

# Graduate Students and Their Health Insurance

Student Health Insurance Program

April 2010

## INTRODUCTION

This study explored health insurance conditions for graduate students at The Ohio State University using measures of satisfaction to evaluate students' perceptions of the adequacy of their current coverage. The study had three basic aims: 1) to examine the health status and health utilization of graduate students, 2) to help describe the health insurance plans available to graduate students, and 3) to investigate whether differences in insurance plans are associated with different consumer satisfaction outcomes. The major concepts covered in this study were:

Health Status  
 Health Service Utilization  
 Health Insurance Plan  
 Health Insurance Knowledge  
 Satisfaction with Health Insurance

*24.1% of respondents rated their insurance plan knowledge as excellent or very good, 81.8% reported excellent or very good health, 90.9% had visited a doctor in the previous year, and 67.6% were enrolled in SHI.*

The study included both students who were enrolled in OSU Student Health Insurance (SHI) and those who were not. For the purpose of comparison across study concepts, the following brief will present results according to enrollment in 'SHI' or 'non-SHI.'

## HIGHLIGHTS

- The vast majority (67.6%) of respondents had SHI. The most frequent non-SHI source of coverage was parents (13.4%), followed by OSU Prime Care and employer-based coverage.
- **Overall, non-SHI enrollees were healthier, used more services, experienced greater ease of access, and were more satisfied with their insurance than SHI enrollees.**
- SHI enrollees reported being less knowledgeable about most aspects of their coverage.
- **SHI enrollees were more satisfied with the information provided by their health insurance plan and the ease of forms required by their plan.**
- Out-of-pocket costs and purchase price were the insurance factors of most important concern for both SHI and non-SHI enrollees.
- **More SHI enrollees reported coverage gaps due to pre-existing conditions, and the rate of individuals exhausting their annual maximum benefit was almost six times higher for SHI enrollees than for non-SHI enrollees.**

### Insurance Source

	N	%
OSU Student Health Insurance	171	67.6
Parents	34	13.4
OSU Prime Care Advantage	14	5.5
Employer	12	4.7
Spouse's employer	11	4.3
Private carrier	6	2.4
COBRA	2	0.8
Medicaid or other public	2	0.8
Uncertain	1	0.4

*The study was implemented in partnership with the office of Student Life Research and Assessment to satisfy partial requirements for a master's degree in social work for Elisa Lenssen. A random sample of 2,000 OSU graduate students received an email invitation to participate in an online survey; 253 students (12.65%) responded. See the end page for respondent demographics.*

## HEALTH STATUS & HEALTH SERVICE UTILIZATION

health insurance

plan

health insurance knowledge

satisfaction with health insurance

Most respondents reported excellent or very good health, and a variety of health services showed robust student utilization rates. SHI enrollees consistently reported lower service utilization rates than non-SHI enrollees, though more SHI enrollees reported chronic condition diagnoses (21.6% compared to 14.6% for non-SHI) and more SHI enrollees rated their health as 'fair.' Due to relatively high overall rates of good health and utilization in both groups, however, it seems likely that the majority of health services were for preventative or minor care issues. Nevertheless, Emergency Room utilization rates hovered around 15% for both enrollee groups.

Among respondents who reported seeing a doctor or medical visit in the last year, the average number of visits for SHI enrollees was higher than the average for non-enrollees (4.29 per year compared to 3.97). The average number of prescription medications taken in the last year was similar for both groups (2.54 and 2.79).

On average, the 'most paid' costs for SHI enrollees for prescription medications were higher, and the 'least paid' costs for SHI enrollees were also higher. The highest prescription purchase price reported for most paid among SHI enrollees was nine times as high as the highest prescription purchase price reported by non-SHI enrollees, and the mean cost was much higher.

*Enrollees in non-SHI plans used preventative services at a higher rate than SHI enrollees.*

### Overall Health, self-rate

	SHI %	Non-SHI %
Excellent	31.6	36.6
Very good	48.0	50.0
Good	16.4	12.2
Fair	4.1	1.2

### Health utilization, last 12 months

	SHI %	Non-SHI %
Doctor visit	88.9	95.1
Prescription medication	67.8	75.6
Dental exam	67.8	84.1
Immunizations	58.5	59.8
Eye exam	49.7	60.5
Routine blood work	39.8	48.8
Emergency Room	14.2	15.9
Physical therapy	12.6	11.3
Outpatient surgery	8.9	11.1
Overnight hospital stay	4.1	4.9
Gynecological exam (females only)	69.4	78.1

*More SHI enrollees reported encountering barriers to accessing medical care and prescription medications.*

Barriers to care, last 12 months

	SHI %	Non-SHI %
Unable to get medical care that he/she or a doctor believed was necessary	9.9	7.3
Unable to get medications that he/she or a doctor believed was necessary	8.8	3.7

Among respondents who were unable to access medical care, the primary reasons given for the inability were similar for both groups: *insurance company wouldn't approve, cover, or pay for care* (47.1% for SHI and 50.0% for non-SHI), and *couldn't afford care* (23.5% and 33.3%). These same reasons were first and second for reported inability to access medication, though non-SHI enrollees reported the insurance company would not pay for the medication at a rate 20 percentage points above SHI enrollees. Among respondents who indicated their insurance plans had a pre-existing condition limitation, more SHI enrollees had experienced initial coverage limits than non-SHI enrollees (19.4% compared to 7.7%). The rate of respondents exhausting an annual maximum benefit was close to six times higher for SHI enrollees.

In the last 12 months, what is the MOST you have paid to fill a single prescription?

	SHI	Non-SHI
Min	\$0.00	\$0.00
Max	\$1800.00	\$200.00
Mean	\$67.95	\$36.50

In the last 12 months, what is the LEAST you have paid to fill a single prescription?

	SHI	Non-SHI
Min	\$0.00	\$0.00
Max	\$65.00	\$90.00
Mean	\$10.99	\$8.44

**HEALTH INSURANCE PLAN & HEALTH INSURANCE KNOWLEDGE**

Uncertainty about insurance plan coverage details was widespread, and is thus a necessary contextual factor for discussions of difference between SHI and non-SHI graduate student coverage. Regardless of enrollment, the extent of respondents' self-evaluated overall plan knowledge was not reproduced in respondents' answers to questions about specific plan coverage elements.

To evaluate the plans as accurately as possible, the survey did provide participants with explanations of the insurance terminology used in the questionnaire. For the eight categories of **service coverage**, examples of services that would fall under these categories were given. When the survey asked students whether or not their plan included five specific **design components**, definitions for those design components were also provided.

*Uncertainty about plan coverage and design among SHI enrollees ranged from 12.9% to 82.5%.*

*Among non-SHI enrollees, plan uncertainty ranged from 8.5% to 67.9%.*

**How would you describe your knowledge of your insurance plan?**

	SHI %	Non-SHI %
Excellent	1.2	3.7
Pretty good	15.2	36.6
Fair	53.8	31.7
Not very good	24.0	22.0
Poor	5.8	6.1

*Plan details were incorrectly reported by SHI enrollees.*

**Does your plan cover:**

	SHI %	Non-SHI %		SHI %	Non-SHI %
<b>Vision</b>			<b>Mental health</b>		
Yes	74.9	69.1	Yes	55.4	54.9
No	4.1	16.0	No	1.2	4.9
Uncertain	21.1	14.8	Uncertain	43.5	40.2
<b>Dental</b>			<b>Ambulatory care</b>		
Yes	82.4	78.0	Yes	55.9	74.4
No	4.7	13.4	No	0.6	4.9
Uncertain	12.9	8.5	Uncertain	43.5	20.7
<b>Preventative care</b>			<b>ER</b>		
Yes	45.9	64.2	Yes	60.4	81.7
No	5.3	4.9	No	0.0	2.4
Uncertain	48.8	30.9	Uncertain	39.6	15.9
<b>Specialty care</b>			<b>Medical equipment</b>		
Yes	53.0	70.7	Yes	16.4	39.5
No	1.8	2.4	No	1.2	3.7
Uncertain	45.2	26.8	Uncertain	82.5	56.8

Knowledge of **plan structure** (PPO, HMO, POS, FFS, etc.) was more limited for SHI enrollees, with 35.3% reporting they were uncertain compared to 25.6% of non-SHI enrollees reporting same. Among the non-SHI enrollees who did affirm a plan structure, PPOs constituted the majority (57.3%).

While 36.6% of non-SHI enrollees reported “pretty good” knowledge--compared to only 15.2% of SHI enrollees who reported same--the percentage of non-SHI enrollees who reported uncertainty about category coverage exceeded that number in five different categories. SHI enrollees also reported answers that were inaccurate. A **pre-existing condition limitation** was incorrectly reported as absent in SHI by 14.0% of enrollees, and a **deductible** was incorrectly identified as absent by 17.0%. More than

*Dental and vision were the only categories for which more SHI enrollees reported coverage.*

twice as many SHI enrollees as non-SHI enrollees did not know if they had a deductible, though the recent introduction of a deductible to SHI may have contributed to that difference.

Uncertainty about **premiums** was similar between groups, with 34.9% of SHI enrollees and 40.5% of non-SHI enrollees unsure about their monthly premium cost. Among non-SHI enrollees, 30.4% paid between \$50 and \$150 per month, 8.9% paid between \$151 and \$250 per month, and 10.1% paid more than \$251 per month.

SHI enrollees demonstrated the least incorrect insurance knowledge for the prescription benefit. Of respondents who provided a definitive yes/no answer, the majority of non-SHI enrollees did not have a **maximum prescription benefit**, whereas the majority of SHI enrollees confirmed they did.

*Insurance inaccuracies among SHI enrollees were lowest for the annual maximum prescription benefit.*

Does your plan have a(n):		SHI %	Non-SHI %
Deductible			
Yes		40.9	61.0
No*		17.0	20.7
Uncertain		42.1	18.3
Pre-existing Condition Limitation			
Yes		18.1	15.9
No*		14.0	23.2
Uncertain		67.8	61.0
Annual Maximum Benefit			
Yes		43.3	31.7
No		4.7	15.9
Uncertain		52.0	52.4
Annual Maximum Out-of-Pocket Expense			
Yes		13.5	45.1
No		8.2	4.9
Uncertain		78.4	50.0
Annual Maximum Prescription Benefit			
Yes		37.5	7.7
No*		3.8	24.4
Uncertain		58.8	67.9

**SATISFACTION WITH HEALTH INSURANCE**

More respondents were satisfied with their health insurance plans than not, and satisfaction was strong. Using an 11-point scale with 0 indicating the *worst health plan possible* and 10 indicating the *best health plan possible*, findings indicate that 50% of SHI enrollees reported a 7 or above, and 50% of non-SHI enrollees reported an 8 or above. The mean score for non-SHI enrollees was higher than the mean score for SHI enrollees. These data are depicted on the following page.

Students were also asked to rate their level of satisfaction with particular aspects of health insurance. Findings indicate these ratings differed at the extremes, with more SHI enrollees *not at all satisfied* and more non-SHI enrollees *very satisfied*. Rates of satisfaction with five coverage aspects between groups were most similar for amount paid for health insurance, and least similar for choice of providers.

*On a scale of 0 to 10, 63.8% of SHI enrollees rated their plans a 7 or above, and 52.5% of non-SHI enrollees rated their plan an 8 or above.*

**Funded and Non-Funded  
Students Enrolled in SHI**

Overall plan ratings were similar among SHI enrollees who have a Graduate Assistantship or other funded position and those who do not. The distribution of scores at 6 or above was nearly identical, and the percent of enrollees reporting 5 or below was also very similar, at 21% of non-funded and 23.1% of funded students. Three times as many non-funded enrollees, however, rated their plan at 3 or below.

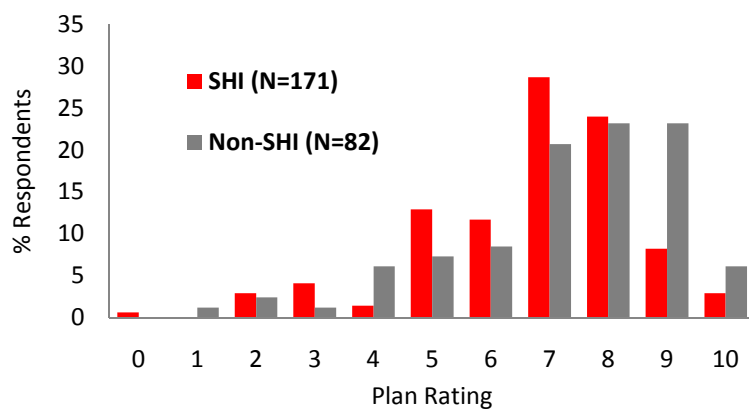
Mean Rating	
SHI enrollees with GAs	6.67
SHI enrollees without	6.87

	SHI %	Non-SHI %
Amount paid for health insurance		
Very satisfied	25.9	28.8
Somewhat satisfied	48.2	48.8
Not too satisfied	18.8	12.5
Not at all satisfied	7.1	10.0
Amount paid out-of-pocket for services		
Very satisfied	30.3	35.8
Somewhat satisfied	46.1	44.4
Not too satisfied	17.6	12.3
Not at all satisfied	6.1	7.4
Access to specialty care		
Very satisfied	25.0	43.8
Somewhat satisfied	51.8	42.5
Not too satisfied	15.9	10.0
Not at all satisfied	7.3	3.8
Choice of providers		
Very satisfied	18.2	40.7
Somewhat satisfied	49.7	46.9
Not too satisfied	24.2	11.1
Not at all satisfied	7.9	1.2
Prescription drug coverage		
Very satisfied	33.1	49.4
Somewhat satisfied	48.2	32.1
Not too satisfied	11.4	12.3
Not at all satisfied	7.2	6.2

Using any number from 0 to 10, where 0 is the worst health plan possible and 10 is the best health plan possible, what number would you use to rate your health plan?

	0	1	2	3	4	5	6	7	8	9	10
SHI	0.6%	0%	2.9%	4.1%	1.4%	12.9%	11.7%	28.7%	24.0%	8.2%	2.9%
Non	0%	1.2%	2.4%	1.2%	6.1%	7.3%	8.5%	20.7%	23.2%	23.2%	6.1%

	SHI	Non-SHI
<b>Mean</b>	<b>6.64</b>	<b>7.22</b>
SD	1.843	1.969



Enrollees in SHI and enrollees in non-SHI plans reported similar health insurance priorities, with out-of-pocket costs identified as most important at the highest rate in each group (38% in SHI and 35.4% in non-SHI). These rates were twice as high as the second-most reported (purchase price) in both groups. On measures of least importance, the same two items--maternity coverage and mental health coverage--were most reported in both groups, though the order was reversed. Mental health coverage was reported as least important by non-SHI enrollees at rates about ten percentage points higher than by SHI enrollees.

*The two most important and the two least important insurance factors were the same for all respondents, regardless of insurance.*

## IMPLICATIONS & LIMITATIONS

### **Respondents enrolled in SHI had unmet needs.**

Nearly 9% reported they had been *unable* to get medication that they (or a doctor) believed was necessary. Close to half of those respondents identified insurance company policy as the primary reason, and the inability to afford the cost of the medications was the second most frequent primary reason. Out-of-pocket costs were higher for SHI enrollees. Differences between groups were not statistically significant, but unmet needs were significant to those experiencing them and may underscore the need to investigate supplemental remedies.

### **Respondents enrolled in SHI were uncertain about their health insurance plan components.**

Higher levels of self-reported general insurance plan knowledge were associated with lower levels of overall satisfaction. As indicated earlier, however, the level of self-reported insurance plan knowledge was not reproduced in answers to specific plan design questions. Uncertainty has implications for the interpretation and application of student satisfaction survey results, particularly as they pertain to future program changes and the ability to predict or interpret student response. Recent campaigns to increase graduate students' understanding should be continued.

### **Respondents enrolled in SHI utilized fewer preventative services than non-SHI respondents.**

Rates of use for SHI enrollees were lower for visits to the doctor, dental exams, eye exams, routine blood work, and immunizations. Just as preventative care is integral to managing graduate students' health, it is integral to managing graduate student health care *costs*. It may be important to explore factors related to the difference in order to improve health care access for students as well as the financing of student health insurance plans and programs.

**LIMITATIONS:** The number of non-SHI enrollee respondents was less than half the number of SHI enrollee respondents, limiting the ability to draw conclusions. Response bias may also compound the study results. It is important to note that OSU African-American students and male students were underrepresented in this study. As research indicates both groups are more likely to underutilize and experience barriers to health care services, further study is warranted.



<b>Respondent Demographics</b>		
<b>N=253</b>		
	<b>N</b>	<b>%</b>
<b>Gender</b>		
Male	100	39.5
Female	153	60.5
<b>Age</b>		
Under 22	5	2.0
22-25	138	54.5
26-29	75	29.6
30 or above	35	13.8
<b>Race/Ethnicity</b>		
Asian or Pacific Islander	33	13.0
Black or African-American, non-Hispanic	5	2.0
Hispanic or Latino/a	6	2.4
White or Caucasian, non-Hispanic	200	79.1
Multi-racial	9	3.6
<b>Citizenship (N=248)</b>		
U.S. Citizen or permanent resident	228	91.9
Non U.S. Citizen	20	8.1
<b>Relationship status</b>		
Single	172	68.0
Married/Partnered	74	29.2
Other	7	2.8
<b>Dependent children</b>		
Yes	24	9.5
No	229	90.5
<b>Academic program (N=252)</b>		
Graduate	110	43.7
Graduate Professional	142	56.3
<b>Degree level (N=223)</b>		
Master's	99	44.4
Post-master's	124	55.6
<b>Year of study (N=251)</b>		
Year 1	91	36.3
Year 2	81	32.3
Year 3	47	18.7
Year 4 or above	32	12.7