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Private Health Insurance Coverage for Substance Use Disorders and the Receipt of Specialty Treatment among U.S. Adults

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Abstract

Objective—Examine the association between private health insurance and the receipt of specialty substance use disorder treatment.

Methods—Weighted logistic regressions were estimated to examine the association between health insurance and the receipt of any specialty substance use disorder treatment in national samples of non-elderly adults with alcohol abuse/dependence (N=22,778), alcohol dependence (N=10,104), drug abuse/dependence (N=9,427), and drug dependence (N=6,736). Analyses compared receipt of any specialty substance use treatment among the uninsured to the privately insured who reported *known* coverage, *no* coverage, or *unknown* coverage for alcohol/drug treatment. Regressions adjusted for sociodemographic characteristics, treatment need, and criminal justice involvement.

Results—Compared to being uninsured, private insurance with *known* coverage for alcohol treatment was associated with greater use of any specialty treatment only among those with alcohol dependence ($p<0.05$).

Conclusion—Private insurance is associated with increased use of specialty treatment among those with severe alcohol use disorders who understand their benefits.

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INTRODUCTION

Substance use disorders are common and costly to society.(1, 2) Even though cost-effective treatments for substance use disorders are available,(3) only 13% of those in need of services receive any specialty care.(4) Cost and lack of health insurance coverage are among the most commonly reported barriers to care for those who perceive a need for alcohol/drug treatment, but do not receive any services.(4) The implementation of the Mental Health Parity and Addiction Equity Act (MHPAEA) of 2008 and the Affordable Care Act (ACA) of 2010 will expand private health insurance coverage for substance use disorders in the coming years.(5, 6)

Although advocates have expressed hope that these federal laws will improve treatment rates, research has found that private health insurance (versus being uninsured) is not associated with the receipt of any treatment or specialty treatment for substance use disorders.(7) However, private health plans are heterogeneous in the extent to which coverage is provided for alcohol/drug treatment, and individuals may lack knowledge about whether this coverage is provided in their private health plan. Additionally, because of the legal distinction between alcohol and illicit drugs, the association between private health insurance and the receipt of treatment may differ for those with alcohol use disorders versus drug use disorders. Using a more refined measure of health insurance that assesses respondents' understanding of private coverage for alcohol/drug treatment, this study provides a more comprehensive examination of the association between private health insurance and the receipt of specialty treatment for alcohol use disorders and drug use disorders, respectively.

METHODS

Five years of data (2005–2009) were pooled from the National Survey of Drug Use and Health (NSDUH), an annual, nationally representative, cross-sectional survey sponsored by the Substance Abuse and Mental Health Services Administration (SAMSHA). A total of 177,462 non-elderly adult respondents (age 18 to 64) participated in the NSDUH during these years, of whom 9.0% (weighted) were identified with an alcohol use disorder (i.e., alcohol abuse or dependence) and 3.1% (weighted) were identified with a drug use disorder (i.e., illicit drug abuse or dependence) in the past year using DSM-IV criteria.(8)

The dependent variables included two dichotomous indicators that assessed whether the respondent received any treatment in the past 12 months for alcohol use or drug use in a specialty setting. Specialty settings included hospitals (inpatient only), drug or alcohol rehabilitation facilities (inpatient or outpatient), and mental health centers.(4)

Health insurance status was assessed with a categorical measure for those with no health insurance (omitted reference), private health insurance (no Medicaid or other insurance), any Medicaid coverage, and other health insurance such as Medicare or military insurance (no Medicaid). Those with private insurance were further divided into three categories based on whether the respondent reported having private insurance *with coverage*, *without coverage*,

or *unknown coverage* for alcohol treatment (sample with alcohol abuse/dependence) or for drug treatment (sample with drug abuse/dependence).

Sociodemographic measures included dichotomous indicators for gender and marital status (married versus not married), and categorical measures of age (18–25, 26–34, 35–49, 50–64), race/ethnicity (Non-Hispanic White, Hispanic, Black, Asian, and other race/ethnicity), employment status (full-time employed, part-time employed, and unemployed or not in labor force), and family income (<\$20K, \$20K–\$50K, \$50K–\$75K, >\$75K). Direct and proxy measures for treatment need included indicators of the type of substance use disorder (i.e., alcohol abuse, alcohol dependence, illicit drug abuse, and illicit drug dependence), an indicator for self-reported perceived need for alcohol/drug treatment, and an indicator of fair/poor self-reported health status. Two additional indicators assessed whether the respondent was arrested and booked for a substance-related crime or some other crime.

To examine the association between health insurance and the receipt of any alcohol/drug treatment in a specialty setting, we estimated logistic models using the “SVY” commands in Stata Version 12 to account for the survey design elements of the data.⁽⁹⁾ All models adjusted for sociodemographic characteristics, treatment need, criminal justice system involvement, and survey year. Analyses were conducted separately for the sample with alcohol abuse/dependence and the sample with illicit drug abuse/dependence. To examine whether the relationship between private health insurance and alcohol/drug treatment was more pronounced for those with a more severe type of the disorder, we also estimated separate models for those with alcohol dependence and drug dependence, respectively.

RESULTS

When examining patterns of insurance coverage, there was a high rate of uninsurance and a high degree of uncertainty about private plan coverage for alcohol/drug treatment in each sample (Table). One-fourth of those with an alcohol use disorder and one-third of those with an illicit drug use disorder were uninsured. Nearly 40% of the privately insured in each sample did not know whether their plan provided coverage for alcohol or drug use treatment.

In the sample with alcohol abuse/dependence (Model 1.1), those with private insurance *without coverage* for alcohol treatment (Marginal Effect [M.E.] = –2.6%; $p < 0.01$) and those with *unknown coverage* for alcohol treatment (M.E. = –2.4%; $p < 0.05$) were less likely to receive alcohol treatment in a specialty setting than the uninsured. After the sample was restricted to those with alcohol dependence (Model 1.2), privately insured respondents *with known coverage* for alcohol use treatment were *more* likely to receive alcohol treatment in a specialty setting (M.E. = 2.8%, $p < 0.01$) than the uninsured. In other words, among those with alcohol dependence, the marginal effect indicates that the predicted percentage of those who received any specialty treatment increased from 6.7% among the uninsured to 9.5% among the privately insured with known coverage for alcohol treatment.

Results for the sample with drug abuse/dependence (Model 2.1) were generally similar to results for the restricted sample with drug dependence (Model 2.2). The privately insured with *unknown coverage* for drug use disorders were less likely to receive drug treatment in a

specialty setting compared to the uninsured in both samples (drug abuse/dependence: M.E.= -8.8%, $p<0.01$; drug dependence: M.E.= -11.9%, $p<0.05$). However, those with known coverage for drug use treatment were not more likely to receive specialty treatment than the uninsured in either sample (drug abuse/dependence: $p=0.14$; drug dependence: $p=0.39$).

The criteria for substance use disorders have changed in the DSM-V, and there is no longer a distinction between abuse and dependence. Rather, substance use disorders are classified on a spectrum ranging from mild to severe based on a symptom count.⁽¹⁰⁾ To assess the robustness of the positive association between private insurance with *known coverage* for alcohol treatment and the receipt of specialty treatment among those with more severe alcohol use disorders, we created a symptom count using 10 of the 11 DSM-V symptoms for an alcohol use disorder available in the data. Using different thresholds from this count, we re-estimated the model among subsamples that would likely meet the criteria for a mild, moderate, and/or severe alcohol use disorder. Key findings remained unchanged and private health insurance with *known coverage* for alcohol treatment was positively associated with the receipt of specialty treatment among those with a moderate or severe alcohol use disorder (i.e., 4/10 symptoms endorsed), but not among a broader sample that only met the criteria for a milder disorder (i.e., 2/10 symptoms endorsed). Furthermore, the effect size increased as more stringent criteria were used to identify those with a more severe disorder (i.e., 6/10 versus 4/10 symptoms endorsed).

DISCUSSION

Among non-elderly adults in the United States, a high percentage of those with a substance use disorder were uninsured during the study period and there was a high level of uncertainty about whether private health plans provided coverage for alcohol/drug treatment in these samples. Results also suggested that having private insurance (versus being uninsured) was associated with increased access to specialty treatment *only* for those with severe alcohol use disorders who understand their benefits.

Given that a higher percentage of adults with alcohol abuse/dependence (25%) and drug abuse/dependence (34%) are uninsured compared to the national average (16%) in the same age range (i.e., 18–64),⁽⁷⁾ those with substance use disorders could disproportionately benefit from health insurance expansions under the ACA. Moreover, as the MHPAEA is implemented, most of those who obtain private insurance will also have access to comprehensive alcohol/drug treatment benefits. Yet, forty percent of those with private insurance in our study sample did not know whether their plan covered alcohol/drug treatment. Because the federal government requires health plans participating in the insurance exchanges to contract with navigators who will assist consumers during the health plan selection process, an opportunity exists to educate individuals obtaining insurance through the exchange about the alcohol/drug treatment benefits in their health plan.

Our findings also suggest that when examining the association between private health insurance and specialty alcohol/drug treatment, it is important to consider alcohol use disorders separately from drug use disorders as well as the severity of the disorder. Among those with alcohol dependence, individuals with private health insurance who reported

having coverage for alcohol treatment were more likely to receive specialty treatment compared to the uninsured. However, this relationship was not observed for those with drug dependence. One possible reason for these different findings may involve the legal status of these substances, combined with the fact that most private health insurance is obtained through one's employer. Supplemental analyses (Available in Online Appendix) revealed that those with a self-reported unmet need for drug treatment were nearly twice as likely to report concerns about their job as a barrier to care (i.e., 32%) than those with a self-reported unmet need for alcohol treatment (i.e., 18%).

Unexpectedly, the privately insured *without coverage* or *unknown coverage* for alcohol/drug treatment were *less* likely than the uninsured to receive treatment in specialty settings. One possible explanation may involve the organization and financing of the specialty alcohol/drug treatment system. Unlike the health care system for medical problems, specialty treatment for substance use disorders is mostly provided in a separate sector that is more heavily financed by public dollars.(11, 12) Compared to those with private insurance, individuals who are uninsured may have more experience interacting with social services systems and primary care safety-net clinics that could facilitate their navigation of this unique system. Supplemental analyses among those with self-reported unmet treatment needs provide some evidence in favor of this possible explanation (Online Appendix). Compared to the uninsured, the privately insured *without coverage* or with *unknown coverage* for alcohol/drug treatment were approximately two to four times as likely to report navigational problems (i.e., not knowing where to get treatment; not finding the type of needed program) as barriers to treatment across all four samples.

The ACA could strengthen the association between private health insurance and the receipt of specialty treatment for alcohol use disorders by requiring health plans to provide full coverage for all services that have received an 'A' or 'B' rating by the U.S. Preventive Services Task Force (USPSTF). Screening, Brief Intervention, and Referral to Treatment (SBIRT) is a public health approach to deliver early intervention or referral to those with risky substance use in primary care and hospital settings, and it has received a 'B' rating by the USPSTF for alcohol misuse.(13) Therefore, as the ACA is implemented, those with private insurance could receive greater screening for alcohol misuse in primary care settings and more referrals to specialty treatment in the coming years.

Several study limitations are noted. First, because the data are cross-sectional, causality cannot be established in these relationships. Second, the available data do not contain measures of potential confounders such as the stigma associated with treatment seeking or the availability of specialty treatment programs in a respondent's community; these measures would be important to examine in future research. Third, health insurance status is self-reported and the availability or comprehensiveness of coverage for alcohol/drug treatment cannot be verified. However, the available measure of health insurance does allow for a more nuanced examination of the association between private insurance coverage and the receipt of specialty treatment for substance use disorders. Finally, this study estimates the average association between health insurance status and receipt of specialty treatment over the five-year study period, which may not have been constant during this time period.

Notwithstanding limitations, this study provides insights about the association between perceived private health insurance coverage for alcohol/drug treatment and the receipt of specialty treatment among those with substance use disorders. These results suggest that private insurance may have the strongest association with the receipt of specialty treatment among those with the most severe alcohol use disorders who understand their benefits. As the ACA and MHPAEA are implemented, future research should examine the relationships among the evolution of private plan coverage for alcohol and drug use treatment, individuals' comprehension of health plan benefits, and the receipt of treatment in primary care and specialty settings among those with substance use disorders.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Table

Health insurance status and the receipt of any specialty treatment (Tx) for substance use disorders among non-elderly U.S. adults

	<u>Alcohol Abuse/Dependence^a</u>		<u>Alcohol Dependence^b</u>	
	Insurance Status	Any Specialty Tx Model 1.1 [†]	Insurance Status	Any Specialty Tx Model 1.2 [†]
	%	(Pct0 = 4.8%) M.E. (%)	%	(Pct0 = 6.7%) M.E. (%)
<i>No Health Insurance (Reference)</i>	24.9	-	27.3	-
<i>Private Health Insurance Only</i>				
<i>With known coverage for alcohol use treatment</i>	28.8	0.7	27.4	2.8**
<i>Without coverage for alcohol use treatment</i>	7.8	-2.6**	7.7	-4.1*
<i>Unknown coverage for alcohol use treatment</i>	24.3	-2.4*	19.8	-1.7
<i>Any Medicaid Coverage</i>	7.9	2.4***	10.2	4.3***
<i>Other Health Insurance</i>	6.4	2.0*	7.5	3.4**
<i>Total</i>	100%	-	100%	-
	<u>Drug Abuse/Dependence^c</u>		<u>Drug Dependence^d</u>	
	Insurance Status	Any Specialty Tx Model 2.1 [†]	Insurance Status	Any Specialty Tx Model 2.2 [†]
	%	(Pct0 = 9.7%) M.E. (%)	%	(Pct0 = 12.1%) M.E. (%)
<i>No Health Insurance (Reference)</i>	33.5	-	33.8	-
<i>Private Health Insurance Only</i>				
<i>With known coverage for drug use treatment</i>	19.8	2.4	20.2	2.0
<i>Without coverage for drug use treatment</i>	6.7	-5.3	6.7	-9.3**
<i>Unknown coverage for drug use treatment</i>	16.6	-8.8**	15.0	-11.9*
<i>Any Medicaid Coverage</i>	15.9	3.7**	17.1	4.9**
<i>Other Health Insurance</i>	7.5	3.2	7.2	2.4
<i>Total</i>	100%	-	100%	-

Notes:

^aN= 22,778;

^bN= 10,104;

^cN= 9,427;

^dN= 6,736.

*p<0.05,

**
p<0.01,

p<0.001

[†]Weighted logistic regressions adjust for sociodemographic characteristics, treatment need, criminal justice involvement, and year of survey.

Pct0: Model-based predicted percentage of receiving any specialty treatment for substance use among those with no health insurance (other covariates held at their observed values).

M.E.: Marginal effects estimated relative to the reference group (i.e., those with no health insurance), with other covariates held at their observed values.