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# Introduction

### **Opioid Crisis**

The United States is in the midst of an opioid crisis with the CDC reporting 47,000 opioid overdose deaths in 2017 (67.8% of all overdose deaths in the US).

### Medication-Assisted Treatment (MAT)

MAT programs use medications in conjunction with counseling and behavioral therapies to treat opioid use disorders in order to reduce relapse. The three FDA approved medications include buprenorphine, methadone, and naltrexone. Suboxone is a combination of buprenorphine and naloxone and is the only FDA approved medication for use with office based treatment.



# Design/Sample

### **PICO Question**

In opioid-addicted persons seeking Suboxone therapy, how does payment method correlate to treatment adherence?

### **Search Techniques Methods**

Search Databases: PubMed, CINAHL, Scopus, PsychINFO, ScienceDirect, and Google Scholar Key Words: Suboxone, buprenorphine, cash, self-pay, insurance, Medicare, Medicaid, therapy adherence, treatment, success, opioid addiction, and opioid dependence





## Results

### **Cash Pay is the Best**

We found one large and other smaller studies looking at this specific topic which presented similar findings. Individuals who pay cash for Suboxone MAT therapy were the most adherent to treatment regimens compared to private insurance. The worst adherence was found with Medicare and Medicaid insurances.



# **Rate of Suboxone Retention vs. Payment Method**

### Payment Method

Saloner, B., Daubresse, M., & Caleb Alexander, G. (2017). Patterns of Buprenorphine-Naloxone Treatment for Opioid Use Disorder in a Multistate Population. *Medical care*, 55(7), 669–676.

### Is Cash Pay Really the Best?

While these results represent the general consensus of the studies, several factors may have played a role in reaching these conclusions:

- There are limited providers offering Suboxone treatment and many of them will only accept cash-pay.
- Frequently, individuals will pay for the Suboxone but forgo the behavioral therapy treatments. Some providers found better compliance when they made individuals bulk pay up front for all behavioral therapy sessions. Because of the large initial investment, individuals may feel more obligated to complete their treatment.
- The situation may be more complex: some state's Medicaid will cover the Suboxone pills, but must pay cash for non-covered office visits to see the physician.
- Some addicts will exaggerate their symptoms to get more Suboxone pills for treatment. They take just what is needed to prevent withdrawal and then sell the rest to make money to continue their cash-pay MAT program.



### Summary

### Why Choose Suboxone?

- Only office based MAT program
- Less risk of addiction compared to methadone
- Less withdrawal symptoms than naltrexone
- Lower risk for abuse, dependence, and respiratory depression

### Findings

- Individuals who are adherent with MAT therapy are ten times less likely to relapse than those who are nonadherent.
- Cash and private pay individuals have better adherence than Medicare and Medicaid.
- People using Suboxone tend to be younger, white, and not in poverty.

### **Limitations of Studies Reviewed**

- Only some states have expanded Medicaid
- Most had small sample sizes

# **Further Study**

### **Further Research Needed**

Considering the drastically improved adherence with self-pay versus those with insurance, comparatively few studies have been conducted looking at the underlying reasons for why this correlation exists.

We conjecture that social determinants of health may play a more mechanistic role with an individual's adherence to Suboxone treatment. In addition to clinical statistics, we would like to survey individuals about their:

- Outside support systems / safety net
- Social environment
- Level of wealth

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