



MEDICAL EDUCATION FUNDING:

**A Report from the
Florida Board of Governors**

December, 2009

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Background

In August of 2008, State University System (SUS) of Florida Chancellor Mark Rosenberg asked University of Florida President Bernard Machen to chair a Medical Education Funding Workgroup to represent the presidents of the SUS institutions that offer programs leading to the M.D. degree. Besides the University of Florida these include existing medical schools at the University of South Florida, recently opened medical schools at Florida State University, the University of Central Florida, and Florida International University, and a Florida Atlantic University-University of Miami affiliated program.

The Workgroup was charged with exploring the possibility of establishing a more transparent and systemic approach to medical education funding and accountability than current practices. In March 2009 the Workgroup reported out to the Board of Governors (BOG), and the BOG directed the Workgroup to develop recommendations for a defensible annual M.D. per-student base-level funding model. The Workgroup was also directed to continue its work on improving outcomes and fiscal reporting for the M.D. program and for other programs insofar as reporting their expenditures assisted in providing clarity and accountability for the state's investment in medically-related programs.

The Proviso

Meanwhile, the 2009 Florida Legislature crafted proviso language in consonance with the work already underway, which reads as follows:

From the funds in Specific Appropriations 144 through 149, the Board of Governors shall develop a funding methodology for a consistent base level of state support on a per-student basis for each 4-year Doctor of Medicine degree program offered by a state university. The Board of Governors shall work with OPPAGA and representatives from each 4-year Doctor of Medicine degree program to develop the methodology. As part of the development of the funding methodology, the Board of Governors shall:

- (1) Review national data on the costs associated with 4-year Doctor of Medicine degree programs offered by public universities.
- (2) Determine a base-level cost per student that excludes supplemental costs or startup costs.

(3) Determine supplemental costs and startup costs that are in addition to the base-level cost per student and that support the unique mission of a degree program or support the implementation of new 4-year Doctor of Medicine degree programs.

(4) Determine a uniform reporting procedure for the consistent annual reporting of expenditures and outcome data for 4-year Doctor of Medicine degree programs.

The Board of Governors shall submit a report on the funding methodology to the Governor, the President of the Senate, and the Speaker of the House of Representatives no later than February 1, 2010.

Underlying Assumptions

This report is intended to respond to the charges of both the legislative proviso and the Chancellor's office, and the Workgroup's recommendations are based on several understandings:

1. The Workgroup understands its charge as recommending an appropriate level of financial commitment by the state for educating an M.D. student on an annual basis. The Workgroup understands that this recommendation is to take the form of a single, standard, per-student base-level dollar figure that would apply to each SUS M.D. program, irrespective of other considerations such as start-up costs, supplemental funding geared toward a unique mission or delivery system, or other supplemental funding that, while appropriated to colleges of medicine, is not directly related to an M.D. program.
2. At this point, the Workgroup is confident in recommending a per-student base-level funding figure informed by an examination of national comparative data. The extraction of comparative numbers from SUS data will improve over time as a new reporting system renders data more accurate and consistent across institutions.
3. The Workgroup understands the intention of the Legislature to identify supplemental funding for purposes of continuance and accountability rather than as a target for budget reductions.

4. While it identified all supplemental funding so that it could be excluded from a per-student base-level figure, the Workgroup found it useful to place supplemental funding into two categories:
 - a. Per proviso, that which relates to the unique mission of an M.D. program; and
 - b. Not referenced by proviso, that which relates to non-M.D. programs and which should also be excluded to better reflect the costs of a per-student base-level funding model.
5. The Workgroup used the following working interpretation of supplemental funding:
 - a. It can be traced back to specific legislatively created language.
 - b. Attached to that language is a specific appropriation, or
 - c. Absent a specific appropriation, a defensible methodology can be provided for calculating the supplemental's cost.
6. Florida's current method of funding medical education bears the markings of disconnected individual requests over time. A per-student, base-level funding model will provide state policy-makers a basis for making more informed funding decisions related to medical education. After considerable analysis, the Workgroup agreed on a methodology using estimated 2007-08 national costs as shown in Appendix A. The Workgroup recommends annual updating of that initial base funding. This adjustment would entail using the Consumer Price Index or some other type of inflationary adjustment to reflect changes in the costs of providing the educational services. Annually revisiting the funding model will also take advantage of the acquisition of better data.
7. With five full-fledged medical schools plus a public-private partnership program, the SUS can and must improve in reporting state revenues and expenditures of state dollars. The final report will identify a new method of revenue and expenditure reporting of state dollars associated with M.D. programs and certain other of the SUS array of medical education programs and health-related activities.

Reporting of Outcomes

Proviso: "Determine a uniform reporting procedure for the consistent annual reporting ofoutcome data for 4-year Doctor of Medicine degree programs."

The Workgroup began by addressing the last in sequence and the least controversial part of its charge, which was to recommend appropriate outcome measures for SUS M.D. programs. Other than those associated with revenues

and expenditures, the SUS Workgroup recommends the following sets of outcome reporting on an annual basis:

1. Aggregate M.D. student body enrollment and most recent graduating class by university, race, gender, and in-state/out-of-state status.
2. Most recent graduating class by university, race, gender, and in-state/out-of-state status.
3. Tuition and fees by resident and non-resident status
4. Passage rates on Step 1 and Step 2 of the U.S. Medical Licensing Examinations.
5. Residency placement of most recent graduating class by specialty and geographic location.

Exclusions to Base-Level Funding

Proviso: "Determine a base-level cost per student that excludes supplemental costs or startup costs; determine supplemental costs and startup costs that are in addition to the base-level cost per student and that support the unique mission of a degree program or support the implementation of new 4-year Doctor of Medicine degree programs."

Startup Costs and Supplemental Costs

Though the proviso language appears straightforward, the Workgroup realized that there were still questions to be answered and interpretations that would have to be made. For example, what was the best way to approach supplemental funding? Was this to be interpreted conservatively, i.e., was the language ("supplemental costs...that support the unique mission of a degree program") pertaining only to the clearly differentiated, multi-site mission of FSU? Or was the legislature also interested in identifying non-M.D. costs as a means to better accountability and so that those costs also could then be peeled away for purposes of getting to a more accurate per-student base-level figure?

As noted previously, excluding supplemental costs brought the Workgroup nearer to a base-level cost. While doing so, the Workgroup attempted, in the context of its reporting format, to distinguish those costs directly associated with the M.D. from those that were not.

The Workgroup further recognized that a per-student base-level funding model would be insufficient for new schools with startup costs that could not be covered by limited or non-existent enrollments. In fact, as the Workgroup

began to review submissions by FSU, UCF, FIU, and FAU it became apparent that a comparison to a per-student base-level recommendation could be meaningful only by taking into account the additional revenues and expenditures with fully enrolled and operating programs.

Per-Student Base-Level Funding: A Recommendation

Proviso: "Review national data on the costs associated with 4-year Doctor of Medicine degree programs offered by public universities. Determine a base-level cost per student that excludes supplemental costs or startup costs."

Two Approaches

Historical Approach

At the most general level, there were two approaches available to this exercise. The first was to work with accurate historical expenditures and funding levels to determine a "consistent base level of state support" per proviso language. The immediate problem inherent with this approach is that the State University System historical data relative to medical education has not proven to be reliable, mostly because university expenditure data is designed to identify costs at a department level, rather than for individual degree programs within a department. While overall expenditure data is accurate, a methodology to prorate expenditures among programs does not exist. Programs within a department share departmental resources in ways that are not easily, or consistently, distinguishable. Until the reporting procedure called for by this proviso is created, used, and modified, the State University System will not be in a position to immediately or confidently establish a base-level cost-per-student figure solely by examining its own appropriations and expenditures.

The differences among the six SUS M.D. programs make this task all the more formidable, especially due to their differing stages of development:

- The research-intensive UF and USF health science centers are similar in the way that their lump-sum appropriations support a variety of programs and activities. However, those activities differ by institution. Moreover, the two institutions are at different stages of implementing mission-based budgeting systems. Finally, UF intends to increase its M.D. enrollment in the near future from 513 to 540.
- The programs at FIU and UCF were virtually joined at the hip in conception and share the same start-up characteristics and costs, and yet their programmatic foci and missions reflect the circumstances and opportunities of their immediate environments.

- Like UCF and FIU, FSU's program is still in a start-up mode, and yet it bears little resemblance to those programs except that it too has not yet grown to its full enrollment. FSU's multi-site clinical experiences and foci on increasing primary, rural, and minority practitioners are unique in that they are legislatively mandated. FSU is also unique because of its front-end funded appropriation, designed to make it unnecessary for the University to request additional funding in start-up subsequent years, which has necessitated carrying-forward substantial dollars. This, combined with FSU's current enrollment status, presented a challenge for making a meaningful comparison to a per-student base-level recommendation.
- The FAU/UM public-private partnership entails a unique funding model in which UM tuition is charged and accrues to UM while FAU is funded by state dollars.

Comparative Approach

The second approach is, through a comparative process of the best information available, to arrive at a defensible best recommendation of an appropriate annual per-student base-level funding figure and to compare that number to those arrived at from an analysis of SUS state revenues and expenditures in order to create a methodology for identifying and accounting for state dollars above or below those generated by the model. This is the approach used by the SUS Workgroup and, given the current reporting system, the most feasible approach.

It bears mentioning that data collected by the Association of American Medical Colleges and other national reporting mechanisms does not isolate M.D. program costs. It should also be kept in mind that the national comparison and the recommendation being made is to *cost* rather than to *funding*: the Workgroup identified and analyzed national cost data, but that data did not shed light on funding sources. That said, the Workgroup assumed that the legislature would determine that some portion of the cost would be borne by students through the payment of tuition. Accordingly, the best way to understand the Workgroup's recommendation is to consider that it initially includes a tuition figure which should then be excluded by some process.

The Recommendation and Its Methodology

The SUS Workgroup recommends an initial per-student base-level cost of \$76,380. This recommendation, as explained above, assumes that a portion of that cost would be borne by tuition. Therefore, in order to account for tuition, the Workgroup

subtracted from that figure the 2007-08 national median tuition of public medical schools (\$18,889) to reach a **final recommendation, less tuition, of \$57,491, rounded to \$57,500 as the State's appropriate per-student base-level commitment**. The rationale and methodology used to reach this recommendation is presented in the seven steps below. The "SUS Per-student Base-level Funding Methodology" in Appendix A is a one-page characterization of those seven steps.

(Step One: Identify a Source and Viable Ranges of Cost)

The 1997 Jones and Korn study, "On the Cost of Educating a Medical Student," is generally considered to be the seminal report on the subject of medical education costs. These researchers classified medical education costs into two categories:

1. *Instructional Costs*, which Jones and Korn define as:
 - a. faculty time spent in teaching, preparation for teaching, and student assessment, as well as in faculty development and administrative activities related to teaching;
 - b. medical school support of the medical student education program (offices of admission, student affairs, curriculum development, etc.) and a share of medical school and departmental administrative and staff support; and
 - c. a share of general instructional support and infrastructure (space/facilities, library, information technology, personnel, campus security, university administration, etc.).

2. *Total Resource Costs* which includes:
 - a. all Instructional Cost components a., b., and c., above, plus one more:
 - b. a research support component.

What these two category types do and do not contain became important as the Workgroup worked toward a recommendation that components 1.a. and b. – instructional, and indirect costs related to the program – should be included in the per-student base-level funding figure as well as component 2.b. – a research support component; while component 1.c. – university-wide indirect support – should not.

On the basis of more than twenty years of data, Jones and Korn identified 1997 Instructional Costs as falling within a \$40,000-\$50,000 per-student range, and Total Resource Costs as falling within a \$72,000-\$93,000 per-student range. These ranges provided the initial numbers from which a per-student base-level cost was calculated.

(Step Two: Determine to Calculate and Use an Average of Each Range)

The next, and relatively simple, step was to determine to calculate and to then employ the average of each of the two ranges. This was due to three considerations:

1. A range's average is, if anything, more defensible to use in a calculation than either of its extremes;
2. The two single figures moved the Workgroup one important step closer toward a single figure per proviso direction; and
3. The single figures rather than the ranges were subsequently easier to mathematically manipulate, to conceptualize, and to reference in text.

Thus, the lower range of \$40,000-50,000 became a single figure of \$45,000 ($\$40,000 + \$50,000 = \$90,000 / 2 = \$45,000$), and the \$72,000-93,000 range became a single figure of \$82,500 via a similar calculation.

(Step Three: Equate to 2008 Dollars)

Next, the Workgroup adjusted both Jones and Korn 1997 average cost figures to 2008 dollars; thus:

1. The \$45,000 Instructional Cost figure was adjusted to \$62,838; and
2. The \$82,500 Total Resource Cost figure was adjusted to \$115,200.

The Workgroup now had two figures in 2008 dollars, but neither of which could yet be considered as the final recommendation.

(Step Four: Calculate to Exclude University-wide Indirect Costs)

As noted above, both Jones and Korn cost categories – Instructional, and Total Resource – contained costs associated with overhead. This is apparent from the description of their contents in the Jones and Korn study narrative. The Workgroup recognized that a portion of that cost – indirect costs associated with university-wide support--should be stripped away from a per-student base-level funding figure. Because there was no immediate, at-hand method for doing so, the Workgroup had to devise a defensible methodology of its own.

Because it represented the most reliable and stable source from which a calculation could be made, the Workgroup based its reductions associated with overhead cost on the percentages of those same types of cost as captured by “University Support” and “Plant Operations and Maintenance” of the SUS Total Education and General expenditures reported in the Board of Governors 2007-08 Expenditure Analysis. Those costs were 12% and 10%, respectively and 22% collectively. Thus, the 2008 updated figures of \$62,838 for Instructional Cost and \$115,203 for Total Resource Cost were reduced by 22%:

- The \$62,838 for Instructional Cost was reduced 22% to equal \$49,014, and
- The \$115,203 for Total Resource Costs was reduced 22% to equal \$89,858.

The Workgroup now had two figures in 2008 dollars, both of which excluded indirect costs, but neither of which could be considered as the final recommendation.

(This methodology should be reviewed in the future, because the exclusion of “University Support” has the impact of generating no university support funding for the M.D. program. By contrast, excluding “PO&M” does not have a similar impact, because PO&M resources are generated based on institutional square footage.)

(Step Five: Include a Research Support Component, but at less than Jones and Korn’s)

At this point, the \$89,858 Total Resource Cost figure, stripped as it was of external overhead costs, would have been a defensible candidate for a base-level funding figure in the opinion of the Workgroup, except for the lone but critical consideration of research support. The Workgroup knew that the original Jones and Korn Total Resource Cost figure contained an element associated with research support, forcing the Workgroup to answer two questions:

1. Was it appropriate for the SUS per-student base-level funding recommendation to contain a research support element, as had Jones and Korn?
2. If so, should that element be funded at 100% of the amount contained in the Jones and Korn figure?

The Workgroup answered the first question in the affirmative: the per-student base-level cost should contain a research element. There were two justifications for this recommendation:

1. Medical school accreditation by the Liaison Committee on Medical Education is absolutely critical, and LCME accreditation requires that medical schools be actively engaged in research, that their students are exposed to research, and that at least one research-focused Ph.D. (often in biomedical sciences) is directly associated with the medical program.
2. Florida has huge expectations for its medical programs as engines of a knowledge-based, innovative economy characterized by commercialization and economic development from biomedical research, pharmaceutical discovery, and medical best practices application. In fact, the State’s decision to create new medical schools was largely carried by the argument that those schools would be linchpins of economic development for the urban regions in which they were located. Given those assumptions, it would be incongruent if the Workgroup recommended base-level funding that did not contain a research support component.

As to the second question, whether a research support component should be funded at 100% of the amount contained in the Jones and Korn figure, the Workgroup elected to take a conservative position by recommending that the State provide 2/3 of that component. The expectation was that SUS medical schools could be expected to compete for and secure far more external funding associated with research; however, it was also understood that those research dollars are mostly expected to be directly associated with the deliverables relative to the research and, therefore, non-discretionary with regard to the manner of support they can provide.

The Workgroup calculated a research support component as follows:

1. It first calculated a 100% research component by subtracting the 2008 Instructional Cost less external overhead (\$49,014) from the 2008 Total Resource Cost less external overhead (\$89,858), since the research component conceptually accounted for the differences between the two numbers, thus arriving at a full research cost of \$40,845.
2. Assuming the inclusion of 2/3 (67%) of that figure in the base-level cost, the Workgroup arrived at \$27,366.

(Step Six: Base-level Cost Recommendation)

To the same Instructional Cost of \$49,014, then, was added the 2/3 research component of \$27,366, arriving at \$76,380. This is how the Workgroup arrived at its recommendation for a per-student base-level cost.

(Step Seven: Calculate to exclude tuition)

The Workgroup then subtracted from the \$76,380 the 2007-08 national median tuition of public medical schools (\$18,889) to reach a final recommendation, less tuition, of \$57,491. This number was then rounded to \$57,500 as the recommended State's appropriate per-student base-level commitment.

Comparative Funding Levels and Estimates

Notwithstanding the credibility of the research by Jones and Korn, the Workgroup sought other sources of information, both nationally and internally, to compare against its recommendation. These included:

1. The SUS M.D. programs (less UCF and FIU, since each has only 40 students at this time) analyzed their revenues and expenditures and provided initial rough estimates of a cost-per-M.D. student. The average figure of those estimates was \$76,667. As a factor pointing toward validation, there was considerable

separation among the three estimates. The highest estimate, as expected, was from FSU because of the costs associated with its legislatively mandated distributive model.

2. In Texas, a Health-Related Institutions Formula Advisory Committee meets biennially to recommend changes to a medical funding formula used by the Texas Higher Education Coordinating Board. This formula applies weights to programs in allied health, biomedical science, undergraduate and graduate nursing, pharmacy, public health, dentistry, and medical education to achieve per-student funding. Recommendations for the 2010-11 biennium for funding the M.D. programs in Texas was \$51,525. This figure does not include a research component.
3. A 1998 study by the Florida Senate derived by formula an annual cost per medical student that, in 2008 dollars, would equal \$113,484. This calculation included all sources of funding.
4. A 2001 Florida House Committee on Colleges and Universities Analysis contained the following figures which were provided by Board of Regents staff:
 - a. For fiscal year 2000-2001, the average full cost of educating a medical student at the UF and USF Colleges of Medicine is approximately \$85,000. This average annual cost reflects the cost of a four-year program, the last three years of which are more expensive per student than the first year because of the relatively small portion of year one that is devoted to clinical instruction.
 - b. Data provided by FSU indicates that for fiscal year 2000-2001, the annual cost of supporting each of 30 PIMS (i.e., year one only) students was approximately \$57,000.

The Workgroup, some members of whom have worked on this SUS issue for years, is confident that its recommendation is not an exaggeration of an appropriate level of state commitment. In fact, some members believed that the figure was probably low.

Reporting of Expenditures

Proviso: "Determine a uniform reporting procedure for the consistent annual reporting of expenditures ...for 4-year Doctor of Medicine degree programs."

Populating the Template

As noted previously, it is difficult (and virtually impossible by means of the SUS Expenditure Analysis as currently configured) to track state dollars allocated in a lump sum to health science centers and then internally allocated to fund the M.D. and other programs both inside and outside the colleges of

medicine. Notwithstanding that the focus is on M.D. costs and M.D. funding, without clearly accounting for the state dollars spent elsewhere, the argument for a base-level funding model for the M.D. becomes less persuasive. While a new reporting system is warranted, it is evident from the work involved to date that its creation is a complex task that may need the improvement afforded by time.

The exhibit in Appendix B is the Workgroup's recommendation for reporting on state revenues and expenditures. The goal is to produce a high-level, easy to understand report. Especially for the health science centers at UF and USF, these revenues are far in excess of those used to support the M.D. program; however, it is by a process of accounting for the non-M.D. expenditures that the M.D. costs can be identified for purposes of comparing them to a per-student, base-level recommendation.

The Workgroup stresses that a report using a recent year's appropriations and expenditures is apt to provide a skewed picture of university costs per M.D. student for those SUS M.D. programs still in a start-up mode. For the purposes of this initial submission, the programs not in a startup mode (UF and USF) are reporting actual 2007-08 data, because it is the most accurate data available, notwithstanding that UF intends to grow from 513 to 540 M.D. students in the future. The programs clearly still in a startup mode (FSU, UCF, FIU, and FAU) use 2016-17 full enrollments to reflect the planned revenues and expenditures associated with fully operational programs. Using a Full Enrollment Model will provide the most realistic and stable picture of university revenues, expenditures, and the associated per-student funding to then be compared against the Workgroup's recommended level.

The Report Template

The template, "State University System of Florida, Medical Education Funding Summary," (Appendix B) while providing information on other health-related programs, is not intended to be comprehensive. Data is provided on dentistry, nursing, public health, and veterinary medicine (lines 13-16), because certain SUS institutions receive appropriations in lump-sums which include the dollars pertaining to their M.D. and to other programs that reside within their health science centers. Similarly, data is provided on non-M.D. programs housed within certain colleges of medicine (line 18a); at other institutions, only the M.D. is housed within a college of medicine. In order to arrive at the best calculations for M.D. costs, dollars expended on other activities must be 'peeled away' from the lump-sum appropriation. A complete list of report definitions is provided in Appendix C.

The template naturally divides into three areas: revenues (lines 1-12), expenditures (lines 13-21), and per-M.D. student summary information (lines 21-25). In layman's

terms, the first section accounts for total state dollars (including tuition) going in, the middle section “peels away” dollars expended for activities other than the M.D., and the third section summarizes that M.D. figure on a per-student basis using M.D. enrollments as a divisor.

Lines 5-11 provide for a number of revenue adjustments which may be either increases to or reductions from the total appropriated revenues published in the General Appropriations Act (lines 1-4). These adjustments mostly reflect actions taken by the state, but they also include institutional actions such as transfers of Education and General funding toward medical education (line 9a). After accounting for these adjustments, the total actual revenues are then identified (line 12).

The “Expenditures” portion of the template is the most complex, and the portion that was the greatest challenge to populate with meaningful data. The Workgroup decided to use actual expenditure data from the SUS Operating Budget, because “peeling away” actual costs is preferable to “building up” costs based on assumptions that may not hold across all institutions. Therefore, discrete costs associated with other colleges within university health science centers are easily identified (lines 13-16); as well as administrative and overhead costs (line 17) that represent resources shared by the colleges within UF and USF’s massive health science centers. All of these overhead costs are “peeled away”, because if included they would have skewed a per-student base-level figure. The single exception is a portion of library costs that will later be added back into the calculation of a per-student base-level cost.

At this point, we focus on the expenditures with the College of Medicine (line 18). The costs associated with non-M.D. degree programs and non-M.D. supplemental activities are removed (lines 18a and 18b). The costs associated with activities related to the M.D. program that were specifically authorized by the legislature are now identified as M.D. supplemental costs (line 18c(i)). FSU was the only institution to claim M.D. supplemental costs, and it provided many workpapers citing the extra costs associated with its distributive model (ex., clinical training sites, additional information technology, medical outreach recruiting, etc.) to justify this claim.

The final step in determining a standardized amount of M.D. expenditures (shown in line 18(c)(iii)) is to add back a portion of the library expenditures (line 18(c)(ii)). The methodology for pro-rating these expenditures is based on the number of colleges within the health science center. Lines 20-25 are associated with per-student expenditures, the divisor being an institution’s M.D. full enrollment (line 20). A comparison between the recommended figure and actual per-student, base level expenditures can be easily made using lines 22 (including a tuition factor) and 25 (minus a tuition factor).

Data Sources, and Methodologies

Backing up the figures and calculations used to populate this template are university workpapers which provide further detail and rationale for their use. This is especially true of certain of the university expenditure numbers that are not directly tied to other SUS reports. Those copious workpapers will be submitted when this report is transmitted to the Legislature.

As to methodologies, where possible the Workgroup endeavored to use methodologies that were the same or similar in order to create the closest comparison among programs. In making calculations that they believed best represented their circumstances, there were instances of disagreement. In a majority of instances, single methodologies could be worked out, and even where they were not, unique methodologies were generally understood and accepted. It would have been miraculous had the Workgroup agreed on every point. In the end, there were comparatively few disagreements, and there was consensus that the new reporting structure was a substantial improvement.

APPENDICES

- A. SUS Per-Student Base-level Funding Methodology
- B. State University System of Florida, Medical Education Funding Summary
- C. Definitions
- D. Non-M.D. / M.D. Supplemental Costs
- E. Calculation of MD and Non-MD Program Expenditures
- F. Outcomes Template

APPENDIX A.

SUS MEDICAL EDUCATION FINANCIAL REPORT
Per-student Base-level Funding Methodology

Based on Jones & Korn's national study.

		Instructional costs	Total Resource costs
STEP 1	Range (in 1996 dollars)	\$40,000 - \$50,000	\$72,000 - \$93,000
STEP 2	Average (in 1996 dollars)	\$45,000	\$82,500
STEP 3	Inflation-adjusted Average (inflated to 2008 dollars)	\$62,838	\$115,203
STEP 4	<i>Less External Overhead</i> ¹		
	<i>University Support</i> (12%)	\$7,541	\$13,824
	<i>Plant Operations & Maintenance</i> (10%)	\$6,284	\$11,520
	Subtotal (22%)	\$13,824	\$25,345
	Costs per MD Student	\$49,014	\$89,858
STEP 5	Research Component of Total Resource Costs		
	Total Resource costs	\$89,858	
	- Instructional costs	- \$49,014	
		<u>\$40,845</u>	
	State Share of Research Component	67%	\$27,366
STEP 6	Per-Student Base-level Cost		
	Instructional costs	\$49,014	
	+ State Share of Research Component	+ \$27,366	
		<u>\$76,380</u>	
STEP 7	<i>Less</i> 2007-08 national median tuition for public medical schools ²	- \$18,889	
	State's Appropriate per-student base-level funding	\$57,491	-----> \$ 57,500

Note¹: External Overhead is based on removing the PO&M and University Support portion from the SUS Total E&G expenditures (without Stand Alone Activity costs) as reported in the Board of Governors 2007-08 Expenditure Analysis.

Note²: Based on the Annual Student Tuition and Fees Survey for public schools produced by the Association of American Medical Colleges (AAMC).

STATE UNIVERSITY SYSTEM OF FLORIDA
Medical Education Funding Summary

REVENUES	ACTUAL		PLANNED			
	UF	USF	FSU	UCF	FIU	FAU
Revenue from G.A.A Appropriation						
1) General Revenue Funds	\$96,396,180	\$64,927,955	\$45,017,734	\$24,188,960	\$27,996,730	\$0
2) Educational Enhancement Trust Fund	\$4,490,799	\$2,698,719	\$3,132	\$0	\$0	\$0
3) Student and Other Fees Trust Fund	\$20,613,583	\$20,871,302	\$7,921,099	\$9,600,000	\$10,080,000	\$0
4) Total Appropriated Revenues	\$121,500,562	\$88,497,976	\$52,941,965	\$33,788,960	\$38,076,730	\$0
Revenue Adjustments						
5) General Revenue Adjustments	-\$4,330,882	-\$2,890,810	\$0	\$0	\$0	\$0
6) Educational Enhancement TF Adjustments	-\$179,632	-\$107,949	\$0	\$0	\$0	\$0
7) Student and Other Fees Trust Fund Adjustments	\$1,932,592	-\$42,276	\$0	\$0	\$0	\$0
8) Administered Fund Issues	\$2,470,102	\$701,282	\$0	\$0	\$0	\$0
9) Other Revenues						
a) Transfers - In (from E&G)	\$9,979,205	\$0	\$0	\$0	\$0	\$14,400,000
b) Risk Management Insurance (from G.A.A.)	\$898,457	\$485,226	\$0	\$0	\$0	\$0
c) Other	\$0	\$0	\$0	\$0	\$0	\$365,000
10) Transfers - Out (Specify)	\$0	\$0	\$0	\$0	\$0	\$2,442,000
11) Total Revenue Adjustments	\$10,769,842	-\$1,854,527	\$0	\$0	\$0	\$12,323,000
12) TOTAL ACTUAL REVENUES	\$132,270,404	\$86,643,449	\$52,941,965	\$33,788,960	\$38,076,730	\$12,323,000
EXPENDITURES						
	UF	USF	FSU	UCF	FIU	FAU
13) College of Dentistry	\$18,401,945	\$0	\$0	\$0	\$0	\$0
14) College of Nursing	\$0	\$7,960,669	\$0	\$0	\$0	\$0
15) College of Public Health	\$0	\$11,121,511	\$0	\$0	\$0	\$0
16) College of Veterinary Medicine	\$21,417,306	\$0	\$0	\$0	\$0	\$0
17) Administration/Overhead Expenditures	\$46,300,759	\$13,043,936	\$0	\$0	\$0	\$0
a) VP Office/ Admin.	\$10,524,037	\$6,155,255	\$0	\$0	\$0	\$0
b) Library	\$4,174,800	\$2,903,725	\$0	\$0	\$0	\$0
c) Plant Maintenance	\$28,860,832	\$0	\$0	\$0	\$0	\$0
d) Other	\$2,741,090	\$3,984,956	\$0	\$0	\$0	\$0
18) College of Medicine	\$45,886,997	\$40,821,284	\$52,941,965	\$33,788,960	\$38,076,730	\$12,323,000
a) Non-MD Degree Programs	\$12,409,678	\$10,467,893	\$4,388,383	\$0	\$0	\$2,989,500
b) Non-MD Supplemental Costs	\$7,028,769	\$4,539,918	\$0	\$0	\$0	\$0
c) MD Medical Professional Program	\$26,448,551	\$25,813,473	\$48,553,582	\$33,788,960	\$38,076,730	\$8,968,500
i. MD Supplemental	\$0	\$0	\$13,119,921	\$0	\$0	\$0
ii. Library Adjustment (add-back)	\$695,800	\$967,908	\$0	\$0	\$0	\$365,000
iii. Standardized MD	\$27,144,351	\$26,781,381	\$35,433,661	\$33,788,960	\$38,076,730	\$9,333,500
19) Total Expenditures	\$132,007,007	\$72,947,400	\$52,941,965	\$33,788,960	\$38,076,730	\$12,323,000
PER MD STUDENT SUMMARY						
	UF	USF	FSU	UCF	FIU	FAU
20) MD Funded Enrollment ¹	513	480	480	480	480	256
21) Total Available Resources per MD Student	\$52,913	\$55,795	\$101,153	\$70,394	\$79,327	\$36,459
22) Standardized Expenditures per MD student	\$52,913	\$55,795	\$73,820	\$70,394	\$79,327	\$36,459
23) State Supplement per MD Student	\$0	\$0	\$27,333	\$0	\$0	\$0
24) Tuition per MD student	\$20,808	\$18,999	\$15,832	\$20,000	\$21,000	\$0
25) State Resource Expenditures per MD Student	\$32,105	\$36,796	\$85,322	\$50,394	\$58,327	\$36,459

Note¹: It is the intention of the University of Florida to increase its M.D. program enrollment from 513 to 540.

Note regarding Revenues : UF, USF and FSU revenues are from the 2007-08 General Appropriations Act. UCF and FIU revenues are based on the BOG approved 10 year plan for 2016-17 (when both schools plan to be at full enrollment). FAU's medical education revenues are included in its 2009-10 E&G appropriation, with adjustments based on allocation decisions by its Board of Trustees. It is important to note that a portion of UF, USF and FSU 2007-08 revenues include non-recurring appropriations. Non-recurring appropriations are a routine part of annual appropriations and are included in the Operating Budget report of actual expenditures. The amounts of non-recurring appropriations vary from year to year and potentially skew any single-year snapshot of expenditures.

Note regarding Expenditures : UF and USF expenditures are based on their 2007-08 actual expenditures as reported in the 2008-09 Operating Budget report (#500A) that accounts for prior year expenditures. FSU expenditures are based on the full roll-out of MD and Non-MD programs, to be completed in 2014-15. UCF and FIU expenditures are based on spending 100% of planned revenues in 2016-17. FAU expenditures are based on planned expenditures for 2009-10.

APPENDIX C.

SUS MEDICAL EDUCATION FINANCIAL REPORT - DEFINITIONS

REVENUES		ACTUAL UF & USF	PLANNED FSU, UCF, FIU & FAU
Revenue from G.A.A Appropriation			
1)	General Revenue Funds	This is the 2007-08 General Revenue appropriation. It is important to note that a portion of UF, USF and FSU 2007-08 revenues include non-recurring appropriations, and the amount of non-recurring appropriation is subject to annual variation.	FSU revenue based on 2007-08 G.A.A. UCF and FIU revenue based on 2016-17 as approved by BOG in 10yr plan. FAU's medical appropriation is included in their 2009-10 E&G funds (see row 9a). It is important to note that a portion of UF, USF and FSU 2007-08 revenues include non-recurring appropriations, and the amount of non-recurring appropriation is subject to annual variation.
2)	Educational Enhancement Trust Fund	This is the 2007-08 appropriation from Lottery revenues.	FSU revenue based on 2007-08 G.A.A.. UCF and FIU revenue based on 10yr plan approved by BOG.
3)	Student and Other Fees Trust Fund	This is the budget authority as reported in the G.A.A..	FSU revenue based on 2007-08 G.A.A.. UCF and FIU revenue based on 10yr plan approved by BOG.
4)	Total Appropriated Revenues	Sum of Rows 1 through 3	
Revenue Adjustments			
5)	General Revenue Adjustments	Adjustments account for budget reductions.	Not estimated.
6)	Educational Enhancement TF Adjustments	Adjustments account for budget reductions.	Not estimated.
7)	Student and Other Fees Trust Fund Adjustments	Adjustments accounts for revisions to Budget Authority as well as differences between actual collections and budget authority.	Not estimated.
8)	Administered Fund Issues	This refers to System-wide funds as allocated by the Governor's Office.	Not estimated.
9)	Other Revenues		
	a) Transfers - In (from E&G)	Transfers-In refer to E&G funds appropriated to the main campus that are transferred to the medical budget entity to support the MD program. These funds may include some Non-MD Degree program expenses.	All of FAU's medical education revenues are included in their 2009-10 E&G appropriation.
	b) Risk Management Insurance (from G.A.A.)	These funds are lumped into one specific appropriation for the whole SUS, which the BOG Budget then distributes proportionally based on each schools current year premiums.	Not estimated.
	c) Other	No identified costs.	This is for any other revenues supporting the MD program (e.g., FAU library resources).
10)	Transfers - Out (Specify)	Transfers-In refer to refer to medical budget appropriations that are transferred to the institution's main campus.	FAU's expected revenues are adjusted to account for allocation decisions by their Board of Trustees
11)	Total Revenue Adjustments	Calculation of Rows: Add Rows 5 through 10.	Not estimated.
12)	TOTAL ACTUAL REVENUES	Calculation of Rows: Row 4 + Row 11.	Calculation of Rows: Row 4 + Row 11.

EXPENDITURES		ACTUAL UF & USF	PLANNED FSU, UCF, FIU & FAU
13)	College of Dentistry	Refers to actual expenditures for the College of Dentistry as reported in the B.O.G. Operating Budget Report (#500A) for Special Units.	Not estimated.
14)	College of Nursing	Refers to actual expenditures for the College of Nursing as reported in the B.O.G. Operating Budget Report (#500A) for Special Units.	Not estimated.
15)	College of Public Health	Refers to actual expenditures for the College of Public Health as reported in the B.O.G. Operating Budget Report (#500A) for Special Units.	Not estimated.
16)	College of Veterinary Medicine	Refers to actual expenditures for the College of Veterinary Medicine as reported in the B.O.G. Operating Budget Report (#500A) for Special Units.	Not estimated.
17)	Administration/Overhead Expenditures	Refers to actual expenditures that are shared, rather than assigned to any one college within the Medical Center, as reported in the B.O.G. Operating Budget Report (#500A).	Not estimated.
18)	College of Medicine	Refers to actual expenditures for the College of Medicine as reported in the B.O.G. Operating Budget Report (#500A) for E&G and Special Units. USF adjusted due to Information Technology expenses reported within the CoM but apply to all HSC.	FSU expenditures based on the full roll-out of programs, to be completed in 2014-15. For UCF and FIU, expenditures are based on spending 100% of planned revenues. FAU expenditures are based on planned expenditures for 2009-10.
	a) Non-MD Degree Programs	Refers to estimated expenditures for Non-MD degree programs within the College of Medicine. Due to the difficulty of splitting programmatic costs for programs with shared faculty and resources, these values are based on the program weights reported by OPPAGA (#09-19) for each university.	FSU expenditures data uses the same methodology as used for UF and USF. FAU data is based on planned expenditures for 2009-10.
	b) Non-MD Supplemental Costs	Refers to expenditures for Non-MD activities specifically approved (and documented) by the Legislature (i.e., language in proviso, Legislative Budget Request that was given recurring revenues). These expenditures include the direct costs reported by Department ID and a portion of the Dean's Office costs (pro-rated based on the percentage of direct supplemental costs to the CoM total expenditures).	Not estimated.
	c) MD Medical Professional Program	Calculation of Rows: Rows 18 - 18a - 18b	Calculation of Rows: Rows 18 - 18a - 18b
	i. MD Supplemental	No identified costs.	Refers to expenditures for FSU's MD activities specifically approved (and documented) by the Legislature (i.e., language in proviso). These expenditures are estimated to be the <u>extra</u> costs associated with FSU's mission. Includes a portion of the Dean's Office costs (pro-rated based on the percentage of supplemental costs to the CoM total expenditures).
	ii. Library Adjustment (<i>add-back</i>)	Because of the institutional variation in where these costs are reported, this row acts to standardize these costs across all institutions by splitting the HSC library's actual expenditures by the number of colleges using it and adds these values back into the cost per MD student. Calculation of Rows: Divide Library (Row 17b) by the number of Colleges (UF=6, USF=3) that use the library.	Not estimated.
	iii. Standardized MD	Calculation of Rows: Rows [18c - 18(c)(i) + 18(c)(ii)]	Calculation of Rows: Rows [18c - 18(c)(i) + 18(c)(ii)]
19)	Total Expenditures	Calculation of Rows: Add Rows 13 through 18.	Total expenditures estimated to equal revenues.

PER MD STUDENT SUMMARY		ACTUAL UF & USF	PLANNED FSU, UCF, FIU & FAU
20)	MD Funded Enrollment	The 2007-08 enrollment as published in the G.A.A.	The BOG-approved planned enrollment when fully developed.
21)	Total Available Resources per MD Student	Calculation of Rows: [Row 18(c)(iii) + Row 18(c)(i)] / Row 20	Same methodology used for Actual.
22)	Standardized Expenditures per MD student	Calculation of Rows: Row 18(c)(iii) / Row 20	Same methodology used for Actual.
23)	State Supplement per MD Student	Calculation of Rows: Row 18(c)(i) / Row 20	Same methodology used for Actual.
24)	Tuition per MD student	This is the 2007-08 medical school tuition for UF and USF - not including the 5% Student Financial Aid fee, which is not included in the medical budget.	This is the 2009-10 medical school tuition for each institution - not including the 5% Student Financial Aid fee, which is not included in the medical budget.
25)	State Resource Expenditures per MD Student	Calculation of Rows: Rows 21 - Row 24	Same methodology used for Actual.

APPENDIX D.

SUS MEDICAL EDUCATION FINANCIAL REPORT - Supplemental Costs

Non-MD Supplemental Costs

PROGRAM / ACTIVITY		Document citation	2007-08 Actual Expenditures
University of South Florida			
1	Pediatric research Super Chairs	1997-152, GAA #175	\$250,205
2	Brain & spinal cord injury	1999-226, GAA #182	\$159,328
3	Regional diabetes center	1999-226, GAA #182	\$717,281
4	Child & Infant Development Center	2001-253, GAA #194	\$456,462
5	FIU/USF Medicine Education Partnership	2004-268, GAA #158	\$239,119
6	Sports Medicine and Athletic Related Trauma Institute (SMART)	2005-6:Allocation Summary Issue	\$2,333,579
7	Center for Women's Advanced Healthcare	2006-7:Allocation Summary Issue	\$27,052
SUBTOTAL:			\$4,183,026
Dean's costs pro-rated to Supplemental activities			\$356,892
TOTAL:			\$4,539,918

University of Florida			
1	Biotechnology Research Institute	Chapter 87-98 LOF, #597A	\$800,000
2	Attention Deficit Hyperactivity Disorder Treatment Program	1997-152, GAA #176	\$273,232
3	Transfer Rural Health	1997-8:Allocation Summary Issue	\$301,811
4	Regional diabetes center	1999-226, GAA #183	\$677,609
5	Cancer Center	2004-5:Allocation Summary Issue	\$1,734,434
6	Shands Proton Therapy Inst. Cancer Treatment	2007-8:Allocation Summary Issue	\$250,000
7	Interdisciplinary Research Career Development in Aging	2007-8:Allocation Summary Issue	\$1,343,629
8	Substance Abuse Research	2008-9:Allocation Summary Issue	\$250,000
9	Plant O&M managed by the College of Medicine	Specific allocation for 1329 Building	\$576,660
SUBTOTAL:			\$6,207,375
Dean's costs pro-rated to Supplemental activities			\$821,394
TOTAL:			\$7,028,769

MD Supplemental Costs

PROGRAM / ACTIVITY		Document citation	2014-15 Estimated Expenditures	MD Supplemental (additional detail in workpapers)	
				%	Dollars
Florida State University (Fully Enrolled)					
1	Clinical Rotational Training Sites (Pensacola, Orlando, Sarasota, Tallahassee, Ft. Pierce, Daytona)	1004.42 Florida Statutes	\$12,622,699	47%	\$5,964,625
2	Information Technology	1004.42 Florida Statutes	\$3,746,279	31%	\$1,178,200
3	Geriatric Medicine	1004.42 Florida Statutes	\$2,395,104	83%	\$1,981,289
4	Immokalee Clinical Training Site	2006-7:Allocation Summary Issue	\$1,036,420	100%	\$1,036,420
5	Medical Outreach Recruiting (includes BRIDGE, not AHEC)	2000-303, GAA #161	\$1,370,905	100%	\$1,370,905
6	Rural Health Track	2000-303, GAA #161	\$423,872	100%	\$423,872
7	Faculty Development	1004.42 Florida Statutes	\$604,249	100%	\$604,249
SUBTOTAL:			\$22,199,527	57%	\$12,559,560
Dean's costs pro-rated to Supplemental activities					\$532,343
TOTAL:					\$13,091,903

APPENDIX E.

SUS MEDICAL EDUCATION FINANCIAL REPORT
Calculation of MD and Non-MD Program Expenditures

Description: This methodology estimates expenditures for Non-MD degree programs within the College of Medicine (CoM). Due to the difficulty of splitting programmatic costs for programs with shared faculty and resources, these values are based on the program weights reported by OPPAGA (#09-19) for each university. Program specific FTE are multiplied by the weights to generate program-specific Weighted FTE (or WFTE), which is then divided into the sum of WFTE for the entire CoM. The resulting percentage represents the share of the CoM expenditures (after Supplemental costs have been removed; and, a Library Adjustment has been added back in).

University of Florida (2007-08)					
	FTE	Weights	Weighted FTE	%	Expenditures
College of Medicine	1,129		748		\$45,886,997
a) Non-MD Supplemental costs					
<i>Direct</i>				-	\$6,207,375
<i>Indirect</i>				-	\$821,394
b) MD Supplemental costs				-	\$0
c) Library Adjustment				+	\$695,800
Adjusted College of Medicine Total					\$39,554,028
d) Non-MD Degree Programs	616		235	31.4%	\$12,409,678
<i>Undergraduate</i>	223	0.05	11	1.5%	\$589,980
<i>Physician Assistant</i>	150	0.42	63	8.4%	\$3,333,517
<i>Graduate</i>	243	0.66	160	21.5%	\$8,486,181
e) Standardized MD program	513	1.00	513	68.6%	\$27,144,351

Note: Weights based on Instructional cost calculations as reported in OPPAGA (#09-19)
 Note: Indirect costs for Non-MD Supplemental costs are based on pro-rating Dean's Office expenses. The formula multiplies the Non-MD Supplemental portion of total CoM expenditures by the costs associated with the Dean's Office, or $=(\$6,207,375/\$45,886,997) * \$6,072,018$.

University of South Florida (2007-08)					
	FTE	Weights	Weighted FTE	%	Expenditures
College of Medicine	900		668		\$40,821,284
a) Non-MD Supplemental costs					
<i>Direct</i>				-	\$4,183,026
<i>Indirect</i>				-	\$356,892
b) MD Supplemental costs				-	\$0
c) Library Adjustment				+	\$967,908
Adjusted College of Medicine Total					\$37,249,274
d) Non-MD Degree Programs	420		188	28.1%	\$10,467,893
<i>Undergraduate (includes Athletic Training)</i>	101.9	0.05	5	1%	\$284,273
<i>Physical Therapy</i>	114	0.42	48	7.2%	\$2,671,443
<i>Graduate</i>	204	0.66	135	20.2%	\$7,512,177
e) Standardized MD program	480	1.00	480	71.9%	\$26,781,381

Note: Weights based on Instructional cost calculations as reported in OPPAGA (#09-19)
 Note: Indirect costs for Non-MD Supplemental costs are based on pro-rating Dean's Office expenses. The formula multiplies the Non-MD Supplemental portion of total CoM expenditures by the costs associated with the Dean's Office, or $=(\$4,183,026/\$40,821,284) * \$3,482,835$

Florida State University (Fully Enrolled)					
	FTE	Weights	Weighted FTE	%	Expenditures
College of Medicine	570		539		\$52,941,965
a) Non-MD Supplemental costs					\$0
b) MD Supplemental costs					
<i>Direct</i>				-	\$12,559,560
<i>Indirect</i>				-	\$532,343
c) Library Adjustment				+	\$0
Adjusted College of Medicine Total					\$39,850,062
d) Non-MD Degree Programs	90		59	11.0%	\$4,388,383
<i>Undergraduate</i>	0	0.05	-	0%	\$0
<i>Graduate</i>	90	0.66	59	11.0%	\$4,388,383
e) Standardized MD program	480	1.00	480	89.0%	\$35,461,679

Note: Weights based on Instructional cost calculations as reported in OPPAGA (#09-19)
 Note: Indirect costs for Non-MD Supplemental costs are based on pro-rating Dean's Office expenses. The formula multiplies the MD Supplemental portion of total CoM expenditures by the costs associated with the Dean's Office, or $=(\$12,559,560/\$50,294,867) * \$2,243,971$.

APPENDIX F.

SUS MEDICAL EDUCATION FINANCIAL REPORT - OUTCOMES REPORT

YEAR : _____

UNIVERSITY : _____

Table 1. MD Student Demographic Information

CATEGORY	CURRENT ENROLLMENT	MOST RECENT GRADUATING CLASS
ETHNICITY		
Nonresident Alien		
Race and Ethnicity unknown		
Hispanics of any race		
For non-Hispanics only:		
American Indian or Alaska Native		
Asian		
Black or African American		
Native Hawaiian or Other Pacific Islander		
White		
Two or more races		
TOTAL		
GENDER		
FEMALE		
MALE		
RESIDENCY		
RESIDENT		
NON-RESIDENT		

Table 2. Tuition and Fees for the MD program

RESIDENT	\$	-
NON-RESIDENT	\$	-

Table 3. Passage Rates on Step 1 and Step 2 of the US Medical Licensing Examinations

	Number Tested	Percent Passed
Step 1		0%
Step 2		0%

Table 4. Graduate Residency placement (by specialty and geographic location)

Discipline	Florida	Out-of-State
Anesthesiology		
Dermatology		
Emergency Medicine		
Family Medicine		
General Surgery		
Internal Medicine		
Neurological Surgery		
Neurology		
Nuclear Medicine		
Obstetrics-Gynecology		
Ophthalmology		
Orthopaedic Surgery		
Otolaryngology		
Pathology		
Pediatrics		
Physical Medicine & Rehab		
Plastic Surgery		
Preventative Medicine		
Psychiatry		
Radiation Oncology		
Radiology - Diagnostic		
Urology		
Thoracic Surgery		
Vascular Surgery		