



Opioid Use Disorder (OUD) Treatment Assays

Advancing evidence-based treatment with drug screens

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The Opioid Crisis

Since the 1990's there have been three—some would argue four—waves of the opioid epidemic. It began with prescription opioids, followed by heroin, and then synthetics such as fentanyl. Polysubstance use—or the fourth wave—is occurring among opioids and other drugs such as cocaine, amphetamines, and xylazine. With the largest global burden of disease attributed to opioids, a reduction in cultivation/production of Afghan opium causing new, more potent synthetic opioids to arise, and people with drug-use disorders receiving no treatment, the gap continues to widen, and the treatment demand grows.⁵

A "whole patient" approach with medication-assisted treatment (MAT)¹



MAT vs. MOUD

Medication-assisted treatment (MAT) is an evidence-based, integrated treatment approach for OUD where medications are used in combination with counseling and behavioral therapies to provide a "whole patient" approach.¹

Medications for opioid-use disorder (MOUD) is OUD treatment that focuses solely on using FDA-approved medications, such as buprenorphine (alone and in combination with naloxone), methadone, and naltrexone.^{2,4}

Both have been shown to improve health outcomes and quality of life for people with drug-use disorders by reducing substance use, improving survival rates, and supporting long-term recovery.²

Utility of drug screening with MAT/MOUD^{3,9}

Drug screening in this environment is not intended as a punitive measure. Conversely, it incentivizes patients and helps start conversations and make treatment adjustments. It can be a helpful tool for low-risk patients, who are less likely to divert or take non-prescribed drugs or medications. Without judgment, drug screening as part of MAT/MOUD impacts the following:

- **Compliance**, which helps identify discrepancies between self-reporting and drug-test findings by ensuring patients are taking medications as prescribed. It is a shared responsibility by both provider and patient.⁹
- **Drug interactions** can cause potential adverse outcomes; knowing whether certain substances are taken concurrently with prescribed medication is critical.
- A **risk assessment** helps identify a patient's level of risk, if any, for ongoing use or relapse. As mentioned above, low-risk patients are great candidates for testing.
- **Treatment success** hinges on a multi-prong approach, and drug screening can help lower diversion, incentivize abstinence, and promote accountability.

Did you know?

In 2023, of the **316M** people who used drugs, **61M** were opioid users⁵

One third of all people in drug treatment in 2023 cited opioids as their primary drug of use according to data available from **135** countries⁵

64M people in 2023 had a drug-use disorder, but only **1 in 7** were in treatment for it⁵

Removing stigma and discrimination and ensuring patient/client participation in treatment decisions is crucial



Treatment drug introduction

Buprenorphine: A medication used by trained/certified physicians to treat opioid addiction. Previously used for pain, buprenorphine is a partial opioid agonist that binds with opioid receptors in the brain, causing reduced pain and enhanced feelings of well-being. It acts much like a full opioid, except it does not create a euphoric state when taken as directed. As a result, buprenorphine will prevent withdrawal symptoms from and reduce cravings for opiate drugs such as heroin and prescription painkillers.⁶

EDDP: A major metabolite of methadone detected in the urine of patients taking methadone as prescribed. It metabolizes into EDDP and results in a positive EDDP screen if at or above the cutoff. If someone adds methadone to their urine to mislead the provider into thinking they are compliant when they are diverting it or taking something else, that will be discovered when EDDP is negative, and methadone is positive.

Methadone: A full opioid agonist used to treat OUD. It can only be dispensed through a SAMHSA-certified opioid treatment program (OTP). Methadone reduces opioid cravings and withdrawals and blunts or blocks the effects of opioids. Taken daily, it is available in liquid, powder, and diskette forms. Those taking methadone for OUD must receive it under the supervision of a practitioner. After a period of stability with progress and consistent compliance, patients may be allowed to take it at home between program visits.⁷

Suboxone and Subutex: Developed for the treatment of opioid addiction. Suboxone contains both buprenorphine and naloxone, whereas Subutex contains only buprenorphine. While Subutex was found to be relatively effective, there was still tendencies for misuse. Many users injected the drug intravenously to obtain the high they had with heroin or prescription painkillers. This gave rise to the development of Suboxone, which combines naloxone and buprenorphine to deter misuse of the medication. Naloxone blocks the effects of opioids at the receptor sites. If someone injects Suboxone, the person will immediately go into precipitated withdrawal, which can be distressing.⁶

Syva treatment assays: Buprenorphine, Methadone and EDDP

Naltrexone: Intramuscular extended-release naltrexone is a non-opioid medication used to treat OUD by blocking the euphoric and sedative effects of opioids. Naltrexone binds and blocks opioid receptors and reduces/suppresses opioid cravings. There is no misuse and diversion potential with naltrexone.⁸

Product ordering information

Assay	Size	SMN #
EMIT II Plus Buprenorphine	28 mL	10720048
	115 mL	10720047
	500 1L	10720046
EMIT II Plus Methadone	28 mL	10445426
	115 mL	10445427
	500 1L	10445428
ARK EDDP	28 mL	11355260
	115 mL	11355261
	500 1L	11355262

For calibrator and control product ordering information, please refer to specific Instructions for Use/Application Sheets



Learn more about
Siemens Healthineers
drug testing solutions.



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