



**Indian Health Service  
National Pharmacy and Therapeutics Committee  
Treatment of Opioid Dependence  
NPTC Formulary Brief  
May 2014**



**Background:**

In May 2014, the I.H.S. NPTC reviewed the treatment of opioid dependence. The discussion included a review of the history of opioid addiction and laws regarding treatment as well as a review of epidemiology of opioid use/abuse in the US. The FDA approved medications for treatment of opioid addiction were also reviewed, which include methadone, naltrexone and buprenorphine. This discussion did not lead to a formulary modification; however, it was felt that a formulary brief would be of benefit to IHS providers.

**Discussion:**

History of Opioid Addiction: Because of increasing opioid addiction and crime in the early 20<sup>th</sup> Century, the Harrison Narcotic Act of 1914 began regulating manufacturing, distribution and prescription of opioids. For those with addiction, federally appropriated treatment facilities were established but were not effective in treating addiction. Both law and medical associations began advocating for medication assisted treatment. In 1964, methadone was approved for treatment of opioid dependence. In 1974, the Narcotics Treatment Act recognized the importance of using an opioid to treat opioid dependence but limited methadone treatment to SAMHSA certified “outpatient treatment programs (OTP)”. The certification process all but eliminated office based treatment of opioid dependence in the Agency. Naltrexone was approved for treatment of opioid dependence in 1984 but clinical effectiveness was poor in opioid dependence treatment. In the 1990s, the IOM and NIH released a consensus panel statement concluding that FDA regulations were inhibiting physicians’ ability to treat addiction (i.e., methadone limited to OTPs) and called for reduction in unnecessary regulation of maintenance pharmacotherapy and expansion of availability. This led the way to the Drug Addiction Treatment Act of 2000 (DATA 2000) which expanded medication assisted opioid treatment to the office based setting using schedule III, IV, or V controlled substances. This was in anticipation of the FDA approval of buprenorphine in 2002 which was listed as a schedule III medication for the treatment of opioid dependence.

Prevalence of Opioid Use and Abuse in the US: There has been an increasing rate of drug overdose deaths in the United States, with a steep increase ever since 2000. Of these, opioids are involved in the most overdose deaths, more than cocaine and heroin combined. The number of ED visits involving use of legal drugs non-medically is similar to the number involving illegal drugs, and among the legal drugs, opioids are the most common, with oxycontin, hydrocodone, and oxycodone as the most common types of opioids.

Characteristics of the Ideal Medication for Treatment of Addiction: The ideal medication for treatment of addiction should relieve symptoms of withdrawal, have low abuse potential (low euphoric effects), low overdose potential, longer duration of action and longer onset of action, should not be able to be injected (utilize an abuse/tamper deterrent dosage form) and should allow return to a productive lifestyle.

FDA approved medications for the Treatment of Opioid Dependence: There are three main types of pharmacotherapy for opioid addiction: agonist (methadone), antagonist (naltrexone), and partial agonist (buprenorphine).

1. Methadone suppresses withdrawal and decreases cravings but is only dispensed in licensed treatment programs, which limits its availability. It has been demonstrated to decrease heroin use, increase employment, and reduce mortality and HIV transmission. In a 2003 Cochrane Review, those on methadone had higher retention in treatment and decreased heroin use compared to placebo.
2. Naltrexone has no abuse or overdose potential and dependence/tolerance do not develop, but there is limited usefulness because there is no agonist effect and patients continue to experience cravings, withdrawal and relapse. In a 2011 Cochrane Review, there was no statistically significant difference between naltrexone and placebo in any primary outcome including retention in treatment, abstinence, or incarceration.

3. Buprenorphine has effects of a typical opioid agonist so it relieves withdrawal but it has lower overdose potential because it produces a ceiling effect. There is slow dissociation so it is longer acting and reduces magnitude of withdrawal. As an advantage over methadone, it is also available for use in an office base setting and patients can participate in treatment activities and maintain other activities of daily living. Buprenorphine can only be administered for opioid dependence by a licensed provider (a requirement of DATA 2000 as above). In a 2014 Cochrane Review, buprenorphine was statistically significantly superior to placebo in retention in treatment, and it was not inferior to medium dose methadone (40-85mg) in retaining patients in treatment and suppressing illicit opioid use. Buprenorphine/Naloxone was formulated to decrease IV abuse potential, as naloxone is a full opioid antagonist when injected. In a recent survey of Chief Pharmacists in the Agency, roughly 9% responded that buprenorphine is being utilized within their facility.

### Findings:

- \* Opioid dependence is a prevalent and growing problem in the US
- \* Methadone is an effective medication to treat opioid dependence but can only be dispensed for this purpose in licensed treatment programs
- \* Buprenorphine (+/- Naloxone) is an effective medication to treat opioid dependence in the office setting but requires physicians to go through a certification program and obtain a special DEA license
- \* Naltrexone is not effective for treatment of opioid dependence
- \* Given the administrative and regulatory restrictions on prescribing methadone and buprenorphine for opioid dependence, the NPTC did not vote to add these agents to the National Core Formulary as not all facilities may have the administrative and clinical processes and systems in place to support their use. However, for programs that have qualified and trained providers in dispensing or prescribing these agents, they may be very appropriate for inclusion on local formularies to meet the needs of the patients. The NPTC identifies value in and supports the continued expanded treatment of opioid dependence into the mainstream of medical practice and the important positive public health impact it may have for our patients.

If you have any questions regarding this document, please contact the NPTC at [IHSNPTC1@ihs.gov](mailto:IHSNPTC1@ihs.gov). For more information about the NPTC, please visit the [NPTC website](#).

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