

COUNCIL FOR EDUCATION POLICY, RESEARCH AND IMPROVEMENT

MEDICAL EDUCATION NEEDS ANALYSIS

**Parameters for a Model to Quantify the Adequacy of the Physician Workforce
(as identified by the Medical Education Needs Analysis Advisory Committee)**

NOTE: *The original charge from the Board of Governors asked CEPRI, in collaboration with an advisory committee, to define the parameters of a model to be used to quantify the adequacy of the State's physician workforce. Advisory committee deliberations over three meetings led to creation of the following matrix.*

Additionally, the charge called for a model to be developed using the parameters defined by the advisory committee. Following discussions of the committee, it was determined that a model could not be created given the lack of data currently available. The committee strongly endorsed the creation of the Florida Health Care Practitioner Workforce Database (HB 1075 and SB 1154, from the 2004 Legislative Session). This database would serve the central state repository for data on physicians in Florida, providing information including: demographic indicators, location of practice, amount of time spent in patient care, as well as information on place of training.

SUPPLY

Concept	Issues	Model Parameters	Data Availability
Demographics Age Race/Ethnicity Gender	<ul style="list-style-type: none"> ➤ Florida has the oldest physician workforce in the nation (26% over the age of 65, and 10% under the age of 35). ➤ Florida has a very ethnically diverse population, yet minorities are underrepresented in the physician workforce. ➤ Females make up a greater percentage of medical school graduates than in the past <ul style="list-style-type: none"> ➤ Study of the physician workforce in Canada shows that women practice at a lesser rate than men at younger ages (30 to 50), but after age 50, women practice at higher rates than men. 	As proposed by the Florida Health Care Practitioner Workforce Database (referred to as “database”) (HB 1075 and SB 1154): <ul style="list-style-type: none"> ➤ Licensed physicians by age, race/ethnicity, and gender ➤ Florida medical school graduates by age, race/ethnicity, and gender ➤ Completers of Florida graduate medical education (i.e., residency) programs by age, race/ethnicity, and gender ➤ Account for differences in expected workload between physicians by gender 	<ul style="list-style-type: none"> ➤ Licensure data from the Board of Medicine and the Board of Osteopathic Medicine and practitioner profile data collected by the Department of Health currently provide basic demographic indicators for licensed physicians. ➤ There are data quality concerns: <ul style="list-style-type: none"> ➤ Information is self-reported in a non-standardized form.
Physician Practice Status	<ul style="list-style-type: none"> ➤ Workforce needs analysis must focus on physicians involved in patient care. 	As proposed by database: <ul style="list-style-type: none"> ➤ Percentage of time physicians are involved in patient care ➤ Expected changes in the amount of patient care or services within the licensure renewal period (2 years) ➤ Indication of approximate date of expected retirement 	<ul style="list-style-type: none"> ➤ Data on physician practice status not currently available. ➤ Status of the license (active, inactive) known; whether physician is practicing unknown.

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Specialty	<ul style="list-style-type: none"> ➤ Florida ranks 16th in overall total physicians-to-100,000 population. ➤ Ranking on overall physicians per 100,000 population masks shortages that may exist by specialty. 	<ul style="list-style-type: none"> ➤ Number of physicians by specialty <p>As proposed by database:</p> <ul style="list-style-type: none"> ➤ To provide a clear identification of physicians by specialty, data provided by licensure applicants should include an indication of principle area(s) of practice; date of initial board certification; and date of most recent re-certification. ➤ For Florida medical school graduates: <ul style="list-style-type: none"> ➤ Type of graduate medical education program graduates plan to enter ➤ Identification of type of programs during postgraduate year 1 and year 2 for graduates entering preliminary or transitional positions during postgraduate year 1 	<ul style="list-style-type: none"> ➤ No central data source currently exists for all specialties.

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Place of Education and Training	<ul style="list-style-type: none"> ➤ One approach to dealing with a physician shortage is to attract more trained physicians practicing in other areas to Florida. ➤ Florida currently imports four-fifths of all its physicians from other states and countries. 	<p>As proposed by database: Data elements indicating the path physicians followed to get to Florida:</p> <ul style="list-style-type: none"> ➤ Location of medical school attended – using standard codes to prevent misidentification ➤ Location of graduate medical education program – requiring license applicants to indicate the state and country of training ➤ Location of previous employment 	<ul style="list-style-type: none"> ➤ Data currently collected by the Department of Health’s practitioner profile database on physician’s medical school, its location and the location of graduate medical education training are self-reported by physicians to an open-ended questionnaire which is not standardized for analysis. ➤ Projections of the number of Florida medical school graduates for the next few years

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Quality of Care and Safety of Practice	<ul style="list-style-type: none"> ➤ Medical education and training is inconsistently regulated in foreign countries. ➤ International Medical Graduates (IMGs) account for 35% of Florida's physician workforce; with a greater dependence on IMGs in certain parts of the state (47% in South Florida). ➤ Like specialty, ranking on overall physicians per population masks the quality of training of the physicians ➤ Licensing requirements should not be relaxed to increase the number of physicians. Florida already has lesser requirements than other states (e.g., only requiring one year of residency training, as opposed to three) – raising potential concerns over quality of care. 	<ul style="list-style-type: none"> ➤ Number of IMGs, future projections <p>As proposed by database:</p> <ul style="list-style-type: none"> ➤ Location of medical school and graduate medical education program – requiring license applicants to indicate the state and country of training ➤ Account for hypothetical changes in licensing requirements 	Licensure data, but data quality concerns remain

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<p>Service Delivery Conditions</p> <ul style="list-style-type: none"> ➤ Malpractice Insurance Costs ➤ Geographic Location of Practice 	<ul style="list-style-type: none"> ➤ Concerns over issues of malpractice insurance costs hinders the ability of doctors to locate in Florida, practice certain specialties (e.g., OB/GYN), and be trained in certain specialties. ➤ Increased Professional Liability Insurance (PLI) rates effects medical schools in the following ways: <ul style="list-style-type: none"> ➤ Challenge with preceptors (pre-doctoral students on clinical rotations) – there is a perception of increased liability risk for physicians who take these students. ➤ Potentially decreases training of medical students in certain specialties. ➤ Decreased potential interest of medical school students taking a residency in Florida because of malpractice insurance cost concerns. ➤ Issues continue to remain about the availability of doctors in underserved (rural, inner-city) areas. 	<p><u>Location of practice</u></p> <ul style="list-style-type: none"> ➤ Number of physicians by area (underserved locations) <p>As proposed by database:</p> <ul style="list-style-type: none"> ➤ Information on secondary practice location(s) and the approximate percentage of time spent in practice at each location. This would provide an indication of physician coverage of different geographic areas. <p><u>Malpractice Insurance Costs</u></p> <ul style="list-style-type: none"> ➤ Account for hypothetical changes in malpractice insurance rates and policies 	<p><u>Location of Practice</u></p> <ul style="list-style-type: none"> ➤ Department of Health currently gathers data necessary for recommending areas for designation by the federal government as health professional shortage areas. ➤ Physicians are currently required to submit data on primary practice location.

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Public Perception	<ul style="list-style-type: none"> ➤ Having a medical school located in the community will have great appeal to a local area (e.g., local pride, heightened perception of the local institution and community) 	<ul style="list-style-type: none"> ➤ Difficult to quantify 	<ul style="list-style-type: none"> ➤ Surveys
Generational Changes	<ul style="list-style-type: none"> ➤ Younger medical students/residents are less likely to work long hours and more likely to change careers. 	<ul style="list-style-type: none"> ➤ Physicians by age group ➤ Account for the workload patterns of younger physicians 	<ul style="list-style-type: none"> ➤ Licensure data for age of physicians, but data quality concerns remain

DEMAND

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Population Growth	<ul style="list-style-type: none"> ➤ Florida is one of the fastest growing states in the country, and some areas of the state are especially growing at a large rate. 	<ul style="list-style-type: none"> ➤ Population growth (per 100,000) <ul style="list-style-type: none"> ➤ Statewide ➤ By region ➤ By age category ➤ By race/ethnicity ➤ By socio-economic status 	<ul style="list-style-type: none"> ➤ Data available on population growth projections statewide and regionally (e.g., US Census)
Economic Indicators	<ul style="list-style-type: none"> ➤ Studies have shown (e.g., Cooper et al.) due to a high correlation between the size of the economy and the number of physicians in the United States, there are causal links between the nation's wealth, its demand for health services, and the demand for health professionals to deliver those services. 	<ul style="list-style-type: none"> ➤ Gross Domestic Product (GDP) per capita as an indicator of the size of the economy. 	<ul style="list-style-type: none"> ➤ Data available

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Issues of the “Pipeline” into Medical Education	<ul style="list-style-type: none"> ➤ If medical school capacity is increased in Florida, are there enough “qualified” Florida applicants to fill the expanded slots in medical school? 	<ul style="list-style-type: none"> ➤ Number of Florida applicants to any medical school in the country: <ul style="list-style-type: none"> ➤ By MCAT score threshold ➤ By GPA 	<ul style="list-style-type: none"> ➤ Data available from American Association of Medical Colleges (AAMC).