

US Medical Students' Health Insurance Coverage for Mental Health and Substance Abuse Treatment

To the Editor: Medical students experience high levels of distress, including burnout, depression, and suicidal ideation.^{1,2} They use alcohol and tranquilizers at rates comparable with those of their peers.³ This distress has serious consequences, negatively affecting student empathy and altruism and contributing to postgraduate medical error.^{1,2} However, few students seek help. Limited data suggest cost is one reason students avoid seeking care.⁴ As no previous study has documented health insurance coverage offered to US medical students by their schools for mental health treatment (MHT) and substance abuse treatment (SAT), we set out to determine coverage standards.

Methods. Between June and December 2010, data on health insurance offered by all US medical schools were obtained from each school's Web site, sending a questionnaire to the dean of students for schools without insurance information online. For schools with more than 1 plan available, we recorded data from the least expensive plan.

For each plan, we recorded the following for both inpatient and outpatient MHT and SAT: annual maximum

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dollar limit; annual maximum visit limit; co-payment amounts; and coinsurance (defined as the percentage of total costs paid by the patient). If maximum visit or dollar limits were not specified, we assumed no limit. When maximum dollar limits were specified only for all medical care, we used that value to represent the maximum limits for MHT and SAT.

The Cambridge Health Alliance institutional review board approved the study.

Results. Health insurance benefit data were obtained for 115 of the 129 medical schools in the United States (89%), exclusive of Puerto Rico. All schools provided some coverage for outpatient MHT, but 6 schools offered no coverage for inpatient MHT, SAT, or either.

TABLE 1 shows the annual dollar and visit limits of medical student health insurance plans. A minority of schools provided unlimited coverage: 43 schools (37.4%) for outpatient MHT, 32 schools (28.6%) for outpatient SAT, 48 schools (43.2%) for inpatient MHT, and 40 schools (36.4%) for inpatient SAT. Annual dollar limits varied widely, with a range of \$1000-\$200 000 for outpatient MHT, \$800-\$200 000 for outpatient SAT, and \$1000-\$2 000 000 for inpatient MHT and inpatient SAT.

TABLE 2 shows the cost sharing required from students. Few schools provided complete coverage without cost sharing (ie, no co-payments or coinsurance): 13 schools (11.3%) for outpatient MHT, 17 schools (15.2%) for outpatient SAT, 22 schools (19.8%) for inpatient MHT, and 23 schools (21.1%) for inpatient SAT. Median co-payments were \$20 for the 36 schools (31.3%) requiring co-payments for outpatient MHT, \$25 for the 26 schools (23.2%) requiring co-payments for outpatient SAT, and \$500 for the 11 schools (9.9%) and 10 schools (9.2%) requiring co-payments for inpatient MHT and inpatient SAT, respectively. Median coinsurance was 20% for all services and was required by 46 schools (40%) for outpatient MHT, 50 schools (44.6%) for outpatient SAT, 70 schools (63.1%) for inpatient MHT, and 68 schools (61.5%) for inpatient SAT.

Comment. Visit and dollar limits, as well as cost sharing, are common features of medical student insurance coverage for MHT and SAT. Only around a third of schools provide unlimited dollar and visit benefits. Although plans vary widely, the maximum dollar benefits can be very low. Fewer than 22% of schools provide first-dollar coverage without cost sharing. This is worrisome because of

Table 1. US Medical School Student Health Plan Annual Dollar and Visit Limits

Type of Service ^a	Types of Annual Limits, No. (%) of Schools		Annual Maximum Dollar Limits		Annual Maximum Visit Limits	
	None	Both Dollar and Visit	No. (%) of Schools	Median Limit [IQR] (Range), \$	No. (%) of Schools	Median Limit [IQR] (Range), d
Outpatient MHT (n = 115)	43 (37.4)	5 (4.3)	18 (15.7)	3000 [1500-100 000] (1000-200 000)	49 (42.6)	30 [20-48] (10-150)
Outpatient SAT (n = 112)	32 (28.6)	3 (2.7)	25 (22.3)	3919 [2000-62 500] (800-200 000)	52 (46.4)	30 [20-60] (8-150)
Inpatient MHT (n = 111)	48 (43.2)	2 (1.8)	12 (10.8)	62 500 [15 000-400 000] (1000-2 000 000)	49 (44.1)	30 [30-35] (7-120)
Inpatient SAT (n = 110)	40 (36.4)	2 (1.8)	18 (16.5)	20 000 [8000-200 000] (1000-2 000 000)	50 (45.5)	30 [30-30] (7-120)

Abbreviations: IQR, interquartile range (25th-75th percentile); MHT, mental health treatment; SAT, substance abuse treatment.
^aNumber indicates number of schools providing coverage for the service type.

Table 2. Cost Sharing Required From Students for Mental Health and Substance Abuse Services

Type of Benefit ^a	First-Dollar Coverage, No. (%) of Schools ^b	Co-payment Without Coinsurance ^c		Coinsurance Without Co-payment ^c		Co-payment and Coinsurance ^c		
		No. (%) of Schools	Co-payment, Median (IQR), \$	No. (%) of Schools	Coinsurance, Median (IQR), %	No. (%) of Schools	Co-payment, Median (IQR), \$	Coinsurance, Median (IQR), %
Outpatient MHT (n = 115)	13 (11.3)	36 (31.3)	20 (12-25)	46 (40.0)	20 (20-20)	20 (17.4)	25 (20-65)	20 (20-20)
Outpatient SAT (n = 112)	17 (15.2)	26 (23.2)	25 (15-25)	50 (44.6)	20 (20-20)	19 (17.0)	20 (15-20)	20 (20-20)
Inpatient MHT (n = 111)	22 (19.8)	11 (9.9)	500 (200-500)	70 (63.1)	20 (20-20)	8 (7.2)	150 (38-200)	20 (20-20)
Inpatient SAT (n = 110)	23 (21.1)	10 (9.2)	500 (240-500)	68 (61.5)	20 (20-20)	9 (8.3)	113 (23-200)	20 (20-20)

Abbreviations: IQR, interquartile range (25th-75th percentile); MHT, mental health treatment; SAT, substance abuse treatment.
^aNumber indicates number of schools providing coverage for the service type.
^bComplete coverage without any co-payments or coinsurance.
^cCoinsurance was defined as the percentage of total costs paid by the patient.

evidence that cost sharing discourages students from seeking both MHT and SAT.⁵ The study may have underestimated the MHT available to medical students, who may access care through student health centers or have more generous coverage through their schools or parents.

Coverage offered by US medical schools is unlikely to be worse than that available to the nonstudent population. Most private insurance plans have annual limits; for example, one study found that 90% of plans limit outpatient MHT and 93% limit outpatient SAT.⁶ This parity is not reassuring given the importance to the medical profession and patients of aggressively treating these disorders. Medical schools should consider improving student insurance coverage for mental health and substance use disorders.

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Author Contributions: Dr Nardin had full access to all of the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis.

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CORRECTIONS

Error in Author Affiliation and in Text: In the Original Contribution entitled "Accuracy of Stated Energy Contents of Restaurant Foods," published in the July 20, 2011, issue of *JAMA* (2011;306[3]:287-293), in the Author Affiliations, the second affiliation should be "Department of Nutrition and Science, Department of Psychological Sciences, and the Ingestive Behavior Research Center, Purdue University, West Lafayette, Indiana (Dr McCrory)." In the Comment section, second paragraph, the second sentence should be "However, the stated information of individual foods was variable and 19% of individually tested foods contained energy contents of at least 100 kcal/portion more than the stated energy contents, an amount that has been projected to cause 5 to 7 kg of weight gain per year if consumed daily.²⁶⁻²⁹" This article was corrected for errors on August 4, 2011.

Incorrect Number and Percentage: In the Original Contribution entitled "Change in Prevalence of Chronic Conditions Between Childhood and Adolescence Among Extremely Low-Birth-Weight Children," published in the July 27, 2011, issue of *JAMA* (2011;306[4]:394-401), in the Results section, the second sentence should read "Among the ELBW children, neonatal complications included bronchopulmonary dysplasia defined as oxygen dependence at 36 weeks corrected age in 74 children (41%) and a severely abnormal cerebral ultrasound in 44 children (24%)." This article was corrected for errors on August 5, 2011.

Omission of Name and Affiliation of a Source: In the Medical News & Perspectives article entitled "Traumatic Brain Injury a Growing Problem Among Troops Serving in Today's Wars," published in the August 3, 2011, issue of *JAMA* (2011; 306[5]:477-479), in the next to last paragraph of the article, there was an omission of a name and affiliation of a source. The paragraph should read "It is likely that optimal treatment for TBI will involve tailoring various therapies to the needs of each patient at different stages after injury, said Jennifer Vasterling, PhD, chief of the VA Boston Healthcare System's psychology service." This article was corrected for errors on August 4, 2011.