

COUNCIL FOR EDUCATION POLICY, RESEARCH AND IMPROVEMENT

MEDICAL EDUCATION NEEDS ANALYSIS

Alternatives to Address Physician Workforce Needs

NOTE: This discussion paper was prepared for the third meeting of the Medical Education Study Advisory Committee on September 28, 2004. The questions throughout the paper guided the discussion at this meeting. A summary of responses from meeting participants is included in italics.

I. Residency Programs

- Research has demonstrated that the location of a physician's graduate medical education (GME) training plays a role in determining where a physician will practice.

Retention

- A recent nationwide analysis¹ by the National Conference of State Legislatures (NCSL) found that 47 percent of allopathic medical residency completers practice in the same state as their GME training.
 - For Florida, the percentage of allopathic medical residency completers who remained in-state to practice was 60.5 percent.
 - Data provided to the committee from Florida community hospitals shows a similar percentage of GME completers in the Community Hospital Education Program (CHEP) (68 percent) immediately entering practice in Florida. Additionally, sixty-three percent of completers who went on to further training stayed in Florida to conduct their training.²
- Thirty-nine percent of allopathic medical school graduates practice in the same state they were educated.
 - For Florida, the percentage of allopathic medical school graduates who remained in-state to practice was 49.4 percent.

Physician Importation

- The same nationwide analysis³ found that 41 percent of allopathic physicians currently practicing in a state completed their most recent GME in the same state
 - For Florida, 31.5 percent of currently practicing allopathic physicians completed their most recent GME in-state.
 - **Discussion question: Is this low percentage among Florida's current physician practicing pool an indication of the limited GME opportunities in the state (Florida ranks 46th in the number of GME positions)?**

¹ Henderson, Tim, Carrie Farmer and Suzanne Szwarc, Practice Location of Physician Graduates: Do States Function as Markets? (Denver, CO: Office of Publications, National Conference of State Legislatures, January 2003).

² 2003 Graduate Destination Report. Community Hospital Education Program. Data provided by Linda Rackleff, Director of the Florida Council of Medical School Deans.

³ Ibid

- Thirty-one percent of allopathic physicians currently practicing in a state graduated from medical school in the same state.
 - For Florida, 16.5 percent of currently practicing allopathic physicians graduated from an in-state medical school.
 - **Discussion question:** Is this low percentage among Florida’s current physician practicing pool an indication of limited medical school slots in the state, or an indication that physicians are more likely to practice where they were trained rather than where they were educated?

Responses from Meeting Participants

Florida retains more of its residency program completers and medical school graduates than the national average. Though some meeting participants mentioned that concerns over the work environment in Florida (e.g., high cost of malpractice insurance) may hinder the likelihood of physicians remaining in-state to practice, the high rate demonstrates that the practice environment is not negatively impacting retention. Though Florida is retaining more residents and medical school graduates than the national average, a lower percentage of the overall physician population in Florida completed their education and/or training in-state. This is an indication that though Florida’s retains a relatively high percentage of medical residents and graduates, the state cannot meet the physician workforce needs and must import more physicians than most other states. Increasing the number of residency slots, in the view of the committee, would be a short-term solution to solving this problem.

Connection between the Location of Medical School and the Location of GME Training

- A definitive connection between the location of medical school training and GME training and its effect on practice location cannot be determined. However, data from the nationwide analysis discussed above suggests that the existence of such a relationship would and does influence practice location.
 - Analysis showed that states with a higher percentage of physician residents from in-state medical schools are more likely to retain physicians of all specialties and geographic locations.
 - **Discussion questions:** What percentage of Florida GME students graduated from a Florida medical school? If a low percentage of Florida GME students graduated from a Florida medical school, what state policies should be pursued to encourage Florida medical students to complete a residency in-state, given the greater likelihood of resident completers practicing in the same state as their training?

Responses from Meeting Participants

Representatives from UF indicated that about 40-60 percent of their medical school graduates remain in-state for GME training. UM reported that about 33 percent remain at Jackson Memorial Hospital in Miami for GME training and an additional 10 percent conduct their training elsewhere in Florida. A variety of factors contribute to the fact that about 60 percent of graduates do not remain in-state for GME training: lack of opportunities in competitive specialty training programs, desire to leave the state for more “prestigious” programs (e.g., Ivy League), where the programs are located (i.e., lifestyle considerations). If GME slots are increased in

certain highly competitive fields, it is believed that more graduates would remain in-state for training—and given the high retention rates—more likely stay in Florida to practice.

However, solely increasing the number of GME slots may not necessarily lead to an increase in the number of Florida medical school graduates remaining in Florida. It was indicated that medical school graduates are looking for quality programs to enroll in for GME. If new slots are the product of new programs or community based hospital programs, lacking a strong reputation, the expansion is not likely to immediately increase the number of Florida medical school graduates remaining in Florida to train until those programs fully develop and earn a quality reputation. What can be concluded though, based on the retention rates, is that if the state increased the number of GME slots, there is a greater likelihood of more residency completers remaining in Florida to practice. If the bottom line is increasing the number of physicians, not Florida educated and trained physicians, the increase in GME slots is an effective alternative to address workforce needs in the short-term.

A follow-up question was posed to the committee asking how an increase in medical school slots would affect a physician workforce shortage, if the percentage of Florida medical graduates who remain in Florida to train is not expected to change (about 40 percent) even if GME slots are increased as well. There was considerable debate on this point. It was accurately noted that though the proportion of medical school graduates remaining in-state to train is not expected to change even if medical school and GME slots were increased, the absolute number of GME students would increase, thus potentially increasing the physician population. However, it was noted that if you solely increased the number of GME slots and filled them with students from throughout the United States, about 60 percent would potentially remain in Florida to practice. Therefore, the physician workforce would increase without the expense of additional medical school slots. It was argued that by looking at the two points of the pipeline in the production of physicians--(1) medical school and (2) residency--if capacity was increased at both points of the pipeline, one would see the largest increase in physicians. However, if solely medical school slots were increased, there would be no immediate impact. Only increasing residency slots would be an immediate impact in increasing the number of physicians. However there are concerns to solely increasing the residency slots without medical school expansion. Concerns were raised over faculty to train more residents and the educational environment of expanded residency programs without the infrastructure of a medical school. It was argued that one solution (i.e., only increasing residency slots) would be insufficient.

The committee's consensus was that the highest priority, in the short-term, is to expand the number of residency slots. It provides the most immediate impact to increasing the physician workforce population in Florida. However, from a long term perspective, given Florida's growing population and the low number of medical school slots per capita, the state needs to explore expanding medical school capacity in the future.

Cost of GME Expansion

- Data presented to the Board of Governors and this committee estimate a total average cost per resident of \$190,000 (with \$115,000 of that average being direct costs and \$75,000 indirect costs).

Sources of Funding: Federal

- The federal Medicare program is the largest explicit source of funding for GME.
- The passage of the Balanced Budget Act (BBA) of 1997 made significant reductions in federal funding for GME. The following provisions of the BBA that affect GME funding are highlighted below:

Negative Impact on Teaching Hospitals

- A cap on total residents funded by Medicare (hospital's most recent count of FTE as of December 31, 1996).
 - The cap does not apply to new programs in rural underserved areas or to hospitals that have not had residency programs prior to January 1, 1995 until they have had three years to fill their resident cohorts
- A reduction in the indirect GME cost Medicare adjustment factor

In conjunction with the decreased Medicare funding due to the BBA, there are indications that private insurance providers—whose payments to hospitals traditionally exceeded Medicare and Medicaid payments—have become increasingly unwilling to accept higher prices (an indirect subsidy of GME training). Additionally adding to the increased cost for teaching hospitals is the potential shifting of hiring away from resident physicians (because of limited supply and growing efforts to limit resident work hours⁴) to other health care professionals (e.g., ARNPs, PAs, other physicians)⁵.

Encouragement of GME Training Opportunities in Non-Traditional Settings

BBA of 1997 Provisions:

- GME payments to non-hospital settings (e.g., rural health clinics) where resident training takes place if the non-hospital provider bears all or nearly all of the cost of training at this setting.
- Medicare indirect and direct GME payments to hospitals for the time residents train at non-hospital ambulatory sites if the hospital bears all or nearly all of the cost of training at that site.

Though the BBA sought to target GME funding to meet rural needs in overcoming physician shortages, financial difficulties remained:

- The exception to the hospital cap on residencies only applied to rural hospitals, not rural satellite facilities of urban teaching hospitals – decreasing

⁴ Cherr, Gregory S. *The Origins of Regulated Resident Work Hours: New York and Beyond*. (Bulletin of the American College of Surgeons, November 2002).

⁵ Davis, P. Hannah, *The Effects of the Balanced Budget Act of 1997 on Graduate Medical Education: A COGME Review*. (Washington, DC: U.S. Department of Health and Human Services, Health Resources and Services Administration, March 2000).

the number of potential residents on the rural training track, since they count against the overall residents at the teaching hospital.

- Indirect GME payments to teaching hospitals for residents in non-hospital settings is of little use since residencies are capped at the number that had actually been in the hospital.
- Though direct GME payments can be made to non-hospital settings, indirect GME payments cannot. The direct component is usually too small to sustain a resident in most of these settings.⁶

The Balanced Budget Refinement Act of 1999 “corrected” some of the problems highlighted above.

- Hospitals located in rural areas are permitted to increase their resident limits by 30 percent for direct and indirect GME payments.
- A 2000 COGME predicted that the 30 percent expansion would allow for only negligible expansion in relatively small residency programs.⁷
- **Discussion question:** It was noted at prior committee meetings that Florida has not expanded or created any new residency programs in recent years. Though federal financing remains problematic, provisions were included in legislation to encourage residency expansion in rural areas. Why has this not occurred in Florida?

Responses from Meeting Participants

The earlier point on the lack of expansion of residency programs in Florida since the BBA of 1997 was inaccurate. New data shows that programs have expanded in Florida, but not in rural, or underserved area hospitals. Most of the growth in residency programs has occurred at the Mayo Clinic and Cleveland Clinic. A follow-up question was posed as to how these program expansions were funded. The source of funding was unknown at this point. Additionally, since these are private providers and are not required to provide funding sources, that information may be difficult to come by. However, one can assume that private sources were the primary elements of funding for the expansion at these large centers.

Meeting participants mentioned that no state has taken advantage of the exception provided in the Balanced Budget Refinement Act of 1999 to increase federally funded residency slots in rural hospitals. Many explanations were provided for this inability to expand in rural areas—despite the federal funding exception. Namely, it is very difficult to sustain a residency program in a rural hospital. Small rural hospitals lack the infrastructure, faculty, and facilities to support residency programs. This creates great difficulty for programs in stand-alone rural hospitals to be accredited. Basically, the exception that allows this expansion is not a practical reality. Recognizing the problem of physician maldistribution and the importance of training and placing physicians in underserved areas, the committee reached a consensus on an approach where large urban teaching hospitals would provide rural clinical rotations for residents to meet the needs of underserved areas. However, the

⁶ Ibid

⁷ *Financing Graduate Medical Education in a Changing Health Care Environment*. Fifteenth Report of the Council on Graduate Medical Education, December 2000.

federal funding constraints remain with this approach because the exception that allows rural hospitals to expand their residency capacity by 30 percent only applies to stand-alone rural hospitals, not satellite programs or clinical rotations at a rural hospital.

Sources of Funding: State

- The only source of explicit state funding to support GME in Florida is the Community Hospital Education Program (CHEP) – intended to increase the number of primary care physicians practicing in Florida.
 - CHEP funding generally constituted 7 percent (for family practice) and 2 percent (for all other specialties) of the average per capita cost to support GME at Florida’s teaching hospitals.⁸
- Since FY 2000-01, the Legislature has not made an appropriation to CHEP. CHEP funding was combined with the Medicaid Program. This has allowed the state to draw down additional federal Medicaid matching funds, but it has effectively eliminated the only state program that provided explicit funding for the state’s primary care GME programs.⁹

Efforts in Other States to Provide Funding for GME¹⁰

- Other states have policies to fund GME that include: direct state appropriations, Medicaid payments linked to state goals, and pooling multiple payment sources.

Model State Programs

Direct State Appropriations

- **Arkansas** – Since 1973, Arkansas has provided state support for six community-based family medicine residency programs. These residencies provide most of the state’s rural physicians. Forty-five percent of graduating residents practice in rural communities.
 - State law prohibits the state’s only medical school from taking any out-of-state students if there is a qualified Arkansas resident.
 - Under state’s community match programs, communities in Arkansas are encouraged to make agreements with medical students in their first year of training, such as paying half a student’s tuition in return for choosing a primary care residency and practicing in that location for a specified time.
- **Colorado** and **Texas** have similar programs where state appropriations are made to increase the number of family practice physicians in underserved areas.
 - Colorado supports 10 family practice residency programs, training about 200 residents for an annual appropriation of \$2.4 million.
 - Texas supports 26 programs, training 700 positions at \$11 million. The Texas Family Practice Residency Program limits state funds to no more than 35 percent of a program’s total budget. Texas also requires budget reviews

⁸ *Graduate Medical Education in Florida: Findings and Recommendations*. Legislatively-mandated study submitted by Florida State University College of Medicine. November, 2001.

⁹ *Ibid*

¹⁰ *State and Managed Care Support for Graduate Medical Education: Innovations and Implications for Federal Policy*. Council on Graduate Medical Education Resource Paper, July, 2004.

and audits of all funded programs and data collection of the area distribution of family physicians in underserved areas.

Medicaid Payments Linked to State Goals

- **Georgia, Michigan, Tennessee, and Utah** have programs that have tied the disbursement of Medicaid funding to hospitals if they meet certain state goals.
 - In Michigan, hospitals were funded based on (1) the 1995 reported costs for medical education and (2) the institution's number of residents in primary care and its share of Medicaid patients. To qualify for reimbursement, a hospital must submit a report to the state detailing resident profiles and the way in which it is using the funds to support specific public policy goals and priorities. A third pool of funding was established to provide monies on a competitive grant process for innovations in health profession education. Only consortia consisting of at least a hospital, a university, and a managed care organization are eligible to apply.
 - The reforms in Michigan have forced university, hospital, and health plan officials to communicate with one another in productive and positive ways on GME issues.

Pooling Multiple Payment Sources

- Minnesota and New York are examples of states which have drawn together various state funding streams into one pooled fund for GME
 - The Minnesota Legislature created the medical education and research cost (MERC) trust fund to capture new and existing state sources of medical education funds. The MERC trust fund consists of: tobacco settlement fund, Medicaid matching funds, State general revenue, and Medicaid managed care carve-out. MERC funds go to support over 2,000 FTE trainees at 400 sites. Funds are distributed based on a cost formula and are not linked to state workforce or policy goals.

Discussion question: States have developed innovative policies to deal with the reduction in federal funding for GME through Medicare. States have moved funding through inter-governmental transfers (IGT) to draw down more matching funds in the Medicaid programs (like Florida with CHEP), but have maintained a policy—using these additional matched dollars—to fund GME? Why has Florida not followed suit? What impedes Florida from pursuing similar policies?

Responses from Meeting Participants

Representatives from the committee raised the following concern. The State of Florida has, through inter-governmental transfer, folded the line-item appropriation for the Community Hospital Education Program (CHEP) into the Medicaid budget in order to draw down more matching funds from the federal government. Additionally, the state, last year, moved state funds for undergraduate medical education (years 1-4 of medical school) in order to draw down additional federal Medicaid funds under a new program, and then supplanted the state funds with the federal funds. Committee representatives felt it important for this group to strongly

make the point that whatever position the Legislature takes in state funding for GME or additional medical school slots, the state does not continue the pattern of supplanting state general revenue with federal revenue. Concerns were raised that continuing this pattern does not accomplish anything, no additional funding is provided, and the funding streams become more unstable and problematic for the medical schools.

According to the committee, the only impediment for Florida to follow approaches other states have adopted to fund GME is the lack of state general revenue. Folding the CHEP money into the Medicaid budget in order to draw down monies from the federal government has led to increase in Medicaid dollars to the state. However, there is no demonstrable change (and probably a decrease) to the amount of funding for GME because the dollars have become untraceable. The funds are no longer earmarked for GME. The state's Graduate Medical Education Committee actually recommended that the state pursue a policy of transferring the dollars in order to draw down more federal funding, with the expectation that more funding would go to GME. However, this approach does not allow one to track whether the funding is indeed going to fund GME.

Some on the committee noted that the percentage of funding CHEP provided to fund residency slots was relatively small (about 5%). However, the point was made that 5 percent was better than nothing, and CHEP programs experience higher retention rates for physicians staying in-state to practice than the overall state residency retention rate (68 percent for CHEP, compared to 60.5 percent for the state average).

The Graduate Medical Education Committee had recommendations in the past to fund GME. These include programs similar to those adopted by other states to "carve-out" state Medicare and Medicaid dollars to support GME. Under this approach, before Medicare and Medicaid funds are disbursed to managed care entities or other entities that do not provide education and training, a portion of the funds are "carved-out" and retained by a state-level body which then distributes the funds to GME programs based on state goals. Other alternatives to fund GME include surcharges on insurance premiums and/or medical licenses.

II. Expansion of Existing Medical School Capacity: Regional Medical School Campuses¹¹

Regional medical campuses are clinical campuses where third- and fourth-year medical students are educated with the following characteristics:

- ❑ The campus is geographically separate and does not serve as the medical school's primary clinical site for medical student education.
- ❑ The campus has an administrative tie to the office of the dean (not only with departmental ties).
- ❑ The campus offers four of the required third-year clerkships.

Branch campuses allow states to increase class sizes at existing medical schools and avoid the difficulties in starting new medical schools, such as: high start-up costs; local and state politics; turf battles among universities; and the reluctance of existing medical schools for new competition.

Regional campuses primarily focus on educational and clinical missions of the medical school. Not surprisingly, they generally have small research enterprises. 74 percent of respondents to a national survey of regional campuses indicated that they receive less than \$2.5 million in external research funding annually from all sources.

Benefits

To the Medical School:

- ❑ Allows focus on primary care and community settings
- ❑ Larger patient base – regional campuses are generally in larger, fast-growing population centers
- ❑ Broadened political network – additional campus expands the support of state legislators for the medical school; may serve as a buffer against the development of another medical school.

To the hospital

- ❑ Affiliation enhances the hospital's standing as an academic medical center
- ❑ Benefits in their marketing initiatives
- ❑ Recruitment of residents and faculty members

To the Local Community

- ❑ Increased physician supply
 - At many of the campuses visited—Binghamton, Fresno, Huntsville, Jacksonville, and Tulsa—significant percentages of local doctors were educated at the clinical site.
 - 50 percent of the residents in the UCSF-Fresno program remain in the area to practice medicine.
- ❑ Medical education program in the community also helps attract specialty physicians that the region might otherwise have difficulty recruiting – especially true in rural

¹¹ Mallon, William T., Many Liu, Robert F. Jones, Michael Whitcomb. *Mini-Med: The Role of Regional Campuses in U.S. Medical Education* (Washington, DC: Association of American Medical Colleges, 2003).

sites. Survey respondent from Fresno noted that the affiliation with UC-San Francisco at Fresno helps attract surgeons to the area.

Educational Experience at the Regional Campus

Benefits

- Students were positive and enthusiastic about the clinical experiences they had at the regional site.
 - Regional clinical campuses are a place for educational innovation.
 - Regional campuses offer small, personal learning environments.
 - Regional campuses offer hands-on training experiences.
 - Regional clinical campuses allow creativity and self-direction.
 - Regional campuses offer learner-focused culture.
 - Regional campuses can offer unique educational foci.

Drawbacks

- The educational experience is not as “academic”
 - Students cited concerns that the regional campus did not have the broad academic resources of the main campus.
 - Smaller library
 - Few electives
 - Fewer opportunities for research
 - Faculty didn’t maintain office hours
- Perception of different student outcomes
 - “Prestige” factor

Costs

- The cost of a regional campus model depends on how the campuses are organized structurally. There are two basic models:
 - “Ownership” model – Branch campus employs a sizable staff, operates their own buildings, and treats the regional dean as a full-time employee of the medical school. UF-Jacksonville is an example of this model. The chart on the following page shows the aggregate costs by source for the Gainesville and Jacksonville campuses.
 - “Contractor” model – Branch campus outsources the regional program to a hospital, medical center, or regional consortium. Under this arrangement, the regional dean is a full-time employee of the hospital, few or no university employees work at the regional site, and the university does not have a separate building or physical presence.

Summary Data from AAMC Annual Questionnaire on Medical School Financing
Gainesville & Jacksonville Campuses
2002/03

	Medical School Averages *	Gainesville	Jacksonville	Total
State Appropriations (1)	57,720,000 <i>10.96%</i>	54,644,685 <i>11.55%</i>	3,609,602 <i>2.31%</i>	58,254,287 <i>9.25%</i>
Grants & Contracts - Direct				
Federal	88,820,000	71,608,357	2,080,070	73,688,427
State	0	10,487,222	1,417,819	11,905,041
Other (2)	41,690,000	61,269,219	3,260,659	64,529,878
Total Grants & Contracts - Direct	130,510,000 <i>24.79%</i>	143,364,798 <i>30.29%</i>	6,758,548 <i>4.32%</i>	150,123,346 <i>23.84%</i>
Grants & Contracts - Indirect	36,270,000 <i>6.89%</i>	21,160,955 <i>4.47%</i>	975,340 <i>0.62%</i>	22,136,295 <i>3.52%</i>
Total Grants & Contracts	166,780,000 <i>31.68%</i>	164,525,753 <i>34.77%</i>	7,733,888 <i>4.94%</i>	172,259,641 <i>27.36%</i>
Practice Plans	189,580,000 <i>36.01%</i>	197,613,665 <i>41.76%</i>	133,647,817 <i>85.44%</i>	331,261,482 <i>52.61%</i>
Gifts & Endowments (3)	23,580,000 <i>4.48%</i>	11,873,634 <i>2.51%</i>	87,500 <i>0.06%</i>	11,961,134 <i>1.90%</i>
Hospital Support	65,590,000 <i>12.46%</i>	39,990,531 <i>8.45%</i>	11,346,077 <i>7.25%</i>	51,336,608 <i>8.15%</i>
Miscellaneous	23,280,000 <i>4.42%</i>	4,598,266 <i>0.97%</i>	0 <i>0.00%</i>	4,598,266 <i>0.73%</i>
Total Revenues	526,530,000	473,246,534 75.16%	156,424,884 24.84%	629,671,418
Total Expenses & Transfers	N/A	476,073,286 75.34%	155,797,659 24.66%	631,870,945
Excess (Shortfall)	N/A	\$ (2,826,752)	\$ 627,225	\$ (2,199,527)

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* Per Review of US Medical School Finances 2001/2002, AAMC website dated 01/04

(1) Includes HSC Overhead of approximately \$10.2 million, Jacksonville at \$3.6 million, Dentistry Lines at \$825,688

Other Units: Anatomical Board, Biotechnology, Brain Institute, Child Health, Neurobiology

(2) Includes UFF Research at approximately \$3.5 million & UFRF at \$31.8 million

(3) Represents Use of Funds - non research

Regional Campus Experience in Florida: UF-Jacksonville¹²

Attendance Patterns

- The average time spent in Jacksonville for third-year UF medical school students is about 20 percent of the year. Some third-year students never come to Jacksonville, and a small number may spend nearly the entire year there.

¹² Email response by University of Florida representatives

- ❑ There are a fixed number of Jacksonville slots for each rotation (currently approximately 26-28 in total for all third year rotations), and the students decide among themselves who will fill those slots.
- ❑ UF-Jacksonville students are always considered students of the University of Florida College of Medicine-Gainesville. All registration, evaluation management, grade assignment is done in Gainesville. There are no required fourth-year slots to be filled at the Jacksonville campus, but some students choose to be at the Jacksonville campus.

Impact on Class Size

- ❑ UF continues to underutilize the available slots for clinical education on the Jacksonville campus in many specialties.
- ❑ The most recent analysis indicated that the Jacksonville campus, with the current educational and clinical (although not administrative) resources available, could effectively educate 48 medical students for their entire third and fourth year in a true regional campus model (a total of 96 students).
- ❑ The chief obstacle to UF increasing its class size significantly is limited space for the first two years of medical school, not the clinical years.

Per Student Cost Differential Between Main and Regional Campus

- ❑ Insufficient data exists to answer this question.

Discussion questions:

Given the apparent benefits and lower costs (less overhead) of regional medical campuses, why have they not been embraced more in Florida?

Discuss the interplay between an urban (or rural) regional medical campus and an associated residency program. Can the expansion of regional campuses in high need urban and rural areas across the state—linked with residency programs—be an effective way of shifting students for clinical education and training in underserved areas, with the promise (due to the residency program tie-in) of students remaining in-state to practice? What are the disadvantages or impediments to such a model?

Given that UF cites the chief obstacle to class size increases as the limited space for the first two years of medical school, should the state encourage the expansion of PIMS programs (not clinical regional campuses as discussed above) that allow medical students to be educated at an affiliated institution for the first two years of medical education as a means to increase physician supply? What are the disadvantages to this approach?

Responses from Meeting Participants

The meeting participants identified many disadvantages to the use of regional campuses (basic science PIMS programs (years 1 and 2) or clinical programs (years 3 and 4)) as a means to expand medical school capacity. First, one committee member noted that teaching of medical school students is more integrated today than the traditional model of teaching basic sciences in the first two years and clinical experience in years 3-4. Since the curriculum is more integrated, the

traditional PIMS programs have begun to shrink nationwide, according to this member. There are about 8 PIMS programs nationwide, with one program in Florida between UM and FAU. Second, the major impediment to regional campuses is the difficulty of accreditation. It is difficult to maintain the continuity and same level of quality of education between the main campus and the branch. Another difficulty noted was the ability of the main campus to manage the regional campus. Keeping the lines of communication open between the two campuses was seen as vital.

A concern was also raised on the ability to find faculty at regional sites to educate the medical students. It was noted that in the first year of medical school, with its focus on basic sciences, about 40 percent of the faculty are clinical (have M.D.'s). By the second year, that figure rises to about 90 percent of faculty. Therefore it is easier to branch out for first year medical education. However, as one progresses along the medical school track, it becomes increasingly difficult to maintain the necessary clinical faculty at regional sites unless there is already a critical mass of clinical faculty in place. Representative from UF cited difficulty in managing the second year of education at their former PIMS program with FSU, given these constraints.

Some committee members felt that regional campuses are clearly less expensive. However, there are many requirements that must be fulfilled (e.g., clinical faculty in place) in order for a regional campus to succeed. There was considerable debate as to whether regional campuses are indeed less expensive.

Representative from UF indicated that UF medical students spend on average 25 percent of the third year at the Jacksonville regional campus (representing 6 percent of their time overall in medical school). The Jacksonville campus' budget amount represents about the same percentage (6 percent) of UF's overall medical school budget. The lower cost figures presented for UF-Jacksonville campus compared to UF-Gainesville campus (page 11) reflect the small amount of time UF medical school students spend at the regional campus.

The UF representative does not believe that it is cheaper to educate using this approach. The cost of educated medical students increases as the years of education progress. UF notes that it costs about \$12,000/student to educate a student in his/her first year. That cost escalates to about \$80,000/student in year three, given the intensive clinical education and one-on-one faculty training. Given this escalating cost, regional clinical campuses (years 3 and 4) are more expensive to operate than regional year 1 and 2 programs.

Some representatives felt that distance between the main campus and a regional campus was not a major barrier to the success of the regional campus. Rather the key for success was attitude and willingness of both campuses to work together. With an amicable working relationship, regional campuses can overcome the difficulties of reaching accreditation and provide an equivalent, not exact, educational experience. A committee member indicated that the situation is analogous to distance education. If the expertise, willingness, and technology is available, the regional or satellite educational offerings can be successful.

The statement was made that two-year regional campuses, if they have adequate local resources, evolve into independent medical schools over time (e.g., University of Illinois). Another factor regarding the faculty is if faculty are transferred from the main campus to the regional campus, distance is a considerable factor. However, as mentioned earlier, for a regional campus to succeed, a critical mass of clinical faculty must be in place at the regional site.

Expansion under one campus eases concerns over maintaining program control and ensuring that all students have the same educational experience. However, using regional campuses or partner institutions provides expanded opportunities to students at the regional sites who may be place-bound. Partnerships spread the wealth of medical education statewide. Questions were raised as to whether regional campuses in Florida (in the PIMS mold) placed more physicians in the regional campus' area. It is too early to tell for the UM/FAU partnership. However, the former UF/FSU PIMS program, which lasted 30 years, did not place any more students in the Florida Panhandle nor did more students go into primary care. The experience at the Jacksonville clinical campus for UF students provides the students with a new experience and different mix of patients. However, unlike true 3-4 year clinical campuses, third year UF students go to the Jacksonville campus on clinical rotations for a temporary period. Though clinical campus experiences in other states have shown that a relatively solid to high percentage of students at regional clinical campuses remain in the area for residency training and given high retention rates may remain to practice there as well, since the UF Jacksonville campus is not a fully year 3-4 clinical campus, it is difficult to determine whether a greater number of students remain in the clinical campus area for residency training. The UF Jacksonville campus is more of an affiliated hospital site than a clinical regional campus.

III. The Use of State Scholarships and Loan Forgiveness Programs

- From the late 1980's to the mid 1990's state scholarship and loan repayment programs more than doubled from 39 programs in 1990 to 82 programs in 1996, with an estimated 1,306 physicians and 370 midlevel practitioners serving across all state programs in 1996.¹³
- These state programs shared a mission to influence the distribution of the health care workforce within their states' borders, an emphasis on primary care, and reliance on annual state appropriations and other public funding mechanisms.¹⁴
- There are various recruitment incentive programs currently in law in Florida. However, these programs have not been funded in recent years.
 - **Florida Health Service Corps (381.0302, F.S.)** – Provided primary care physicians and select other health professionals up to \$25,000 a year plus a 39 percent tax subsidy in exchange for service in a Health Professional Shortage Area (HPSA) for a minimum of 2 years. Program funding ended in June 1996.
 - **Medical Education Reimbursement and Loan Repayment Program (1009.65, F.S.)** – Provided primary care physicians and select other health professionals up to \$20,000 per year in loan repayment for service in a HPSA for a minimum of 2 years. Program is currently not funded.
 - **The National Health Service Corps (NHSC) State Loan Repayment Program** requires a state to provide matching funds on a dollar-for-dollar basis. Currently no matching funds are appropriated.
- The federal National Health Service Corps (NHSC) Scholarship program and Loan Repayment Program both provide physicians and other select health professionals with incentives to serve in federally designated shortage areas.
- Such programs, and in particular the NHSC, have been criticized over the years because a relatively small percentage of those assigned remain in underserved areas for long periods after their obligations.
 - Between 1991 and 1993, 48 percent of NHSC loan repayment recipients and 27 percent of scholarship recipients were still at the site where they completed their service one year after fulfilling the program requirement.¹⁵
 - Obstacles to retention include¹⁶:
 - Non-competitive incomes;
 - Lack of clinical and administrative support;
 - “Burnout” in small practices; and
 - Conflicts over health center management and working conditions

¹³ Pathman, Donald, et al. *State Scholarship, Loan Forgiveness, and Related Programs: The Unheralded Safety Net*. Journal of the American Medical Association, Volume 284 (16): 2084-2092, October 2000.

¹⁴ Ibid

¹⁵ General Accounting Office. (1995). *National Health Service Corps: Opportunity to Stretch Scarce Dollars and Improve Provider Placement*. GAO/HEHS-96-28.

¹⁶ *Tenth Report: Physician Distribution and Health Care Challenges in Rural and Inner-City Areas*. Council on Graduate Medical Education, February 1998.

Discussion question: Though obstacles to retention remain, scholarship and loan repayment programs do provide a supply of physicians and other health professionals to underserved areas. What are the advantages and disadvantages of Florida resuming funding for state programs already in statute as a means to deal with a physician shortage and physician distribution problems?

Responses from Meeting Participants

It was stated at the meeting that if the goal was to attract Florida medical school graduates to Florida residency programs who might not be inclined to stay in Florida otherwise, an effective approach would be loan forgiveness programs. However, it was also noted that when the programs were funded at the state level, the amount of funding was insufficient to make a difference. Others mentioned that problems remain with physicians remaining in the underserved areas once the service obligation is fulfilled.