BUPRENORPHINE:

Easier Opioid Withdrawal and Treatment Available in Primary Care Settings

Buprenorphine is available under the brand names Subutex® (pure buprenorphine) and Suboxone® (buprenorphine plus naloxone). Suboxone® is the most commonly prescribed form and comes in tablet or soluble film that dissolves when placed under the tongue. Neither is effective when swallowed.

Buprenorphine is a long-acting partial agonist. It acts on the same receptors as heroin and morphine, but has a limited effect that does not increase with an increased dose. It relieves drug cravings and withdrawal symptoms without producing an intense "high" or dangerous side effects. While buprenorphine is being used, other opioids will have little to no effect, minimizing the risk of sudden or impulsive return to opioid use.

Buprenorphine represents a positive alternative for opioid addiction treatment because it:

- rapidly reduces or eliminates withdrawal symptoms, often within an hour. Without medical assistance with buprenorphine, withdrawal is experienced as 3-6 days of severe flu-like symptoms. This keeps many people addicted to opioids actively involved in illicit drug use to avoid the withdrawal experience.
- is available by prescription from specially trained physicians in primary care and other office-based settings. This allows for increased access to opioid treatment, thus providing an alternative for those who are concerned about going to a methadone clinic, and helps reduce stigma by bringing addiction treatment into the primary care setting.

Physicians who have met the requirements and are authorized to treat patients with buprenorphine are listed by state on SAMHSA's Treatment Locator website: http://buprenorphine.samhsa.gov/bwns_locator/.

Buprenorphine therapy is comprised of three phases:

- **Induction**: medically monitored startup of buprenorphine therapy. The individual has abstained from using short-acting opioids for a minimum of 8-12 hours and demonstrates clinical signs of moderate withdrawal. If the patient is not in the early stages of withdrawal (i.e., if he or she has other opioids in the bloodstream), then the buprenorphine dose could precipitate acute withdrawal.
- **Stabilization**: patient has discontinued or greatly reduced use, no longer has cravings, and is experiencing few or no side effects. The dose may need to be adjusted during the stabilization phase.
- **Maintenance**: patient is doing well on a steady dose of buprenorphine. The length of the maintenance phase is individualized and may be indefinite.
- **Medically supervised withdrawal** may be considered after a sufficient period of maintenance and once stabilization has been achieved.

Buprenorphine allows for increased access to opioid treatment by bringing addiction treatment into the primary care setting.

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Primary counseling and adjunctive medical management are critical in providing the most effective treatment with buprenorphine. Counselors should take care to work with, not against, the medication. Counseling with a focus on "getting off" buprenorphine can convey the idea that taking the medication is somehow wrong. Instead, counselors should support patients' medication compliance, framing it as one aspect of a comprehensive treatment plan.

Patients and physicians will decide together about the option to use buprenorphine. Ideal candidates who may benefit from this medication:

- have been diagnosed with opioid addiction,
- are capable of self-administering medication on a daily basis and participating in counseling and other support services necessary for recovery,
- are willing to follow safety precautions for treatment (e.g., safe storage, not sharing medication, not abusing benzodiazepines, etc.),
- have no contraindications (e.g., co-ingestion of alcohol, co-ingestion of certain central nervous system depressants), and
- agree to treatment with buprenorphine after a review of treatment options.

Ongoing care coordination between the physician, counselor, community support provider, and self-help/12-step program is essential.

For more information:

Buprenorphine information from NIDA:
http://www.drugabuse.gov/publications/topics-in-brief/buprenorphine-treatment-opiate-addiction-right-in-doctors-office

NIDA/SAMHSA Blending Initiative websites:
http://www.attcnetwork.org/explore/priorityareas/science/blendinginitiative/

www.nida.nih.gov/blending

SAMHSA buprenorphine website:
http://buprenorphine.samhsa.gov/about.html

FDA Suboxone® and Subutex® website:
http://www.fda.gov/Drugs/DrugSafety/PostmarketDrugSafetyInformationforPatientsandProviders/ucm191520.htm

SAMHSA's *Treatment Improvement Protocol (TIP) 43: Medication-Assisted Treatment for Opioid Addiction in Opioid Treatment Programs:*
http://www.ncbi.nlm.nih.gov/books/NBK14677/

Sources for information contained within this fact sheet:

http://www.attcnetwork.org/explore/priorityareas/science/blendinginitiative/

http://www.oregon.gov/OHA/addiction/publications/addiction-messenger/buprenorphine.pdf?ga=t

For more information, including a POATS Resource List, please visit the NIDA/SAMHSA Blending Initiative section of the Addiction Technology Transfer Center Network website, http://www.attcnetwork.org.

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METHADONE:

Methadone maintenance treatment (MMT) can help injection drug users (IDUs) reduce or stop injecting and return to productive lives. (IDU HIV Prevention, CDC, February 2002)

Methadone is a synthetic, long-acting medication that has been used to treat opioid addiction for over 40 years. A Schedule II controlled substance, Methadone is a mu-receptor opioid agonist. Also known under the brand names Dolophine® and Methadose™, methadone is a legal, well-tested medication. A potent analgesic, methadone is highly effective in reducing morbidity and mortality associated with opioid addiction. The medication is taken orally either in tablet, liquid or dispersible tablet (diskette) form. With an onset of action within 30 minutes and an average duration of action of 24 to 36 hours, methadone only needs to be taken once a day for the treatment of opiate abuse. When prescribed for the treatment of chronic pain, methadone is typically dosed 3 times per day.

Methadone for opioid addiction treatment can only be dispensed in specially licensed outpatient maintenance treatment programs or medically supervised withdrawal programs. Oversight of these Opioid Treatment Programs (OTPs) is a tripartite system including states, SAMHSA, and the U.S. Department of Justice/Drug Enforcement Administration. Opioid treatment programs (OTPs) are not available for treatment in all states (see http://www.dpt.samhsa.gov/treatment/treatmentindex.aspx for an OTP Directory). Authorization for take-home medication is left to the discretion of the program's medical director according to eight criteria specified in 42 CFR part 8, 12 (i) (e.g., length of time the patient has been in treatment, regularity of clinic attendance, continued opioid abstinence).

As methadone was developed for persons with significant histories of heroin addiction, it is not appropriate for individuals who used opioids occasionally. Current addiction to an opioid drug and a one-year history of addiction is necessary for admission to maintenance treatment. According to 42 CFR, the first initial dose of methadone should not exceed 30 milligrams (mg) and a total dose for the first day shall not exceed 40 mg. Patients who abused diverted medical opioids alone may require a lower initial dose [42CFR 8.12 (h)(2)(c)].

A patient's response to treatment determines her or his progression through the stages of methadone treatment. Studies suggest that the duration of retention in treatment is directly related to success in outcome (Gerstein et al., 1994; French et al., 1993; French & Zarkin, 1992; Gerstein & Harwood, 1992; Hubbard et al., 1989; Simpson et al., 1986*). As there are no limits on duration or dosage level, a major goal for programs is to retain patients for as long as they can benefit from treatment and express a desire to continue. Research has shown that compared to those on lower doses, patients on higher doses (60-120 mg daily) stay in treatment longer, use less heroin and other drugs, and have lower incidence of HIV infection.

Research has shown that methadone patients stay in treatment longer, use less heroin and other drugs, and have lower incidence of HIV infection

The Stages of Methadone Treatment are as Follows:

***Initial Treatment Period*:**

- First day dosing not to exceed 30-40 mg
- Entails intensive assessment and intervention
- Requires vigilance over rapid dosage increases due to methadone's half-life and degree of tolerance
- Necessitates daily dosing at the OTP
- Lasts from 3-7 days

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Early Stabilization:

- Patient can become eligible for take home medication within 90 days
- Periodic assessment of the most appropriate combination of treatment and services is provided
- Lasts from the third to the seventh day of treatment until the eighth week

Long-term Treatment:

- Clinical stability typically achieved at doses between 80-120 mg/day
- Occurs from the end of stabilization and lasts for an **indefinite period of time**

Medically Supervised Withdrawal:

- Only conducted **if and when appropriate** as some patients may require lifelong maintenance
- Tapering is conducted gradually at a rate that is well tolerated by the patient, is in accordance with sound clinical judgment, and is conducted under the supervision of a physician
- Goal is to achieve the elimination of physical dependence to opioid medications
- Patients are apprised of the high risk of relapse to illicit drug use associated with discontinuation of methadone maintenance treatment

The major risks of methadone are often related to over or under medication. These can include respiratory depression and, to a lesser degree, systemic hypotension. The most frequently observed side effects to the medication include lightheadedness, dizziness, sedation, nausea, weight gain, vomiting, and sweating.

As a medication, methadone is effective in:

- blocking the euphoric and sedating effects of opiates
- relieving the craving for opiates (a major factor in relapse)
- relieving symptoms associated with withdrawal from opiates
- eliminating the euphoria or intoxication allowing a person to work
- improving individual functioning including family and other social relationships
- reducing HIV infection

Further, patients enrolled in an OTP receive medical, counseling, vocational, educational and other assessment an treatment services. Methadone is currently the recommended treatment for opioid-addicted pregnant women, when properly used, methadone is considered *relatively* safe for the fetus. By participating in an OTP, pregnant patients receive necessary prenatal care and other gender specific services either by the OTP or by referral to appropriate healthcare providers.

References*:

Gerstein, D.R., Johnson, R.A., Harwood, H.J., Fontain, D., Suter, N., & Malloy, K. (1994). *Evaluating Recovery Services: The California Drug and Alcohol Treatment Assessment (CALDATA) - General Report,* Publication No. ADP 94-629. Sacramento, CA: California Department of Alcohol and Drug Programs.

French, M.T., G.A. Zarkin, R.L. Hubbard, & Rachal, J.V. (1993). The effects of time in drug abuse treatment and employment on posttreatment drug use and criminal activity. *American Journal of Drug and Alcohol Abuse, 19*(1), 19-33.

French, M.T., & Zarkin, G.A. (1992). The effects of drug abuse treatment on legal and illegal earnings. *Contemporary Policy Issues, 10*, 98-110.

Gerstein, D.R., & Harwood, H.J. (1992). *Treating Drug Problems, Volume 2.* Washington, D.C.: Institute of Medicine.

Hubbard, R.L., Marsden, M.E., Rachel, J.V., Harwood, H.J., Cavanaugh, E.R., & Ginzburg, H.M. (1989). *Drug Abuse Treatment: A National Study of Effectiveness.* Chapel Hill, NC: University of North Carolina Press.

Simpson, D.D., Joe, G.W., Lehman, W.E.K., & Sells, S.B. (1986). Addiction careers: Etiology, treatment, and 12-year follow-up outcomes. *Journal of Drug Issues, 16*(1), 107-21.

For more information, including a POATS Resource List, please visit the NIDA/SAMHSA Blending Initiative sectio of the Addiction Technology Transfer Center Network website, http://www.attcnetwork.org.

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NALTREXONE:

Naltrexone can reduce craving and increase abstinence for individuals dependent on opioids or alcohol

Naltrexone, an opioid antagonist, blocks the effects of opioid drugs (such as morphine, heroin, and oxycodone) in the brain and decreases the craving for alcohol by reducing the intoxicating effects. As such, it helps to eliminate alcohol- or drug-seeking behavior and to prevent relapse. It is an effective, yet underutilized, medication that can help individuals remain abstinent from alcohol and opioids. It is important to note that naltrexone **does not** reduce the effects of alcohol that impair coordination and judgment.

Naltrexone has many positive characteristics, including:

- no associated intoxication
- no potential for abuse
- does not cause physical dependence
- when stopped, it does not cause withdrawal symptoms
- an unlikely candidate for black market sales or other unintended uses

Individuals must be completely opioid-free before taking naltrexone. Using naltrexone while on opioids can precipitate severe withdrawal symptoms.

Naltrexone requires a prescription from a licensed medical provider. Prescriptions are usually issued in an outpatient medical setting or after medical detoxification in a residential setting.

Naltrexone is currently available in three forms:

- ReVia® or Depade®, pills taken orally on a daily basis, generally for weeks to months; standard dosage levels exist, and courses of therapy can be adjusted for the individual
- Vivitrol®, a new long-acting formulation of the medication, given monthly by intramuscular injection, administered by a health care professional

Naltrexone is suited for opioid-dependent patients who are:

- Highly motivated, recently detoxified patients who desire total abstinence and whose circumstances may increase their motivation.
- Other potential candidates may include opioid-dependent persons who prefer to try alternative pharmacotherapy prior to buprenorphine or methadone; or persons currently abstinent but concerned about possible relapse.

Naltrexone is suited for alcohol-dependent patients who are:

- Highly motivated and need additional support to resist the temptation to drink by limiting alcohol's pleasurable effects.
- Other potential candidates may include alcohol-dependent persons who desire help in reducing cravings for alcohol.

Naltrexone is an effective medication that can help to eliminate alcohol- or drug-seeking behavior and reduce relapse.

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Naltrexone can be a highly effective part of a comprehensive recovery program. Chances of a favorable treatment outcome increase with:

- a positive therapeutic relationship
- effective counseling or therapy and aftercare/support
- careful monitoring of medication compliance
- patient and family education about the medication
- use of motivational incentives, such as rewards for maintaining abstinence

Side effects -- when taken as directed, naltrexone's side effects are:

- uncommon
- generally minor
- temporary

Toxic effects on the liver are rare but have been reported; blood tests of liver function should be performed prior to, and periodically during, treatment to determine if liver toxicity is taking place.

Contraindications -- naltrexone should not be taken by:

- persons currently using, or unable to abstain from opioids
- persons using opioids for the treatment of acute or chronic pain
- pregnant or breastfeeding women
- persons with severe liver or kidney damage

For more information:

SAMHSA's Medication Assisted Treatment for Substance Use Disorders website:
http://dpt.samhsa.gov/medications/naltrexone.aspx

Principles of Drug Addiction Treatment: A Research-Based Guide (2nd edition):
https://www.drugabuse.gov/publications/principles-drug-addiction-treatment

The Facts about Naltrexone (patient education booklet):
http://www.kap.samhsa.gov/products/brochures/pdfs/naltrexone_facts.pdf

Sources for the information in this fact sheet:

http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0000853/

http://dpt.samhsa.gov/medications/naltrexone.aspx

http://www.atforum.com/pdf/NTX-Opioid.pdf

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The Facts about Naltrexone (patient education booklet):
http://www.kap.samhsa.gov/products/brochures/pdfs/naltrexone_facts.pdf

Sources for the information in this fact sheet:

http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0000853/

http://dpt.samhsa.gov/medications/naltrexone.aspx

http://www.atforum.com/pdf/NTX-Opioid.pdf

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