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

Janet R. Cummings, Ph.D.
Hefei Wen, B.A.
Alexis Ritvo, M.D.
Benjamin G. Druss, M.D., M.P.H.

Objective: **The study examined 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 nonelderly adults with alcohol abuse or dependence (N=22,778), alcohol dependence (N=10,104), drug abuse or dependence (N=9,427), and drug dependence (N=6,736). Receipt of any specialty substance abuse treatment was compared among the uninsured and privately insured persons who reported known coverage, no coverage, or unknown coverage for alcohol and drug abuse treatment. Regressions adjusted for sociodemographic characteristics, treatment need, criminal justice involvement, and year of survey.** ***Results:*** **Compared with being uninsured, private insurance was associated with greater use of any specialty substance use disorder treatment only among those with alcohol dependence with known coverage for alcohol treatment ($p<.05$).** ***Conclusions:*** **Private insurance was associated with increased use of specialty treatment among persons with severe alcohol use disorders who knew they had coverage for alcohol abuse treatment. (*Psychiatric Services* 65:1070–1073, 2014; doi: 10.1176/appi.ps.201300443)**

Dr. Cummings, Ms. Wen, and Dr. Druss are with the Department of Health Policy and Management, and Dr. Druss is Rosalynn Carter Chair in Mental Health at the Rollins School of Public Health, Emory University, Atlanta, Georgia (e-mail: jrcummi@emory.edu). Dr. Ritvo is with the Department of Psychiatry, University of Colorado at Denver School of Medicine.

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 substance abuse 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 have begun to expand private health insurance coverage for substance use disorders (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 substance abuse treatment, and individuals may lack knowledge about whether this coverage is provided in their private health plan. In addition, 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 substance abuse treatment, we aimed with this study to provide 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 (SAMHSA). A total of 177,462 nonelderly adult respondents (age 18–64) participated in the NSDUH during these years, of whom 9.0% (weighted) were identified in the past year with an alcohol use disorder (abuse or dependence) and 3.1% (weighted) with a drug use disorder (illicit drug abuse or dependence) according to *DSM-IV* criteria (8).

Among persons with an alcohol use disorder, 70.1% (weighted) were non-Hispanic white, 14.4% were Hispanic, 10.9% were black, 2.0% were Asian,

and 2.6% were members of another racial-ethnic group. Among those with a drug use disorder, 66.1% (weighted) were non-Hispanic white, 13.4% were Hispanic, 15.7% were black, 1.9% were Asian, and 2.9% were members of another racial-ethnic group.

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 persons with no health insurance, private health insurance (no Medicaid or other insurance), any Medicaid coverage, or other health insurance, such as Medicare or military insurance (no Medicaid). Persons 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 abuse treatment (sample with alcohol abuse or dependence) or for drug abuse treatment (sample with drug abuse or dependence).

Sociodemographic measures included dichotomous indicators for gender and marital status (married versus not married) and categorical measures for age (18–25, 26–34, 35–49, and 50–64), race-ethnicity (non-Hispanic white, Hispanic, black, Asian, and other), employment status (employed full-time, employed part-time, and unemployed or not in labor force), and family income (<$20,000, $20,000–$49,999, $50,000–$74,999, and ≥$75,000). Direct and proxy measures for treatment need included indicators of the type of substance use disorder (alcohol abuse, alcohol dependence, illicit drug abuse, or illicit drug dependence), an indicator for self-reported perceived need for alcohol or drug abuse treatment, and an indicator of fair or poor self-reported health status. Two additional indicators assessed whether the respondent was arrested and booked for a substance abuse–related crime or some other crime.

To examine the association between health insurance and the receipt of any alcohol or drug abuse treatment in a specialty setting, we estimated logistic models by using the SVY commands in Stata Version 12.0 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 or dependence and the sample with illicit drug abuse or dependence. To examine whether the relationship between private health insurance and alcohol or drug abuse 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.

This study did not require review by an institutional review board because all data were gathered from publicly available sources and the authors did not have access to any protected health information.

Results

When examining patterns of insurance coverage, we found a high rate of uninsurance and a high degree of uncertainty about private plan coverage for alcohol and drug abuse treatment in each sample (Table 1). 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 abuse treatment.

In the sample with alcohol abuse or dependence (model 1.1), persons with private insurance but without coverage for alcohol abuse treatment (marginal effect=–2.6%, $p<.01$) and those with unknown coverage for alcohol abuse treatment (marginal effect=–2.4%, $p<.05$) were less likely than the uninsured to receive alcohol abuse treatment in a specialty setting. After the sample was restricted to persons with alcohol dependence (model 1.2), privately insured respondents with known coverage for alcohol abuse treatment were more likely than the uninsured to receive alcohol abuse treatment in a specialty setting (marginal effect=2.8%, $p<.01$). In other words, among those with alcohol dependence, the marginal effect indicated 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 abuse treatment.

Results for the sample with drug abuse or 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 abuse treatment in a specialty setting compared with the uninsured in both samples (drug abuse or dependence, marginal effect=–8.8%, $p<.01$; drug dependence, marginal effect=–11.9%, $p<.05$). However, those with known coverage for drug abuse treatment were not significantly more likely than the uninsured in either sample to receive specialty treatment.

The criteria for substance use disorders have changed with publication of *DSM-5*, 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 on the basis of 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 persons with more severe alcohol use disorders, we created a symptom count, using ten of the 11 *DSM-5* symptoms for an alcohol use disorder available in the data. Using different thresholds from this count, we reestimated the model among subsamples of persons who would likely meet the criteria for a mild, moderate, or severe alcohol use disorder. Key findings remained unchanged, and private health insurance with known coverage for alcohol abuse treatment was positively associated with the receipt of specialty treatment among those with a moderate or severe alcohol use disorder (specifically, four or more of the ten symptoms endorsed) but not among a broader sample that met only the criteria for a milder disorder (two or more of ten symptoms endorsed). Furthermore, the effect size increased as more stringent criteria were used to identify those with a more severe disorder (that is, six of ten versus four of ten symptoms endorsed).

Table 1

Health insurance status and the receipt of any specialty substance abuse treatment among nonelderly U.S. adults with substance use disorders[a]

Insurance status	Alcohol abuse or dependence (N=22,778)		Alcohol dependence (N=10,104)		Drug abuse or dependence (N=9,427)		Drug dependence (N=6,736)	
	%[b]	Model 1.1 (Pct_0=4.8%) marginal effect (%)[c]	%[b]	Model 1.2 (Pct_0=6.7%) marginal effect (%)[c]	%[b]	Model 2.1 (Pct_0=9.7%) marginal effect (%)[c]	%[b]	Model 2.2 (Pct_0=12.1%) marginal effect (%)[c]
No health insurance (reference)	24.9	—	27.3	—	33.5	—	33.8	—
Private health insurance only								
With known coverage for substance abuse treatment	28.8	.7	27.4	2.8**	19.8	2.4	20.2	2.0
Without coverage for substance abuse treatment	7.8	–2.6**	7.7	–4.1*	6.7	–5.3	6.7	–9.3**
Unknown coverage for substance abuse treatment	24.3	–2.4*	19.8	–1.7	16.6	–8.8**	15.0	–11.9*
Any Medicaid coverage	7.9	2.4***	10.2	4.3***	15.9	3.7**	17.1	4.9**
Other health insurance	6.4	2.0*	7.5	3.4**	7.5	3.2	7.2	2.4

[a] Source: National Survey of Drug Use and Health, 2005–2009. Weighted logistic regressions examined the association between insurance status and the receipt of specialty treatment for substance use disorders. These models adjusted for sociodemographic characteristics, treatment need, criminal justice involvement, and year of survey.

[b] Weighted percentage of sample by type of insurance coverage

[c] Marginal effect (in percentages) of insurance status on specialty treatment, estimated relative to the reference group—persons with no health insurance—with other covariates held at their observed values. Pct_0 is a model-based predicted percentage of receiving any specialty treatment for substance use among those with no health insurance, with other covariates held at their observed values.

*p<.05, **p<.01, ***p<.001

Discussion

Among nonelderly 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 or drug abuse 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 understood their health care benefits.

Given that a higher percentage of adults with alcohol abuse or dependence (25%) and drug abuse or dependence (34%) are uninsured compared with the national average (16%) for persons in the same age range (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 people who obtain private insurance will also have access to comprehensive alcohol and drug abuse treatment benefits. Yet 40% of persons with private insurance in our study sample did not know whether their plan covered alcohol and drug abuse 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 exchanges about the alcohol and drug abuse treatment benefits of their health plan.

Our findings also suggest that when examining the association between private health insurance and specialty alcohol and drug abuse treatment, it is important to consider alcohol use disorders as well as the severity of the disorder separately from drug use disorders. Among persons with alcohol dependence, individuals with private health insurance who reported having coverage for alcohol abuse treatment were more likely to receive specialty treatment compared with the uninsured. However, this relationship was not observed for those with drug dependence. Possible reasons for the difference may involve the legal status of these substances, combined with the fact that most private health insurance is obtained through employers. Supplemental analyses revealed that people 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 (32%) than those with a self-reported unmet need for alcohol treatment (18%). [Details of these analyses are available in the online data supplement to this report.]

Unexpectedly, the privately insured without coverage or with unknown coverage for alcohol or drug abuse 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 or drug abuse treatment system. Unlike the health care system for general 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 with 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 provided some evidence in favor of this possible explanation (see online supplement). Compared with uninsured persons, those with private insurance but without coverage or with unknown coverage for alcohol and drug abuse treatment were approximately two to four times as likely to report navigational problems (specifically, not knowing where to get treatment or 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). Special Brief Intervention and Referral to Treatment is a public health approach to deliver early intervention or referral to individuals 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 were cross-sectional, causality could not be established in these relationships. Second, the available data did 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 was self-reported, and the availability or comprehensiveness of coverage for alcohol or drug abuse treatment could not be verified. However, the available measure of health insurance allowed 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 estimated 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 period.

Conclusions

Notwithstanding limitations, this study sheds light on the association between perceived private health insurance coverage for alcohol and drug abuse treatment and the receipt of specialty treatment among people 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 know that they have coverage for substance abuse treatment. As the ACA and MHPAEA are implemented, future research should examine the relationships among the evolution of private plan coverage for alcohol and drug abuse treatment, individuals' comprehension of health plan benefits, and the receipt of treatment in primary care and specialty settings among people with substance use disorders.

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