

## Medical Education Needs Analysis



Council for Education Policy,  
Research and Improvement

---

### Charge

---

In a letter dated March 29, 2004 to the Council for Education Policy, Research and Improvement (CEPRI), Carolyn K. Roberts, Chair of the Board of Governors, requested that CEPRI “define the parameters of a model to be used to quantify the adequacy of the State’s physician workforce; project the extent to which a physician shortage exists and to develop cost/benefit estimates of various alternatives to produce the required number of additional physicians including but not limited to: expanding the capacity of existing medical schools, creating new medical schools, expanding or creating new residency programs and other incentive programs to attract physicians to Florida.”

The letter called upon CEPRI to “define the parameters of the model in collaboration with an advisory committee including representatives of the Council of Florida Medical School Deans, the Graduate Medical Education Committee, and representatives from other interested public universities. Upon completion of the definition of the model’s parameters, the model shall be developed in collaboration with The Bureau of Economic and Business Research of the University of Florida, under contract with the Department of Education.”

---

### Study Activities

---

Under the direction of CEPRI Chairman Dr. Akshay Desai, an advisory committee was convened to complete the tasks outlined in the Board of Governors’ charge. The committee met in June, August, and September of 2004. Over the course of three meetings, a matrix of parameters to assess physician workforce needs was developed. Additionally, various alternatives to address the need for additional physicians were discussed. The recommendations contained within this report are a product of the deliberations of this advisory committee.

<http://www.cepri.state.fl.us>

The Council for Education Policy, Research and Improvement (CEPRI) was created as an independent office under the Office of Legislative Services by the 2001 Legislature (Section 1008.51, Florida Statutes). The Council serves as a citizen board for independent policy research and analysis and is composed of five members appointed by the Governor and two members appointed by Speaker of the House and two members appointed by the President of the Senate.

---

November 2004

---

#### *The Council’s full report:*

*The full report, containing a more detailed discussion of the issues, is available at CEPRI’s website: <http://www.cepri.state.fl.us>*

---

# Policy Recommendations

---

---

## Assessing the Adequacy of the Physician Workforce

---

### Quality and Availability of the Data

#### POLICY RECOMMENDATION 1

*The Legislature should enact the Florida Health Care Practitioner Workforce Database, as outlined in House Bill 1075 and Senate Bill 1154 from the 2004 Legislative Session. The database would serve as the official statewide source of valid, objective and reliable data on the physician workforce.*

In Florida, attempts to assess the adequacy of the physician workforce have been hindered by the lack of available, reliable data. Under current law (Chapters 456, 458, 459, 460, and 461, F.S.) medical licensure applicants are required to submit specified information as a prerequisite to licensure. Additionally, Section 456.039, F.S., created the Practitioner Profile, under which each licensed medical physician, osteopathic physician, chiropractic physician, and podiatric physician is required to submit specific data to the Department of Health that is then compiled and made available to the public.

Though the information collected seems vast, there are considerable concerns with the data quality, and there is other information of use to adequately assess the physician supply in Florida that is not collected. Most importantly, much of the data is based on self-reported responses to questionnaires. Most of the information is not standardized for analysis nor verified for accuracy. The burden of verification for the Practitioner Profile information is placed on a physician, who has thirty days to correct any factual inaccuracies. Given that the data contained in the Practitioner Profile is collected at the point of initial licensure, much of the information that is subject to change at any time (e.g., practice locations) is not likely to be accurate unless a physician initiated an update to his/her information.

### Parameters of a Model

#### POLICY RECOMMENDATION 2

*As more reliable data becomes available, state policymakers should develop a model to quantify the adequacy of the state's physician workforce taking into account the following factors: demographics, physician practice status, specialty, place of education and training, quality of care and safety of practice, service delivery conditions, generational changes, public perception, population growth, economic indicators, and issues of the "pipeline" into medical education.*

Because of concerns over the quality and availability of data, the advisory committee and staff determined that the development of a model to accurately assess the adequacy of the physician

workforce in the state was not possible at this time. However, the advisory committee developed a framework for such a model once the necessary data became available. The committee identified the following series of supply and demand factors that should be taken into account to accurately assess the adequacy of the state's physician workforce.

## SUPPLY

### ***Demographics***

- Florida has the oldest physician workforce in the nation (26% over the age of 65 and 10% under the age of 35).
- Studies indicate differential work patterns between female and male physicians.

### ***Physician Practice Status***

- The amount of time physicians devote to active practice is currently unknown.

### ***Specialty***

- No central data source exists in Florida for all medical specialties.
- Despite Florida's relative high ranking in terms of the number of physicians, shortages by specialty may exist.

### ***Place of Education and Training***

- Florida currently imports about 80 percent of all its physicians from other states and countries.

### ***Quality of Care and Safety of Practice***

- Medical education and training is inconsistently regulated in foreign countries.
- Continuing the process of attracting foreign-trained physicians to meet the demand for additional physicians in Florida faces the challenges of more stringent licensing requirements and restrictions on immigration.

### ***Service Delivery Conditions***

- Environmental constraints on practice — most notably geographic distribution and malpractice insurance costs — hinder the ability of physicians to locate in Florida, practice certain specialties, and be trained in certain specialties.
- A nationwide survey of medical students found that 50% indicated the current medical liability environment was a factor in their specialty choice; 39% said it affected their decision about which state they would like to complete residency training.

### ***Generational Changes***

- Younger medical students/residents are less likely to work long hours and more likely to change careers.

### ***Public Perception***

- The subjective element of public perception plays a role in assessing the need for additional physicians given the appeal of having a medical school or teaching hospital in one's local community.

## DEMAND

### ***Population Growth***

- Florida continues to be one of the fastest growing states in the country — projected to grow by about 9.5 million residents (or approximately 60 percent) between 2000 and 2030.
- Over that same time period, the elderly population in the state is projected to grow by 124% — largest increase among all age groups.
- Given this growth, it is clear that there will be an increased demand for medical services in the foreseeable future.

### ***Economic Indicators***

- Casual links have been established between the nation's wealth, its demand for health services, and the demand for health professionals to deliver those services.
- With Florida's economy continuing to grow at a steady clip, increased demands for health care services are likely to follow.

### ***Issues of the "Pipeline" into Medical Education***

- Questions have arisen as to whether there are enough "qualified" Florida applicants to fill any expansion in medical school capacity.
- Analysis demonstrated that in 2003, based on GPA and MCAT scores, only 452 of the 1,505 Florida applicants to a U.S. medical school were deemed "qualified".

---

# Policy Recommendations

---

---

## Alternatives to Address a Physician Workforce Shortage

---

Though the actual shortage of physicians cannot be estimated accurately at this time, all indications are that a shortage either does or will exist in Florida in the near future, given:

- The low number of residency positions per 100,000 state population in the state (Florida ranks 46th)
- The heavy reliance on International Medical Graduates (IMGs) to meet the demand for physicians in the state
- The continued growth of Florida's population, most notably the elderly population
- The age of Florida's physicians (Florida has the oldest physician population in the country).

The committee identified three basic approaches available to address the immediate and/or impending physician shortage in Florida: expanding residency positions, using incentives to attract additional physicians to the state, and expanding medical school capacity.

### The Expansion of Residency Positions

#### POLICY RECOMMENDATION 3

*To address the immediate and/or impending physician shortage in the state, the State of Florida should **first** pursue a policy of creating and expanding medical residency positions in the state.*

#### POLICY RECOMMENDATION 4

*Given the federal funding limitations on the expansion and creation of residency positions, the Legislature should provide direct state funding for the residency positions at a rate no less than half of the average estimated direct cost for residency training. Funding for residency positions should be targeted to areas of on-going critical need to the state.*

Expanding residency opportunities in Florida provides the most immediate impact to increasing the physician workforce in Florida. Compared to expanding medical school capacity, expanding residency training positions provides a quicker turnaround for producing licensed practicing physicians (3-5 years compared to 7-10 years for an incoming medical student). Additionally, residency completers are more likely to remain in-state to practice than medical school graduates. Analysis found that 61 percent of residency completers remained in Florida to practice, compared to 49 percent of Florida medical school graduates.

The single largest impediment to using this approach to alleviate a physician shortage is the lack of funding available for residency positions. Given that federal funding, the largest explicit funding source for residency training, has been effectively frozen since 1997, funding from other sources, such as the state, would need to be targeted to promote the expansion and/or creation of new residency programs.

Increasing residency positions is a less expensive option and more immediate option for the state to increase the number of physicians practicing in the state. There are a few concerns to solely using residency positions as an option to address an immediate or impending physician shortage, though. Even with the addition of state funding, the establishment of residency programs remains a difficult proposition given the difficulty hospitals face in gaining accreditation and the necessity to find additional funds to support the program. Federal funding is strictly limited to new hospitals, hindering the ability of existing programs to expand. There is the concern of finding health care providers willing to offer residency training, given service delivery concerns (e.g., PLI rates), and able to offer residency training given the critical mass of clinical faculty and educational infrastructure needed to support such programs.

However, Florida has a large window of opportunity to grow in terms of the number of residency positions available, ranking 46<sup>th</sup> among the states in allopathic and osteopathic residency positions. Though there are enough first residency positions to support all of Florida's medical school graduates today, this will not likely be the case in the near future, especially in non-surgical specialties, given the enrollment increases occurring at existing schools, the growth of the Florida State University College of Medicine, and the new branch of the Lake Erie College of Osteopathic Medicine in Bradenton. Based on expansion that has already occurred in Florida, without added residency positions Florida medical school graduates, of whom about 60 percent already leave the state for residency training, will have fewer opportunities to choose from to remain in Florida to train. The consequence of this is the state will produce more medical school graduates, yet more will train out-of-state, and are less likely to return to Florida to practice.

## The Use of Incentives to Attract Physicians to Florida

### POLICY RECOMMENDATION 5

***The Legislature should provide funding to the Florida Health Service Corps (381.0302, F.S.) and the Medical Education Reimbursement and Loan Repayment Program (1009.65, F.S.) as a means to immediately provide physicians to critically underserved areas.***

There are various recruitment programs currently in law in Florida designed to influence the distribution of physicians within the state and steer medical students to fields of critical need (e.g., *Florida Health Services Corps (381.0302, F.S.) and Medical Education Reimbursement and Loan Repayment Program (1009.65, F.S.)*). However, these programs have not been funded in recent years.

Scholarships and loan forgiveness programs are useful tools to attract physicians to these underserved areas. Concerns remain over the value of these programs placing physicians in these areas long-term. Though that concern is valid, an active program of scholarships or loan forgiveness could provide a steady stream of new physicians to the area replacing those who leave once their obligations are fulfilled. These programs can be especially attractive to recent graduates given the exploding growth in the debt burden of medical students. As tuitions have increased at Florida's medical schools, student debt loads have increased. The average debt for Florida's graduating medical students is \$90,000, and 90 percent of all medical graduates have debt.

## The Expansion of Medical School Capacity

### POLICY RECOMMENDATION 6

*The expansion of medical school capacity should be pursued only after policies to immediately address a physician shortage have been implemented (increasing residency positions and funding scholarship and loan forgiveness programs).*

### POLICY RECOMMENDATION 7

*When expansion of medical school capacity is pursued, the options of expanding existing medical school capacity, establishing regional partnerships, and establishing new medical schools should be prioritized based on cost-efficiency.*

Florida's relatively low rank nationally on the number of medical school seats to state population indicates that the state has room to grow in providing opportunities of medical education to its residents. However, given the time required for an incoming medical student to reach full licensed physician status is approximately seven to ten years (compared to 3 to 5 years for residency program completers), the likelihood that only about half of Florida's medical school graduates will remain in-state to practice (compared to 61 percent of residency program completers), and the growing lack of residency opportunities for Florida medical school graduates, any further expansion of medical school capacity before residency positions are increased would not result in any significant increase in the number of physicians actively practicing in Florida. In the long-term, the ideal would be an expansion of residency positions and medical school seats. However, for an immediate impact in increasing the number of physicians in Florida, the policies of increasing residency positions and the use of loan-forgiveness and scholarship programs are the most effective options for the state to pursue.

The expansion of medical school capacity either through expansion at existing sites, regional campuses, or new medical schools each come with their own advantages and disadvantages. ***Expansion at existing schools*** provides no concerns over building a strong reputation to attract students. The existing medical schools in Florida already, through time, have established strong reputations by which to attract students. Additionally, expansion at existing medical schools requires less capital expense than the establishment of branch campuses or new schools. ***Expanding through regional branch campuses*** allows students to train with more varied patient loads and health care delivery settings. Also, branch campuses provide access to medical education in parts of the state not served by a medical school, without the increased expense of starting a new school. However, expansion of medical school capacity through branch campuses raises concerns over accreditation. There is a difficulty in maintaining a parallel educational experience between the main and regional campuses and finding enough faculty at a regional site. Additionally, success of a branch campus requires a willingness of multiple institutions to partner. ***Expanding medical school capacity through new medical schools*** provides economic benefits to the local community and state with increased job opportunities and tax revenue. Also, a medical school enhancing the prestige of the local institution, and as with regional campuses, provides access to medical education in other areas of the state. However, starting a new medical school is a costly option requiring start-up capital expenses, the hiring of new faculty and administrators, and a heavier reliance on state general revenue to support medical education than existing, established schools.

**Please visit our website at <http://www.cepri.state.fl.us> for the full report**