

Unnecessary & Redundant Health Care Costs for College & University Students:

An analysis of the costs imposed on university students due to the lack of direct insurance billing by campus health centers

Prepared For:
Highland Campus Health Group

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EXECUTIVE SUMMARY

Although most university students have health insurance coverage through parents' private health insurance plans, they often find that such insurance has little value on college campuses. Most student health centers do not offer direct billing for private insurance plans and few students are successful in getting reimbursed for services. Also, most students with private insurance are forced to pay redundant student health fees. Additionally, many universities offer student health insurance plans that feature "benefit payout ratios" that are uncompetitive with typical private sector health insurance plans.

Commissioned by Highland Campus Health Group and conducted by Keybridge Research ("Keybridge"), this study estimates the unnecessary annual costs that college students and their families face because university student health centers do not typically offer direct billing of private insurance plans. This study identifies six sources of unnecessary healthcare costs that university students pay, including:

- Fee for service overcharges for students with private health insurance plans
- Fee for service overcharges for students with university student health insurance plans
- Overcharges for school health insurance plans
- Redundant student health fees for students with private health insurance plans
- Redundant student health fees for students in school health insurance plans
- Over insurance for some students (purchasing a student health insurance plan even when private health insurance is in force)

These six cost components were estimated individually and then summed to provide total cost estimates.

To conduct this study, Keybridge gathered data from multiple sources, including the U.S. Department of Education's National Center for Education Statistics, the U.S. Department of Health and Human Services, a Louisiana State University survey of student health services at 51 universities nationwide, and other published studies. In addition, Keybridge collected original data from a representative sample of universities nationwide. Keybridge issued public records requests to 64 universities nationwide and conducted Internet

EXECUTIVE SUMMARY (continued)

research and/or phone interviews with officials from 100 randomly sampled universities.

KEY FINDINGS

Based on this study, key findings include:

- Total unnecessary health care costs faced by university students and their families are at least \$2.3 billion per year, and could be as high as \$2.9 billion per year.
- For the average university student these unnecessary healthcare costs amount to at least \$1,204 over a four-year college career.
- Among the top cost components are redundant student health fees paid by students with private health insurance plans (\$1.2 billion annually) and fee for service overcharges for students with private health insurance (\$413 million annually).
- Students also are overcharged about \$125 million a year for uncompetitive student health insurance plans and purchase about \$200 million a year of unnecessary double insurance.
- This study likely understates the total costs. For example, it does not account for the relatively low maximum benefits provided by most school-sponsored health insurance plans. These low maximum benefits place many students at risk for overwhelming health care costs in case of serious illness or injury. In addition, the study does not include hidden health care fees which are often imbedded in university tuition charges due to the difficulty in quantifying these costs with statistical certainty.

STUDY ACRONYMS

BPR	Benefit Payout Ratio, or sometimes referred to as the “Medical Expense Ratio.” Equal to the dollar amount of medical benefits paid out divided by the dollar amount of collected premiums.
CBC	Complete Blood Count
PHIP	Private Health Insurance Plan
SHC	Student Health Center
SHF	Student Health Fee
SHIP	Student Health Insurance Plan

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Student health systems currently consist of misaligned incentives, hidden costs, and significant inefficiencies.

Schools and insurers maintain several advantages in constructing, mandating, and managing on-campus health systems:

- **Schools “Make the Market”:** By imposing insurance mandates and automatic enrollment policies, schools can force students into school-sponsored plans and earn a percentage of the premiums paid by students.¹
- **Schools “Agency Problem” and Redundant Fees:** For students with insurance, mandatory SHC fees are a redundant and largely unnecessary cost.
- **Price Discrimination:** In some cases, schools charge students higher fees-for-service if they are not in the school insurance plan.
- **Unknown Costs Lead to Sub-optimal Decision-making:** Schools often do not provide exact fee-for-service information to students, who are unable to make informed decisions due to incomplete information regarding health center fees, SHIP premiums, and out-of-pocket expenses. Students may be inclined to purchase supplemental insurance to mitigate the risk of these unknown costs, or forgo services entirely.
- **Regulatory Weakness:** Schools are not required to register as “in-network” providers, resulting in “out-of-network” fees and lower reimbursement rates for students who travel out of state to school.

These market and policy failures are faced by students and institutions from all areas of higher education. Unnecessary health care costs have attracted high-level litigation and policy action.

¹ 1.5% at Kansas, 5% at Alaska, and 50% at Colorado, as reported by: Liang, Bryan A., Crisis on Campus: Student Access to Health Care (May 13, 2009). University of Michigan Journal of Law Reform, Vol. 43, No. 3, 2010.

Students often have to navigate a confusing web of overlapping fees, insurance, deductibles, and benefits.

Typical Fees, Premiums & Benefits for School Health Insurance Plans (2009-2010)

School Name	Student Health Fees	Student Health Ins. Premiums	Copay, Coinsurance, & Deductible	Maximum Benefit
Indiana University	\$ 218	\$1,864	20% co-insurance	\$75,000 (per year)
Montana State University	\$322	\$1,472	\$300 deductible + 30% co-insurance	\$200,000 (per year)
California State University, Chico	\$240	\$898	\$25	\$50,000 (lifetime)

These contributing factors cause the typical student to be uninsured, underinsured, or “functionally uninsured.”

Students' Insurance Status

Students' Insurance Status	Percent of Total Student Population	On-Campus Insurance Status	Explanation
Privately Insured Through Parents' Employer-Based Plan	67% ¹	Functionally Uninsured	These students' insurance has little value on most college campuses, because most student health center facilities do not accept private insurance. Moreover, the reimbursement rates paid by insurers tends to be very low (15% to 25%) for students who do attempt to be reimbursed. ²
Public Health Insurance Plan	6% ¹		
School Insurance Plan	7% ¹	Under-insured	The Government Accountable Office (GAO) reported in a 2008 study that “more than half of the insurance plans recommended by colleges offer benefits of \$30,000 or less.”
Uninsured	20% ¹	Uninsured	Compared with 15.3% of the total population (in 2007). ³ 19-20 year olds are the fastest growing group without health insurance in the U.S. ⁴

¹ Department of Health and Human Services (2006), Medical Expenditure Survey.

² US News and World Report (2008).

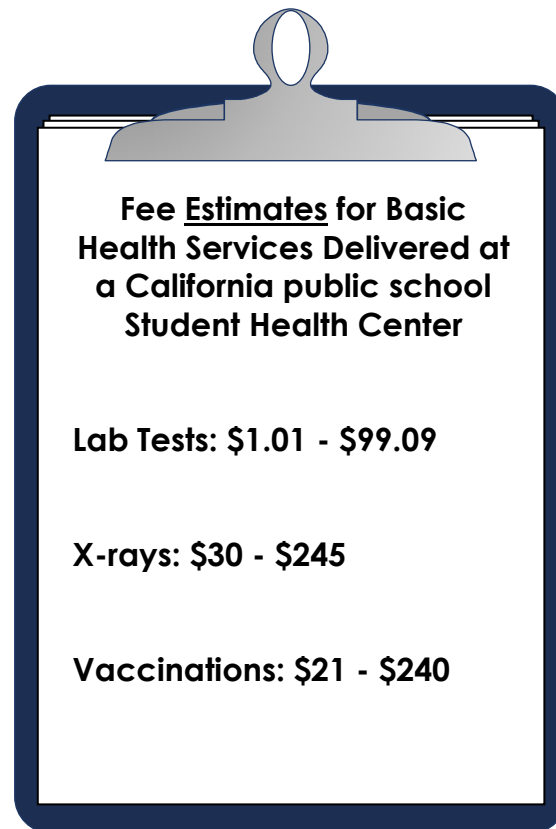
³ US Census Bureau (2007), “Income, Poverty and Health Insurance Coverage in the United States: 2007.”

⁴ The Commonwealth Fund (2008).

Additionally, unknown costs inhibit students from making prudent decisions about their health care spending.

“Since prices change from time to time we do not post the fees associated with services here at the health center.”

- Medical biller at a California public school¹



¹ Keybridge phone interview with school medical biller, September 2009.

The purpose of this study is to estimate the unnecessary annual health care costs incurred by university students and their parents.

Statement of the Issue

While most university students have health insurance, they are often “functionally uninsured” and face myriad mandatory student health fees and often are subject to student health center overcharges for service rendered. For example, private insurance through a parent's employer is rarely accepted on campus, requiring students to pay out-of-pocket for services that would be fully covered at home. Students are also charged annual health center fees for which little benefit is gained, or they may face systematic price discrimination for health services if they do not participate in the school-sponsored health insurance plan. These and other factors result in significant unnecessary costs to students and their parents.

Purpose of This Study

Keybridge Research was asked by Highland Campus Health Group to estimate the unnecessary costs to college students and their parents that result from university student health centers not offering direct billing of private insurers and other related charges and fees.

Keybridge's general approach was to account for the unnecessary health costs faced by the "typical" student.

General Methodological Approach

The general approach to this study was to assess the unnecessary costs facing the "typical" college student and their parents. The study estimates what students would pay for health care if schools were to provide direct-billing to private insurers. Accordingly, costs were calculated for unavoidable fees (e.g., mandatory student health fees), over-charges for school health insurance plans, and over-charges for health care services obtained on campus.

To conduct this study Keybridge gathered data from multiple sources, including the U.S. Department of Education's National Center for Education Statistics, the U.S. Department of Health and Human Services, a Louisiana State University survey of student health services at 51 universities nationwide, and other published studies. In addition, Keybridge collected original data from a representative sample of universities nationwide. Keybridge issued public records requests to 64 universities nationwide and also conducted Internet research and/or phone interviews with officials from 100 randomly sampled universities. As a result of this data gathering effort, Keybridge believes the majority of data cited in this study are statistically reliable and representative of national averages. However, due to the complexity of the nation's health care system and the difficulty of obtaining a few highly detailed data points, a few data series were not drawn from statistically representative samples. In these cases, Keybridge has estimated low, medium and high values in order to present a probable range of health costs.

This study is focused on the "typical" college student, and does not quantify the additional costs to students who face serious illness or injury. Students with private insurance could presumably return home for expensive treatments. Students with only a school-sponsored insurance plan may face a relatively low maximum benefit limit (particularly on a per-illness per-lifetime basis), and could face substantial medical bills. By omitting these costs, this study intentionally models conservative estimates to avoid inaccurately inflating the unnecessary health care costs to the typical student.

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Keybridge employed a five-step methodology for this study.

Five-Step Methodology

Calculating Unnecessary Health Care Costs Facing University Students



Cost Categories	Data Elements	Data Gathering	National Average	Costs
<ul style="list-style-type: none"> Define the “typical” student as the unit of observation Define redundant, unnecessary health care cost to students and/or their parents Define student categories (e.g., full-time and part-time) and the instances in which they might be overcharged for health care 	<ul style="list-style-type: none"> Define the specific data elements required to calculate each cost category Define and document the specific assumptions required for each calculation 	<ul style="list-style-type: none"> Identify data sources for each data element Gather data using public and private sources Capture data in a consistent fashion and standardize data using transparent and consistent assumptions 	<ul style="list-style-type: none"> Using the gathered data, calculate national averages for all data elements Trim high and low outliers that obscure underlying trends For data with insufficiently large sample sizes, estimate likely range based on best available information 	<ul style="list-style-type: none"> Calculate the unnecessary health care costs for each cost category Aggregate costs to a national total Calculate the average costs for the “typical” student and for each student category

Step 1a: Identify the universe of students and define the “typical” student as the unit of observation.

Universe of University Students¹

Category	Undergraduate	Graduate
At 4-Year Institutions	8,986,150	2,293,284
Male	43%	40%
Female	57%	60%
Full-Time	80%	49%
Part-Time	20%	51%
Public Schools	65%	53%
Private Schools	35%	47%

Who Is the “Typical” Student?

- Most college and graduate students are young and healthy. They typically access the health care system for routine preventative care (immunizations, annual physicals, and women's exams), treatments including prescriptions for minor illness or injury, and/or lab tests.²
- For several reasons, this study does not include the cost of serious illness or injury:
 - The study focuses on on-campus health care, and most college campuses are not equipped to provide such treatments.
 - The majority of students with private insurance through a parent's employer are likely to return home to receive expensive, specialized treatments.
- This study is not able to quantify the cost to students who are on a school insurance plan and fall seriously ill:
 - These students may face extraordinary medical bills while their SHIP provides very low lifetime maximum benefits.
 - While this is a very serious issue for those afflicted, data for this group is neither readily available, nor is it representative of what the “typical” college or graduate student faces in terms of health care costs.

¹ National Center for Education Statistics, U.S. Department of Education

² See Slide 22 for the break-down of the Top 10 services per student.

Step 1b: Identify the main types of unnecessary health care costs facing the typical university student and his/her parents.

Student Categories & Types of Unnecessary Health Care Costs

Cost Category	Cost Description	Students with Private or Public Insurance	Students with Only School Health Insurance Plan	Students with Both Private and School-Based Insurance
1. Functionally uninsured	Students cannot use their private insurance on campus	✓		
2. Overcharges for school-plans	Students/parents are overcharged for university health insurance plans		✓	✓
3. Redundant student fees	Proportion of student health center fee not devoted to campus health education programs	✓	✓	✓
4. Over-insured students	Students with insurance forced into the school plan			✓
5. Fee-for-service overcharges for students with school health insurance	Student health centers charge higher than market fees-for-services		✓	✓
6. Hidden health fees	Fees embedded within tuition that go towards health center budgets	✓	✓	✓

Step 1c: Estimate the number of students for two broad cost categories.

University Student Categories[†]

Students	Total ¹	Percent Subject to Student Health Fee	Number of Students Paying Health Fee	Percent of Students Under Age 25 with PHIP & Subject to SHF	Students Under Age 25 with PHIP & Subject to SHF	Percent of Students Under Age 25 & Enrolled in SHIP	Number of Students Under Age 25 Enrolled in SHIP	Uninsured Students Under Age 25 ⁷
Undergraduate	8,986,150	89.78%	8,067,319	65.54%	5,889,143	16.28%	1,463,340	714,836
Full Time	7,148,487	100.00%	7,148,487	73.00%	5,218,396	18.14% ³	1,296,672	633,419
Part Time	1,837,663	50.0% ²	918,832	36.50%	670,747	9.07% ⁴	166,668	81,417
Graduate	2,293,284	74.25%	1,702,774	11.49%	263,576	2.86%	65,494	31,993
Full Time	1,112,263	100.00%	1,112,263	19.81%	220,339	4.92% ⁵	54,750	26,745
Part Time	1,181,021	50.0% ²	590,511	3.66%	43,237	0.91% ⁶	10,744	5,248
TOTAL	11,279,434	86.62%	9,770,092	54.55%	6,152,718	13.55%	1,528,833	746,830

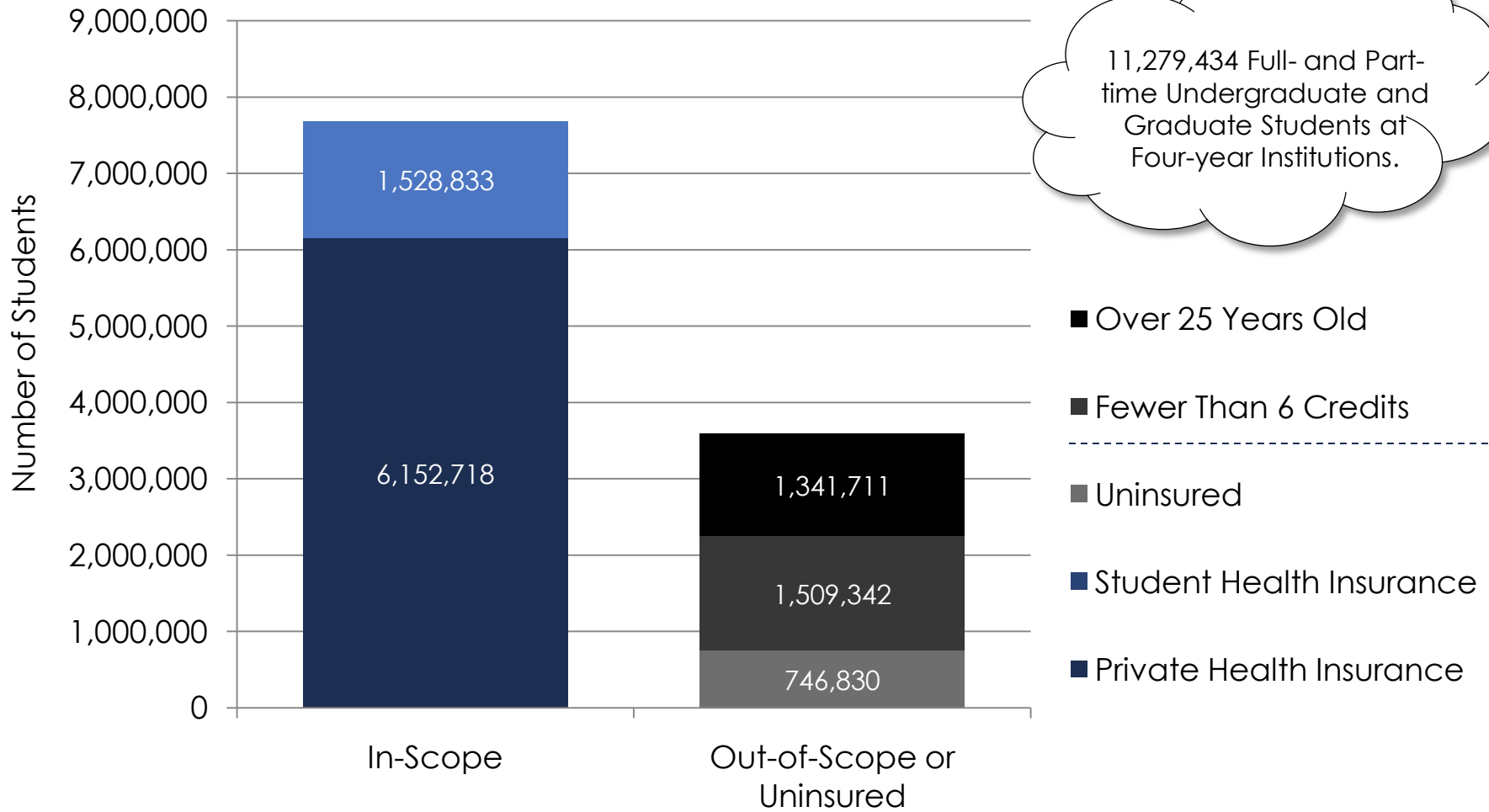
Sources & Assumptions:

1. Sourced from National Center for Education Statistics: *Table 193. Total fall enrollment in degree-granting institutions, by level of enrollment, sex, attendance status, and type and control.*
2. Schools typically charge students a health fee if they take 6 credit hours or more. Due to a lack of available data, it is assumed that 50% of total part-time students take at least 6 credits.
3. The Department of Health & Human Services data indicates a maximum of 7% of students are enrolled in school health insurance plans ("SHIP"). However Keybridge Research analysis indicates a 18.14% SHIP enrollment rate.
4. Of part-time undergraduates who took 6 credits or more (50% of total), 18.14% are assumed to be enrolled in student health insurance plans (50% x 18.14% = 9.07% of total part-time undergrads enrolled in SHIPs).
5. Full-time graduate students under the age of 25 (27.1% of the total) are assumed eligible for their parent's insurance, as employer-based plans phase-out student/dependent eligibility between 22 and 25 years of age. Assuming the undergraduate SHIP enrollment rate of 18.14% applies to eligible graduate students, this equates to 4.92% of all full-time graduate students.
6. As of Spring 2008, 10% of part-time graduate students were under 25 years old, of which 50% are assumed to be enrolled in 6 or more credit hours with an assumed 18.14% SHIP enrollment rate (10% x 50% x 18.14% = 0.91% of total part-time graduate students).
7. HHS data indicates that 20% of students are uninsured—Keybridge assumes that SHIPs marginally enroll the uninsured.

[†] Note: Totals and Sub-totals may not add-up due to rounding errors.

This study covers 68% of total undergraduate and graduate students at four-year institutions.

In- and Out-of-Scope Student Categories





Step 2: Identify data elements needed to calculate the unnecessary costs.

Unnecessary Health Cost Data Elements

1. Total number of full-time, part-time, undergraduate, and graduate students at four-year schools
2. Percent of students with non-school sponsored insurance (e.g., private insurance)
3. Percent of students with school-sponsored insurance
4. Percent of student with no insurance
5. Average fee-for-service with school health insurance, for the most commonly provided services
6. Average fee-for-service with non-school health insurance, for the most commonly provided services
7. Difference in fee-for-service (#2-#1), for the most commonly provided services
8. Current reimbursement rate at student health centers
9. Average co-pay in the private market for the most commonly provided services
10. Average number of services per student
11. Average annual school-insurance plan premium
12. Benchmark benefit payout ratio
13. Average benefit payout ratio
14. Average annual student health fee
15. Percent of student health fee spent on campus/public health programs
16. Percent of schools that force students into school-sponsored health plans
17. Percent of schools that automatically enroll students in school-sponsored health plan
18. Average hidden health fees not used on campus/public health programs

Step 3: Gather data from available public and private sources.

Data Gathering Methods

Public Records Requests of the Top 64 Public Schools

- Public records requests were sent to 64 public colleges and universities, including the top 50 as ranked by US News & World Report

100 Randomly Sampled Schools

- A stratified random sample of 100 schools were taken from the National Center for Education Statistics lists of all four-year colleges and universities
- Data was gathered from these schools' health center websites and per phone interviews with health center staff

Louisiana State University Survey of 51 Schools¹

- The LSU Student Health Center conducted a study of 51 schools for health care data from July 2003 to June 2004, including health fees, and the quantity and types of services received by students

Government Databases

- The Department of Health & Human Services Medical Expenditure Panel Survey includes data on the proportion of insured students, as well as total and out-of-pocket health care expenses

Previous Health Care Studies

- Studies conducted by the University of Maryland, The Commonwealth Fund, and Bryan Liang of the California Western School of Law were used for specific data points that were otherwise unavailable

Step 4a: Calculate national averages for each data point.

Summary Statistics & Ranges

Variable	Average	Sample Size
Total Full-Time Students at 4-year Schools	8,260,750	NCES ¹
Total Part-time Students at 4-year Schools	3,018,684	NCES ¹
% of Students with Private Insurance	73%	MEPS ²
% of Students with School-Sponsored Insurance	7%-18%	MEPS ² , Keybridge analysis
% of Student with No Insurance	9%-20%	MEPS ² , Keybridge analysis
Annual School-Insurance Plan Premium	\$1,083.20	73
Benchmark Benefit-Payout Ratio	80%	n/a
Actual Benefit-Payout Ratio	71.4% ³	17 ⁴
Annual Student Health Fee	\$226.02	48
% of SHF Spent on Campus/Public Health Programs	5.2%	9
% of Schools Forcing Students Into SHIP	3.4%	88
% of Schools Automatically Enrolling Students in SHIP	47%	89
Hidden Health Fee Costs	See Slides 42-43	

¹ Source: National Center for Education Statistics

² Source: Department of Health and Human Services, Medical Expenditure Panel Survey

³ Only 15 out of 64 schools responded to the public request for benefit payout information. The range of ratios received was 35% to 158%.

Further inquiry may be warranted as to why schools' response rate was particularly low for this question.

⁴ Note: Average includes 10% tail trimming of low and high outliers

These national findings (p. 20) are supported by a recent study by the Massachusetts Division of Health Care Finance and Policy.

Summary Statistics: Massachusetts DHCFP Student Health Program Baseline Report¹

Variable	Average ²	State Colleges	UMass Schools	Self-Funded Schools	Other Schools ³
% of Students with Private Insurance	73%	89%	74%	33%	73%
% of Students with School-Sponsored Insurance	27%	11%	26%	67%	27%
% of Student with No Insurance	0%	0%	0%	0%	0%
Annual School-Insurance Plan Premium	\$1,216	\$1,253	\$1,608	\$1,767	\$1,242
Private Insurance Benefit-Payout Ratio	88%	88%	88%	88%	88%
Actual Benefit-Payout Ratio	69%	56%	71%	75%	64%
Administrative Expense Ratio	20%	25%	20%	13%	24%
Profit Margin	10%	20%	8%	11%	12%
Sample Size	118	7	5	4	86

Note: See Appendix IV for more information on the Massachusetts report.

15% of students in plans with \leq 60% BPR
 70% of students in plans with \leq 70% BPR
 98% of students in plans with \leq 80% BPR

¹ Source: Massachusetts Division of Health Care Finance and Policy, *Student Health Program*, November 2009

² Average also includes 16 community colleges

³ "Other Schools" include private schools and trade schools.

This study also provides a detailed break-out of fee-for-service data.

Top 10 Most Commonly Provided On-Campus Health Services

On-Campus Service	Per Student Per Year ¹
Prescriptions	1.12
Lab Tests	0.81
Routine Nurse's Visit	0.65
Routine Doctor Visit	0.54
Routine Women's Exams	0.43 ²
Immunization	0.18
Psychologist	0.14
Routine Physical	0.11 ³
Physical Therapy	0.09
X-ray	0.06

¹ Data taken from Louisiana State University Survey unless otherwise noted.

² Assumes that 75% of all women (57% of the total student population) receive annual exams.

³ Assumes that 25% of all men (43% of the total student population) receive annual physical.

Student Health Centers typically charge a fee for routine services...

Average Fees for the Top 10 Most Common On-Campus Health Services

On-Campus Service	Average Campus Health Center Fee	Sample Size
Prescriptions	n/a	n/a
Lab Tests ¹	\$23.35	74
Routine Nurse's Visit	\$0.00	n/a
Routine Doctor Visit*	\$49.40	11
Routine Women's Exams	\$63.03	18
Immunization ²	\$56.41	103
Psychologist [†]	\$64.93	5
Routine Physical	\$55.74	16
Physical Therapy [†]	\$41.42	8
X-ray ³	\$57.43	55

¹ Average of over-charges for CBC, Basic Chem Profile, STD Screening and HIV Screening.

² Average of over-charges for Flu shot, MMR, Meningitis, Hepatitis A and Hepatitis B.

³ Average of over-charges for Chest, Ankle, Wrist and L-Spine X-rays.

* Note: An additional 26 schools reported free doctor's visits to students in the school insurance plan and/or students who pay the student health fee. Keybridge reflects these "free" doctor's visits in its total cost calculations (See Slide 34). In other words, while some schools do report a fee for doctor's visits, this study assumes that, on average, students receive a free doctor's visit each year.

[†] Note: The low sample sizes indicate that many student health centers do not offer these services on campus, forcing students to seek off campus—and most likely, out of network—health care.

...that is higher than the co-pays (and/or coinsurance) students would pay if student health centers billed private insurers.

Average Co-Pay & Co-insurance for the Top 10 Most Common On-Campus Health Services¹

On-Campus Service	Average Co-pay & Coinsurance for PHIP	Sample Size	Average Co-pay & Coinsurance for SHIP	Sample Size
Prescriptions	n/a	n/a	n/a	n/a
Lab Tests ¹	\$28.93	170	\$21.47	151
Routine Nurse's Visit	\$0.00	n/a	\$0.00	n/a
Routine Doctor Visit	\$22.22 22% [†]	27 45 [†]	\$18.15 18% [†]	28 33 [†]
Routine Women's Exams	\$47.50	13*	\$25.00	28
Immunization	\$53.75	14*	\$38.57	45
Psychologist	\$29.29	44	\$22.73	44
Routine Physical	\$40.00	7*	\$27.00	45
Physical Therapy	\$31.06	45	\$25.29	45
X-ray	\$27.50	48	\$27.00	41

¹ Keybridge Research analysis of competitive insurance plans. Survey included Aetna, United Health Care, Kaiser Permanente as well as competitive school-based plans.

* Note: Due to the low sample size, data was verified with insurance policy information published by Aetna, United Healthcare and Kaiser Permanente. Based on this comparison, the figures used in this study are conservative estimates of what patients pay in the private market. For example, most private health plans provide routine women's exams and physicals for co-pays as low as \$20. Using higher figures therefore leads to a low estimate of overcharges to students who receive these services.

[†] Note: Refers to coinsurance for a particular service.

Resulting in overcharges for routine services provided at student health centers.

Average Overcharges for the Top10 Most Common On-Campus Health Services¹

On-Campus Service	Average Overcharge For Student in PHIP	Average Overcharge For Student in SHIP
Prescriptions	n/a	n/a
Lab Tests	\$14.08	\$3.97
Routine Nurse's Visit	n/a	n/a
Routine Doctor Visit	\$57.98	\$0.00
Routine Women's Exams	\$53.95	\$49.67
Immunization	\$25.12	\$9.09
Psychologist	\$37.51	\$0.00
Routine Physical	\$32.58	\$55.90
Physical Therapy	\$28.70	\$0.00
X-ray	\$38.77	\$0.00

¹ Keybridge Research analysis, comparing what Student Health Centers charge versus what competitive co-pays and co-insurance would require students to pay out-of-pocket.

Weighting these overcharges by the average SHC usage results in the average fee-for-service overcharge for the “typical” student.

Average Overcharges for a Typical Student¹

On-Campus Service	Per Student Per Year ¹	Average Overcharge For Student in PHIP	Overcharge for Typical Student with PHIP	Average Overcharge For Student in SHIP	Overcharge for Typical Student with SHIP
Prescriptions	1.12	n/a	\$0.00	n/a	\$0.00
Lab Tests	0.81	\$14.08	\$11.41	\$3.97	\$3.22
Routine Nurse’s Visit	0.65	n/a	\$0.00	n/a	\$0.00
Routine Doctor Visit	0.54	\$57.98	\$31.31	\$0.00	\$0.00
Routine Women’s Exams	0.43	\$53.95	\$23.13	\$49.67	\$21.29
Immunization	0.18	\$25.12	\$4.52	\$9.09	\$1.64
Psychologist	0.14	\$37.51	\$5.25	\$0.00	\$0.00
Routine Physical	0.11	\$32.58	\$3.49	\$55.90	\$5.99
Physical Therapy	0.09	\$28.70	\$2.58	\$0.00	\$0.00
X-ray	0.06	\$38.77	\$2.33	\$0.00	\$0.00
TOTAL			\$84.02		\$32.13

¹ Keybridge Research analysis weights the overcharges for individual services by the rate at which the “typical” student consumes these services.

Step 5: Calculate the unnecessary health care costs for full- and part-time students.

Calculate Unnecessary Health Care Costs

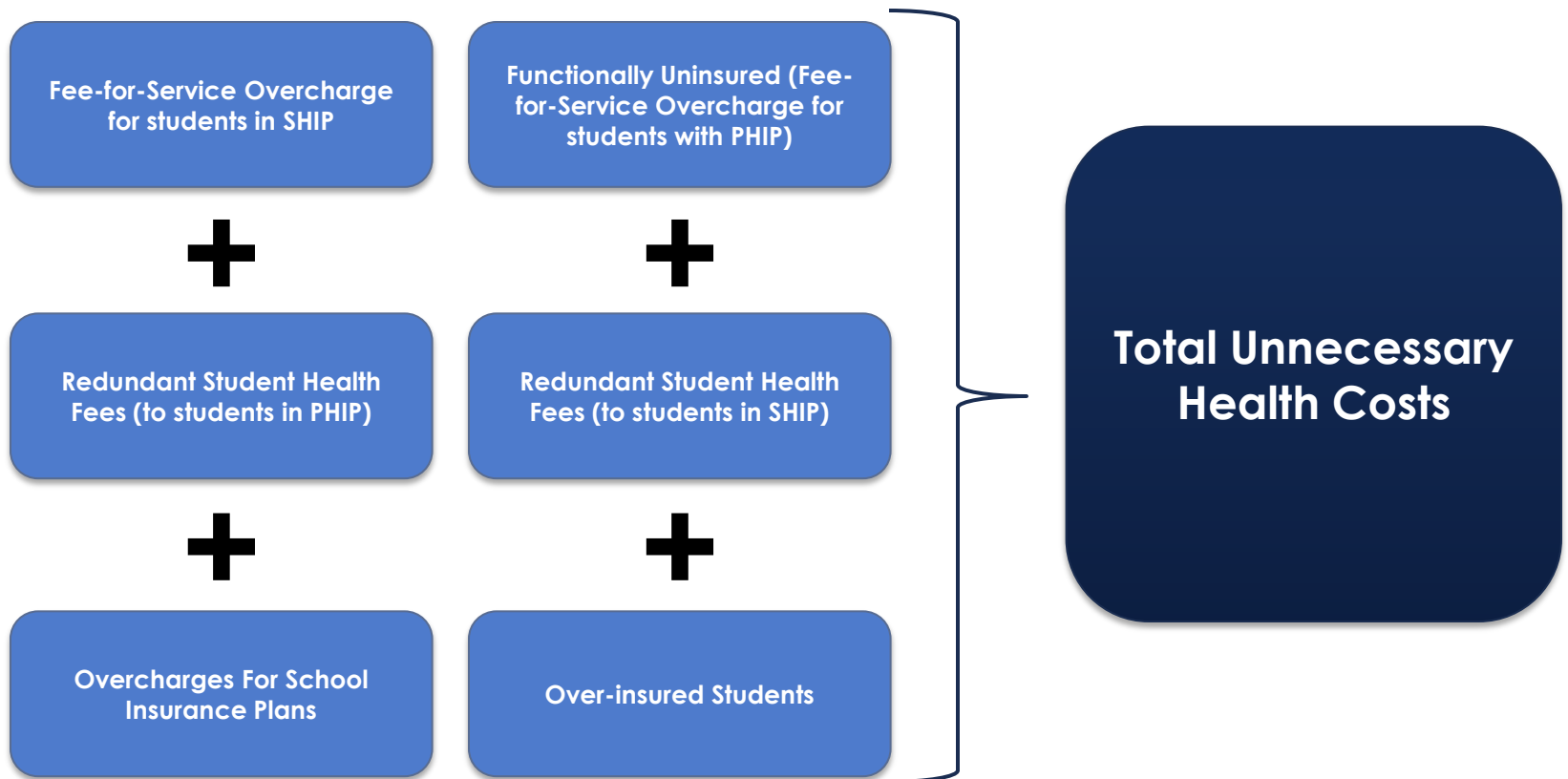


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Recall that there are six major categories of unnecessary and redundant health care costs to students and their parents.

Student Categories & Types of Unnecessary Health Care Costs

Cost Category	Cost Description
1 Functionally uninsured	Students cannot use their private insurance on campus
2 Overcharges for school-plans	Students/parents are overcharged for university health insurance plans
3 Redundant student fees	Proportion of student health center fee not devoted to campus health education programs
4 Over-insured students	Students with insurance forced into the school plan
5 Fee-for-service overcharges for students with school health insurance	Student health centers charge higher-than-market fees for services
6 Hidden health fees	Fees embedded within tuition that go towards health center budgets

Functionally uninsured students are those who have private insurance that is not accepted on campus.

Example:

A student has private insurance through a parent's employer, but that insurance is not accepted on campus. If that student receives health care on campus, they have to submit for reimbursement with their insurance provider. Only a small fraction of claims are reimbursed.

Calculation:

Students with PHIP x Average Overcharge Per Student x (1-Current Reimbursement Rate)

Calculating the "Average Overcharge Per Student" includes several steps:

- 1) Identify the Top 10 most common services received by students on campus, and calculate the average number of services received per student.
- 2) For each of the Top 10 services, estimate the average differential between what student health centers charge for services and what the co-pay (and co-insurance) should be if direct billing to private insurers were provided.

A student health center that does not accept private insurance charges \$75 for a routine physical exam, whereas the typical private insurance would only charge a co-pay of \$20. In this case, the overcharge is \$55, of which approximately 20% is likely to be reimbursed, resulting in a net unnecessary cost of \$44.

The “functionally uninsured” face total annual unnecessary charges of more than \$413 million.

Estimated Cost of Functionally Uninsured Students

Variable	Keybridge Estimate	Low Range	High Range
Students with private health insurance plan	6,152,718 ¹	6,152,718 ¹	6,152,718 ¹
Average overcharge per student	\$84.02 ²	\$78.94 ³	\$131.26 ⁴
Current reimbursement rate	20% ⁵	30% ⁵	10% ⁵
TOTAL COST	\$413,574,008	\$339,996,895	\$726,870,072
PER STUDENT	\$67.22	\$55.26	\$118.14

Cost Equation:

Students with PHIP x Average Overcharge Per Student x (1-Current Reimbursement Rate)

Sources & Assumptions:

1. Keybridge Research analysis. See Slide 16.
2. Keybridge Research analysis. The per student overcharge is conservatively based on a bundle of consumed services that assumes the typical student does not incur a significant illness or injury. See Slide 26.
3. Low-case scenario assumes only the most basic use of student health centers by eliminating the use of psychological visits, physical therapy and x-rays.
4. High-case scenario assumes double the rate for doctor's visits (1.08 per student), lab tests (1.62 per student) and immunizations (0.36 per student).
5. Liang (2009) cites a UC Davis study indicating that less than 25% of on-campus health costs are reimbursed by private insurers. Highland Campus Health Group's experience suggests that this figure is as low as 10% to 15%.

Students with school health insurance plans pay high premiums, compared with health insurance industry benchmarks.

Example:

A student who buys into the school health insurance plan pays a higher premium for the level of benefits received relative to private market plans.

Calculation:

Students with SHIP x [(Average Annual SHIP Premium) x (Benchmark Benefit Payout Ratio – Actual Benefit Payout Ratio)]

The Benefit Payout Ratio is an industry term for the percentage of premiums that are paid out as benefits. The general rule of thumb is that insurance plans should have a BPR of 80%. According to some health insurance experts, a BPR below 75% should be grounds for renegotiating rates.

A university charges a \$1,000 annual premium for its health insurance plan. The plan's benefit payout ratio is 70%, compared to the 80% industry benchmark. In this case, each student in the plan is overcharged an amount equal to: $\$1,000 \times (80\% - 70\%)$, or \$100 per year.

Students who buy their university's health insurance plan overpay by approximately \$125 million per year.

Estimated Cost of Overcharges for School Health Insurance Plan

Variable	Keybridge Estimate	Low Range	High Range
Students with school health insurance plan only	1,344,252 ¹	1,405,779 ¹	1,282,725 ¹
Average annual SHIP premium	\$1,083.20 ²	\$1,083.20 ²	\$1,083.20 ²
Benchmark benefit payout ratio	80% ³	80% ³	80% ³
Average benefit payout ratio	71.41% ⁴	73.88% ⁵	68.18% ⁶
TOTAL COST	\$125,148,700	\$93,185,858	\$164,183,150
PER STUDENT	\$93.10	\$66.29	\$128.00

Cost Equation:

Students with SHIP x (Average Annual SHIP Premium x (Benchmark Benefit Payout Ratio – Actual Benefit Payout Ratio))

Sources & Assumptions:

1. Equal to 1,528,833 (see Slide 16) less the number of students in both PHIP and SHIP (see Footnote 2 on Slide 39).
2. Keybridge Research analysis. See Slide 20.
3. See Liang, Bryan A. "Crisis On Campus" (2009)
4. Keybridge Research collected 21 data points for schools' benefit-payout ratios ("BPR"). The middle value is equal to the average after trimming the outliers (10% of both high and low values). Tail trimming is a commonly used statistical technique, particularly with smaller sample sizes.
5. Equal to the average BPR without tail trimming. This is higher than the middle case mainly due to Rutgers which reported a 158% BPR.
6. Assumes that any BPR over 95% is unsustainable, and therefore drops UC Davis (98%) and Rutgers (158%).

Students with private health insurance also pay a student health fee, the majority of which provides them with few benefits.

Example:

A student with private insurance pays a student health fee as part of the regular semester bill. Part of that fee goes to campus-wide health programs, such as drug and alcohol awareness programs, healthy eating programs, etc. Another part of the fee covers, on average, about one visit to the student health center per year. But the remainder of the fee provides little direct benefit to a university student who has private insurance.

Calculation:

Students with PHIP x [(Average Annual Student Health Fee) x (1 – Percent of Fee Going to Campus Health Programs)] – Average Benefit from Receiving “Free” Services

A school charges each student an annual student health fee of \$225, of which 5% (\$11.25) is spent on campus health programs. On average, each student captures an additional \$20 of benefits from receiving a “free” visit to the student health center. The remainder of the student health fee, \$193.75, provides little direct benefit to the student who has private health insurance.

For students with PHIP, annual student health fees are largely redundant, and cost students nearly \$1.2 billion per year.

Estimated Cost of Redundant Health Fees for Students with Private Insurance

Variable	Keybridge Estimate	Low Range	High Range
Students with PHIP subject to SHF	6,152,718 ¹	6,152,718 ¹	6,152,718 ¹
Average annual SHF	\$226.02 ²	\$226.02 ²	\$226.02 ²
% of SHF spent on campus	5.24% ³	16.30% ³	0.50% ³
Benefit received from SHF	\$20.00 ⁴	\$20.00 ⁴	\$20.00 ⁴
TOTAL COST	\$1,194,665,569	\$1,040,907,627	\$1,260.628,051
PER STUDENT	\$194.17	\$169.18	\$204.89

Cost Equation:

Students with PHIP x [Average Annual Student Health Fee x (1 – Percent of Fee Going to Campus Health Programs)] – Average Benefit from Receiving “Free” Services

Sources & Assumptions:

1. Keybridge Research analysis. See Slide 16.
2. Keybridge Research analysis. See Slide 20.
3. Keybridge Research analysis. With only 9 data points for this variable, Keybridge used the average, minimum and maximum values.
4. At most schools the student health fee does pay for, or in part subsidize, doctors' and nurses' visits at the campus health center. We assume that, on average, each student received the equivalent of one free visit per year, which is worth a standard co-pay of \$20 for routine check-ups.

Students with the school health insurance plan also pay a student health fee, the majority of which is unused by the student.

Example:

A student with the school health insurance plan pays an annual student health fee as a part of their semester bill. Part of that fee goes to campus-wide health programs, such as drug and alcohol awareness and healthy eating programs, etc. But the remainder of the fee is spent with little direct benefit to the student. These students do not receive the benefits of “free” services, because they are already paid for by the school insurance plan.

Calculation:

Students with SHIP x [Average Annual Student Health Fee x (1 – Percent of Fee Going to Campus Health Programs)]

A school charges each student an annual student health fee of \$225, of which 5% (\$11.25) is spent on campus health programs. The remainder of the student health fee, \$213.75, provides little direct benefit to the student.

For students with SHIP, annual student health fees are almost entirely redundant, and cost students \$327 million per year.

Estimated Cost of Redundant Health Fees for Students with School Insurance

Variable	Keybridge Estimate	Low Range	High Range
Students with SHIP subject to SHF	1,528,833 ¹	1,528,833 ¹	1,528,833 ¹
Average annual SHF	\$226.02 ²	\$226.02 ²	\$226.02 ²
% of SHF spent on campus programs	5.24% ³	16.30% ³	0.50% ³
TOTAL COST	\$327,428,334	\$289,222,410	\$343,818,755
PER STUDENT	\$214.17	\$209.07	\$220.37

Cost Equation:

$Students\ with\ SHIP \times [Average\ Annual\ Student\ Health\ Fee \times (1 - Percent\ of\ Fee\ Going\ to\ Campus\ Health\ Programs)]$

Sources & Assumptions:

1. Assumes that 18% of students buy-in to SHIP. See Slides 17 and 21.
2. Keybridge Research analysis. See Slide 20.
3. Keybridge Research analysis. With only 9 data points for this variable, Keybridge used the average, minimum and maximum values.

A small percentage of students unnecessarily have both private and school-sponsored insurance.

Example:

For multiple reasons, a student could have both private and school-sponsored insurance. The parents could opt for both plans to ensure full coverage. Or, some schools automatically enroll students in the school plan and students must provide evidence of outside insurance in order to waive the school plan. Parents may not know about the automatic enrollment until after they receive a billing statement.

Calculation:

(Students with PHIP x Percent of Students Also Enrolled in SHIP) x Average Annual SHIP Premium

A parent opts for dual coverage because they want their child to be fully covered in the event their private insurance is not accepted on campus. If the school were to provide direct billing to private insurers, then the full cost of the SHIP would be unnecessary.

Students with two insurance plans are over-paying the full price of the SHIP, about \$200 million per year.

Estimated Cost of Dually Insured Students

Variable	Keybridge Estimate	Low Range	High Range
Students with private health insurance plan	6,152,718 ¹	6,152,718 ¹	6,152,718 ¹
Percent of these students also with SHIP	3.00% ²	2.00% ²	4.00% ²
Average SHIP premium	\$1,083.20 ³	\$1,083.20 ³	\$1,083.20 ³
TOTAL COST	\$199,939,353	\$133,292,902	\$266,585,803
PER STUDENT	\$1,083.20	\$1,083.20	\$1,083.20

Cost Equation:

(Students with PHIP x Percent of Students Also Enrolled in SHIP) x Average Annual SHIP Premium

Sources & Assumptions:

1. Keybridge Research analysis. See Slide 16.
2. Although there is no good data source for this information, Keybridge believes this is a conservative assumption. Evidence indicates that 73% of students have insurance through a parent's employer while another 18% are enrolled in SHIPs, yet the uninsured rate for students is 20%. This implies an overlap between PHIPs and SHIPs of up to 11%. Keybridge believes this would be too aggressive an assumption, and has instead assumed that SHIPs help insure students who would otherwise go uninsured. To estimate 3%, Keybridge relied on its survey of school plans that indicated that a small percentage (about 2% to 4%) of universities do force students into the SHIP and do not allow waivers.
3. Keybridge Research analysis. See Slide 20.

Students with the university health insurance plan are, at some schools, overcharged for certain individual services.

Example:

Some school health insurance plan do not cover several of the most commonly demanded services—for example, some lab tests, immunizations and annual physicals. Students with only the school insurance plan may be charged a fee for service by the health centers with no recourse for reimbursement.

Calculation:

Students with SHIP x Average Overcharge Per Student x (1-Current Reimbursement Rate)

Calculating the “Average Overcharge Per Student” includes several steps:

- 1) Identify the Top 10 most common services received by students on campus, and calculate the average number of services received per student
- 2) For each of the Top 10 services that are not fully covered by SHIP, estimate the average differential between what student health centers charge for the service and what a competitive co-pay should be

A student health center charges \$75 for a routine physical exam, which is not covered by the student health insurance plan. In this case, a student who only has the SHIP must pay \$75 out of pocket, but would only have to pay a \$20 co-pay under a competitive private insurance plan. Since there is no opportunity for reimbursement, the overcharge is equal to \$55.

Students with SHIP still have gaps in their on-campus coverage, leading to unnecessary costs of nearly \$50 million per year.

Estimated Cost of Fee-for-Service Overcharges for Students with School Health Insurance Plan

Variable	Keybridge Estimate	Low Range	High Range
Students with SHIP	1,528,833 ¹	1,528,833 ¹	1,528,833 ¹
Average Overcharge Per Student	\$32.13 ²	\$32.13 ³	\$36.99 ⁴
Current Reimbursement Rate	0%	0%	0%
TOTAL COST	\$49,127,841	\$49,127,841	\$56,547,873
PER STUDENT	\$32.13	\$32.13	\$36.99

Cost Equation:

$Students\ with\ SHIP \times Average\ Overcharge\ Per\ Student \times (1 - Current\ Reimbursement\ Rate)$

Sources & Assumptions:

1. Assumes that 18% of students buy-in to SHIP. See Slides 17 and 21.
2. Keybridge Research analysis, assuming a standardized bundle of services consumed. This calculation is relatively conservative as it assumes that the typical student would, on average, not incur an illness or injury. See Slide 26.
3. Low-case scenario assumes only the most basic use of student health centers by eliminating the consumption of psychological visits, physical therapy, and x-rays. These services are typically free for students in the SHIP, therefore there is no impact to the per-student over-charge.
4. High-case scenario assumes double the rate for doctor's visits (1.08 per student), lab tests (1.62 per student) and immunizations (0.36 per student).

Some schools include additional fees in tuition that go towards funding the student health center.

Example:

Student Health Centers earn revenue from various sources, including student health fees and grants. In addition, some SHCs pull revenue from the school's general fund, which would be funded either directly or indirectly by tuition and fees.

Calculation:

Total Students x [Average Annual "Hidden" Fee x (1 – Percent of Fee Going to Campus Health Programs)]

Assessing the average annual hidden fees is very difficult. Keybridge examined several SHC budgets and estimates that SHCs pull in an average of \$16.22 per student from their school's general fund.

Note: Because these assumptions are based on a limited number of data points, and the estimates are difficult to verify, Keybridge did not include this calculation in the final cost tabulation.

It was not possible to obtain reliable data on the hidden fees, therefore this cost was not added to total unnecessary costs.

Rough Estimate of Hidden Health Fees

Variable	Keybridge Estimate	Low Range	High Range
Total number of students	6,152,718 ¹	6,152,718 ¹	6,152,718 ¹
Average hidden health fee	\$16.22 ²	\$16.22 ²	\$16.22 ²
% of SHF spent on campus programs	5.24% ³	16.30% ³	0.50% ³
TOTAL COST	\$94,543,385	\$83,511,605	\$99,276,042
PER STUDENT	\$15.37	\$13.57	\$16.14

Although this estimate is based on limited data, Keybridge believes that the figure is likely within an order of magnitude of the actual cost. While the small sample size precludes the use of this estimate in the final cost calculation, because these costs are indeed real and affect all students, this estimate is included in the top-end range of total costs.

Cost Equation:

$Total\ Students \times [Average\ Annual\ "Hidden"\ Fee \times (1 - Percent\ of\ Fee\ Going\ to\ Campus\ Health\ Programs)]$

Sources & Assumptions:

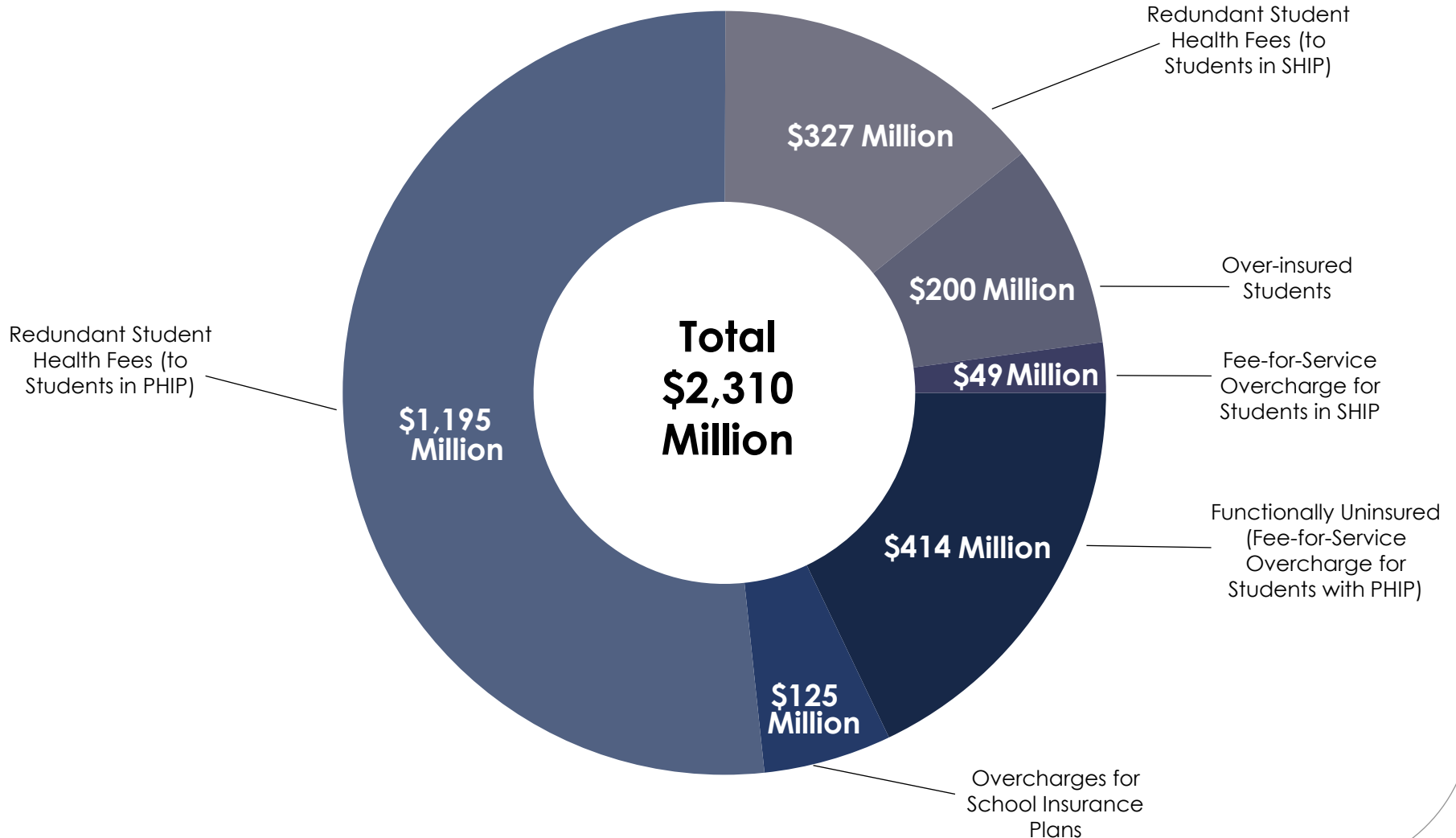
1. Keybridge Research analysis. See Slide 16.
2. Based on the SHC budgets of University of Vermont and the University of Illinois. Assumes that non-fee and non-grant revenue come from tuition and fees.
3. Keybridge Research analysis. With only 9 data points for this variable, Keybridge used the average, minimum and maximum values.

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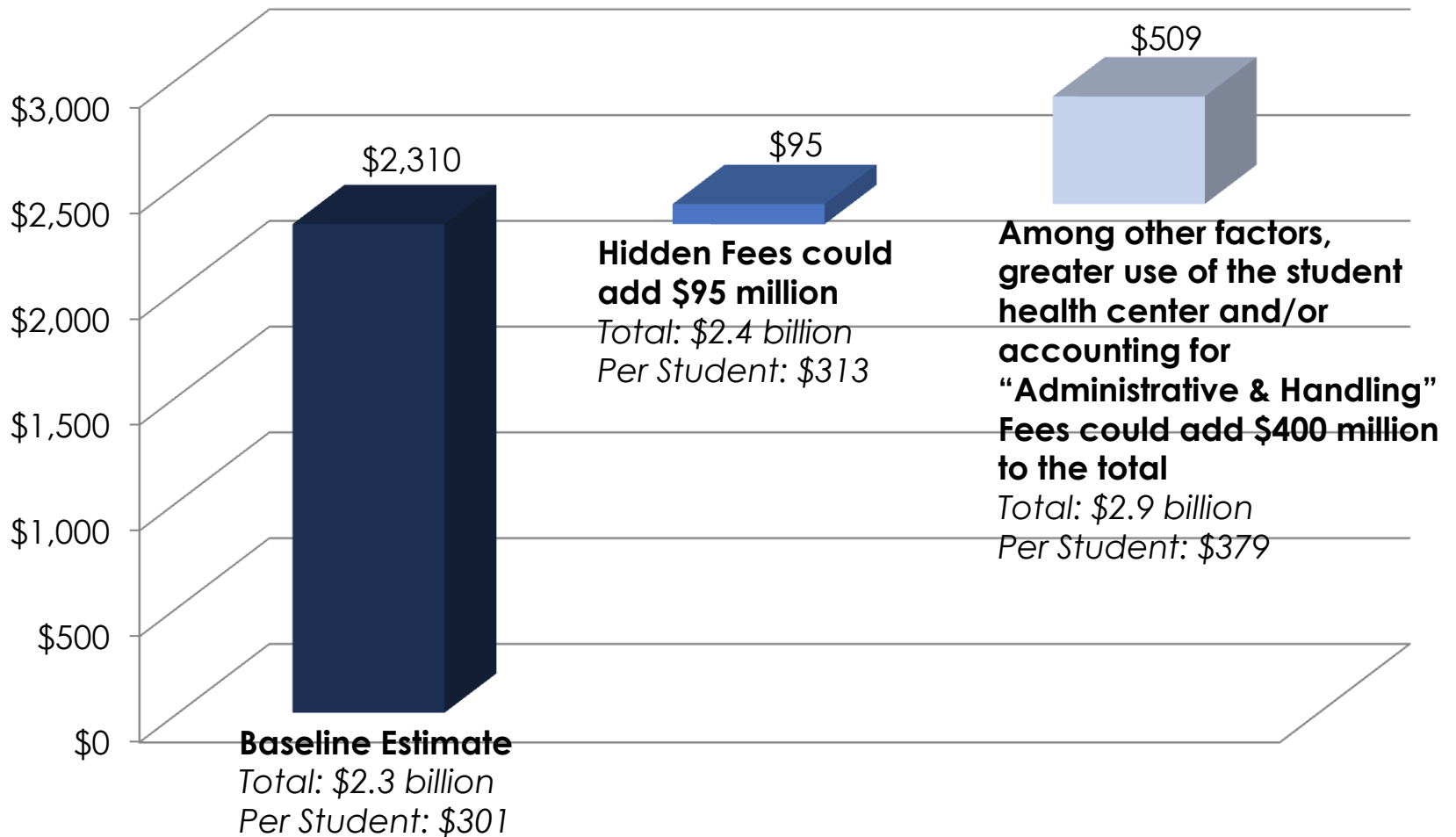
In total, university students and their parents face unnecessary healthcare costs of at least \$2.3 billion per year.

Total Unnecessary Health Costs



While the baseline estimate is conservative, additional costs could increase the total by up to \$600 million per year—to \$2.9 billion.

Estimated Range of Total Costs (\$ Millions)



On average, each university student faces unnecessary health costs of \$301 per year, or \$1,203 over a four-year college career.

Total Unnecessary Health Costs Per Student

Student Category	Annual Cost	Over Four Years	Number of Students Affected
Average for All Students	\$300.71	\$1,202.82	7,681,552
Has PHIP Only	\$261.39	\$1,045.55	6,152,718
Enrolled in SHIP Only	\$339.40	\$1,357.61	1,344,252
Dually-Insured	\$1,329.51	\$5,318.03	184,582

CONCLUSIONS FOR POLICY MAKERS

Summary of Main Conclusions

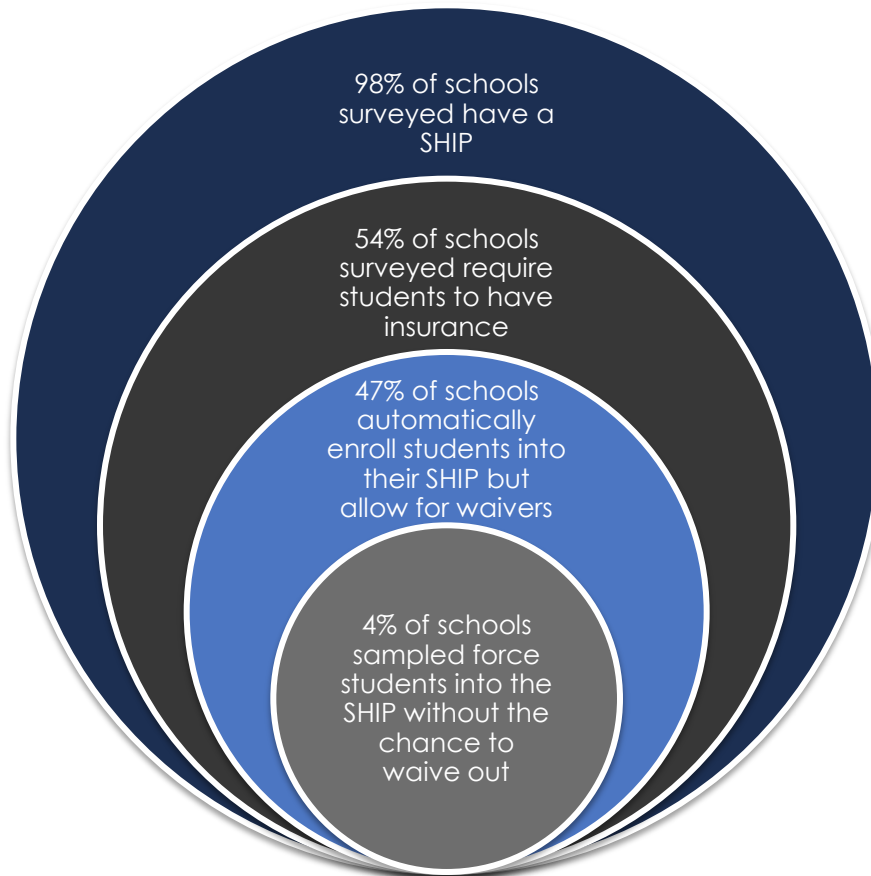
- Total unnecessary health care costs faced by university students and their families are at least \$2.3 billion per year, and could be as high as \$2.9 billion per year.
- For the average university student these unnecessary healthcare costs amount to at least \$1,204 over a four-year college career.
- Among the top cost components are redundant student health fees paid by students with private health insurance plans (\$1.2 billion annually) and fee for service overcharges for students with private health insurance (\$413 million annually).
- Students also are overcharged about \$125 million a year for uncompetitive student health insurance plans and purchase about \$200 million a year of unnecessary double insurance.
- This study likely understates the total costs. For example, it does not account for the relatively low maximum benefits provided by most school-sponsored health insurance plans. These low maximum benefits place many students at risk for overwhelming health care costs in case of serious illness or injury. In addition, the study does not include hidden health care fees which are often imbedded in university tuition charges due to the difficulty in quantifying these costs with statistical certainty.

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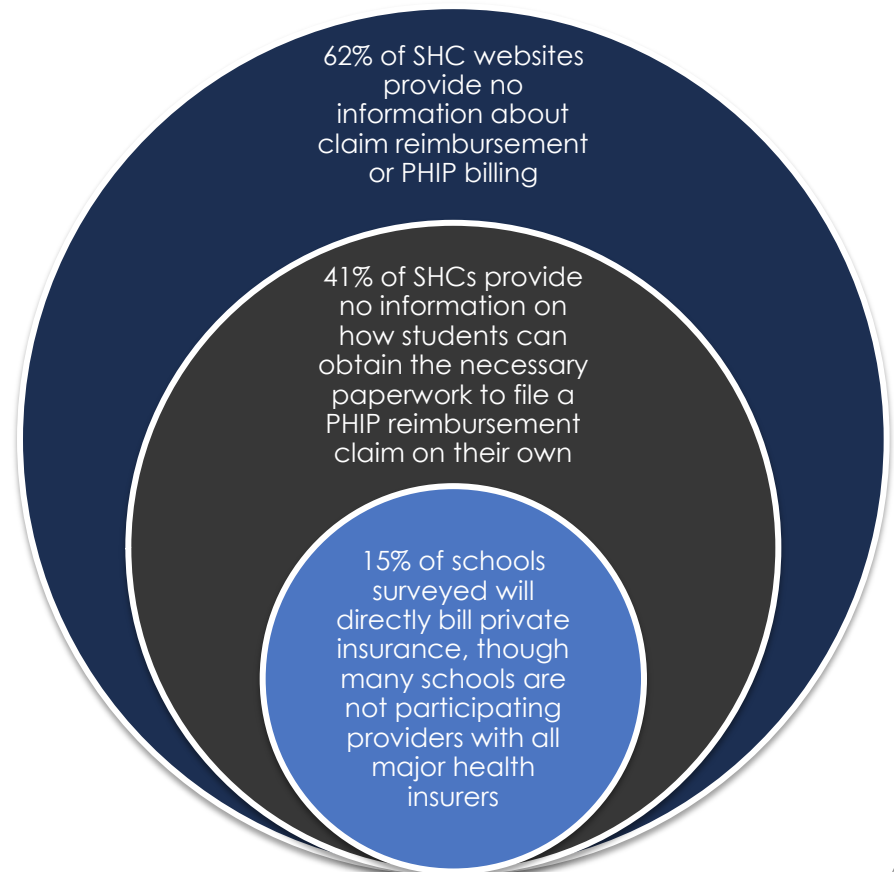
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A close examination reveals that many schools are indeed making a market for their student health insurance plans...

Some schools mandate their own plans...

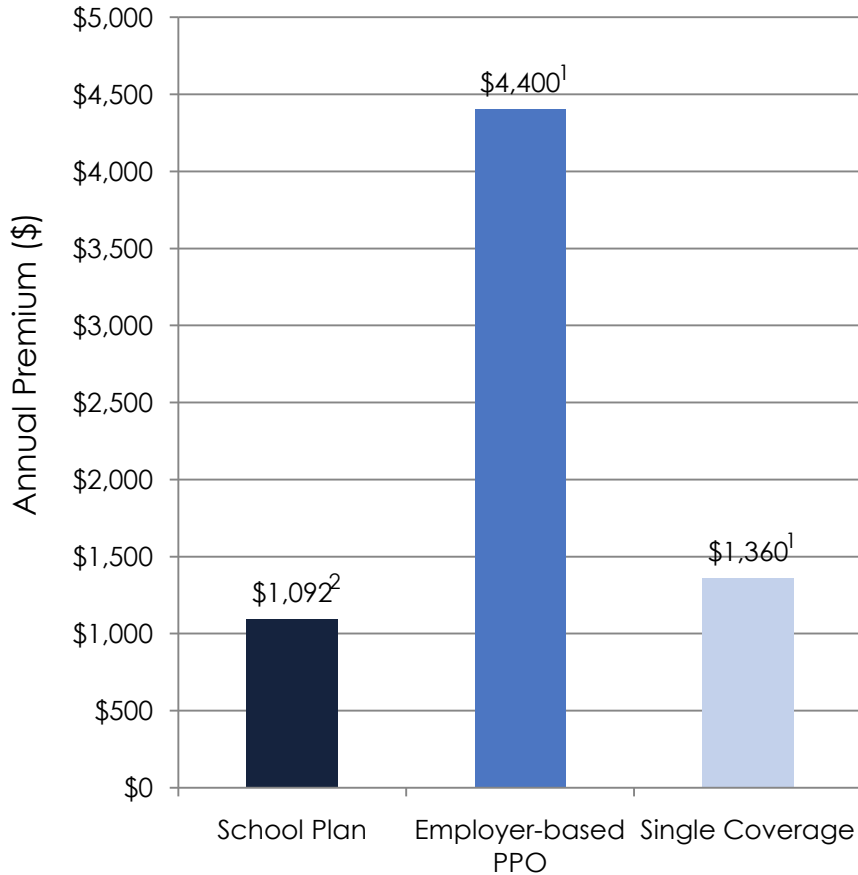


...And many schools also provide little to no information for students who wish to seek PHIP reimbursement.

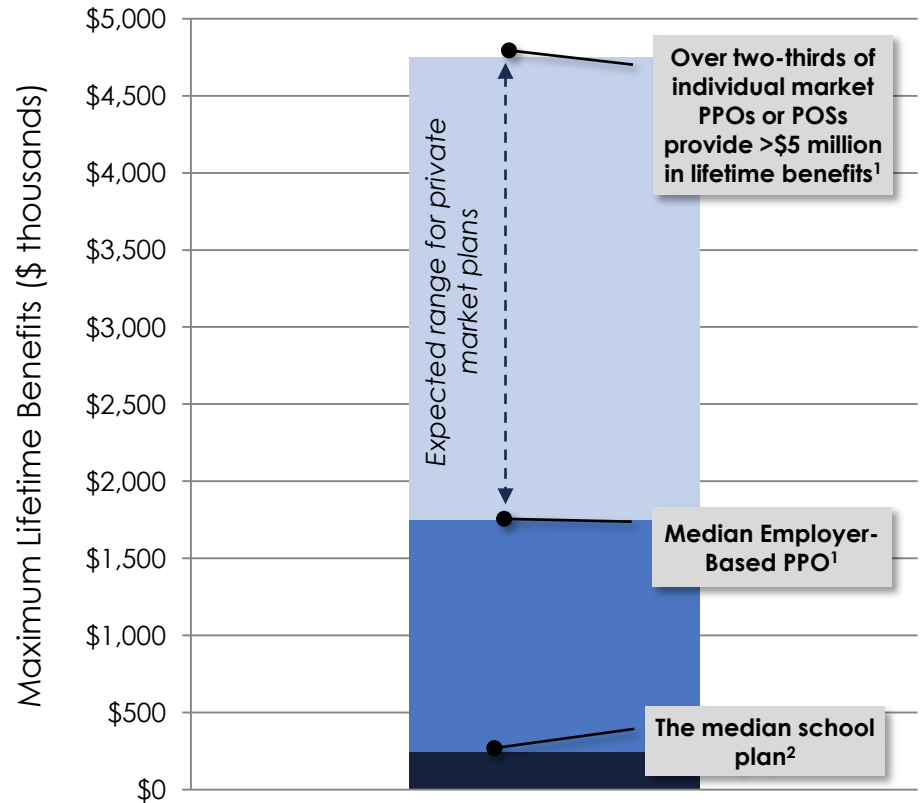


...while the plans offered by schools provide relatively limited benefits.

Student health plans tend to have lower premiums than private market plans...



...which is made possible by limiting payout amounts.



¹ Government Accountability Office, "Health Insurance: Most College Students Are Covered through Employer-Sponsored Plans, and Some Colleges and States Are Taking Steps to Increase Coverage," GAO-08-389, March 2008.

² Keybridge Research analysis

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PUBLIC RECORDS REQUESTS ISSUED BY KEYBRIDGE RESEARCH

Public Records Requests Issued		
Auburn	SUNY-Stony Brook	University of Mississippi
Brigham Young University	Texas A&M	University of Missouri
Clemson	University of Alabama	University of Nebraska - Lincoln
Colorado School of Mines	University of Arizona	University of North Carolina
Colorado State	UC - Berkeley	University of North Texas
Florida State University	UC - Davis	University of Oklahoma
Georgia Tech	UC - Riverside	University of Oregon
Indiana University	UC - San Diego	University of Pittsburgh
Iowa State U	UC - Santa Cruz	University of South Carolina
Loyola Marymount	University of Colorado	University of Tennessee
Miami University - Oxford	University of Connecticut	University of Texas
Michigan State	University of Delaware	University of Vermont
Mississippi State	University of Florida	University of Virginia
Missouri	University of Georgia	University of Washington
North Carolina State	University of Illinois	University of West VA
Ohio State	University of Iowa	University of Wisconsin
Oregon State	University of Kansas	University of Virginia
Pennsylvania State	University of Kentucky	Virginia Tech
Purdue University	University of Maryland	William & Mary
Rutgers University	University of Massachusetts	Washington State
SUNY - Binghamton	University of Michigan	
SUNY College	University of Minnesota	

INFORMATION REQUESTED FROM PUBLIC SCHOOLS

- (1) Benefit payout ratio (or “claims to premiums” ratio) of your institution's sponsored health insurance plans for students. If your institution has more than one plan offered to students, please provide the benefit payout ratio for each plan.
- (2) The dollar amounts of all student health care fees (for example, student health center fee per semester).
- (3) The percentage of student health center fees that cover campus-wide education and awareness programs (for example, nutrition and wellness programs, drug and alcohol awareness programs, and public health information).
- (4) Top 10 health services or procedures, by frequency, provided to students.
- (5) List of health services provided on campus, with fee schedules for students in the school sponsored insurance plan and fees for students not in the school sponsored plan.
- (6) Number of full time equivalent (FTE) students in 2008-09 school year.
- (7) Number of students enrolled in the school sponsored health insurance plan during the 2008-09 school year.

¹ The response rate to each question varied. Only 28 of 64 schools responded at all. The lowest response rate was for Question 3 with 11 out of 64 responses—this is likely due to schools not having activity-based cost accounting abilities. The second lowest response rate was for Question 1 with 15 out of 64 responses—the benefit payout ratio is a highly sensitive figure that schools may not wish to report.

LIST OF 100 RANDOMLY SAMPLED SCHOOLS

100 Randomly Selected Schools

Franklin and Marshall College	Manhattan College	The College of New Rochelle	East Tennessee State University
Meredith College	DeVry University-Ohio	University of Wisconsin-River Falls	Idaho State University
Albright College	University of Phoenix-Utah Campus	University of Nebraska at Kearney	University of South Alabama
Brigham Young University-Hawaii	Saint Marys College of California	University of Arkansas-Fort Smith	Indiana University of Pennsylvania-Main Campus
Lafayette College	Francis Marion University	Pennsylvania College of Technology	Northern Kentucky University
Tusculum College	Gardner-Webb University	Northwest Florida State College	CUNY John Jay College Criminal Justice
Franklin Pierce University	Saint Josephs College-Suffolk Campus	East Stroudsburg University of Pennsylvania	Loyola University Chicago
Kettering University	Black Hills State University	University of North Alabama	University of Rhode Island
Alvernia College	Lee University	Roosevelt University	University of California-Santa Cruz
University of Wisconsin-Superior	Niagara University	Mercer University	Miami University-Oxford
SUNY College of Technology at Delhi	Roger Williams University	Saint Joseph's University	University of Alabama at Birmingham
Carthage College	The Evergreen State College	Franklin University	California State University-Chico
Al Miami International University of Art and Design	Embry Riddle Aeronautical University-Daytona Beach	Adelphi University	Bowling Green State University-Main Campus
Friends University	University of Mary Washington	New Jersey City University	The University of Texas at El Paso
Adams State College	College of St Catherine	University of Wisconsin-Stout	University of Delaware
Faulkner University	Saint Edward's University	Morehead State University	Ohio University-Main Campus
The Art Institute of Colorado	Bowie State University	Loyola Marymount University	Middle Tennessee State University
School of the Art Institute of Chicago	Missouri Southern State University	Florida Gulf Coast University	DePaul University
Cedarville University	Baker College of Flint	Tennessee Technological University	Auburn University Main Campus
Smith College	Dowling College	The Art Institute of Pittsburgh	Harvard University
Southern Arkansas University Main Campus	SUNY College at Oneonta	Regis University	The University of Tennessee
Savannah State University	Rider University	Montana State University	Purdue University-Main Campus
University of Arkansas at Pine Bluff	La Salle University	California State University-Dominguez Hills	Pennsylvania State University-Main Campus
California Lutheran University	Missouri University of Science and Technology	University of Vermont	University of Central Florida
Norwich University	Campbell University Inc	University of Northern Iowa	University of Minnesota-Twin Cities

SCHOOLS INCLUDED IN LOUISIANA STATE UNIVERSITY SURVEY

LSU Student Health Center Survey		
Appalachian State	Northwest Missouri State University	University of North Carolina - Charlotte
Clemson University	Pacific University	University of North Carolina - Greensboro
Coastal Carolina University	Texas A&M University - Corpus Christi	University of South Alabama
Duke University	Texas State University - San Marcos	University of South Carolina - Columbia
Elon University	Tulane University	University of South Carolina - Spartanburg
Florida Atlantic University	University of Arizona	University of Southern Mississippi
Florida International University	University of Arkansas	University of Texas - Arlington
Florida Int'l University Park Campus	University of Central Florida	University of Texas - Pan American
Florida State University	University of Colorado - Boulder	University of TN Health Science Center
Georgia Institute of Tech	University of Florida	Vanderbilt University
James Madison University	University of Houston	Virginia Commonwealth University
Louisiana State University	University of Kansas	Virginia Tech University
Mississippi State University	University of Louisiana at Lafayette	Wake Forest University
Mississippi University for Women	University of Maryland - College Park	West Virginia University
North Carolina Central University	University of Miami	Western Carolina University
North Carolina State University	University of New Hampshire	Western Kentucky University
Northwestern University Evanston	University of North Carolina at Chapel Hill	Winthrop University

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KEY ASSUMPTIONS & POTENTIAL LIMITATIONS (1 OF 4)

Due to the complex and non-standardized nature of private and school insurance plans, several key assumptions were made that directly impact the outcome of this study.

1. Percent of Students with Dual Insurance:

- To determine the percent of students with dual insurance, Keybridge used data from the Department of Health and Human Services as a baseline and supplemented it with public information requests and randomized sampling:
- A 2006 Health and Human Services database and a Keybridge survey indicate that:
 1. Approximately 80% of students had some type of insurance in 2006, with the remaining 20% uninsured.
 2. A maximum of 7% of students were enrolled in school health insurance plans (SHIP).
 3. However, Keybridge data suggest that approximately 18% of students enrolled in SHIPS in 2008-09.
- Assuming that these three data points are all accurate, then as many as 11% (18% - 7%) of students could have dual-insurance but only report to HHS that they have some type of private insurance (i.e., 20% uninsured, 7% only in SHIPs, 11% with dual coverage and 62% with only private insurance).
- However, this does not allow for the likely scenario that SHIPs enroll the uninsured. Because insurance is mandatory at many schools, and SHIPs are offered at relatively low annual premiums, it stands to reason that some proportion of the uninsured student population opts into school plans, thereby reducing the percentage of uninsured students from 20%.
- Due to a lack of available data, there is no direct way to estimate the rate at which students have dual insurance, but Keybridge survey data that suggests that only approximately 2% to 4% of schools force students into their health plans without an option to waive out. Consequently, this assumption implies that school insurance plans are enrolling about 7% to 9% of the total student body that was otherwise uninsured.
- This assumption is significant, because the cost per student of being dually insured is on average \$1,083 per year (the average annual SHIP premium).

KEY ASSUMPTIONS & POTENTIAL LIMITATIONS (2 OF 4)

2. Overcharges for Fee-For-Service:

- The Fee-for-Service calculations rely on multiple assumptions and averages due to the complexity and ambiguity of Student Health Center charging practices; not to mention the potentially hundreds of services available that would need to be catalogued and compared across schools. Indeed, many of Keybridge's interview subjects admitted to confusing and unclear fees, and in some cases were even unable to quote specific prices for services.
- In order to arrive at an over-charge per student, we first simplified the universe of services to the top ten most commonly received services as indicated by a Louisiana State University study during the 2003-04 school year. Next, we surveyed SHCs current fees and compared them to what private and student health insurance plans would charge for the same service. Where the latter information was unavailable, we assumed an average co-pay and/or coinsurance based on available data.
- There is some concern that the surveyed data is not representative of small schools, because most of the fee data was found at larger universities. Small schools either do not have available information, or in some cases do not offer all the services covered in this study.
- Keybridge feels that the figures presented for the per student overcharge for fee-for-service is accurate given the available information. The results represent the average overcharges a "typical" student would face in a given year.
- However, this study likely underestimates the total overcharge by ignoring all other services provided on campus. Indeed there are a number of students who use the Student Health Center more than the average student, and particularly large schools provide specialized, relatively expensive treatments for which students could be over-billed.

KEY ASSUMPTIONS & POTENTIAL LIMITATIONS (3 OF 4)

3. Reimbursement Rate:

- This study assumes a constant reimbursement rate for all services received on campus by students with private insurance plans. There is little direct evidence of what this reimbursement rate is, but Bryan A. Liang cites a UC Davis study in his report "Crisis on Campus" (2009) indicating that less than 25% of on-campus health costs are reimbursed by private insurers. Highland Campus Health Group's experience suggests that this figure is as low as 10% to 15%.
- Keybridge's surveys of schools suggests that only 50% to 60% of student health centers will furnish the proper documentation and help process a reimbursement request on behalf of students.
- Given this lack of statistical evidence, Keybridge used a range of 10%, 20% and 30% to capture a highly likely bound for the reimbursement rate.

KEY ASSUMPTIONS & POTENTIAL LIMITATIONS (4 OF 4)

4. Part-Time Status:

- Keybridge's research indicates that schools typically assess health fees and allow eligibility in school health insurance plans at around 6 credit hours per semester.
- No data was identified that categorizes students by credit hours, therefore there was no way of telling how many part-time students are above or below the 6 credit hour mark.
- Therefore, Keybridge assumed that 50% were below 6 credits and 50% were above. For lack of better information, this assumption was the only unbiased solution.
- While this assumption should have no effect on the average cost per student, it does affect the total aggregate costs. For example, assuming that 100% of part-time students are enrolled in at least 6 credit hours would increase the total unnecessary health costs by about \$270 million.

KEY ASSUMPTIONS FOR UPWARD RANGE OF TOTAL COSTS

The baseline figure of \$2.3 billion in total unnecessary costs represents a relatively conservative estimate. There are several key factors that could push the total cost up to \$2.9 billion or higher.

1. Hidden Fees:

- There is strong anecdotal evidence that schools embed fees into tuition and then divert those funds to the Student Health Center. For example, amid state-wide budget cuts, the University of Maryland is upping their mandatory fees by about \$200, including a \$70 University Health Center fee to free \$2 million for other initiatives. The fee was cut in half before passing.¹ Similarly, Berkeley raised fees and added new co-pays (\$15 for Primary Care visits, and \$30 for Urgent Care visits) to make up for budget cuts.²
- Measuring these “hidden” fees on a national scale is naturally difficult. Due to this difficulty, and general lack of data, Keybridge decided not to include this cost in the total tabulation. However, Keybridge’s rough estimate indicates an approximate charge equal to \$16.22 per student, which is equal to nearly \$95 million in total costs.

2. Student Health Center Administrative & Handling Fees:

- There is evidence indicating that some schools have extra fees for students seeking on-campus immunizations or lab tests. Keybridge applied these fees to schools that made available this information
- However, Keybridge estimated that it would be too aggressive to apply an average fee to all other schools. In doing so, this study likely under-counts the number of schools that do charge a fee, and therefore understates the total and per student overcharge for fee-for-service.
- At the top-end, this fee could add as much as \$10 to \$15 per student, or roughly \$60 to \$90 million in total costs per year.

¹ www.diamondbackonline.com/news/student-fees-skyrocket-1.524087

² <http://uhs.berkeley.edu/home/news/budget/shtml>

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The Massachusetts Division of Health Care Finance and Policy recently released the *Student Health Program Baseline Report*

Summary of Student Health Program Baseline Report (November 2009)¹

- Purpose of the Report:
 - Provide an overview of Student Health Program (SHP) enrollment and financial performance at Massachusetts colleges and universities;
 - Serve as a baseline for SHP comparisons in the future; and
 - Improve transparency within the SHP marketplace
- Major Findings:
 - Of the 118 schools surveyed, approximately 27% of students (97,618 out of 361,548) are enrolled in school insurance plans
 - The average SHP premium is \$1,216 per year, but there is a wide range of premiums among schools. Some schools achieve lower than average premiums through limiting benefit coverage. Students enrolled in SHPs offering lower levels of coverage may experience significant out-of-pocket expenses due to coverage gaps.
 - The average medical expense ratio² was 69% for all schools, but only 56% for state colleges and 64% for “other schools” which primarily consists of private schools.
 - Student Health Program enrollment is concentrated among a small number of national insurance carriers. This market dynamic may have contributed to the higher average profit margins realized by SHP carriers compared to those seen in private insurance products in Massachusetts.

¹ Massachusetts Division of Health Care Finance and Policy, November 2009

² The Medical Expense Ratio is the same as the Benefit Payout Ratio in the Keybridge Research report.

Students enrolled in post secondary institutions in Massachusetts must have health insurance, and schools must offer a health plan.

- The Massachusetts Division of Health Care Finance and Policy (DHCFP) study covered 118 school insurance plans
 - 16 community colleges, 4 self-funded schools, 7 state colleges, 5 UMass schools, and 86 “other” schools
- For the academic years beginning 2005-07, 14 insurance carriers underwrote all student insurance plans in Massachusetts
 - The top three providers (Aetna, Self-funded schools, and Nationwide) control 75% of the market
- The Massachusetts DHCFP conducts the Student Health Program (SHP) Performance Metrics Survey to analyze and monitor SHPs offered by Massachusetts institutions of higher education. Data is collected on an annual basis and surveys information on school plans, including (but not limited to):¹
 - Insurance carrier and/or broker
 - Number of students enrolled in the school plan
 - Number of “covered lives” (student, spouse, and dependants) enrolled in the school plan
 - School plan premiums and financial information
 - School plan benefit limitations and customer service
 - Total earned premiums
 - Total medical expenses paid
 - Medical expense ratio
 - Total administrative expenses paid
 - Administrative expense ratio
 - Total insurance fees paid to agents, brokers and other persons
 - Other health related charges or fees assessed to students

The results of the Massachusetts study mirror Keybridge's analysis on several key statistics.

Summary Statistics & Ranges

Variable	Massachusetts DFCFP Average ¹	Keybridge Research Assumptions
% of Students with Private Insurance	73%	73%
% of Students with School-Sponsored Insurance	27%	7%-18%
% of Student with No Insurance	0%	9%-20%
Annual School-Insurance Plan Premium	\$1,216	\$1,083
Private Insurance / Benchmark Benefit-Payout Ratio	88%	80%
Actual Benefit-Payout Ratio	69%	71%
Administrative Expense Ratio	20%	n/a
Profit Margin	10%	n/a
Sample Size	118	Varies by data point

¹ Source: Massachusetts Division of Health Care Finance and Policy, *Student Health Program*, November 2009

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Keybridge Research LLC is an international economics and public policy consulting firm based in Washington, DC. Keybridge provides analytical support and strategic advice to a select clientele that includes Fortune 500 companies, global financial firms, G-7 governments, and premier industry associations. The firm's researchers have the highest level academic qualifications and the firm's research studies are highly respected for their technical rigor, analytical insights, and objectivity.

Keybridge provides clients with access to a full suite of analytical services, including macroeconomic risk assessments, econometric modeling studies, policy impact studies, qualitative policy evaluations, and survey design and analysis. For clients requiring regular consultations, Keybridge offers on-going strategic advisory services in the areas of macroeconomic trends and risks, international trade and finance, and energy and environmental economics. Keybridge also assembles and manages inter-disciplinary teams of experts to conduct thought leadership projects to assist clients with building competitive advantages or reframing policy debates through the development, sharing, and application of innovative ideas. The firm's principals are regularly asked to present research and share insights with economic, financial, and policy audiences around the world, including committees of the U.S. Congress, corporate strategic planning committees, and international conferences.

KEYBRIDGE PROJECT TEAM MEMBERS

Dr. Robert F. Wescott, is President of Keybridge Research LLC. Dr. Wescott has nearly 30 years of professional experience working on macroeconomic and public policy issues. Dr. Wescott served for four years as Special Assistant to the President for Economic Policy at the White House and as Chief Economist at the President's Council of Economic Advisers. From 1982-93, he was Senior Vice President and Chief Economist at Wharton Econometrics (today IHS Global Insight), where he oversaw a staff of 60 and was responsible for all economic modeling, forecasting, and consulting operations. Dr. Wescott also was Deputy Division Chief in the Research Department of the International Monetary Fund, where he did research on global economic risks and policy challenges. In 1989-90 he was Research Director at the International Center for the Study of East Asian Development in Kitakyushu, Japan. He holds a Ph.D. in Economics from the University of Pennsylvania.

Adam Karson is Senior Economist at Keybridge Research LLC. Mr. Karson specializes in international economics, finance, and investment analysis. Before joining Keybridge, Mr. Karson spent three years at Booz Allen Hamilton as a consultant to U.S. Federal government and private sector clients, where he focused on economic and regulatory impact studies and worked extensively in the Middle East. From 2001 to 2004, he worked with The Capital Group Companies, a major global investment firm, and performed research and valuations for equity and fixed income securities, gaining international experience in London and Geneva. Mr. Karson holds a Bachelor's degree, with Honors, in Economics from Johns Hopkins University and a Master's degree in Public Policy from Duke University.

Mark W. McNulty is Director of Economic & Policy Analysis at Keybridge Research LLC. Mr. McNulty heads Keybridge's energy and environment practice, and he has served as advisor to the California cement industry since 2006. Before joining Keybridge, Mr. McNulty served as a consultant for U.S. financial institutions and rural development organizations, where he designed and implemented financial products tailored to the needs of low-income consumers. From 2000-2001, he served as the Staff Assistant for International Economics at the White House's National Economic Council, where he was responsible for research and analysis on global economic and financial risks. Mr. McNulty holds a B.A. in Business Administration & Economics from Rhodes College and a Masters in Public Policy from Harvard's Kennedy School of Government.

KEYBRIDGE PROJECT TEAM MEMBERS

Brendan M. Fitzpatrick is Senior Economist at Keybridge Research LLC. Mr. Fitzpatrick specializes in international economics and environmental policy. Prior to joining Keybridge, Mr. Fitzpatrick served in the Office of the Chief Economist of the World Bank, where he focused on development finance, environment, and the production of the 2006-08 Global Monitoring Reports. He also worked with USAID's Agriculture and Rural Enterprise Development team in Rwanda and worked in education and community development in Ecuador. Mr. Fitzpatrick holds Bachelor's degrees in Bioengineering & Economics from the University of Illinois at Urbana-Champaign and a Master's degree in Public Administration in International Development from Harvard's Kennedy School of Government.