



# VCU

Virginia Commonwealth University  
VCU Scholars Compass

---

Graduate Research Posters

Graduate School

---

2020

## Differences in treatment for substance use disorders by insurance status: Self-help only versus outpatient medical treatment

Huyen Pham  
*Virginia Commonwealth University*

Lauryn Walker PhD RN

Andrew J. Barnes PhD

Peter Cunningham PhD

Follow this and additional works at: <https://scholarscompass.vcu.edu/gradposters>



Part of the [Medicine and Health Sciences Commons](#)

---

### Downloaded from

Pham, Huyen; Walker PhD RN, Lauryn; Barnes PhD, Andrew J.; and Cunningham PhD, Peter, "Differences in treatment for substance use disorders by insurance status: Self-help only versus outpatient medical treatment" (2020). *Graduate Research Posters*. Poster 42.  
<https://scholarscompass.vcu.edu/gradposters/42>

This Poster is brought to you for free and open access by the Graduate School at VCU Scholars Compass. It has been accepted for inclusion in Graduate Research Posters by an authorized administrator of VCU Scholars Compass. For more information, please contact [libcompass@vcu.edu](mailto:libcompass@vcu.edu).



# Differences in treatment for substance use disorders by insurance status: Self-help versus outpatient medical treatment

Huyen Pham MPH, Lauryn Walker PhD RN, Andrew J. Barnes PhD, Peter Cunningham PhD  
 Department of Health Behavior and Policy, VCU

## Background

Substance use disorders (SUD) have been a pressing public health concern and affect 20.1 million people.<sup>1</sup> The SUD costs \$440 billion dollar annually;<sup>2</sup> however, only 10.6 percent of people with SUD receive treatment.<sup>3</sup>

Different types of SUD treatments include:

- Abstinence based approach (e.g., self-help groups): little evidence-based support for reducing relapse rates and other recovery outcomes.<sup>4-6</sup>
- Outpatient medical treatment including pharmacological and/or psychological therapies: stronger evidence on effectiveness.<sup>7,8</sup>

The role of insurance on SUD treatment utilization is generally poorly understood and still less is known on how insurance status relates to the use of evidence based medication assisted treatment compared to other treatments, like self-help groups.

### Study aims:

- To examine the association between health insurance and any SUD treatment utilization
- To examine differences between the use of self-help versus outpatient medical treatment by insurance status

## Method

Data were from the 2015-2017, nationally representative cross-sectional National Surveys on Drug Use and Health (NSDUH), 3 waves of data ( 2015, 2016, 2017).

- Study sample: 13,213 people having SUD aged 19-64.
- Population size: 55,092,536

### Dependent variables

- Past year utilization of any alcohol/ drug treatment
- Past year utilization of outpatient medical treatment versus self-help (among those who received any SUD treatment)

### Independent variable

- Health insurance coverage: No insurance, Medicaid, private, others. (Medicare category was dropped due to its small sample size of disabled people with SUD (n=107) when we restricted the sample to people aged 19-64).

**Covariates** Age, gender, race/ethnicity, education, family income, urbanicity, and recent major depressive episode (MDE).

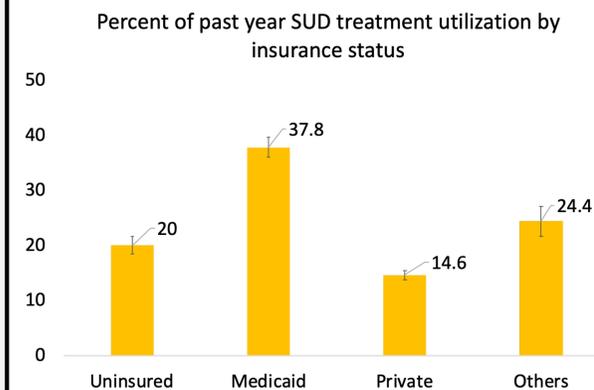
### Analysis

- Unadjusted associations between SUD treatment use and insurance status were examined using a Z-test.
- Adjusted logistic regressions  

$$Y_i = \beta_0 + \beta_1 insurance_i + \beta_2 Familyincome_i + \beta_3 Age_i + \beta_4 Gender_i + \beta_5 Race_i + \beta_6 Urbanicity_i + \beta_7 MDE_i + \beta_8 year_i + \epsilon_i$$
- All analyses used survey weights to be representative of the US population and account for the NSDUH's complex survey design.

## Principal Findings

### 1. Insurance coverage and any SUD treatment



Before adjustment, those with SUD covered by Medicaid were most likely to access any SUD treatment compared with those without insurance (37.8% versus 20%, p<0.001).

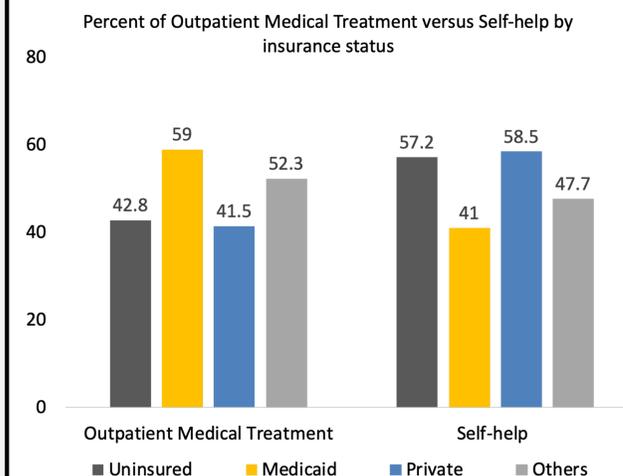
\*N= 6,512 (Population size = 27,846,324)

Type of health insurance coverage	Past year utilization of any SUD treatment	
	AOR	95% CI
Uninsured (reference)		
Medicaid	2.1***	1.5-2.8
Private	0.8	0.6-1.1
Others	1.4	0.9-2.2

After adjustment, those with SUD covered by Medicaid remained more likely to use any SUD treatment in the past year compared to those without insurance (AOR=2.1, p< 0.001).

\*\*\* p value <.001, AOR = Adjusted Odd Ratios, CI= Confidence Interval

### 2. Insurance coverage and outpatient medical treatment versus self-help



Before adjustment, those with SUD covered by Medicaid were more likely than those without insurance to use outpatient medical treatment versus self-help use (59% versus 42.8%, p<0.05).

\*N= 986 (Population size = 3,902,689)

## Principal Findings

Type of health insurance coverage	Past year utilization of Outpatient Medical Treatment versus Self-help	
	AOR	95% CI
Uninsured (reference)		
Medicaid	2.1*	1.2-3.8
Private	1.1	0.6-1.9
Others	1.7	0.7-4.1

\* p value <0.05, AOR = Adjusted Odd Ratios, CI = Confidence Interval

After adjustment, those with SUD covered by Medicaid remained more likely to use outpatient medical treatment versus self-help, compared to those without insurance (AOR=2.1, p<0.05).

## Conclusions

### Limitation

- Data were from cross-sectional surveys and so causal inferences cannot be made. Insurance, substance use, utilization of SUD treatment are self-reported and so may be measured with error.
- SUD treatment options differ widely by drug of abuse (e.g., alcohol, methamphetamines, opioids, etc.). Thus, the importance of insurance coverage in access to SUD treatment utilization may vary by substance choice.
- Health insurance is potentially endogenous and failure to account for this may lead to biased estimates.
  - ✓ Exploring how to address this endogeneity in next steps of this project.

### Conclusion

Individuals with SUD covered by Medicaid insurance programs appear:

- ✓ More likely to receive SUD treatment in the past year.
- ✓ More likely to receive outpatient medical treatment, while the uninsured are more likely to use self-help groups.

Medicaid has taken a central role in providing evidence-based SUD treatment.

Additional research is needed to:

- Assist policymakers to increase access to SUD treatment
- Shift access towards outpatient medical treatments that have stronger evidence-based links to improved recovery outcomes.

### Reference

1. SAMHSA. (2018). <https://newsletter.samhsa.gov/2017/10/12/samhsa-new-data-mental-health-substance-use-including-opioids/> Accessed on Sep 24 2018.
2. NIDA. 2018. Trends and statistic Costs of Substance Abuse. <https://www.drugabuse.gov/related-topics/trends-statistics>. Accessed Dec 5, 2018
3. National Survey on Drug Use and Health(NSDUH).2016. Key Substance Use and Mental Health Indicators in the United States: Results from the 2016 National Survey on Drug Use and Health. <https://www.samhsa.gov/data/sites/default/files/NSDUH-FFR1-2016/NSDUH-FFR1-2016.htm>. Accessed on 12/14/2018.
4. Kelly, J. F. (2003). Self-help for substance-use disorders: History, effectiveness, knowledge gaps, and research opportunities. *Clinical Psychology Review*, 23(5), 639-663.
5. Brown, B. S., O'Grady, K. E., Farrell, E. V., Flechner, I. S., & Nurco, D. N. (2001). Factors associated with frequency of 12-step attendance by drug abuse clients. *The American journal of drug and alcohol abuse*, 27(1), 147-160.
6. Humphreys, K., Huebsch, P. D., Finney, J. W., & Moos, R. H. (1999). A comparative evaluation of substance abuse treatment: V. Substance abuse treatment can enhance the effectiveness of self-help groups. *Alcoholism: Clinical and Experimental Research*, 23(3), 558-563.
7. Kelly, J. F., Myers, M. G., & Brown, S. A. (2000). A multivariate process model of adolescent 12-step attendance and substance use outcome following inpatient treatment. *Psychology of Addictive Behaviors*, 14(4), 376.
8. World Health Organization.(2004) Neuroscience of psychoactive substance use and dependence. Geneva: World Health Organization.