from methadone
Patients who are doing well on methadone should be encouraged to stay in treatment with methadone and not transfer to a potentially destabilizing new medication.

For patients who do transfer from methadone to buprenorphine, taper of the methadone dose is recommended, as methadone’s long-action and high tissue stores can lead to precipitated relative withdrawal upon buprenorphine ingestion (buprenorphine has higher attachment to the opioid receptor than methadone, and will displace the methadone.) Taper the patient’s methadone dose to 30 mg and keep it at or below 30 mg for one week to allow a new lower steady state to be established. Patients transferring from methadone may have significant opiate withdrawal symptoms while the methadone dose is being decreased to 30 mg/day and during the first few days of induction. The care of patients being treated in a methadone maintenance program should be coordinated with the program until the last day of methadone dosing at the program. As a practical matter, it will be very difficult for some methadone maintained patients to get down to 30 mg/day where a switchover to sublingual buprenorphine can occur.

Once the patient has been at 30mg for a week, wait at least 24 hours or, preferably, skip a dose (that is, wait 48 hours) before induction to buprenorphine.
• Instruct patient on how to take a sublingual tablet and provide patient information sheet about induction
• Administer patient’s first dose (2 mg of Subutex®/Suboxone®) after moderate opiate withdrawal symptoms have developed (consider use of standardized opiate withdrawal scale). Because the rate of metabolism of methadone is highly variable between patients, opiate withdrawal may develop within the first 24 hours after a methadone dose for some patients, but may not occur for 36-48 in others.
• If patient’s opiate withdrawal symptoms improve over the next 2 hours, administer an additional 4mg of Subutex®/Suboxone®. (If opiate withdrawal symptoms have worsened over the 2 hours after the first dose, there are no clear, evidence-based guidelines, but one option is to lower the second dose, and administer 2 mg of Subutex®/Suboxone®. Dispense or prescribe an additional 3 2mg doses of medication to be taken later in the day and at bedtime and the following morning, unless the patient is too unstable to handle take-home medication.
• Assess patient’s response to first day’s dosing. Follow steps above, described for induction from short-acting opioids after day 2.

Maintenance Dosing on Subutex®/Suboxone®
The goal of maintenance is to prevent the emergence of inter-dose opiate withdrawal symptoms, suppress the patient’s craving for opiates, and greatly attenuate the effect of self-administered opiates in patients who continue to episodically use illicit opiates.
The appropriate maintenance dose is variable but for most patients will be in the range of 12-24 mg/day. During maintenance, most patients can be maintained with once daily dosing or twice/day if the patient prefers.

Less frequent than daily dosing regimens have been used but are applicable primarily in a clinic setting with observed dosing. Several studies have shown that alternate day, or three times a week doses are effective, if the intercurrent days’ doses are added to the observed day’s dose. (Amass, Kamien & Mikulich 2001) For self-administered medications, adherence to a daily dosing regimen is likely to be higher and will usually produced fewer withdrawal symptoms between doses.

Dosing adjustments can generally be made in 2 mg/day increments. Because buprenorphine has a long plasma half-life and an even longer duration of action at the mu opiate receptor, 5 days should be allowed between dose adjustments to assess the effect of the new dose following adjustment.

As Suboxone® has less potential for intravenous abuse, most patients should be maintained on Suboxone® during maintenance to minimize diversion/misuse of medication.

Managing Acute and Chronic Pain

The principles of pain management in a patient who is taking buprenorphine are very similar to those above for patient on methadone maintenance. However the high attachment of a partial agonist (buprenorphine) to the opioid receptor has at least theoretical potential problems in a patient who is in pain and needs more opioids.

**Acute pain**

Consider in advance how unanticipated acute pain (e.g., emergency surgery) will be managed for patients maintained on buprenorphine. The maintenance dose of buprenorphine will not provide pain relief. Identify types of opioid and non-opioid medications and other types of pain management (e.g., regional analgesia). If opioids are to be used, consider switching the patient from buprenorphine to methadone if full agonist pain reliever is needed.

**Chronic pain**

Patients in treatment for opioid dependence with Suboxone®/Subutex® may also suffer from chronic pain. While the sublingual forms of buprenorphine are approved by the FDA for treatment of opioid dependence, they are not approved for the treatment of chronic pain. Their use for the sole indication of pain would be an “off label” use.

Buprenorphine’s strong attachment to the opioid receptor may interfere with use of additional opioids. If additional opioid medications are to be used in the treatment of chronic pain, consider switching the patient from buprenorphine to methadone for maintenance medication.

Ambulatory Discontinuation of Suboxone®/Subutex®

In general, the principles for medically supervised withdrawal from methadone apply to medically supervised withdrawal from buprenorphine.
Medical indication to discontinue
If a patient cannot be stabilized on buprenorphine, the patient should be referred for treatment with methadone.

When the patient wants to discontinue
When the patient wants to discontinue pharmacotherapy, a discontinuation trial can be planned. Although there is little evidence-based guidance on medically supervised withdrawal from buprenorphine, in general, a longer period of discontinuation is to be preferred over a shorter one (e.g., less than 1 month). Taper over a period of one month or longer may provide a more comfortable experience for the patient. The goal is to discontinue maintenance treatment while minimizing the risk that the patient will relapse to opiate abuse. Psychosocial treatments should continue throughout the period of the taper and preferably after Subutex®/Suboxone® has been discontinued. The long-term relapse rates after buprenorphine withdrawal are unknown.

Suggested procedures for medically supervised withdrawal from buprenorphine:
- Decrease Suboxone®/Subutex® in 2 mg increments (not more frequent than weekly) and assess the effect on the patient’s opiate use/craving, inter-dose opiate withdrawal, and overall well being.
- If a dose decrease induces increased opiate use/craving or decrement in patient’s overall well being, increase the daily dose by 2 mg and try again to decrease after several weeks.
- If a dose decrease results in inter-dose opiate withdrawal, increase the frequency of dosing to bid or tid.

Use of Suboxone® for detoxification
A recently published multi-site clinical trial showed that Suboxone® for short-term, 13-day detoxification was well tolerated and feasible in a variety of settings, including outpatient. Retention in treatment during detoxification was excellent. Long-term follow-up data are not yet available. (Amass et al. 2004) Aside from this study, there is not much literature to guide detoxification treatment with buprenorphine.
APPENDIX C – Office-Based Opioid Agonist Treatment (OBOT)

Office-based treatment with methadone usually takes the form of “Medical Maintenance” – a model in which the OTP refers a suitable methadone maintenance patient to an office-based setting where a qualified physician continues to provide the methadone and perhaps other aspects of care as well. In this model, there is a close affiliation between the office practice and the OTP that refers patients. OBOT physicians must be affiliated with a sponsoring OTP, and there should be a close, collaborative relationship between the OBOT physician and the OTP clinical staff.

The benefits for the patient
There are at least two benefits to the patient. First, general medical and/or psychiatric care can be integrated with treatment of opioid dependence. Second, the potential for “graduation” to a less structured, more convenient setting can be a motivating element to a patient.

How to establish an OBOT Program
Exemptions must be requested from CSAT by OTPs. The first step is to establish a relationship with a qualified physician. The American Society of Addiction Medicine recommends that the physicians selected to provide OBOT with methadone should have completed certain training. (2004 ASAM Public Policy Statement “Opioid Agonist Treatment in Office-based Practice” available from ASAM website www.asam.org) The second step is to develop a protocol. The third step is to apply to CSAT for the necessary exemption. The application takes the form of a letter; no application form is used. Address the letter to Office of Pharmacological Therapies, CSAT, 1 Choke Cherry, Rm 2-1075, Rockville, MD 20850

California statutes adopted by the legislature in 2000 (SB1807) authorize OBOT programs in California, but not until the California Department of Alcohol and Drug Programs develops regulations for them. As of March 2005, the Department has not drafted such regulations. (California Health & Safety Division 10, Chapter 9.8, section 11877.2)
APPENDIX D – Sample Forms

Short Form – Intake History and Physical Examination

PATIENT’S NAME __________________________________ DATE ______________

CC: ____________________________________________

Opiate abuse history:
Yrs/mos of use ___. Type of use ___. Current run of continuous use ___.
Amount of current use _______. Last use date/time ________.
Present symptoms ________________________________________
History of drug abuse treatment: __________________________________

Medical history:
Allergies __________________ Current meds ____________________________
Medical/ psychiatric problems __________________________________________
Hospitalization/surgery ______________________________________________
Hepatitis______ SBE ______ HIV ___ TB ___ STD ______
(women) LMNP_____ G__ P __ TAB __ SAB __ Contraception __________
ROS: ______________________________________________________________

Other drug abuse history:
Cocaine/stimulant _____ Alcohol _____________
Valium/sedatives _____ Caffeine _____________
Marijuana _________ Nicotine/cigarettes ______ quit/cut down? ____________

Nutrition history: ________________________________________________

Routine screening history(pap, chol, etc.): ____________________________

PHYSICAL EXAMINATION:
T ___ P ___ BP ___ R ___ WT. ___ HT ___ Gen. Appearance: ________________

HEENT: ___________________ ABD
Thyroid/neck _______________ BACK
Heart ___________________ Neuro
Lungs ___________________ Extrem
Chest/breast _______________ Skin
Signs withdrawal:
- Pupils ___
- Rhinorrhea ___
- Lacrimation ___
- Perspiration ___
- Pilorection ___
- Increase temp. ___
- Increase BP ___
- Tachycardia ___
- Vomiting ___
- Diarrhea ___

Office-based opioid maintenance assessment:
- __ opioid dependence
- __ withdrawal: degree________________

PLAN:
- __ admit to maintenance treatment; initial dose order: _________________________
- __ routine labs; other labs: _____________________________
- __ TB test; placed date_______ to be read date _________
  other TB status checks __________________________
- __ drug screen schedule ___________________________________________

Next visit: ____________________________________________

Counseling plans: ____________________________________________

Signed ________________________________ Date ________________________

Patient name ____________________________________________
Long Form for Admission History and Physical Examination

Name: ____________________________  Date:___/___/___  I.D. # ____________

Date of birth:___/___/___  Age:_____  Sex: M / F  Race: B / W /other:__________

Past Medical History: hospitalization: yes  no  - list date, hospital and reason.
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________

HBP [ ] heart dz [ ] endocarditis [ ] asthma [ ] pneumonia [ ] PUD [ ]
HIV [ ] psych [ ] liver dis./hepatitis [ ] anemia [ ] diabetes [ ] thyroid
dz [ ] CA [ ] seizure [ ]

Medications (include OTC):
_________________________________________________________________________

Allergies:
_________________________________________________________________________

Immunizations: Last Td _____ Doesn’t know [ ]  Accepts booster (> 10yrs.):____
  Pneumonia vaccine: no  yes  date:____________
  Previous PPD: ______________ Result:___________
  Treated:_________________________
  Previous HIV test:_____________ Result:___________

Prior Drug Tx.: total #_______  _____________________________________________

Inpatient Detox:  #_______  _____________________________________________

Drug Overdose:  #_______  _____________________________________________

Family History (first degree rel.) If deceased, give age and cause of death.:
Heart dz [ ] Diabetes [ ] HBP [ ] Kidney dis. [ ] Alcohol or drug problem
[ ] Mental illness [ ] CA [ ]
_________________________________________________________________________
### Substance Use History:

<table>
<thead>
<tr>
<th>Substance</th>
<th>Duration</th>
<th>Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heroin</td>
<td>$______/day</td>
<td><strong><strong>days/wk. I.V. I.N. Dependent</strong></strong> yrs.</td>
</tr>
<tr>
<td>Other opiates</td>
<td>$______/day</td>
<td><strong><strong>days/wk. P.O. I.V. drug</strong></strong>______</td>
</tr>
<tr>
<td>Cocaine</td>
<td>$______/day</td>
<td>____days/wk. I.V. I.N. Smoked</td>
</tr>
<tr>
<td>Alcohol</td>
<td>Type &amp; amt.______/day</td>
<td>____days/wk. Current: y n</td>
</tr>
<tr>
<td>Benzodiazep.</td>
<td>Drug &amp; amt.______/day</td>
<td>____days/wk. Current: y n</td>
</tr>
<tr>
<td>Marijuana</td>
<td>Amt.______/day</td>
<td>____days/wk.</td>
</tr>
<tr>
<td>Tobacco</td>
<td>____ pack(s)/day</td>
<td>Current: yes no, quit date__________</td>
</tr>
<tr>
<td>Other: (clonidine, phenergan, other sedatives, PCP, LSD, amphetamines, inhalants)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Last drug use: (what, when)__________________________________________

### Social History:

- Currently working: yes no
- Type (present or previous work):_______________________________
- Healthcare: yes no where:____________________________________
- last visit:_____________
- Health insurance: M.A. Private VA None
- Prescription coverage: yes no
- Marital status:________________________________ Lives with:____________________________
- Does spouse or partner use drugs?_______________________________
- Children: (ages)____________________________________________
- Children live with:__________________________________________

### Dietary:

- Avg. # meals/day:_______ Food intolerance: no yes:__________
- Comments:________________________

### Behavioral History:

- Number sexual partners in past 5 yrs.:____0, __1, ____2-5, ____>5
  - Opposite sex Same
- Number sexual partners in last 4 wks: ____0, ____1, ____2-5, ____>5
  - Opposite sex Same
- Have you shared works?_______ How recently?________________
- Contraceptive used:________________________
  - Condoms used:______times/last 10

### STD:

- Ever had: Syphilis Gonorrhea Herpes Chlamydia
  - Genital warts
OB/Gyn:

Last menstrual period:__________ Interval:__________
Flow: Nl. □ Heavy □ Scant □ Abnormal discharge: n / y

# times pregnant:_____ # deliveries____
Breast: c/o Pain_____ Lump_____ Discharge____
Last Pap smear:______________ Result: Nl □ Abn.__

Review of Systems: √ if pos.

Drug/withdrawal related: Runny nose___, Body aches___, Irritable___,
Chills___, Nausea___, Stomach cramps___, Diarrhea___, Agitation___,
Difficulty concentrating___, Tremors___.
General: Weight change___, Loss of appetite___, Fever___, Night sweats___, Fatigue___.
Immunol./Integ.: Swollen “glands”___, Skin rash___, Abscess___.
ENT: Poor vision___, Poor hearing___, Dental problems___, Hoarseness___.
Pulmonary: Cough___, Wheezing___, Shortness of breath___.
Circulatory: Chest pain___, Painting___, Palpitations___, Ankle swelling___,
COLD or painful extremity___.
Gastrointest: Heartburn___, Abdominal pain___, N / V / D / C (circle)___,
Hemorrhoids___.
Urogenital: Nocturia x ___, Urgency/freq.___, Hematuria___, Discharge___,
Decreased Libido___, Irregular Periods___, Amenorrhea___.
Musculoskeletal: Back pain___, Joint pain___, Joint swelling___, Muscle weakness___.
Neurologic: Headache___, Memory loss___, Incoordination___,
Depression___, Anxiety___.
Comments:___________________________________________________________
____________________________________________________________________
____________________________________________________________________
____________________________________________________________________

Patient Education: (*) if done

HIV prevention ( )
TB prevention ( )
Quit smoking ( )
Other:________________________ ( )

Advanced Directives information offered:
Yes ( ) No ( ) If no, document reason in progress note.

Signature person completing this form:______________ Date: ________
Laboratory results:

EKG:

Immunization needs:

Td:____
Pneumonia vaccine:____

Diagnoses:
1. _________________________
2. _________________________
3. _________________________
4. _________________________
5. _________________________

History of, S/P:

Problem List / Plan:
1. ____________________________________________________________
2. ____________________________________________________________
3. ____________________________________________________________
4. ____________________________________________________________
5. ____________________________________________________________
6. ____________________________________________________________

Physician’s signature:__________________________  Date:___________
Authorization for the Release of Confidential Client Information

CONSENT FOR THE RELEASE OF CONFIDENTIAL CLIENT INFORMATION

CONFIDENTIAL CLIENT INFORMATION: If sent to an incorrect fax number, please call immediately to notify of error.

Tele ___________________

CLIENT NAME: ___________________________________ DATE OF BIRTH: _______________________
SOCIAL SECURITY NUMBER: _____________________ ID NUMBER: ____________________

Federal regulation 42 CFR, Part 2, prohibit further disclosure of information without specific written consent from person to whom it pertains, or as otherwise permitted by such regulation. A general authorization for release of medical or other information is NOT sufficient for this purpose.

I, ___________________________________________, Hereby authorize ______________________________________ (Person/ Agency Name)

at ___________________________ (Telephone Number) to disclose or receive records/information obtained in the course of service rendered to me to/from __________________________________________________

This disclosure of records/ information authorized herein is required for the following purpose(s):

_____________________________________________________________________________________
_____________________________________________________________________________________

and shall be limited to the following specific types of information (select one or more):

Please initial beside each type of information authorized.

_____ [ ] Dates/ Attendance/ Types of Service  _____ [ ] Intake Summary  _____ [ ] Psychiatric evaluation

_____ [ ] Demographic Background  _____ [ ] Correspondence  _____ [ ] Medication

_____ [ ] Financial Information  _____ [ ] Physical Exam  _____ [ ] History and Progress

_____ [ ] Continue of Care Referral Summary  _____ [ ] Other (specify): _______________________

_____ [ ] Any information in my treatment record ___________________________________________

I understand that my records are protected under the federal regulations governing Confidentiality of Alcohol and Drug Abuse Patient records, 42 CFR Part 2, and cannot be disclosed without my written consent unless otherwise provided for in the regulations. I understand that I may revoke this consent at any time except to the extent that action has taken on it, and that in any event this consent expires automatically as follow:

_______________________________________________ (Date/ event/ condition upon which this consent expires)

______________________________________ __________________________ (Client Signature) (Date)
**To be signed by staff member who initiates from.____________________
Physician Request for a Patient’s Controlled Substance Profile

Effective January 1, 2003, California physicians are entitled to make a written request for and receive the history of controlled substances dispensed to an individual under his or her care.

The form prepared for making that request is called the “Patient Activity Report” (PAR) (formerly the “Physician Request For Patient Controlled Substance Profile.”) It can be downloaded from website of the California Attorney General:

http://caag.state.ca.us/bne/pdfs/BNE1176.pdf

The profile prepared by the Department of Justice will provide the physician with a list of all Schedule II controlled substances prescriptions to the patient that have been filled within the last three months, the name of the physician issuing the prescription, and the pharmacy where the prescription was filled.

A PAR printout “contains prescribing history contained in the CURES data system for that patient by medical prescribers in California. Verification by the California Department of Justice staff is required to substantiate the validity of the requesting medical prescriber or pharmacist before information on a PAR is released.” (quote from the website of the CA Office of the Attorney General, CURES section, viewed 8-13-04)
Physician Activity Report

Complete, accurate and legible information will ensure timely response to your request.

<table>
<thead>
<tr>
<th>PHYSICIAN INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician DEA No:</td>
</tr>
<tr>
<td>Physician Name:</td>
</tr>
<tr>
<td>Physician Address:</td>
</tr>
<tr>
<td>City:</td>
</tr>
<tr>
<td>Telephone No:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PATIENT INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last Name:</td>
</tr>
<tr>
<td>AKA (Also Known As):</td>
</tr>
<tr>
<td>Patient Address:</td>
</tr>
<tr>
<td>City:</td>
</tr>
<tr>
<td>Telephone No:</td>
</tr>
<tr>
<td>Social Security No:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ADDITIONAL COMMENTS OR INFORMATION</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>AUTHORIZATION</th>
</tr>
</thead>
</table>
"By signing below, I certify that I am a licensed health care practitioner eligible to obtain triplicate prescription forms. I request the history of controlled substances dispensed to the patient in my care identified above, based on data contained in the Controlled Substance Utilization Review and Evaluation System (CURES). I understand that any request for, or release of, a controlled substance information subject to the provisions of the Confidentiality of Medical Information Act (Civil Code §§ 56 et seq.), and that I should allow ten business days for receipt of the requested history."

Please FAX your request to (916) 227-5079

Or mail to: California Department of Justice, P.O. Box 160447, Sacramento, CA 95816

Physician Signature: Date:

<table>
<thead>
<tr>
<th>For Department of Justice Use Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Received</td>
</tr>
<tr>
<td>Initials</td>
</tr>
</tbody>
</table>
APPENDIX E: References


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