Florida Department of Health

Physician Workforce
Annual Report **2010**
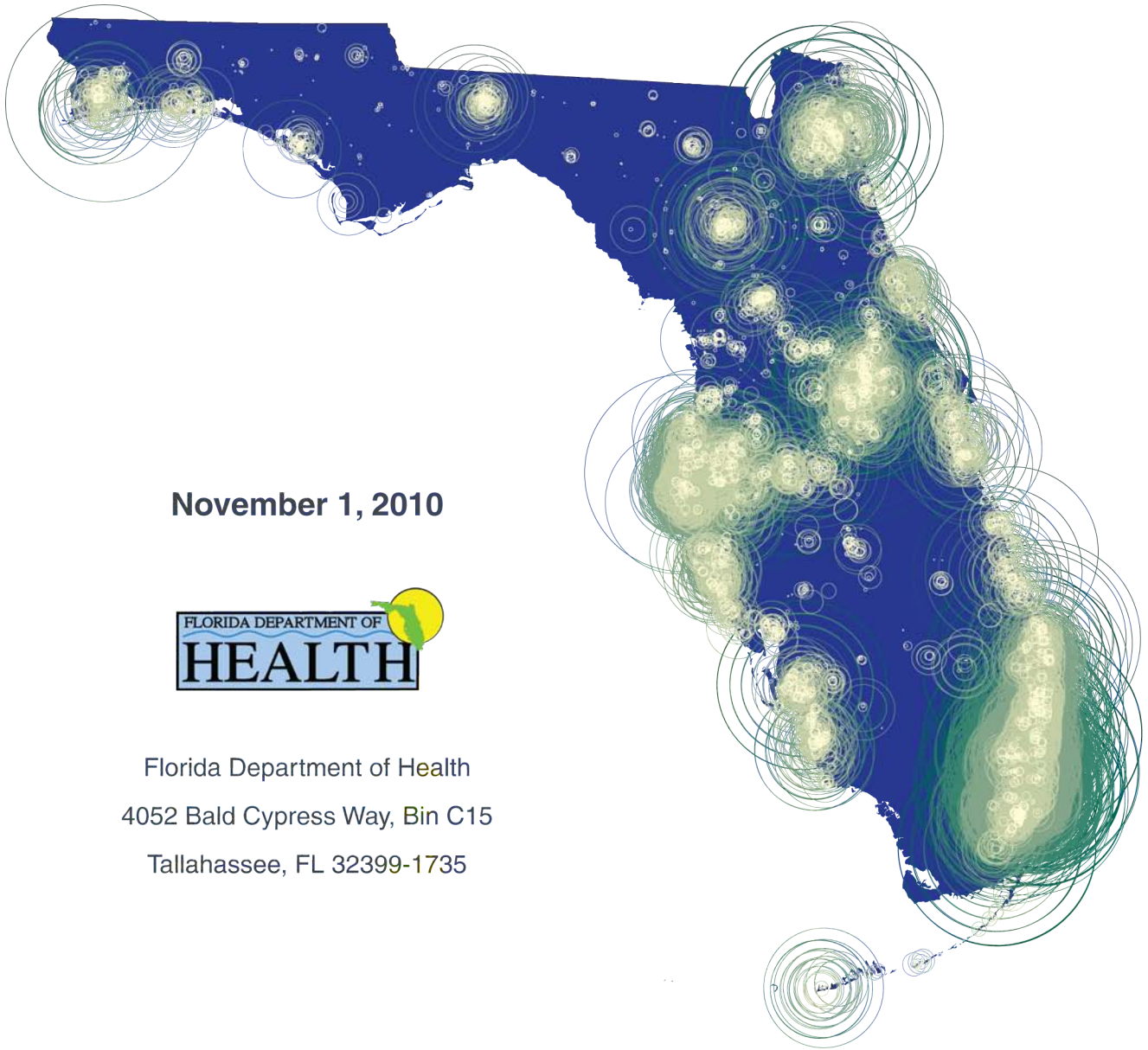
November 1, 2010

FLORIDA DEPARTMENT OF
HEALTH

Florida Department of Health

4052 Bald Cypress Way, Bin C15

Tallahassee, FL 32399-1735

Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Charlie Crist
Governor

November 1, 2010

To: The Honorable Charlie Crist, Governor
          The Honorable Jeff Atwater, Senate President
          The Honorable Larry Cretul, House Speaker

This past year has been one of discovery and growth for the Department of Health in its efforts to achieve a healthier future for all Floridians. New legislation passed this year that allows the Department to seat a 19-member advisory council to address physician workforce issues, renewing the charge to the Ad Hoc Committee members and healthcare stakeholders to develop and implement strategies to ensure a dynamic and comprehensive physician workforce focused on health care access across the state. Additional legislation in 2010 also expands the scope of the Department's physician workforce reporting, which will be reflected in this, the third Physician Workforce Annual Report. Also of note, legislation passed authorizing the expanded practice by retired military physicians in areas of critical need.

Any discussion of the pivotal role of Florida's military veterans turns my thoughts to the loss of our stalwart friend and ally, Admiral LeRoy Collins, Jr. He was instrumental in the collaboration of a group of policymakers, educators and physician workforce stakeholders who developed and implemented strategies to change state and federal healthcare policy. Admiral Collins understood that in these uncertain times we must collaborate, consolidate resources and move towards solutions.

Admiral Collins' untimely death has saddened all of us fortunate enough to have known him—to know him was to admire his natural leadership, his unflagging loyalty to his fellow military veterans, his determination to aid Floridians in need, and his many years of service to state and country. It is to that end that I dedicate this report to the memory of Admiral Collins and, in his honor, reaffirm the Department's commitment to improve healthcare access for all.

On behalf of the Department and its stakeholders, thank you for your unwavering support of the physician and healthcare practitioner workforce efforts.

Sincerely,

Ana M. Viamonte Ros, M.D., M.P.H.
Chairperson, Physician Workforce Advisory Council
State Surgeon General, Florida Department of Health

Contents

Preface

Pursuant to Sections 381.4018, 458.3192 and 459.0082, Florida Statutes, the Department of Health is responsible for assessing the state's current and future physician workforce needs and preparing an annual report on the physician workforce in Florida. This report is provided to the Governor, the President of the Senate, and the Speaker of the House of Representatives annually on November 1.

The Department presents the 2010 Physician Workforce Annual Report, established in section 381.4018, Florida Statutes. The recommendations are based on the collaborative effort of the committee and do not necessarily represent those of the State Surgeon General or the Florida Department of Health. Also presented in this report is an analysis of the Physician Workforce Survey, which presents data by geographic area and specialty physicians, who:

- Perform deliveries of children.
- Read mammograms and perform breast-imaging-guided procedures in this state.
- Perform emergency care on an on-call basis for a hospital emergency department.
- Plan to reduce or increase emergency on-call hours in a hospital emergency department.
- Plan to relocate outside the state.
- Practice medicine.
- Plan to reduce or modify the scope of their practice.

Acknowledgments

PHYSICIAN WORKFORCE ADVISORY COUNCIL MEMBERS

The Department of Health extends a sincere thank you to those who give so generously of their time and talents to ensure the success of physician workforce planning in Florida.

Organization	Appointee
Designee from DOH who is a physician and recommended by SSG	**Joanna Drowos, D.O.** Florida Department of Health Palm Beach County Health Department Senior Physician Center Director, Riviera Beach Health Center
SSTRIDE recommended by AHEC	**Les Beitsch, M.D., J.D.** Associate Dean for Health Affairs Florida State University College of Medicine
Dean Allopathic	**Robert Watson, M.D.** Executive Associate Dean Florida State University College of Medicine
Dean Osteopathic	**Jim Howell, M.D.** Chair, Department of Rural Medicine Nova Southeastern University College of Osteopathic Medicine
FHA-Licensed Hospital, GME Program, Not Statutory Teaching Hospital	**Michael Epstein, M.D.** Senior Vice President for Medical Affairs All Children's Health System
Statutory Teaching Hospital-Teaching Alliance	**Mathis Becker, M.D.** Director of Professional Relations USF Health Administrative Liaison to Vice Dean for Clinical Affairs University of South Florida College of Medicine
Family Practice Hospital-Council of Family Medicine and Community Teaching Hospitals	**Edwin Prevatte, M.D.** Residency Program Director Halifax Health Medical Center
FMA-Primary Care	**Karl Altenberger, M.D.**

FMA Non-Primary Care   **Ed Homan, M.D.**
                                        Assistant Professor Orthopedic Surgery
                                        University of South Florida College of Medicine

FOMA-Primary Care   **Nicole Sirchio, D.O.**
                                        Family Doctor of Spring Hill
                                        Immediate Medicare

FOMA-Non Primary Care   **Paul Seltzer, D.O.**
                                        Orthopedic Surgeon

GME Program Director- Allopathic   **Diane Davey, M.D.**
                                        Asst. Dean, Graduate Med. Ed./Prof. of Pathology
                                        Clinical Sciences Faculty
                                        University of Central Florida College of Medicine
                                        Orlando VAMC

GME Program Director-Osteopathic   **Mark Gabay, D.O.**
                                        Pediatric Residency Program Director
                                        Allopathic Pediatric Residency Associate Program
                                        Director
                                        Nova Southeastern University
                                        Miami Children's Hospital

Florida Association of Community   **Anita Riels, CEO**
Health Centers   Palms Medical Group

Florida Academy of Family Physicians   **Sandra Argenio, M.D.**
                                        Mayo Clinic, Jacksonville
                                        Family Medicine

Florida Alliance for Health Profes-   **Alma Littles, M.D.**
sions Diversity   Senior Associate Dean for Medical Education and
                                        Academic Affairs
                                        Florida State University College of Medicine

SUS system   **R.E. LeMon, Ph.D.**
                                        Florida Board of Governors
                                        State University System of Florida

Layperson determined by SSG   **Jan Gorie, J.D.**
                                        Buchanan Ingersoll & Rooney, PA

SSG is the 19th member   **Ana M. Viamonte Ros, M.D., M.P.H.**

STAFF

The Florida Deparment of Health provided staff to support the Committee as well as the Committee meetings. Staff included:

Kimberly Berfield
Deputy Secretary
Florida Department of Health

Jessica Swanson Rivenbark, M.S.W.
Program Administrator
Division of Health Access and Tobacco

Robert E. Clift, M.S.
GIS Data Analyst
Division of Health Access and Tobacco

Nabanita Raha Das
GIS Intern
Division of Health Access and Tobacco

Special thanks are also due to the members of the Department of Health Geographic Coordination Committee for their review and feedback.

Introduction

Section 381.4018, Florida Statutes mandates the Department of Health and its governmental and non-governmental stakeholders to address physician workforce issues in Florida. This past year the legislature expanded this mandate by creating the Physician Workforce Advisory Council to provide targeted expertise and guidance to the State Surgeon General. The combined impact of this legislation, along with the mandate to survey physicians and present those findings in this report, create a cohesive and comprehensive approach to address the opportunities and issues surrounding physician manpower and health care access.

This report presents analysis of the most current workforce data in spatial, graphical and tabular formats. The information here represents a snapshot of the vast wealth of workforce data that has been collected by the Department in the past 3 years. One of the objectives of the Physician Workforce Advisory Council will be to review data analysis and make recommendations on how to best refine the presentation of information both online and in future annual reports. Physician workforce data analyses originate from Physician Workforce Survey results combined with the Practitioner Profile and Licensure databases to create a more complete and effective presentation of information. Analysis products presented in this annual report include: (1) an overview of the geographic distribution of the workforce focusing on primary care and 15 distinct specialty groups; (2) a breakdown of demographics and survey responses; and (3) thematic maps based on survey results.

In thanks to the efforts of Jessica Swanson Rivenbark and Robert E. Clift we present this quantitative review of the data gathered reflecting the physician workforce environment in our state.

Kimberly Berfield
Deputy Secretary
Florida Department of Health

Executive Summary

The Department of Health presents the third Physician Workforce Annual Report, which will:

- Discuss the creation of the new Physician Workforce Advisory Council and its objectives and priorities for the upcoming year.

- Present a discussion of Graduate Medical Education (GME), in Florida, including the numbers of residency positions, the location of residency programs, the cost and reimbursement of programs.

- Offer a detailed review of the importance of GME to the overall physician workforce in the state.

- Detail physician workforce findings compiled from the 2009 and 2010 Physician Workforce Surveys, the Physician Practitioner Profile and physician licensure data housed in the Division of Medical Quality Assurance.

- Offer conclusions and next steps to detail the upcoming events for the Department and the Physician Workforce Advisory Council.

Through a series of questions in the Physician Workforce Survey, coupled with demographic information in the physician's licensure file, the state is able to define physician workforce by location and specialty. This report will detail the survey results from 2009 and 2010 to showcase the complete physician workforce[1]. Results for this report include:

- Of all physicians renewing a license in 2009 or 2010, 99% responded to the survey.

- There are 57,750 physicians eligible for renewal in 2009 and 2010, serving as a starting point for this analysis.

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1   The Physician Workforce Survey is part of the licensure renewal process for physicians. The total count of physicians is divided into two groups, with each group renewing every other year. The result is the combination of two years worth of data for a total count of Florida physicians (excluding newly-licensed physicians).

- 91% of survey respondents are allopathic physicians while 9% are osteopathic physicians.

- Among the 2009 and 10 survey respondents actively practicing in Florida:

  - Age: 12% < 40 years old

                  29% > 60 years old

  - Gender: 24% (n=9,730) female

                  76% (n=31,540) male

  - Ethnicity: 63% (n=25,955) White

                  15% (n=6015) Hispanic

                  11% (n=4,479) Asian/Pacific Islander

                  04% (n=1,812) Black

                  0.1% (n=40) American Indian

                  4.4% (n=1,613) Other

- Of the 1,698 physicians responding to the survey indicating practice in obstetrics or gynecology, 957 deliver babies.

- Of the 1,334 physicians responding to the survey indicating practice in radiology, 491 respondents read mammograms or perform other guided breast imaging procedures.

Specialty Areas:

Among the 2009 and 2010 survey respondents actively practicing in Florida, the top five specialties were:

- Family Medicine (13%);
- Medical Specialist[2] (12.2%);
- Surgical Specialist[3] (11.4%);
- Internal Medicine (10%); and
- Anesthesiology (5%).

Licensed, Non-Practicing

2   See Appendix A.
3   See Appendix A.

Of the non-practicing physicians having an active license in Florida, the reasons for not practicing in the state were:

- "Not maintaining a full-time residence in Florida" (30.5%)
- "Planning to move to Florida" (23.8%)
- "Retired" (11.7%)
- "Liability" (1.5%)
- "Reimbursement" (.4%)
- "Other" (32.25)

Additional Findings

- 53% of the practicing physicians indicated they see 76 or more patients per week.
- There were 5,900 newly licensed physicians in 2009-2010.
- Among the 2009 and 2010 survey respondents actively practicing in Florida:
  - 17% indicated plans to change their scope of practice in the next five years
  - 11% indicated plans to retire
  - 4% indicated plans to relocate outside of Florida
  - 2% indicated plans to retrain (enter into an educational program to relearn another specialty area).

The report findings will be instrumental to the Physician Workforce Advisory Council (Council) in its work to provide advice and recommendations to the State Surgeon General and the Department on matters concerning current and future physician workforce needs in this state.   As part of its work, the Council will examine physician workforce planning in its entirety, including, but not limited to the medical education and the medical education pipeline, the recruitment and retention of active physicians in Florida and the overall impact that GME programs have on physician workforce planning. GME has been recognized by many entities as having a direct influence on the number, location and specialty of practicing physicians. The group will offer its in-

put on planning for innovations in funding for new GME positions, programs, and the expanded capacity of existing programs.

Advances in data collection and web applications will be detailed in the conclusion of this report as the Department embarks on expanded practices in analyzing results and presenting interactive uses to policymakers and the public. These opportunities will foster the development of detailed strategic planning and provide an expanded scope of workforce analysis. In addition, plans to streamline data collection from practitioners while accessing information derived from other data resources will offer physician workforce stakeholders the ability to evaluate true health care access, cost and quality in a meaningful and practical way.

Physician Workforce Advisory Council

The Physician Workforce Advisory Council was created in Chapter 2010-161, Laws of Florida in order to address medical education, graduate medical education and attracting and retaining physicians in Florida. The law directs the State Surgeon General to appoint a Physician Workforce Advisory Council that is to meet at least twice annually to:

1. Advise the State Surgeon General and the Department on matters concerning current and future physician workforce needs in this state;

2. Review survey materials and the compilation of survey information;

3. Annually review the number, location, cost, and reimbursement of graduate medical education programs and positions;

4. Provide recommendations to the Department regarding the survey completed by physicians licensed under chapter 458 or chapter 459;

5. Assist the Department in preparing the annual report to the Legislature pursuant to ss. 458.3192 and 459.0082;

6. Assist the Department in preparing an initial strategic plan, conduct ongoing strategic planning in accordance with the statute, and provide ongoing advice on implementing the recommendations;

7. Monitor and provide recommendations regarding the need for an increased number of primary care or other physician specialties to provide the necessary current and projected health and medical services for the state; and

8. Monitor and make recommendations regarding the status of the needs relating to graduate medical education in this state.

The Council, at its initial meeting, addressed the history and development of the state's physician workforce, and reconfirmed that GME programs must be a top priority in physician workforce development. The capacity, nature and quality of Florida's residency programs define and assist the recruitment of highly qualified resident physician applicants. These applicants are likely to ultimately remain in the state to establish practice and to contribute to their respective communities, affecting the quality, specialty or sub-specialty mix of the physician workforce and the geographic distribution of physician specialists in Florida.

In 2010-2011, the Physician Workforce Advisory Council will lend its expertise to shape recommendations that target innovations in funding, building community partnerships and consortia to add new positions and programs and expand capacity in existing programs. A comprehensive review of the available state physician workforce data will be an important tool for the Physician Workforce Advisory Council in recommending strategies that focus on suggested resources and planning for areas of need.

Physician workforce development is an area of great concern and great opportunity. The Department will work closely with the Physician Workforce Advisory Council to:

- Develop a physician workforce strategic plan over the next year, which will include efforts to ensure a quality physician workforce.
- Establish an interactive web-based application intended for use by stakeholders, policymakers and the public to access physician workforce data.
- Add new spatial and tabular data sets such as hospital discharge data, healthcare facility data, newly available demographics, and county-level healthcare statistics.
- Seek additional data and tools to broaden the scope of workforce analysis.
- Streamline data collection procedures to ensure availability of accurate and comprehensive data, while simplifying the burden to physicians upon liensure renewal.

The framework from which the Council is starting was developed by the State Surgeon General's Healthcare Practitioner Ad Hoc Committee in 2008-2009. The Council's priorities will focus largely on survey development and strategic planning with an eye towards graduate medical education funding and growth, and a need to attract and retain physicians in the state. The recommendations of the Physician Workforce Advisory Council will be presented in future strategic planning and annual reports, and will likely follow the principles of the Healthcare Practitioner Ad Hoc Committee's recommendations.

In 2009 the Healthcare Practitioner Ad Hoc Committee offered the following recommendations for action by the State Surgeon General, the Governor of Florida and the Florida Legislature:

Recommendation 1

As residency rotations through rural and outpatient locations support the overall

experience of the resident, and encourage the resident to practice in out-patient or rural communities, innovations in residency funding should be secured to support the directors of residency programs identified as an area of need by state workforce data.

Recommendation 2

The Area Health Education Center (AHEC) Network currently supports the primary care rotations of residents and medical students in rural and underserved locations. The expanded work of the AHEC Network, focusing on the new medical schools in Florida must be supported and encouraged in order to incrase the opportunities for new medical students and residents to participate in these rotations.

Recommendation 3

The state reinvigorate the Graduate Medical Education Innovations Program (section 381.0406, F.S.) and the Medical Education Loan Reimbursement and Repayment Program (section 1009.65, F.S.) to support physicians interested in practicing in identified rural and underserved areas or specialties. The combined impact of these two projects could result in exposure of residents to alternative settings and could offer incentives for physicians to practice in these areas. This recommendation includes consideration of using state match funds to leverage federal dollars provided by the Health Resources and Services Administration or National Health Service Corps funding. Florida currently doesn't receive any federal funding because no state match monies have been appropriated.

Recommendation 4

Evaluation of the Community Hospital Education Program as a mechanism to fund primary care residency programs as defined in section 381.0404, Florida Statutes.

Recommendation 5

Collaborations and consortiums have proven successful in offering rotations for residents and placements of physicians in identified specialty and geographic areas. Such relationships should be further explored for the expanded capacity of federal and state partnerships and community-state partnerships. These collaborations could include the Florida Department of Health partnering with the Health Resources and Services Administration to develop Florida as a Workforce Center to forge continued and enhanced partnerships with the State Office of Primary Care, Federally Qualified Health Centers, the Area Health Education Center Network, state licensing and regulatory boards, practitioners and others as a mechanism for exploring further avenues for access to healthcare. In addition, the collaborative efforts of the Council of Florida Medical School Deans, the Florida Department of Veterans Affairs, the Board of Osteopathic Medicine, Board of Medicine, and physician workforce stakeholders should be supported for the training of physicians wishing to reenter Florida's workforce based on geographic and specialty mix needs in Florida.

Recommendation 6

Further expanding upon the data needed to benchmark and trend physician specialty and location through the additional survey information collected from physicians applying for initial licensure in Florida.

Recommendation 7

Explore additional incentives for physicians, hospitals and those benefiting from medical education through tax exemptions or other state opportunities that would benefit the overall healthcare practitioner workforce.

Recommendation 8

Explore additional incentives or opportunities for areas of telemedicine and tele-

health, including Medicaid Waivers or Insurance Reimbursements for an area that would directly impact health access through technology.

Recommendation 9

Maintain the statewide Healthcare Practitioner Ad Hoc Committee through statutory change that would support the effective and ongoing effort of a multitude of physician workforce stakeholders on a variety of issues, including, but not limited to medical education, graduate medical education and attracting and retaining physicians.

Recommendation 10

The Ad Hoc Committee is in strong support of a process to identify retired physicians who are interested in reentering the work force; working with the State Boards to identify a process for assessment of competency, with an opportunity for retraining (if necessary), resulting in the relicensure of competent physicians to help meet the health care needs of the citizens of Florida.

Graduate Medical Education

GME has been identified as a top priority of the Physician Workforce Advisory Council because it has a direct impact on the quality and adequacy of the state's physician specialty and sub-specialty workforce and the geographic distribution of physicians. Residents are more likely to practice in the state where they completed their graduate medical education training rather than where they went to medical school. Residency programs serve as health care "safety nets", providing a substantial amount of care to indigent, uninsured and underserved patients in the state. Despite the significance of GME programs on developing the physician workforce, there are barriers to creating new positions and programs.

The Physician Workforce Advisory Council is interested in exploring current state and federal sources of funding for GME programs and in ways to expand support for residencies targeting needed specialties and sub specialties. Ongoing strategic planning for the development and maintenance of new GME programs and positions is also crucial to meeting healthcare needs. Analyzing existing data will assist policymakers in decision making for the strategic growth of residency programs to meet the state's needs.

GRADUATE MEDICAL EDUCATION IN FLORIDA

- The Association of American Medical Colleges (AAMC) 2009 State Physician Workforce Data Book ranks Florida seventh nationally in the retention of physicians completeing both their undergraduate medical education and graduate medical education in the state ;

- The AAMC ranks Florida thirty-first nationally in having more undergraduate medical education slots than GME positions.

- The AAMC ranks Florida forty-third in residents per 100,000 population, having only 17.9 residents per 100,000 versus the national average of 35.7 residents per 100,000 population.

- Florida has over 3,600 allopathic and osteopathic residency programs (including 370 positions dedicated to serving veterans and active military personnel).

- There are 346 allopathic and osteopathic residency programs (Accreditation Council of Graduate Medical Education and American Osteopathic Association, 2009).

- Florida has over 1,700 slots in primary care (defined in section 381.0403, Florida Statutes, as family practice, internal medicine, obstetrics and gynecology, pediatrics, psychiatry, emergency medicine and osteopathic internship),

- Florida has 190 general surgery and 25 geriatric medicine residents (which are also included in the definition of primary care under federal legislation).

Florida will almost have to double the number of resident positions to meet the national average ratio of residents per 100,000 population as well as keep pace with the number of anticipated medical school graduates resulting from new and expanded medical school enrollment in the state. An adequate number of residency programs is an important health access issue for a state that:

- Has the largest and fastest growing percentage of citizens over age 65, when health care needs increase as age increases;
- Ranks fifth in the number of citizens who are uninsured;
- Ranks eigth in active physicians age 60 or older (AAMC, 2009), with 25 percent of physicians over the age of 65; and
- Ranks third in the number of active physicians who are international medical graduates (AAMC, 2009).

Expanding residency positions is a key component of increasing the physician workforce and providing access to health care; however, several factors influence the ability to create new programs and residency positions within existing programs.   Expansion depends upon:

- Availability of qualified faculty to supervise and teach;
- Commitments from hospitals to sponsor programs (influenced by the availability of federal and state funds); and
- Changes to federal reimbursement caps on the number of resident positions supported in programs.

The Board of Governors of the State University System of Florida has expressed support of GME programs in Florida. When the Board approved the two new medical schools in 2006 (University of Central Florida and Florida International University), they adopted a resolution that recognized that medical schools are one component of

a system of medical training. The resolution also emphasized that the expansion of residency programs must be a top priority for the state.

In September 2009, the Board of Governors released a report: GME Medical Residency Programs: A Report of the Board of Governors. The report identified issues that could become recommendations for future board actions. The report included the following recommendations:

1. Florida needs a multi-agency state and federal strategy to increase residency positions.

2. The medical schools at UCF and FIU need to report on their progress in establishing new residencies.

3. Further research needs to be done on physician workforce and existing Florida residency programs.

4. The Community Hospital Education Program needs to be reviewed. Florida's only program dedicated to GME funding, the Community Hospital Education Program (CHEP) has seen the fiscal ebb and flow of legislative funding. More importantly, what was at one time a transparent flow of CHEP funding to GME programs for the funding of medical resident education has become more opaque due to the commingling of those funds with other hospital reimbursements for purposes of being able to draw down greater numbers of federal dollars through Medicaid matching. For educational programs there has been a loss of transparency and accountability for the dollars intended for GME program destinations. Stakeholders would benefit from reviewing whether current policies and procedures are providing the best return on investment given Florida's current healthcare challenges.

There are additional factors impacting the state's struggle to further expand programs and positions, including the federal limitations of the 1997 Balanced Budget Act and the instability of Medicaid funding for GME programs and positions. The Bal-

anced Budget Act capped the number of GME positions a hospital could support using Medicare funding, the largest supporter of GME in Florida and nationally. Hospitals can no longer create positions with support from Medicare, limiting the hospitals ability to support positions without Direct Graduate Medical Education or Indirect Graduate Medical Education payments. This forces hospitals to find other sources to cover these costs. Medicaid supports many hospitals that maintain GME programs through per diem rates, which recognizes GME costs as well as through discretionary funding through the Medicaid Disproportionate Share and Lower Income Pool (LIP) programs; both of which provide financial benefits to hospitals that maintain GME programs and positions in hospitals.

The only other source of funding that was originally intended to support primary care residency programs under section 381.0403, Florida Statutes, is the Community Hospital Education Program (CHEP). The program was intended to provide healthcare access at a local level and to ensure the continued supply of highly trained primary care physicians. Previously the program was funded in the amount of $13.75 million appropriated to the Department of Health. The funding has been removed from the DOH budget and has been placed in the Medicaid program to be used as part of the intergovernmental transfer that draws down additional federal dollars.

Under the Medicaid program a portion of the $13.5 million funding amount is used to provide enhanced payments for certain hospitals that are designated by DOH as "CHEP" hospitals—hospitals that receive only CHEP funds and have no other qualifying exemptions.

The Department continues to monitor participation of CHEP programs, however there is no longer accountability to ensure that funds are utilized directly for GME because the funding is not awarded or monitored through the Community Hospital

Education Council (CHEC). Under Medicaid, a hospital must only meet the minimum CHEP requirements in Florida Statutes to receive enhanced Medicaid reimbursements. It might be noted that the state university system board of governors and Healthcare Practitioner Ad Hoc Committee have recommended review of the CHEP program, particularly with respect to the transparency and accountability of dollars intended for GME.

While there is no other statutory requirement that the state support graduate medical education though Medicaid payments, Florida includes graduate medical education costs in its base per diem as well as part of the LIP program and part of the Medicaid Disproportionate Share (DSH) program. This funding relies heavily on intergovernmental fund transfers from local governments to match with federal dollars, which offsets general revenue in other parts of the state budget. These programs, approved by the legislature and the federal government, allow for cost-based reimbursements derived from cost reports completed by hospitals, GME costs are included and therefore embedded in a teaching hospital's per diem rates. The DSH program has a ceiling for the total amount of inpatient and outpatient services for which reimbursement will be provided, and there are other county specific caps on reimbursements for specific procedures. The DSH program allows the public the benefit of a hold-harmless payment or a safety net payment but without specific graduate medical education accountability.

Alternative Sources of Funding

While federal sources of funding through Medicare and Medicaid are the main sources of sustaining GME programs, alternative sources support GME in Florida.

- The U.S. Department of Veterans Affairs funding to the state's veterans medical centers in Miami, Tampa, Gainesville, and Bay Pines. There are over 370 residency positions dedicated to the VA, and the VA has emerged at the forefront of explor-

ing opportunities to further residency training and the retraining of retired physicians to support the physician workforce in Florida. Working with the VA has become an important collaborative effort and option to share costs and resources while meeting healthcare and professional needs in the state.

● The National Heath Service Corps, as part of the Health Resources and Services Administration, offers individual assistance for residents and physicians in underserved or designated shortage areas after the completion of their training and hence, is not a direct contributor to defray the direct costs of graduate medical education in Florida's resident physician training programs. In practice, this program principally repays medical school tuition loans through a program of debt forgiveness.

● The Area Health Education Center Network (AHEC) also supports the rotation of residents through underserved and rural areas, often exposing residents to a new opportunity to practice outside of the traditional hospital setting. The AHEC Network in Florida also utilizes resources to recruit underserved and minority populations into the medical field and works to recruit and retain physicians in rural and underserved areas.

● Children's hospitals, which frequently have limited Medicare participation, primarily related to chronic renal disease and certain other chronic diseases, such as cystic fibrosis, have access to other designated funding streams through a distinct federally funded children's hospital GME program as well as Medicaid DSH funding that provides support for direct and indirect costs, although at a lower rate than the average per-resident Medicare payment.

● Teaching hospitals and safety net hospitals with GME programs report contributions in excess of $250 million for the education and training of medical residents in 2008.

● State appropriations have allowed for additional funding to build consortiums that could offer a variety of training opportunities and cost/resource sharing between members. It is an important and innovative strategy in meeting Florida's needs.

- Florida medical schools receive no specific funding for graduate medical education Medical schools may receive some support from teaching hospitals for faculty services not directly related to the graduate medical education programs. There are other contractual agreements that individual, but not all medical schools, may participate in to help absorb or share these costs.

The Department of Health and the Physician Workforce Advisory Council encourage the focus on increasing new GME positions and programs as a critical factor in Florida's physician workforce development and continued ability to provide quality care. Planning for the strategic expansion of residency capacity in the state will help meet healthcare needs, and could lead to innovations in training for community and ambulatory settings. Concepts in ways to increase the number of new GME positions and programs to meet the state's needs include, but are not limited to:

- Providing incentives to encourage residents to practice in identified areas of specialty or geographic need; and

- Fostering collaborative work with in-state consortia to encourage cost-sharing and educational support of new and expanded residency programs.

Methodology

The legislative mandate to examine the physician workforce by geographic distribution and specialty mix has led the Department to apply Geographic Information Systems (GIS) tools and techniques. A geographic information system is any system that captures, stores, analyzes, manages and presents data that are linked to a location. In the simplest terms, GIS is the merging of cartography, statistical analysis, and database technology.

To analyze Florida's physician workforce most simply is to determine where and

how many of each specialty of physician are practicing throughout the state. Additional layers of complexity emerge upon sorting and grouping practitioners based on their survey responses and demographic characteristics at different geographic scales.

The Department has established new practices for analyzing results of the Florida Physician Workforce Survey. The data underpinning this endeavor comes in the form of loosely organized columns and rows and is ideally suited for storage in a relational database management system (RDBMS). The Department chose to use a modified form of the open-source RDBMS PostgreSQL to house the raw data due to the software's advanced support for geographic functions.

Leveraging a resource already in place, the Department used the industry-standard ESRI ArcGIS suite of applications for cartography, ancillary data processing/storage, and simple analysis functions. Finally, the open-source statistics application R was chosen to perform some of the more complex geostatistical analysis.

Inputs for the analysis presented in this report include: (a) practitioner-provided data submitted to and stored by the Department's Division of Medical Quality Assurance (MQA); and (b) ancillary geographic data sets from various state and federal agencies hosted within the Department on a shared basemap server.

The Department also maintains two more data sets from which inputs are drawn. The physician licensure database contains important details concerning license status and demographics. The practitioner profile database contains practitioner-updated details about practice locations, education history, completed residencies, and board certifications.

Survey Responses	**Licensure**	**Profiling**
Client Code	Client Code	Client Code
File Number	File Number	File Number
Question #	License Number	Street Address 1
...	...	...

Figure 1
Data Sets Connected By Key Fields

These input data sets require processing before use. The tabular inputs from MQA, while comprehensive, are not normalized to common database standards. Identified by a unique key, the same physician is routinely referred to multiple times in a single collection of records. The 777,591 survey responses gathered in the 2009-2010 renewal cycle, for example, came from a mere 32,218 respondents. The Department "flattened" the tabular inputs by carefully examining the data, then sorting the records in a database.

Having organized the data, the Department proceeded to determine which physicians should be counted among the workforce. Respondents were sorted into the following groups:

- Active, Licensed Physicians
- Licensed, Non-Practicing Physicians
- Residents, Interns and Fellows

Those respondents practicing in-state were then sorted by specialty. As in previous years, similar specialties were collapsed to create specialty groups for reporting purposes. The grouping of specialties, which has remained consistent from year to year in this report, was initially proposed in 2007 by Robert G. Brooks, M.D. and Nir Menachemi, Ph.D. (Appendix A).

With the raw data processed, the Department can answer more complex spatial questions about the physician workforce, like:

- How many neurologists practice within a 25-mile radius of each trauma center?
- Of physicians planning to change their scope of practice, how many fall within federal Health Professional Shortage Areas?
- What is the specialty mix of physicians practicing in the state's rural areas?

The Department produced a number of analysis products for this report, reflecting the guidelines set forth in Florida Statutes 458.3192 and 459.0082. Some of the products listed below pertain only the the workforce as a whole (W). All other analysis products are repeated for the entire workforce, the primary care segement of the workforce (Appendix B), and the specialty groups.

1. Practitioner Distribution Map (W)

Point locations of all active, licensed physicians were joined to a statewide population density grid and then plotted, sized according to density at the practice location.

2. Perform Deliveries Map (W)

Point locations of physicians who perform deliveries were joined to a shapefile representing Florida's counties. The counties were then plotted and color coded to visualize the distribution of physicians.

3. Perform Mammography Map (W)

Point locations of physicians who read mammograms or perform breast-imaging-guided procedures were joined to a shapefile representing Florida's counties. The counties were then plotted and color coded to visualize the distribution of physicians.

4. Physicians Per County By Specialty Group Table

Counts of physicians are broken out by county and specialty group.

5. Perform Emergency Care Map (W)

Point locations of physicians who perform on-call emergency care for a hospital emergency department were joined to a shapefile representing Florida's counties. The counties were then plotted and color coded to visualize the distribution of physicians.

6. Status of Practice Map (W)

Point locations of physicians planning to retire, relocate or retrain were joined to a shapefile representing Florida's counties. The counties were then plotted and color coded to visualize the distribution of physicians. The numbers of physicians planning to retire, relocate or retrain were listed in the supplimentary table following the map.

7. Practitioner Distribution Detail Maps

Concentrations of physicians are mapped at state, region, county and census tract levels in a six-map series (single map for primary care and specialty groups).

8. Workforce Demographics Info-Graphic

Reported mix by age, gender and ethnicity.

9. Survey Response Info-Graphic

Reported responses to questions concerning: Medicaid and Medicare acceptance; patient care hours and average number of patients per week; status of practice; hospital privileges and levels of student loan debt.

10. Distance & Density Plots

These plots were generated in R enabled with the SpatStat package for point-pattern analysis. Both types of plots are color-coded, continuous images in the shape of the state. The density plots demonstrate the concentration of physicians at any given point in the state while the distance plots demonstrate the distance to the nearest physician from any given point in the state.

The following series of maps, charts and graphs represent a summary of data from the Physician Workforce Survey.

Physician Workforce Survey:
Key Findings

Physician Workforce &
POPULATION DENSITY

Represented here are those physicians renewing their licenses in the 2008/2009 and 2009/2010 cycles. Excluded are those: a) indicating they had not practiced medicine in Florida over the course of the year prior to renewal; b) failing to provide a valid Florida practice address; c) indicating participation in a residency, internship, or fellowship program; or d) having a licensure status disallowing their practice of medicine.

The point symbols representing the physicians' primary practice addresses are scaled here according to location's population density. Density values were interpolated based on census data and then appended to the physician location records.

Physician Locations
By Population Density (Sq Miles)

{21,705}   Count of
             Physicians...41,210

{1,092}   Minimum
             Density........0

{443}   Maximum
             Density........21,705

{197}   Mean
             Density........209

             Median
             Density.......140

Sources: 2009 & 2010 Physician Workforce Survey results joined with the Licensure and Practitioner Profile Databases maintained by the Florida Department of Health, Division of Medical Quality Assurance. Population density data derived from the U.S. Census Bureau's Census 2000.

Data processing and cartography: Florida Department of Health, Office of Medical Education, October 2010.

Projected Coordinate System: NAD 83 / Florida Albers Conic Equal Area.

Physician Workforce
CRITICAL SERVICES*
*Services identified in Florida Statute for detailed analysis

Perform Deliveries

Represented here are those physicians (renewing their licenses in the 2008/2009 and 2009/2010 cycles and meeting all other criteria for inclusion in this study) indicating that they perform deliveries.

Of the 1,698 physicains responding to the survey indicating practice in obstetrics or gynecology, 957 deliver babies.

- 0 - 4
- 5 - 13
- 14 - 27
- 28 - 76
- 77 - 121

Perform Breast Imaging

- 0 - 3
- 4 - 9
- 10 - 19
- 20 - 46
- 47 - 60
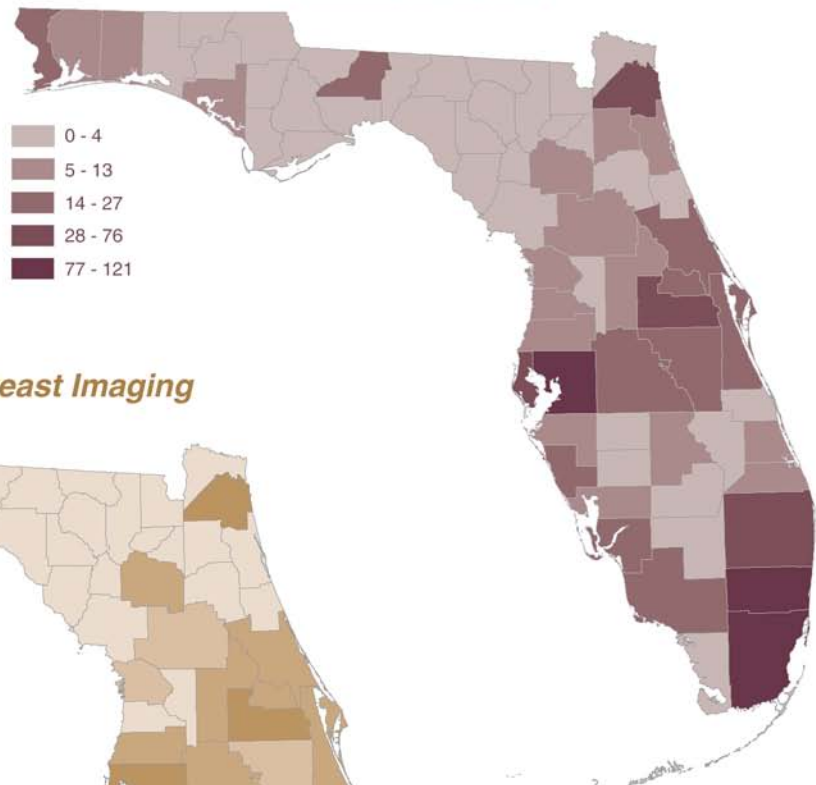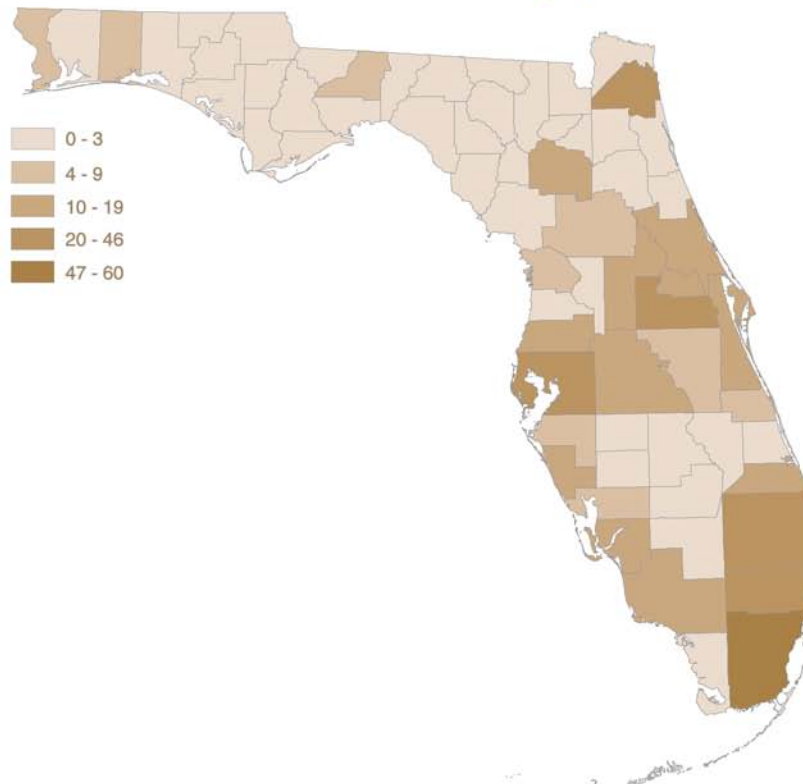
Represented here are those physicians (renewing their licenses in the 2008/2009 and 2009/2010 cycles and meeting all other criteria for inclusion in this study) indicating that they perform mammograms or other breast imaging procedures.

Of the 1,334 physicians responding to the survey indicating practice in radiology, 491 respondents read mamograms or perform other guided breast imaging procedures.

Sources: 2009 & 2010 Physician Workforce Survey results joined with the Licensure and Practitioner Profile Databases maintained by the Florida Department of Health, Division of Medical Quality Assurance.

Data processing and cartography: Florida Department of Health, Office of Medical Education, October 2010.

Projected Coordinate System: NAD 83 / Florida Albers Conic Equal Area.

Physician Workforce
# SPECIALTY COUNTS BY COUNTY

Miami-Dade County

Primary Care

Total Active, Licensed Physicians: 6,400

Anesthesiology: 307	Internal Medicine: 719	Pediatric Sub-Specialists: 238
Dermatology: 118	Medical Specialists: 874	Pediatrics: 407
Emergency Medicine: 222	Neurology: 122	Psychiatry: 334
Family Medicine: 862	OB-GYN: 237	Radiology: 190
General Surgery: 147	Pathology: 103	Surgical Specialists: 705

Broward County

Primary Care

Total Active, Licensed Physicians: 4,283

Anesthesiology: 286	Internal Medicine: 474	Pediatric Sub-Specialists: 125
Dermatology: 98	Medical Specialists: 582	Pediatrics: 223
Emergency Medicine: 224	Neurology: 77	Psychiatry: 148
Family Medicine: 511	OB-GYN: 198	Radiology: 149
General Surgery: 83	Pathology: 75	Surgical Specialists: 507

Palm Beach County

Primary Care

Total Active, Licensed Physicians: 3,641
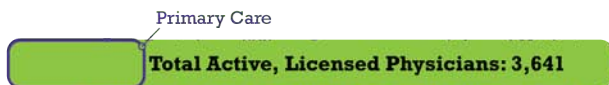
Anesthesiology: 201	Internal Medicine: 407	Pediatric Sub-Specialists: 69
Dermatology: 130	Medical Specialists: 501	Pediatrics: 152
Emergency Medicine: 115	Neurology: 67	Psychiatry: 156
Family Medicine: 322	OB-GYN: 167	Radiology: 107
General Surgery: 73	Pathology: 55	Surgical Specialists: 498

Hillsborough County

Primary Care

Total Active, Licensed Physicians: 3,100

Anesthesiology: 177	Internal Medicine: 320	Pediatric Sub-Specialists: 88
Dermatology: 67	Medical Specialists: 391	Pediatrics: 171
Emergency Medicine: 123	Neurology: 70	Psychiatry: 166
Family Medicine: 315	OB-GYN: 140	Radiology: 112
General Surgery: 78	Pathology: 103	Surgical Specialists: 371

Orange County

Primary Care

Total Active, Licensed Physicians: 2,499

Anesthesiology: 155	Internal Medicine: 213	Pediatric Sub-Specialists: 112
Dermatology: 29	Medical Specialists: 303	Pediatrics: 154
Emergency Medicine: 151	Neurology: 37	Psychiatry: 92
Family Medicine: 334	OB-GYN: 117	Radiology: 90
General Surgery: 57	Pathology: 65	Surgical Specialists: 265

Physician Workforce
SPECIALTY COUNTS BY COUNTY

Duval County

Primary Care

Total Active, Licensed Physicians: 2,462

Anesthesiology: 160	Internal Medicine: 207	Pediatric Sub-Specialists: 103
Dermatology: 31	Medical Specialists: 375	Pediatrics: 135
Emergency Medicine: 145	Neurology: 59	Psychiatry: 67
Family Medicine: 323	OB-GYN: 110	Radiology: 99
General Surgery: 58	Pathology: 43	Surgical Specialists: 271

Pinellas County

Primary Care

Total Active, Licensed Physicians: 2,441

Anesthesiology: 115	Internal Medicine: 280	Pediatric Sub-Specialists: 112
Dermatology: 48	Medical Specialists: 323	Pediatrics: 115
Emergency Medicine: 132	Neurology: 44	Psychiatry: 76
Family Medicine: 332	OB-GYN: 78	Radiology: 75
General Surgery: 47	Pathology: 50	Surgical Specialists: 318

Lee County

Primary Care

Total Active, Licensed Physicians: 1,185

Anesthesiology: 55	Internal Medicine: 120	Pediatric Sub-Specialists: 31
Dermatology: 26	Medical Specialists: 143	Pediatrics: 61
Emergency Medicine: 48	Neurology: 16	Psychiatry: 45
Family Medicine: 153	OB-GYN: 47	Radiology: 35
General Surgery: 26	Pathology: 18	Surgical Specialists: 170

Brevard County

Primary Care

Total Active, Licensed Physicians: 1,164

Anesthesiology: 73	Internal Medicine: 148	Pediatric Sub-Specialists: 10
Dermatology: 25	Medical Specialists: 170	Pediatrics: 46
Emergency Medicine: 56	Neurology: 25	Psychiatry: 43
Family Medicine: 161	OB-GYN: 46	Radiology: 39
General Surgery: 33	Pathology: 16	Surgical Specialists: 137

Sarasota County

Primary Care

Total Active, Licensed Physicians: 1,097

Anesthesiology: 58	Internal Medicine: 105	Pediatric Sub-Specialists: 5
Dermatology: 40	Medical Specialists: 178	Pediatrics: 30
Emergency Medicine: 36	Neurology: 21	Psychiatry: 39
Family Medicine: 139	OB-GYN: 41	Radiology: 22
General Surgery: 20	Pathology: 15	Surgical Specialists: 162

Physician Workforce
SPECIALTY COUNTS BY COUNTY

Volusia County

Total Active, Licensed Physicians: 903

Anesthesiology: 36	Internal Medicine: 76	Pediatric Sub-Specialists: 7
Dermatology: 16	Medical Specialists: 128	Pediatrics: 32
Emergency Medicine: 58	Neurology: 19	Psychiatry: 30
Family Medicine: 181	OB-GYN: 29	Radiology: 39
General Surgery: 20	Pathology: 18	Surgical Specialists: 126

Polk County

Total Active, Licensed Physicians: 877

Anesthesiology: 46	Internal Medicine: 117	Pediatric Sub-Specialists: 8
Dermatology: 18	Medical Specialists: 128	Pediatrics: 42
Emergency Medicine: 33	Neurology: 16	Psychiatry: 32
Family Medicine: 107	OB-GYN: 43	Radiology: 30
General Surgery: 27	Pathology: 13	Surgical Specialists: 113

Alachua County

Total Active, Licensed Physicians: 850

Anesthesiology: 83	Internal Medicine: 85	Pediatric Sub-Specialists: 20
Dermatology: 13	Medical Specialists: 85	Pediatrics: 36
Emergency Medicine: 29	Neurology: 16	Psychiatry: 60
Family Medicine: 108	OB-GYN: 29	Radiology: 37
General Surgery: 14	Pathology: 22	Surgical Specialists: 86

Collier County

Total Active, Licensed Physicians: 782

Anesthesiology: 37	Internal Medicine: 74	Pediatric Sub-Specialists: 6
Dermatology: 36	Medical Specialists: 117	Pediatrics: 36
Emergency Medicine: 40	Neurology: 21	Psychiatry: 30
Family Medicine: 91	OB-GYN: 37	Radiology: 25
General Surgery: 13	Pathology: 12	Surgical Specialists: 99

Escambia County

Total Active, Licensed Physicians: 736

Anesthesiology: 46	Internal Medicine: 68	Pediatric Sub-Specialists: 25
Dermatology: 13	Medical Specialists: 95	Pediatrics: 34
Emergency Medicine: 35	Neurology: 18	Psychiatry: 26
Family Medicine: 107	OB-GYN: 29	Radiology: 29
General Surgery: 22	Pathology: 19	Surgical Specialists: 98

Pasco County

Total Active, Licensed Physicians: 725

Anesthesiology: 36	Internal Medicine: 115	Pediatric Sub-Specialists: 1
Dermatology: 13	Medical Specialists: 116	Pediatrics: 42
Emergency Medicine: 29	Neurology: 11	Psychiatry: 25
Family Medicine: 124	OB-GYN: 19	Radiology: 14
General Surgery: 58	Pathology: 10	Surgical Specialists: 77

Seminole County

Total Active, Licensed Physicians: 670

Anesthesiology: 13	Internal Medicine: 78	Pediatric Sub-Specialists: 2
Dermatology: 21	Medical Specialists: 76	Pediatrics: 47
Emergency Medicine: 25	Neurology: 10	Psychiatry: 27
Family Medicine: 149	OB-GYN: 32	Radiology: 13
General Surgery: 21	Pathology: 4	Surgical Specialists: 59

Physician Workforce
SPECIALTY COUNTS BY COUNTY

Leon County

Total Active, Licensed Physicians: 568

Anesthesiology: 34	Internal Medicine: 41	Pediatric Sub-Specialists: 14
Dermatology: 15	Medical Specialists: 61	Pediatrics: 26
Emergency Medicine: 27	Neurology: 11	Psychiatry: 26
Family Medicine: 103	OB-GYN: 25	Radiology: 21
General Surgery: 16	Pathology: 13	Surgical Specialists: 72

Manatee County

Total Active, Licensed Physicians: 567

Anesthesiology: 24	Internal Medicine: 44	Pediatric Sub-Specialists: 4
Dermatology: 15	Medical Specialists: 85	Pediatrics: 32
Emergency Medicine: 29	Neurology: 9	Psychiatry: 19
Family Medicine: 84	OB-GYN: 23	Radiology: 21
General Surgery: 12	Pathology: 6	Surgical Specialists: 67

Marion County

Total Active, Licensed Physicians: 539

Anesthesiology: 20	Internal Medicine: 65	Pediatric Sub-Specialists: 3
Dermatology: 11	Medical Specialists: 84	Pediatrics: 22
Emergency Medicine: 22	Neurology: 10	Psychiatry: 25
Family Medicine: 75	OB-GYN: 16	Radiology: 16
General Surgery: 14	Pathology: 6	Surgical Specialists: 67

Lake County

Total Active, Licensed Physicians: 490

Anesthesiology: 28	Internal Medicine: 62	Pediatric Sub-Specialists: 6
Dermatology: 8	Medical Specialists: 72	Pediatrics: 26
Emergency Medicine: 17	Neurology: 6	Psychiatry: 17
Family Medicine: 70	OB-GYN: 19	Radiology: 31
General Surgery: 12	Pathology: 12	Surgical Specialists: 54

Okaloosa County

Total Active, Licensed Physicians: 380

Anesthesiology: 29	Internal Medicine: 37	Pediatric Sub-Specialists: 3
Dermatology: 8	Medical Specialists: 36	Pediatrics: 18
Emergency Medicine: 24	Neurology: 8	Psychiatry: 20
Family Medicine: 64	OB-GYN: 21	Radiology: 8
General Surgery: 13	Pathology: 4	Surgical Specialists: 50

St. Lucie County

Total Active, Licensed Physicians: 368

Anesthesiology: 16	Internal Medicine: 36	Pediatric Sub-Specialists: 4
Dermatology: 3	Medical Specialists: 50	Pediatrics: 24
Emergency Medicine: 18	Neurology: 13	Psychiatry: 18
Family Medicine: 63	OB-GYN: 13	Radiology: 9
General Surgery: 9	Pathology: 5	Surgical Specialists: 56

Indian River County

Total Active, Licensed Physicians: 360

Anesthesiology: 24	Internal Medicine: 39	Pediatric Sub-Specialists: 3
Dermatology: 8	Medical Specialists: 59	Pediatrics: 14
Emergency Medicine: 18	Neurology: 7	Psychiatry: 10
Family Medicine: 43	OB-GYN: 15	Radiology: 10
General Surgery: 6	Pathology: 2	Surgical Specialists: 57

Physician Workforce
SPECIALTY COUNTS BY COUNTY

Osceola County

Total Active, Licensed Physicians: 359

Anesthesiology: 11	Internal Medicine: 50	Pediatric Sub-Specialists: 3
Dermatology: 4	Medical Specialists: 60	Pediatrics: 18
Emergency Medicine: 12	Neurology: 4	Psychiatry: 10
Family Medicine: 67	OB-GYN: 27	Radiology: 5
General Surgery: 12	Pathology: 1	Surgical Specialists: 45

Charlotte County

Total Active, Licensed Physicians: 349

Anesthesiology: 12	Internal Medicine: 48	Pediatric Sub-Specialists: 1
Dermatology: 6	Medical Specialists: 54	Pediatrics: 9
Emergency Medicine: 18	Neurology: 9	Psychiatry: 16
Family Medicine: 47	OB-GYN: 7	Radiology: 12
General Surgery: 13	Pathology: 6	Surgical Specialists: 50

Martin County

Total Active, Licensed Physicians: 341

Anesthesiology: 19	Internal Medicine: 29	Pediatric Sub-Specialists: 0
Dermatology: 11	Medical Specialists: 43	Pediatrics: 13
Emergency Medicine: 15	Neurology: 9	Psychiatry: 11
Family Medicine: 47	OB-GYN: 19	Radiology: 11
General Surgery: 15	Pathology: 1	Surgical Specialists: 49

Bay County

Total Active, Licensed Physicians: 322

Anesthesiology: 16	Internal Medicine: 39	Pediatric Sub-Specialists: 5
Dermatology: 4	Medical Specialists: 43	Pediatrics: 12
Emergency Medicine: 23	Neurology: 9	Psychiatry: 21
Family Medicine: 49	OB-GYN: 19	Radiology: 7
General Surgery: 10	Pathology: 4	Surgical Specialists: 48

St. Johns County

Total Active, Licensed Physicians: 320

Anesthesiology: 12	Internal Medicine: 37	Pediatric Sub-Specialists: 3
Dermatology: 5	Medical Specialists: 42	Pediatrics: 24
Emergency Medicine: 19	Neurology: 4	Psychiatry: 14
Family Medicine: 43	OB-GYN: 9	Radiology: 15
General Surgery: 3	Pathology: 7	Surgical Specialists: 37

Hernando County

Total Active, Licensed Physicians: 277

Anesthesiology: 8	Internal Medicine: 52	Pediatric Sub-Specialists: 0
Dermatology: 3	Medical Specialists: 44	Pediatrics: 9
Emergency Medicine: 12	Neurology: 6	Psychiatry: 5
Family Medicine: 52	OB-GYN: 10	Radiology: 4
General Surgery: 9	Pathology: 8	Surgical Specialists: 27

Clay County

Total Active, Licensed Physicians: 244

Anesthesiology: 16	Internal Medicine: 26	Pediatric Sub-Specialists: 0
Dermatology: 5	Medical Specialists: 30	Pediatrics: 16
Emergency Medicine: 6	Neurology: 2	Psychiatry: 6
Family Medicine: 64	OB-GYN: 14	Radiology: 3
General Surgery: 4	Pathology: 2	Surgical Specialists: 24

Physician Workforce
SPECIALTY COUNTS BY COUNTY

Citrus County

Total Active, Licensed Physicians: 243

Anesthesiology: 15	Internal Medicine: 22	Pediatric Sub-Specialists: 2
Dermatology: 5	Medical Specialists: 40	Pediatrics: 9
Emergency Medicine: 13	Neurology: 4	Psychiatry: 7
Family Medicine: 46	OB-GYN: 5	Radiology: 11
General Surgery: 9	Pathology: 3	Surgical Specialists: 31

Highlands County

Total Active, Licensed Physicians: 169

Anesthesiology: 9	Internal Medicine: 24	Pediatric Sub-Specialists: 1
Dermatology: 2	Medical Specialists: 30	Pediatrics: 7
Emergency Medicine: 4	Neurology: 4	Psychiatry: 4
Family Medicine: 27	OB-GYN: 7	Radiology: 7
General Surgery: 7	Pathology: 6	Surgical Specialists: 22

Santa Rosa County

Total Active, Licensed Physicians: 169

Anesthesiology: 10	Internal Medicine: 15	Pediatric Sub-Specialists: 3
Dermatology: 0	Medical Specialists: 7	Pediatrics: 12
Emergency Medicine: 8	Neurology: 1	Psychiatry: 5
Family Medicine: 49	OB-GYN: 10	Radiology: 8
General Surgery: 3	Pathology: 1	Surgical Specialists: 15

Monroe County

Total Active, Licensed Physicians: 167

Anesthesiology: 7	Internal Medicine: 23	Pediatric Sub-Specialists: 0
Dermatology: 2	Medical Specialists: 12	Pediatrics: 5
Emergency Medicine: 17	Neurology: 6	Psychiatry: 11
Family Medicine: 29	OB-GYN: 6	Radiology: 5
General Surgery: 9	Pathology: 3	Surgical Specialists: 16

Columbia County

Total Active, Licensed Physicians: 120

Anesthesiology: 6	Internal Medicine: 16	Pediatric Sub-Specialists: 0
Dermatology: 1	Medical Specialists: 17	Pediatrics: 7
Emergency Medicine: 6	Neurology: 2	Psychiatry: 7
Family Medicine: 27	OB-GYN: 4	Radiology: 1
General Surgery: 3	Pathology: 1	Surgical Specialists: 10

Flagler County

Total Active, Licensed Physicians: 102

Anesthesiology: 5	Internal Medicine: 13	Pediatric Sub-Specialists: 0
Dermatology: 1	Medical Specialists: 15	Pediatrics: 1
Emergency Medicine: 11	Neurology: 2	Psychiatry: 2
Family Medicine: 28	OB-GYN: 4	Radiology: 4
General Surgery: 5	Pathology: 0	Surgical Specialists: 8

Sumter County

Total Active, Licensed Physicians: 98

Anesthesiology: 2	Internal Medicine: 23	Pediatric Sub-Specialists: 1
Dermatology: 4	Medical Specialists: 13	Pediatrics: 2
Emergency Medicine: 6	Neurology: 0	Psychiatry: 4
Family Medicine: 19	OB-GYN: 3	Radiology: 1
General Surgery: 4	Pathology: 3	Surgical Specialists: 7

Physician Workforce
SPECIALTY COUNTS BY COUNTY

Putnam County

Total Active, Licensed Physicians: 81

Anesthesiology: 3	Internal Medicine: 13	Pediatric Sub-Specialists: 0
Dermatology: 1	Medical Specialists: 9	Pediatrics: 6
Emergency Medicine: 2	Neurology: 1	Psychiatry: 1
Family Medicine: 17	OB-GYN: 3	Radiology: 3
General Surgery: 2	Pathology: 1	Surgical Specialists: 8

Nassau County

Total Active, Licensed Physicians: 68

Anesthesiology: 2	Internal Medicine: 7	Pediatric Sub-Specialists: 0
Dermatology: 0	Medical Specialists: 6	Pediatrics: 7
Emergency Medicine: 6	Neurology: 0	Psychiatry: 1
Family Medicine: 15	OB-GYN: 3	Radiology: 0
General Surgery: 2	Pathology: 0	Surgical Specialists: 4

Gadsden County

Total Active, Licensed Physicians: 49

Anesthesiology: 0	Internal Medicine: 4	Pediatric Sub-Specialists: 0
Dermatology: 0	Medical Specialists: 1	Pediatrics: 1
Emergency Medicine: 2	Neurology: 0	Psychiatry: 14
Family Medicine: 21	OB-GYN: 0	Radiology: 0
General Surgery: 0	Pathology: 0	Surgical Specialists: 2

Baker County

Total Active, Licensed Physicians: 42

Anesthesiology: 0	Internal Medicine: 1	Pediatric Sub-Specialists: 0
Dermatology: 0	Medical Specialists: 1	Pediatrics: 3
Emergency Medicine: 2	Neurology: 1	Psychiatry: 14
Family Medicine: 16	OB-GYN: 0	Radiology: 1
General Surgery: 0	Pathology: 0	Surgical Specialists: 0

Jackson County

Total Active, Licensed Physicians: 42

Anesthesiology: 0	Internal Medicine: 6	Pediatric Sub-Specialists: 1
Dermatology: 1	Medical Specialists: 3	Pediatrics: 3
Emergency Medicine: 6	Neurology: 0	Psychiatry: 3
Family Medicine: 10	OB-GYN: 4	Radiology: 2
General Surgery: 2	Pathology: 0	Surgical Specialists: 1

Okeechobee County

Total Active, Licensed Physicians: 42

Anesthesiology: 0	Internal Medicine: 9	Pediatric Sub-Specialists: 0
Dermatology: 1	Medical Specialists: 8	Pediatrics: 6
Emergency Medicine: 0	Neurology: 1	Psychiatry: 1
Family Medicine: 4	OB-GYN: 1	Radiology: 0
General Surgery: 1	Pathology: 1	Surgical Specialists: 5

DeSoto County

Total Active, Licensed Physicians: 26

Anesthesiology: 0	Internal Medicine: 5	Pediatric Sub-Specialists: 0
Dermatology: 0	Medical Specialists: 1	Pediatrics: 3
Emergency Medicine: 1	Neurology: 0	Psychiatry: 2
Family Medicine: 5	OB-GYN: 4	Radiology: 0
General Surgery: 1	Pathology: 0	Surgical Specialists: 0

Physician Workforce
SPECIALTY COUNTS BY COUNTY

Suwannee County

Total Active, Licensed Physicians: 26

Anesthesiology: 0	Internal Medicine: 4	Pediatric Sub-Specialists: 0
Dermatology: 0	Medical Specialists: 0	Pediatrics: 1
Emergency Medicine: 6	Neurology: 0	Psychiatry: 2
Family Medicine: 11	OB-GYN: 0	Radiology: 0
General Surgery: 0	Pathology: 0	Surgical Specialists: 0

Levy County

Total Active, Licensed Physicians: 24

Anesthesiology: 0	Internal Medicine: 3	Pediatric Sub-Specialists: 0
Dermatology: 0	Medical Specialists: 1	Pediatrics: 5
Emergency Medicine: 2	Neurology: 0	Psychiatry: 1
Family Medicine: 7	OB-GYN: 0	Radiology: 0
General Surgery: 0	Pathology: 0	Surgical Specialists: 0

Hendry County

Total Active, Licensed Physicians: 22

Anesthesiology: 0	Internal Medicine: 5	Pediatric Sub-Specialists: 0
Dermatology: 0	Medical Specialists: 0	Pediatrics: 3
Emergency Medicine: 1	Neurology: 0	Psychiatry: 0
Family Medicine: 8	OB-GYN: 1	Radiology: 1
General Surgery: 2	Pathology: 0	Surgical Specialists: 1

Bradford County

Total Active, Licensed Physicians: 19

Anesthesiology: 1	Internal Medicine: 4	Pediatric Sub-Specialists: 0
Dermatology: 0	Medical Specialists: 0	Pediatrics: 2
Emergency Medicine: 2	Neurology: 0	Psychiatry: 0
Family Medicine: 11	OB-GYN: 0	Radiology: 0
General Surgery: 0	Pathology: 0	Surgical Specialists: 0

Taylor County

Total Active, Licensed Physicians: 19

Anesthesiology: 1	Internal Medicine: 4	Pediatric Sub-Specialists: 0
Dermatology: 0	Medical Specialists: 1	Pediatrics: 1
Emergency Medicine: 3	Neurology: 0	Psychiatry: 0
Family Medicine: 5	OB-GYN: 0	Radiology: 0
General Surgery: 1	Pathology: 0	Surgical Specialists: 1

Hardee County

Total Active, Licensed Physicians: 17

Anesthesiology: 0	Internal Medicine: 3	Pediatric Sub-Specialists: 0
Dermatology: 0	Medical Specialists: 1	Pediatrics: 3
Emergency Medicine: 1	Neurology: 1	Psychiatry: 1
Family Medicine: 7	OB-GYN: 1	Radiology: 0
General Surgery: 1	Pathology: 0	Surgical Specialists: 0

Union County

Total Active, Licensed Physicians: 16

Anesthesiology: 0	Internal Medicine: 1	Pediatric Sub-Specialists: 0
Dermatology: 0	Medical Specialists: 1	Pediatrics: 0
Emergency Medicine: 2	Neurology: 0	Psychiatry: 2
Family Medicine: 6	OB-GYN: 0	Radiology: 0
General Surgery: 0	Pathology: 0	Surgical Specialists: 1

Physician Workforce
SPECIALTY COUNTS BY COUNTY

Franklin County

Total Active, Licensed Physicians: 14

Anesthesiology: 1	Internal Medicine: 1	Pediatric Sub-Specialists: 0
Dermatology: 0	Medical Specialists: 1	Pediatrics: 0
Emergency Medicine: 2	Neurology: 0	Psychiatry: 0
Family Medicine: 4	OB-GYN: 3	Radiology: 0
General Surgery: 0	Pathology: 1	Surgical Specialists: 0

Washington County

Total Active, Licensed Physicians: 13

Anesthesiology: 1	Internal Medicine: 1	Pediatric Sub-Specialists: 0
Dermatology: 0	Medical Specialists: 0	Pediatrics: 0
Emergency Medicine: 1	Neurology: 0	Psychiatry: 1
Family Medicine: 6	OB-GYN: 0	Radiology: 0
General Surgery: 0	Pathology: 0	Surgical Specialists: 1

Gulf County

Total Active, Licensed Physicians: 11

Anesthesiology: 0	Internal Medicine: 2	Pediatric Sub-Specialists: 0
Dermatology: 0	Medical Specialists: 1	Pediatrics: 0
Emergency Medicine: 1	Neurology: 0	Psychiatry: 0
Family Medicine: 4	OB-GYN: 0	Radiology: 0
General Surgery: 0	Pathology: 0	Surgical Specialists: 0

Holmes County

Total Active, Licensed Physicians: 10

Anesthesiology: 0	Internal Medicine: 1	Pediatric Sub-Specialists: 0
Dermatology: 0	Medical Specialists: 0	Pediatrics: 0
Emergency Medicine: 0	Neurology: 0	Psychiatry: 0
Family Medicine: 8	OB-GYN: 0	Radiology: 0
General Surgery: 0	Pathology: 0	Surgical Specialists: 0

Wakulla County

Total Active, Licensed Physicians: 10

Anesthesiology: 0	Internal Medicine: 0	Pediatric Sub-Specialists: 0
Dermatology: 0	Medical Specialists: 0	Pediatrics: 0
Emergency Medicine: 0	Neurology: 0	Psychiatry: 1
Family Medicine: 7	OB-GYN: 0	Radiology: 0
General Surgery: 0	Pathology: 0	Surgical Specialists: 0

Counties with eight or fewer active, licensed physicians: Calhoun, Dixie, Gilchrist, Glades, Hamilton, Jefferson, Lafayette, Liberty, and Madison.
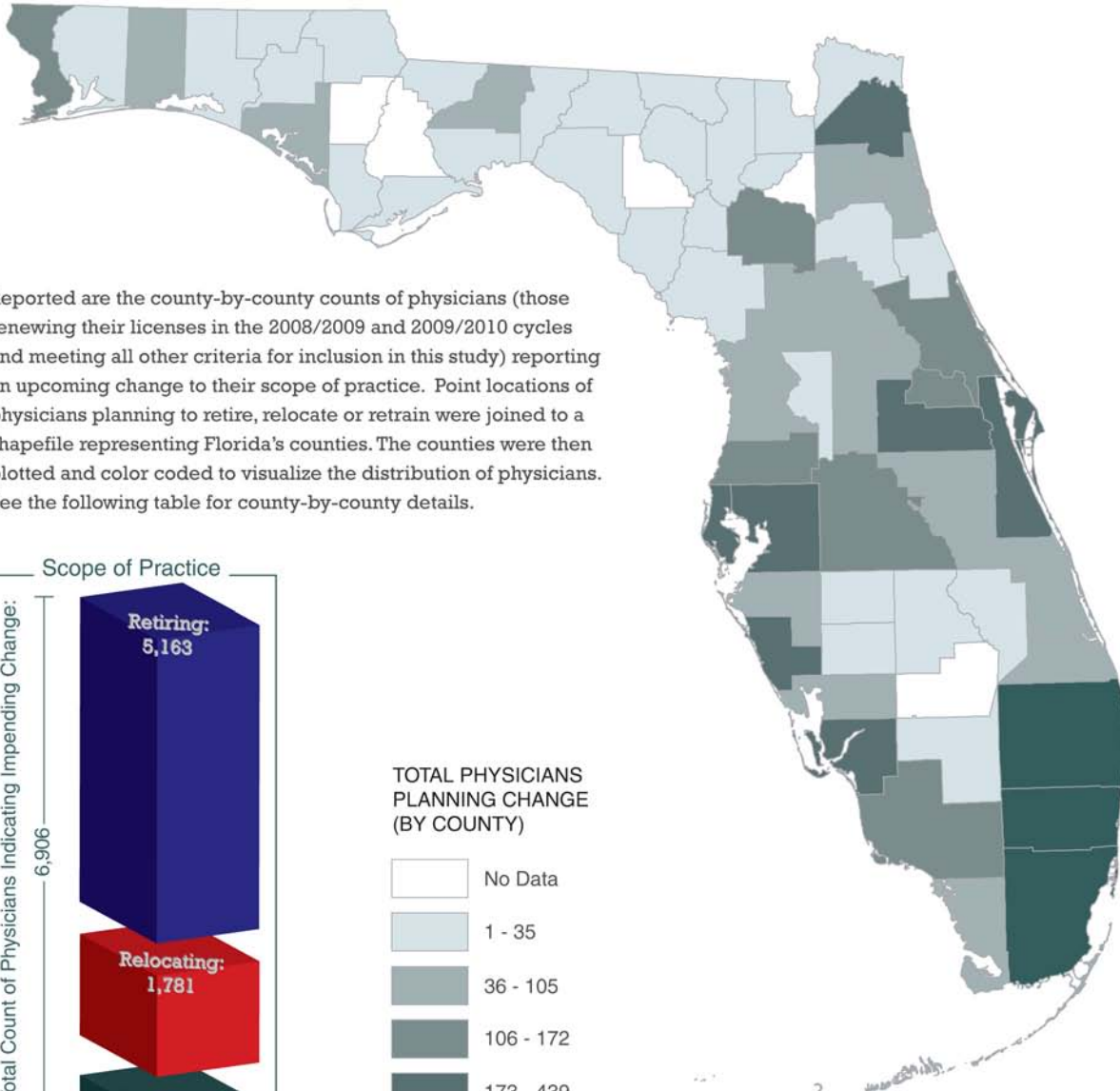
Physician Workforce ON-CALL HOURS

Total Physicians Taking On-Call Hours:	12,808
Physicians Reporting Decreased On-Call Hours:	1,263
Physicians Reporting Increased On-Call Hours:	2,875
Physicians Reporting Unchanged On-Call Hours:	8,670

Reported here is the county-by-county difference between physicians (those renewing their licenses in the 2008/2009 and 2009/2010 cycles and meeting all other criteria for inclusion in this study) reporting an increase or decrease of on-call hours. This map does not represent gains or losses to the total amount of on-call hours worked by physicians. Take, for instance, the example below concerning Escambia County. 28 more physicians reported an increase than a decrease in on-call hours worked.

Legend:
- No Data
- Loss
- No Change
- Small Gain
- Moderate Gain
- Large Gain

EXAMPLE
EscambiaCounty
Unchanged: 182 x 0 = 0
Increased: 57 x 1 = 57
Decreased: 29 x -1 = -29
NET CHANGE: +28

Sources: 2009 & 2010 Physician Workforce Survey results joined with the Licensure and Practitioner Profile Databases maintained by the Florida Department of Health, Division of Medical Quality Assurance.

Data processing and cartography: Florida Department of Health, Office of Medical Education, October 2010.

Projected Coordinate System: NAD 83 / Florida Albers Conic Equal Area.

Physicians Changing Their
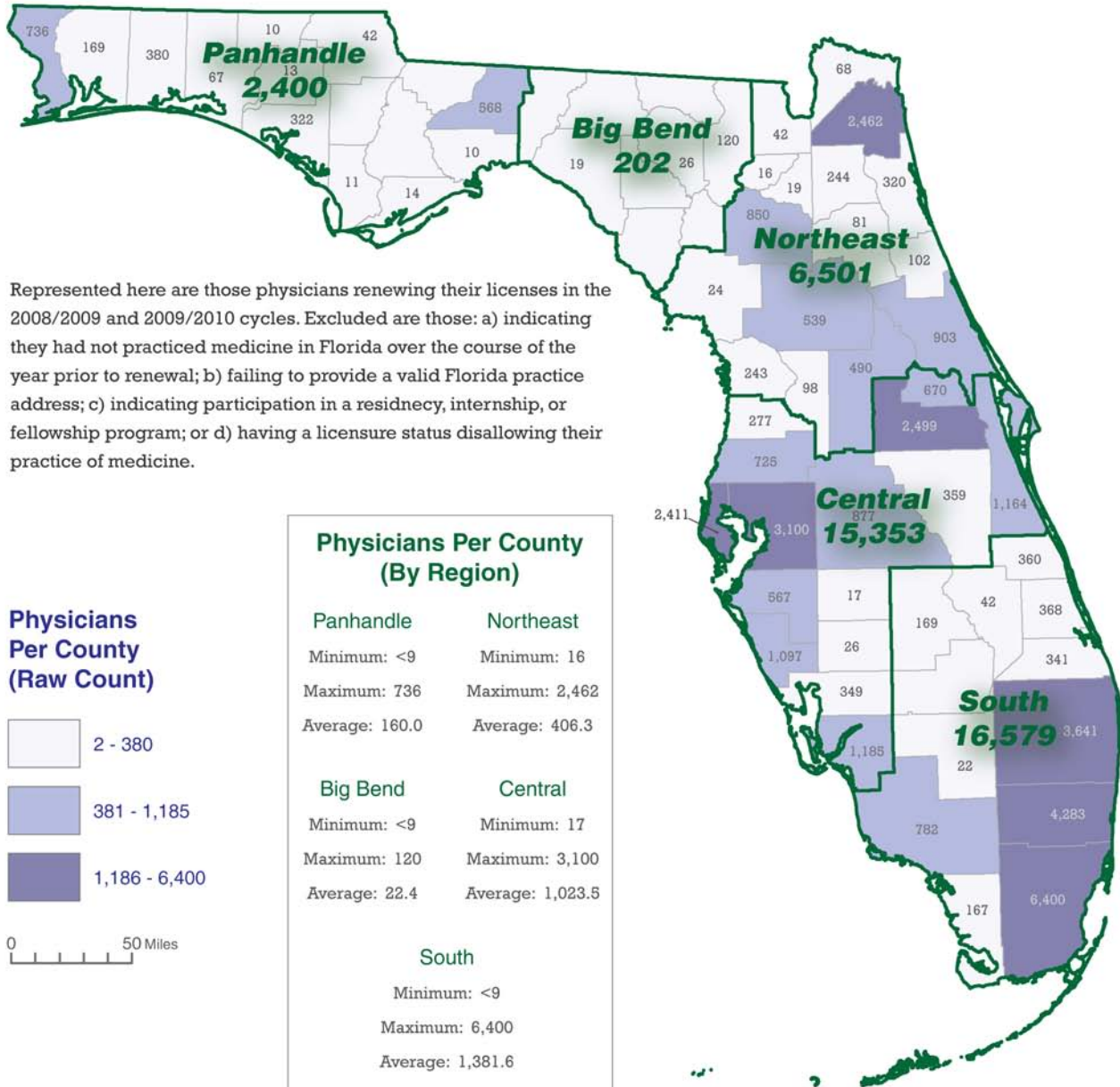# SCOPE OF PRACTICE

Reported are the county-by-county counts of physicians (those renewing their licenses in the 2008/2009 and 2009/2010 cycles and meeting all other criteria for inclusion in this study) reporting an upcoming change to their scope of practice. Point locations of physicians planning to retire, relocate or retrain were joined to a shapefile representing Florida's counties. The counties were then plotted and color coded to visualize the distribution of physicians. See the following table for county-by-county details.

Scope of Practice

Total Count of Physicians Indicating Impending Change: 6,906

Retiring: 5,163

Relocating: 1,781

Retraining: 527

TOTAL PHYSICIANS
PLANNING CHANGE
(BY COUNTY)

	No Data
	1 - 35
	36 - 105
	106 - 172
	173 - 439
	440 - 1,042

Sources: 2009 & 2010 Physician Workforce Survey results joined with the Licensure and Practitioner Profile Databases maintained by the Florida Department of Health, Division of Medical Quality Assurance.

Data processing and cartography: Florida Department of Health, Office of Medical Education, October 2010.

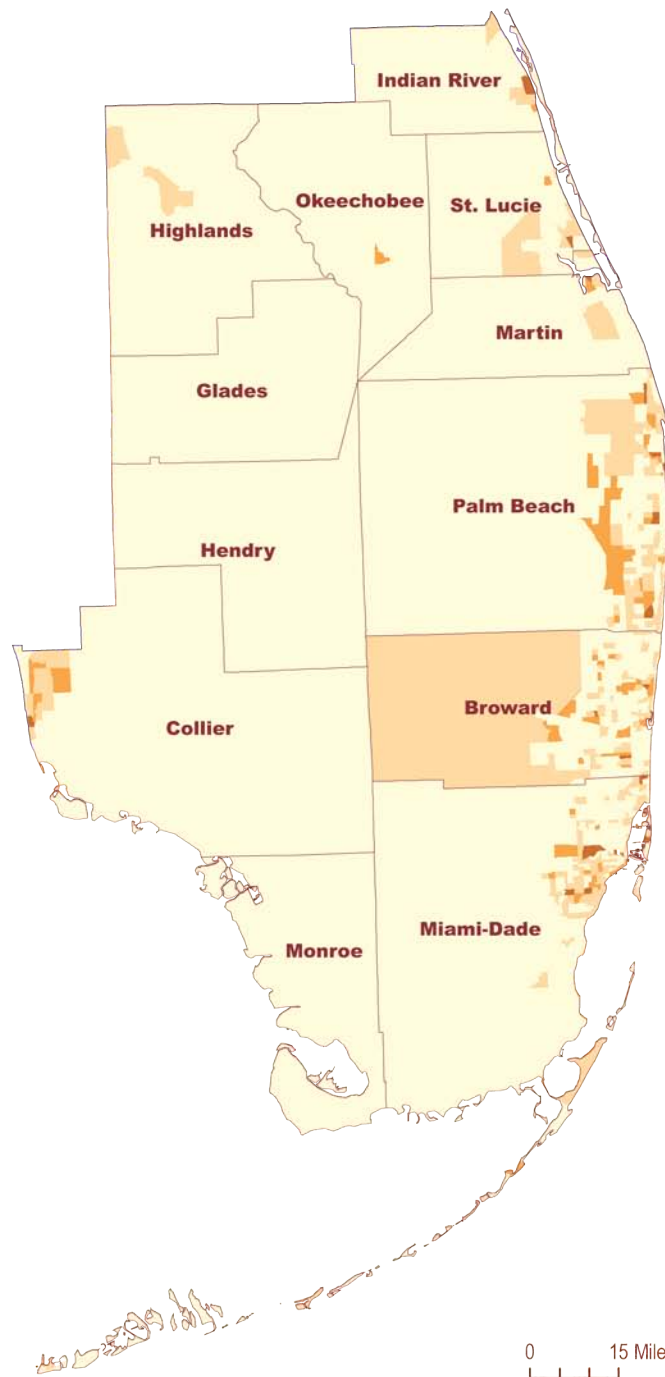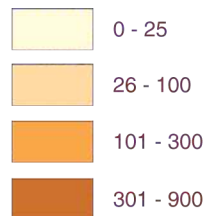*Projected Coordinate System: NAD 83 / Florida Albers Conic Equal Area.*

Scope Of Practice Change Details

County	Will Retire		Will Relocate		Will Retrain	
	Count	% of County Workforce	Count	% of County Workforce	Count	% of County Workforce
Alachua	112	13.18	44	5.18	8	0.94
Baker	18	42.86	1	2.38	1	2.38
Bay	35	10.87	19	5.90	7	2.17
Bradford	0	0.00	0	0.00	0	0.00
Brevard	120	10.31	42	3.61	14	1.20
Broward	463	10.81	169	3.95	31	0.72
Calhoun	0	-----	0	-----	0	-----
Charlotte	47	13.47	6	1.72	6	1.72
Citrus	34	13.99	13	5.35	2	0.82
Clay	35	14.34	11	4.51	6	2.46
Collier	90	11.51	24	3.07	11	1.41
Columbia	21	17.50	3	2.50	0	0.00
DeSoto	5	19.23	2	7.69	1	3.85
Dixie	2	-----	0	-----	0	-----
Duval	286	11.62	92	3.74	29	1.18
Escambia	95	12.91	47	6.39	6	0.82
Flagler	11	10.78	5	4.90	2	1.96
Franklin	1	7.14	2	14.29	0	0.00
Gadsden	19	38.78	1	2.04	0	0.00
Gilchrist	1	-----	2	-----	0	-----
Glades	0	-----	0	-----	0	-----
Gulf	1	9.09	0	0.00	0	0.00
Hamilton	3	-----	0	-----	0	-----
Hardee	5	29.41	1	5.88	1	5.88
Hendry	3	13.64	1	4.55	0	0.00
Hernando	44	15.88	10	3.61	2	0.72
Highlands	27	15.98	6	3.55	2	1.18
Hillsborough	309	9.97	98	3.16	26	0.84
Holmes	3	30.00	0	0.00	0	0.00
Indian River	42	11.67	7	1.94	3	0.83
Jackson	11	26.19	6	14.29	0	0.00
Jefferson	1	-----	0	-----	0	-----
Lafayette	0	-----	0	-----	0	-----
Lake	51	10.41	18	3.67	5	1.02
Lee	136	11.48	41	3.46	10	0.84
Leon	77	13.56	22	3.87	6	1.06
Levy	3	12.50	1	4.17	0	0.00
Liberty	0	-----	0	-----	0	-----
Madison	1	-----	0	-----	0	-----
Manatee	63	11.11	21	3.70	4	0.71
Marion	64	11.87	19	3.53	6	1.11
Martin	58	17.01	17	4.99	5	1.47
Miami-Dade	759	11.86	213	3.33	70	1.09
Monroe	33	19.76	16	9.58	8	4.79
Nassau	13	19.12	3	4.41	0	0.00
Okaloosa	54	14.21	37	9.74	6	1.58
Okeechobee	9	21.43	1	2.38	1	2.38
Orange	260	10.40	79	3.16	18	0.72
Osceola	33	9.19	24	6.69	6	1.67

Scope Of Practice Change Details

County	Will Retire		Will Relocate		Will Retrain	
	Count	% of County Workforce	Count	% of County Workforce	Count	% of County Workforce
Palm Beach	434	11.92	152	4.17	36	0.99
Pasco	73	10.07	38	5.24	11	1.52
Pinellas	304	12.45	104	4.26	29	1.19
Polk	102	11.63	29	3.31	7	0.70
Putnam	10	12.35	4	4.94	1	1.23
Santa Rosa	24	14.20	7	4.14	1	0.59
Sarasota	159	14.49	33	3.01	14	1.28
Seminole	81	12.09	36	5.37	10	1.49
St. Johns	40	12.50	14	4.38	3	0.94
St. Lucie	47	12.77	20	5.43	4	1.09
Sumter	12	12.24	2	2.04	2	2.04
Suwannee	1	3.85	1	3.85	0	0.00
Taylor	4	21.05	3	15.79	1	5.26
Union	6	37.50	1	6.25	0	0.00
Volusia	101	11.18	34	4.21	10	1.11
Wakulla	1	10.00	0	0.00	0	0.00
Walton	6	8.96	7	10.45	1	1.49
Washington	1	7.69	0	0.00	0	0.00

More than 25% of physicians in highlighted counties report a possible scope-of-practice change within the next five years.

Physician Workforce Distribution:
OVERVIEW

Represented here are those physicians renewing their licenses in the 2008/2009 and 2009/2010 cycles. Excluded are those: a) indicating they had not practiced medicine in Florida over the course of the year prior to renewal; b) failing to provide a valid Florida practice address; c) indicating participation in a residnecy, internship, or fellowship program; or d) having a licensure status disallowing their practice of medicine.

Physicians Per County (Raw Count)

- 2 - 380
- 381 - 1,185
- 1,186 - 6,400

0   50 Miles

Physicians Per County (By Region)

Panhandle	Northeast
Minimum: <9	Minimum: 16
Maximum: 736	Maximum: 2,462
Average: 160.0	Average: 406.3

Big Bend	Central
Minimum: <9	Minimum: 17
Maximum: 120	Maximum: 3,100
Average: 22.4	Average: 1,023.5

South

Minimum: <9

Maximum: 6,400

Average: 1,381.6

Sources: 2009 & 2010 Physician Workforce Survey results joined with the Licensure and Practitioner Profile Databases maintained by the Florida Department of Health, Division of Medical Quality Assurance. Population data derived from the U.S. Census Bureau's Census 2000.

Data processing and cartography: Florida Department of Health, Office of Medical Education, October 2010.
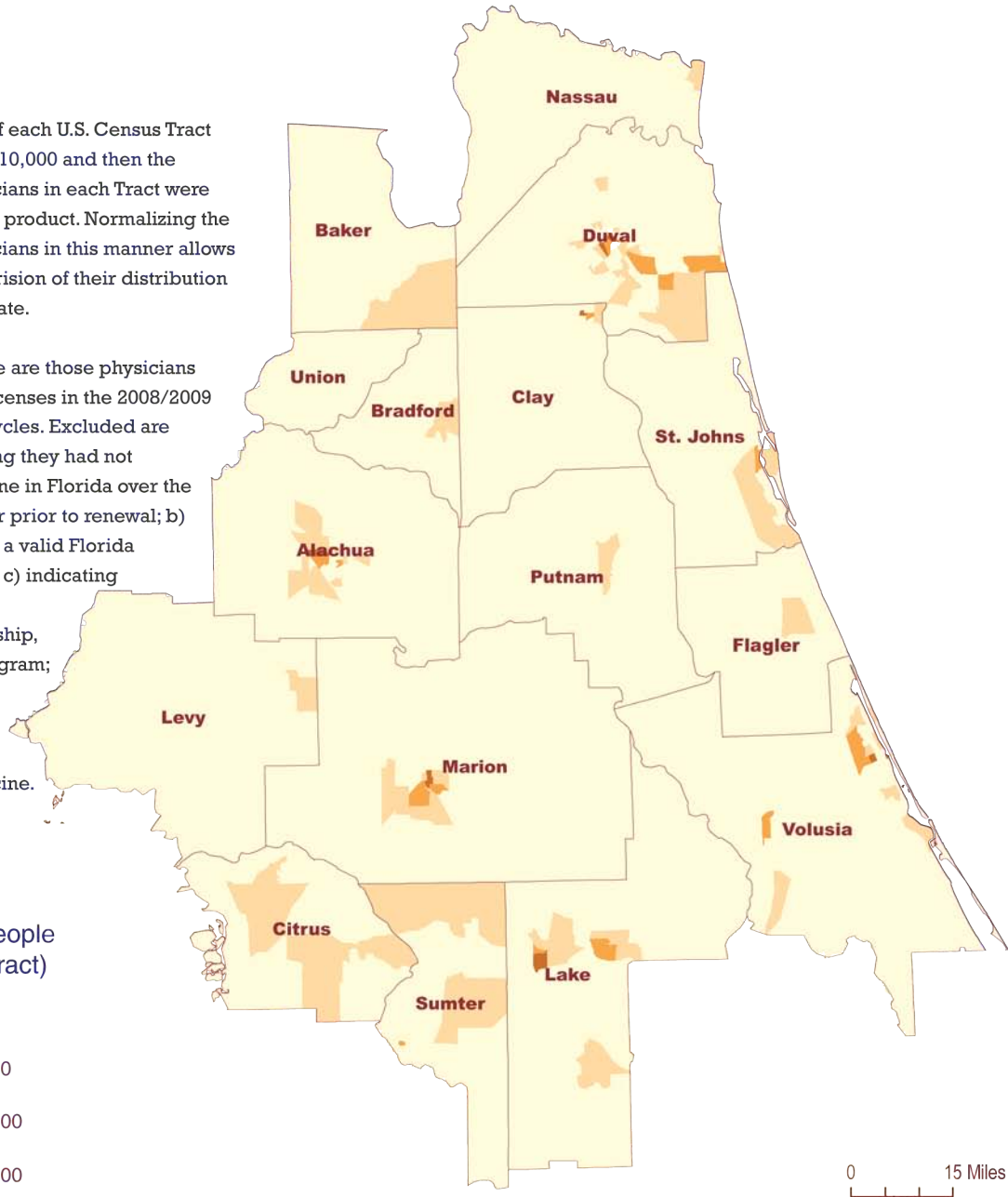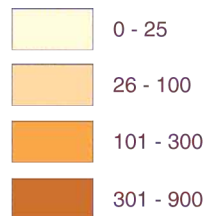
Projected Coordinate System: NAD 83 / Florida Albers Conic Equal Area.

Physician Workforce Distribution:
SOUTH

The population of each U.S. Census Tract was divided into 10,000 and then the number of physicians in each Tract were multiplied by the product. Normalizing the number of physicians in this manner allows for direct comparision of their distribution throughout the state.

Represented here are those physicians renewing their licenses in the 2008/2009 and 2009/2010 cycles. Excluded are those: a) indicating they had not practiced medicine in Florida over the course of the year prior to renewal; b) failing to provide a valid Florida practice address; c) indicating participation in a residnecy, internship, or fellowship program; or d) having a licensure status disallowing their practice of medicine.
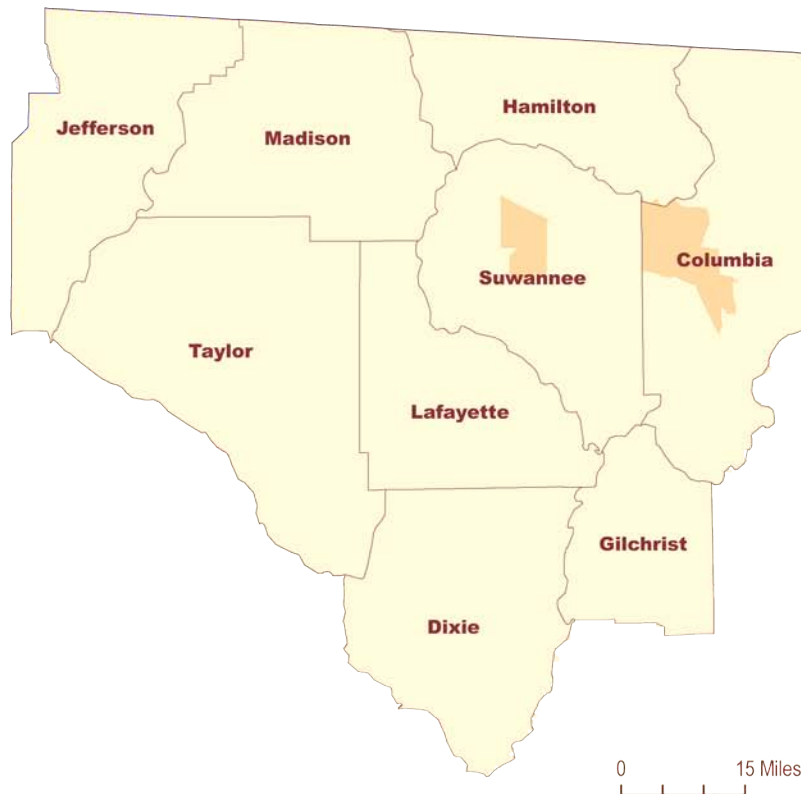
Physicians
Per 10,000 People
(By Census Tract)

- 0 - 25
- 26 - 100
- 101 - 300
- 301 - 900

0   15 Miles

Physician Workforce Distribution:
CENTRAL

The population of each U.S. Census Tract was divided into 10,000 and then the number of physicians in each Tract were multiplied by the product. Normalizing the number of physicians in this manner allows for direct comparision of their distribution throughout the state.

Represented here are those physicians renewing their licenses in the 2008/2009 and 2009/2010 cycles. Excluded are those: a) indicating they had not practiced medicine in Florida over the course of the year prior to renewal; b) failing to provide a valid Florida practice address; c) indicating participation in a residnecy, internship, or fellowship program; or d) having a licensure status disallowing their practice of medicine.

Physicians Per 10,000 People (By Census Tract)

- 0 - 25
- 26 - 100
- 101 - 300
- 301 - 900

Sources: 2009 & 2010 Physician Workforce Survey results joined with the Licensure and Practitioner Profile Databases maintained by the Florida Department of Health, Division of Medical Quality Assurance. Population data and Census Tract boundaries from the U.S. Census Bureau's Census 2000.

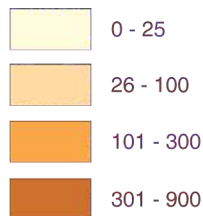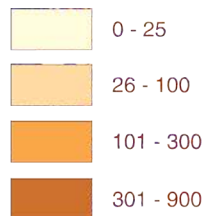*Data processing and cartography: Florida Department of Health, Office of Medical Education, October 2010.*

Projected Coordinate System: NAD 83 / Florida Albers Conic Equal Area.

Physician Workforce Distribution:
Northeast

The population of each U.S. Census Tract was divided into 10,000 and then the number of physicians in each Tract were multiplied by the product. Normalizing the number of physicians in this manner allows for direct comparision of their distribution throughout the state.

Represented here are those physicians renewing their licenses in the 2008/2009 and 2009/2010 cycles. Excluded are those: a) indicating they had not practiced medicine in Florida over the course of the year prior to renewal; b) failing to provide a valid Florida practice address; c) indicating participation in a residnecy, internship, or fellowship program; or d) having a licensure status disallowing their practice of medicine.

Physicians Per 10,000 People (By Census Tract)

- 0 - 25
- 26 - 100
- 101 - 300
- 301 - 900

0   15 Miles

Physician Workforce Distribution:
BIG BEND

Physicians Per 10,000 People (By Census Tract)

- 0 - 25
- 26 - 100
- 101 - 300
- 301 - 900

The population of each U.S. Census Tract was divided into 10,000 and then the number of physicians in each Tract were multiplied by the product. Normalizing the number of physicians in this manner allows for direct comparision of their distribution throughout the state.

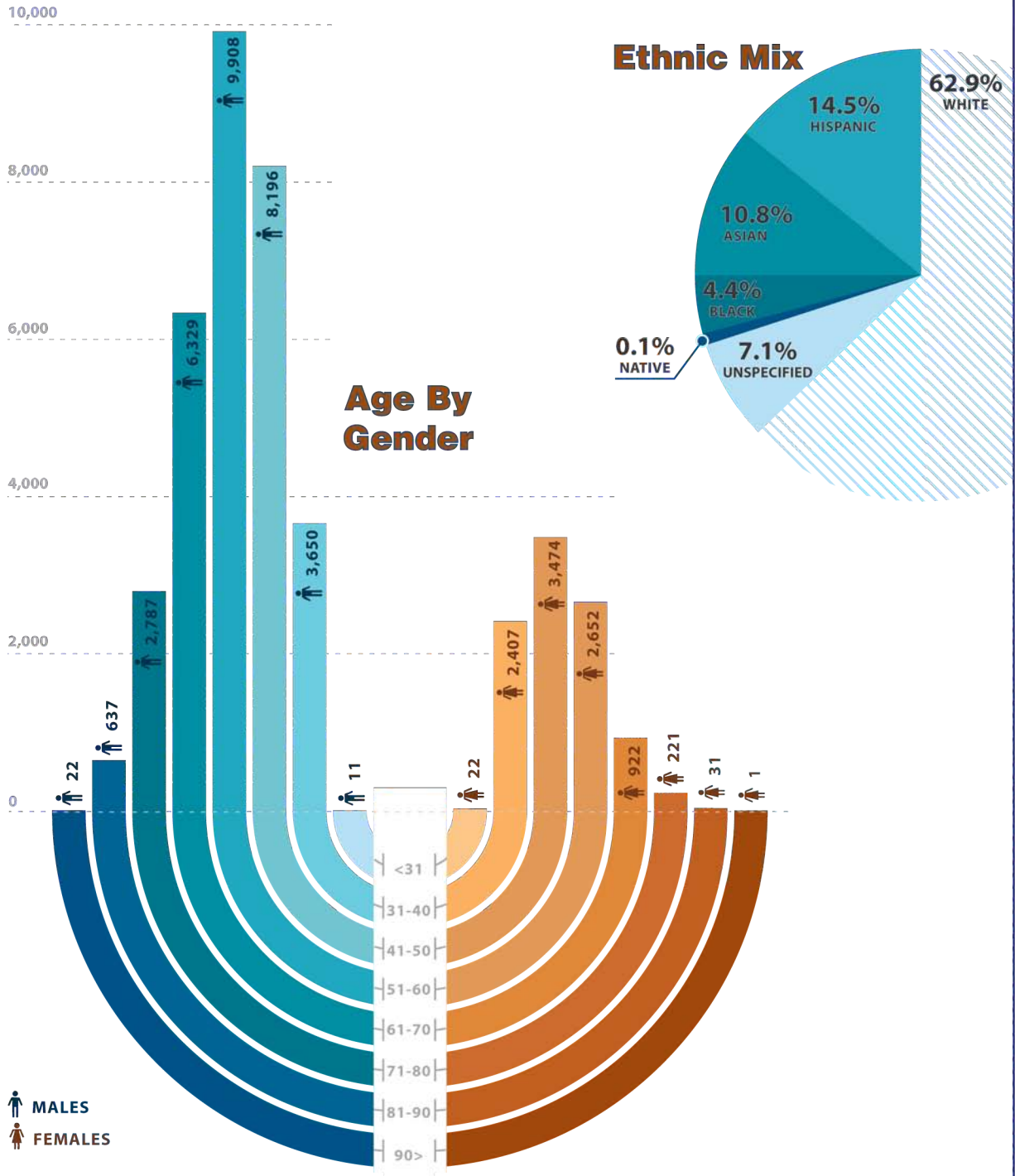Represented here are those physicians renewing their licenses in the 2008/2009 and 2009/2010 cycles. Excluded are those: a) indicating they had not practiced medicine in Florida over the course of the year prior to renewal; b) failing to provide a valid Florida practice address; c) indicating participation in a residnecy, internship, or fellowship program; or d) having a licensure status disallowing their practice of medicine.

Physician Workforce Distribution:
PANHANDLE

**Physicians
Per 10,000 People
(By Census Tract)**

	0 - 25
	26 - 100
	101 - 300
	301 - 900

The population of each U.S. Census Tract was divided into 10,000 and then the number of physicians in each Tract were multiplied by the product. Normalizing the number of physicians in this manner allows for direct comparision of their distribution throughout the state.

Represented here are those physicians renewing their licenses in the 2008/2009 and 2009/2010 cycles. Excluded are those: a) indicating they had not practiced medicine in Florida over the course of the year prior to renewal; b) failing to provide a valid Florida practice address; c) indicating participation in a residnecy, internship, or fellowship program; or d) having a licensure status disallowing their practice of medicine.

Physician Workforce **DEMOGRAPHICS**

Ethnic Mix

- 62.9% WHITE
- 14.5% HISPANIC
- 10.8% ASIAN
- 4.4% BLACK
- 0.1% NATIVE
- 7.1% UNSPECIFIED

Age By Gender

Males: 22, 637, 2,787, 6,329, 9,908, 8,196, 3,650, 11

Females: 22, 2,407, 3,474, 2,652, 922, 221, 31, 1

Age groups: <31, 31-40, 41-50, 51-60, 61-70, 71-80, 81-90, 90>

👨 MALES
👩 FEMALES

Sources: 2009 & 2010 Physician Workforce Survey results joined with the Licensure and Practitioner Profile Databases maintained by the Florida Department of Health, Division of Medical Quality Assurance. Population data and Census Tract boundaries from the U.S. Census Bureau's Census 2000.

Data processing and design: Florida Department of Health, Office of Medical Education, October 2010.

Responses From The **2009 & 2010** Physician Workforce Surveys
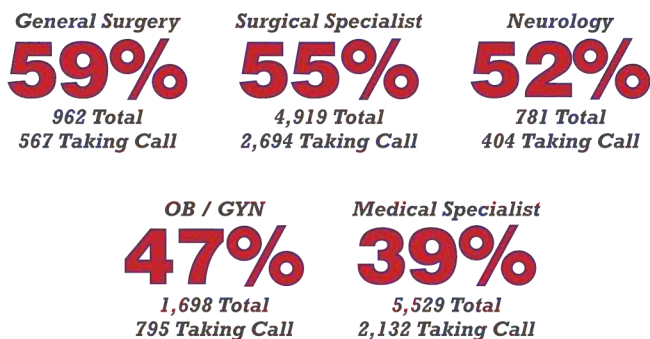
Patients Seen Per Week
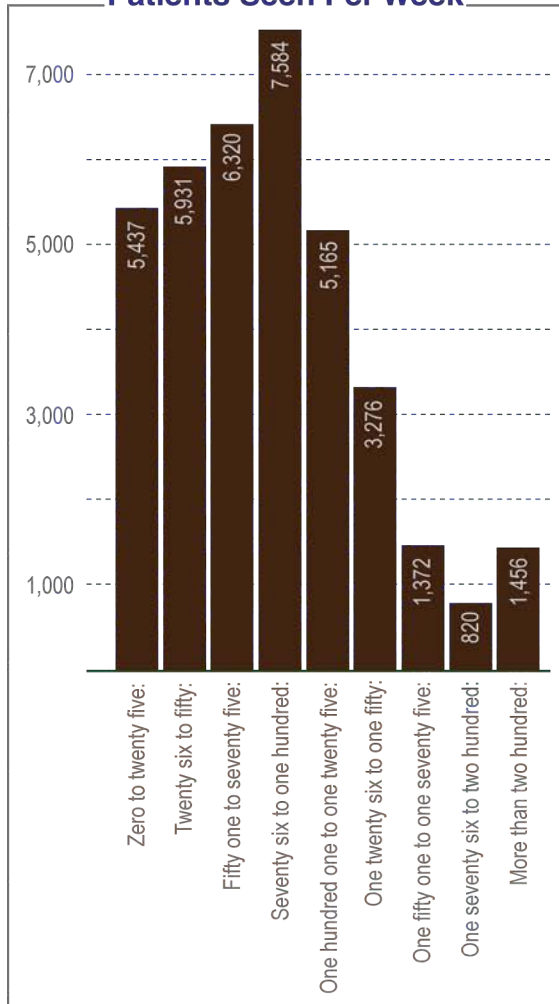
*Physicians were evaluated on how many patients they see per week in the 2009 and 2010 surveys (of the 41,274 active, licensed respondents, 37,361 completed the question concerning patients per week). Survey data indicates the average number of patients per week is **82.57**. A 2001 American Medical Association survey reports a national average of **94** patients per week.*
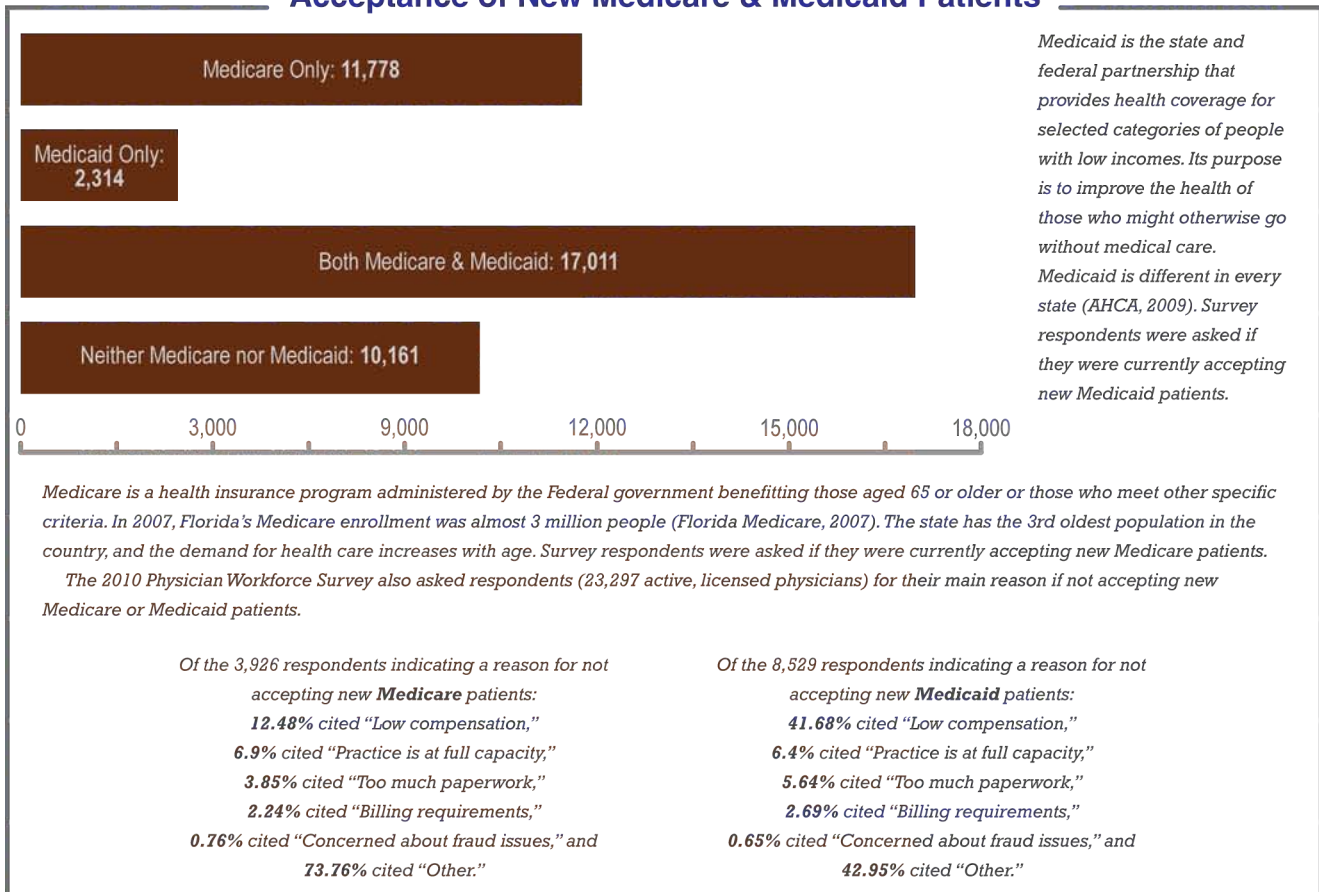
Patient-Care Hours Per Week
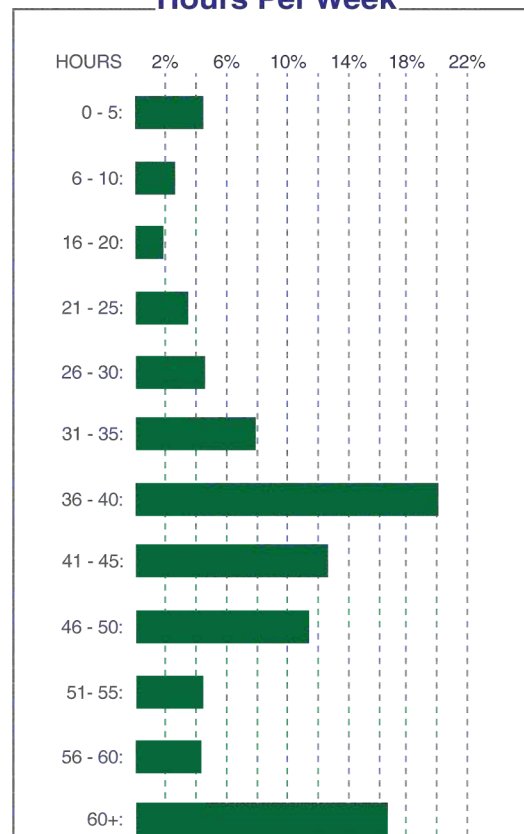
*Physicians were evaluated on their allocation of weekly work hours in the 2009 and 2010 surveys (of the 41,274 active, licensed respondents, 37,375 completed the question concerning weekly patient-care hours). In a three-part question, respondents were asked about time spent on patient care (office and hospital), administrative matters, and research and training. Survey data indicate the average time spent on patient-care is **40.83**.*

Specialties On Call: Top 5 Groups By Percentage

General Surgery
59%
962 Total
567 Taking Call

Surgical Specialist
55%
4,919 Total
2,694 Taking Call

Neurology
52%
781 Total
404 Taking Call

OB / GYN
47%
1,698 Total
795 Taking Call

Medical Specialist
39%
5,529 Total
2,132 Taking Call

2009 & 2010 Survey Respones (continued)

Acceptance of New Medicare & Medicaid Patients

Medicare Only: **11,778**

Medicaid Only: **2,314**

Both Medicare & Medicaid: **17,011**

Neither Medicare nor Medicaid: **10,161**

0   3,000   9,000   12,000   15,000   18,000

Medicaid is the state and federal partnership that provides health coverage for selected categories of people with low incomes. Its purpose is to improve the health of those who might otherwise go without medical care. Medicaid is different in every state (AHCA, 2009). Survey respondents were asked if they were currently accepting new Medicaid patients.

Medicare is a health insurance program administered by the Federal government benefitting those aged 65 or older or those who meet other specific criteria. In 2007, Florida's Medicare enrollment was almost 3 million people (Florida Medicare, 2007). The state has the 3rd oldest population in the country, and the demand for health care increases with age. Survey respondents were asked if they were currently accepting new Medicare patients.

The 2010 Physician Workforce Survey also asked respondents (23,297 active, licensed physicians) for their main reason if not accepting new Medicare or Medicaid patients.

*Of the 3,926 respondents indicating a reason for not accepting new **Medicare** patients:*
12.48% cited "Low compensation,"
6.9% cited "Practice is at full capacity,"
3.85% cited "Too much paperwork,"
2.24% cited "Billing requirements,"
0.76% cited "Concerned about fraud issues," and
73.76% cited "Other."

*Of the 8,529 respondents indicating a reason for not accepting new **Medicaid** patients:*
41.68% cited "Low compensation,"
6.4% cited "Practice is at full capacity,"
5.64% cited "Too much paperwork,"
2.69% cited "Billing requirements,"
0.65% cited "Concerned about fraud issues," and
42.95% cited "Other."

Average Student Loan Debt :

$47,200

According to the Association of American Medical Colleges, the amount of debt a student carries after medical school can directly influence the specialty area that he or she chooses for residency and practice (2006). Survey respondents were presented with a set of debt ranges from which to choose and the average presented here was computed (based on the median of each range) for the purpose of direct comparison between the workforce as a whole and selected specialty groups.

Hospital Privileges

Four + 4,854

Three 5,186

None 10,513

Two 8,564

One 11,655
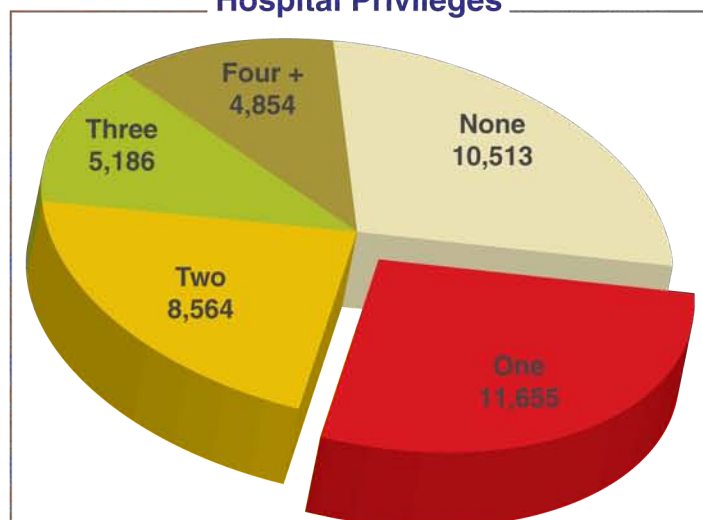
*Hospital privileges are an important factor when considering the continuity of patient care. The process by which hospitals grant privileges is based on documentation, experience and current clinical competence. Of the **40,772** active, licensed physicians responding to the question concerning privileges, **74.22%** have privileges and **45.63%** have privileges at more than one hospital.*

Physician Workforce
POINT PATTERN ANALYSIS

AVERAGE DENSITY (Physicians/Sq Mile)
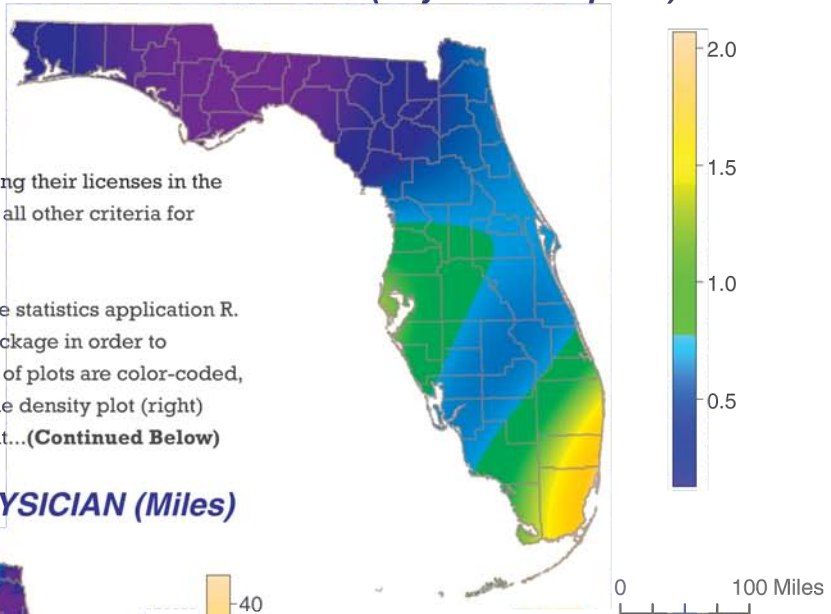
Represented here are those physicians renewing their licenses in the 2008/2009 and 2009/2010 cycles and meeting all other criteria for inclusion in this study.

These plots were generated in the open-source statistics application R. The software was enabled with the SpatStat package in order to perform the point-pattern analysis. Both types of plots are color-coded, continuous images in the shape of the state. The density plot (right) demonstrates the concentration of physicians at...**(Continued Below)**

DISTANCE TO NEAREST PHYSICIAN (Miles)
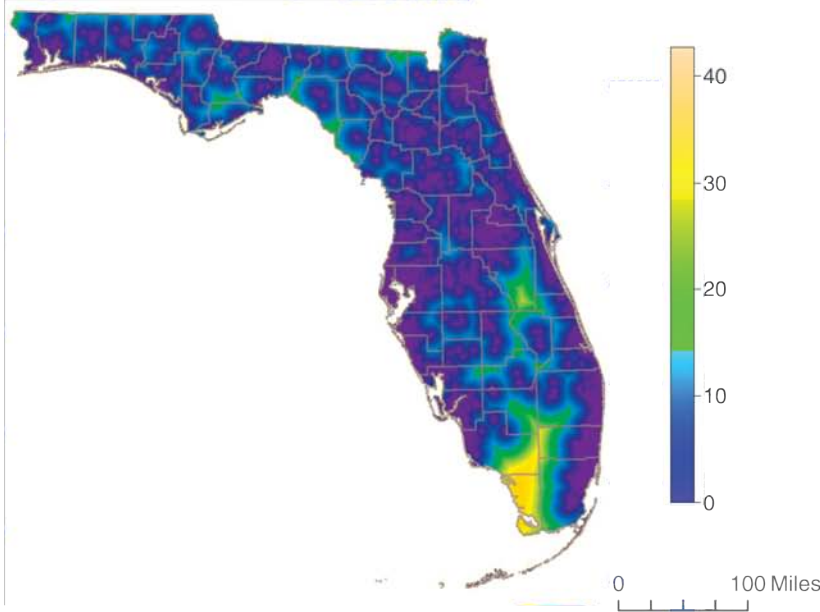
(Continued From Above) any given point in the state. The distance plot (left) demonstrates the distance to the nearest physician from any given point in the state.

While the point-pattern analysis distance output for this report is limited to measuring cartesian (straight-line) distance, the Department plans to employ the same techniques in conjunction with a network of Florida roads to determine the approximate driving distance from any address to the nearest physician.

Sources: 2009 & 2010 Physician Workforce Survey results joined with the Licensure and Practitioner Profile Databases maintained by the Florida Department of Health, Division of Medical Quality Assurance. Population data and Census Tract boundaries from the U.S. Census Bureau's Census 2000.

Data processing and cartography: Florida Department of Health, Office of Medical Education, October 2010.

Projected Coordinate System: NAD 83 / Florida Albers Conic Equal Area.

Licensed, Non-Practicing Physicians

Figure 2
Plans of Licensed, Non-Practicing
*Physicians To Relocate To Florida*
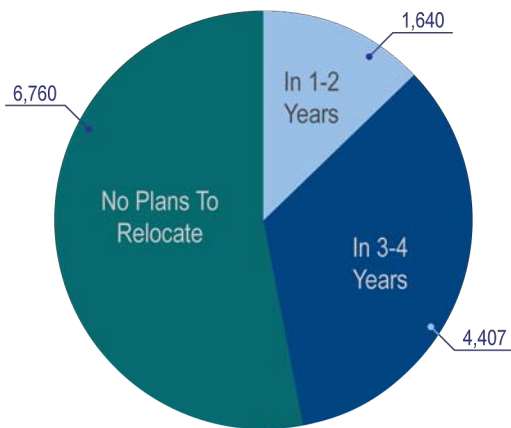
1,752 respondents who indicated they do not practice in state chose not to specify their plans for relocation to Florida.

One of the most interesting facts from the first Physician Workforce Survey was the high percent of physicians who renewed their Florida licenses but did not actually practice at any time during the year in Florida. For 2009 & 2010, representing the entire count of physicians in Florida (n=57,750), over 5% indicated that they did not practice at any time during the year. This number becomes an important factor in understanding the reasons someone may or may not choose to practice in the state by age and gender. Policymakers and stakeholders will evaluate the reasons why to create incentives and to plan for those who say they are planning to come to Florida.

When asked to indicate the main reason they have a Florida license but do not practice medicine in Florida, of identifiable cases (n = 14,554), 30.5% cited not maintaining a full-time residence in Florida was the main reason. Those citing liability or reimbursement as reasons for not practicing in Florida made up less than 2% in total. Figure 6 represents the main reasons that those having a license but are not practicing in Florida by age. In 2010, a follow up question was asked of those licensed, non-practicing physicians regarding plans to relocate to Florida. Figure 5 indicates that around 6,000 physicians (n=6,047) plan to relocate in Florida in the next 1-4 years.

Figure 3
Reasons Given By Florida Licensed
Physicians For Not Practicing In State
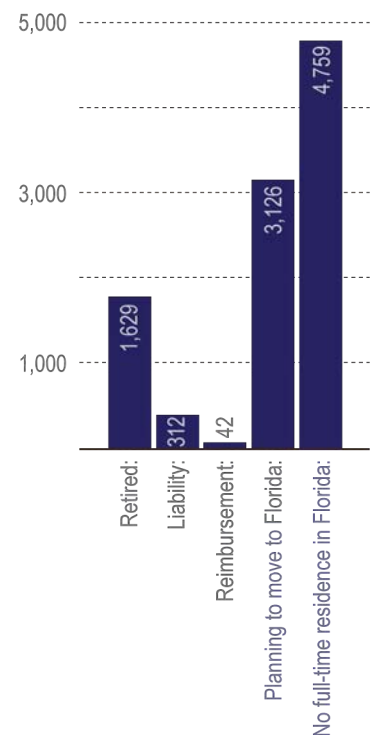
4,686 respondents who indicated they do not practice in state chose not to specify a reason.

Conclusion

The Department of Health renews its commitment to access to health care for all Floridians and will support the efforts of the Physician Workforce Advisory Council throughout the upcoming year as a strategic plan is developed and further data analyzed. Further, the Department will work to cement partnerships and collaborations by serving as a data clearinghouse, focusing activities in the creation of web-based applications to determine physician location and specialty by facility. The successful implementation of the physician workforce project has resulted in new information for policymakers on clinical practice, geographic location, and scope of practice for Florida physicians. The evaluation of this data will continue to provide better resources for planning both the recruitment and retention of physicians, and the expanded capacity for residency programs.

Appendix A: Specialty Groups

Anesthesiology
   Critical Care Medicine
   Pain Medicine

Dermatology
   Dermatopathology
   Procedural Dermatology

Emergency Medicine

Family Medicine
   Sports Medicine
   Geriatric Medicine

General Surgery

Internal Medicine
   Geriatric Medicine

Medical Specialists
   Allergy and Immunology
   Cardiovascular Disease
   Clinical Cardiac Electrophysiology
   Critical Care Medicine
   Endocrinology, Diabetes, and Metabolism
   Gastroenterology
   Hematology
   Hematology and Oncology
   Infectious Disease
   Interventional Cardiology
   Nephrology
   Oncology
   Pulmonary Disease
   Pulmonary Disease and Critical Care Medicine
   Rheumatology
   Sports Medicine
   Sleep Medicine

Neurology
   Clinical Neurophysiology
   Neuromuscular Medicine
   Neurodevelopmental Disabilities
   Pain Medicine
   Vascular Neurology

OB/GYN

Pathology
   Blood Banking/Transfusion Medicine
   Chemical Pathology
   Cytopathology
   Forensic Pathology
   Hematology
   Medical Microbiology
   Neuropathology
   Pediatric Pathology
   Surgical (Selective) Pathology

Pediatric Subspecialists
   Neonatal-Perinatal Medicine
   Pediatric Cardiology
   Pediatric Critical Care Medicine
   Pediatric Emergency Medicine
   Pediatric Endocrinology
   Pediatric Gastroenterology
   Pediatric Hematology/Oncology
   Pediatric Infectious Diseases
   Pediatric Nephrology
   Pediatric Pulmonology
   Pediatric Rheumatology
   Developmental-Behavioral Pediatrics
   Pediatric Otolaryngology
   Pediatric Urology
   Sports Medicine
   Child Neurology
   Pediatric Anesthesiology
   Pediatric Rehabilitation

Pediatrics
   Adolescent Medicine
   Pediatric Sports Medicine

Psychiatry
   Addiction Psychiatry
   Child and Adolescent Psychiatry
   Forensic Psychiatry
   Geriatric Psychiatry
   Pain Medicine
   Psychosomatic Medicine

Radiology
   Abdominal Radiology
   Cardiothoracic Radiology

Endovascular Surgical Neuroradiology
Musculoskeletal Radiology
Neuroradiology
Nuclear Radiology
Pediatric Radiology
Vascular and Interventional Radiology

Surgical Specialists
Colon and Rectal Surgery
Neurological Surgery
Ophthalmology
Orthopaedic Surgery
Adult Reconstructive Orthopaedics
Foot and Ankle Orthopaedics
Hand Surgery
Musculoskeletal Oncology
Orthopaedic Sports Medicine
Orthopaedic Surgery of the Spine
Orthopaedic Trauma
Pediatric Orthopaedics
Otolaryngology
Plastic Surgery
Craniofacial Surgery
Hand Surgery
Pediatric Surgery
Surgical Critical Care
Vascular Surgery
Thoracic Surgery
Urology

Other
Spinal Cord Injury Medicine
Preventive Medicine
Medical Toxicology
Undersea and Hyperbaric Medicine
Therapeutic Radiological Physics

Appendix B: Primary Care

Responses From The **2009 & 2010** Physician Workforce Surveys
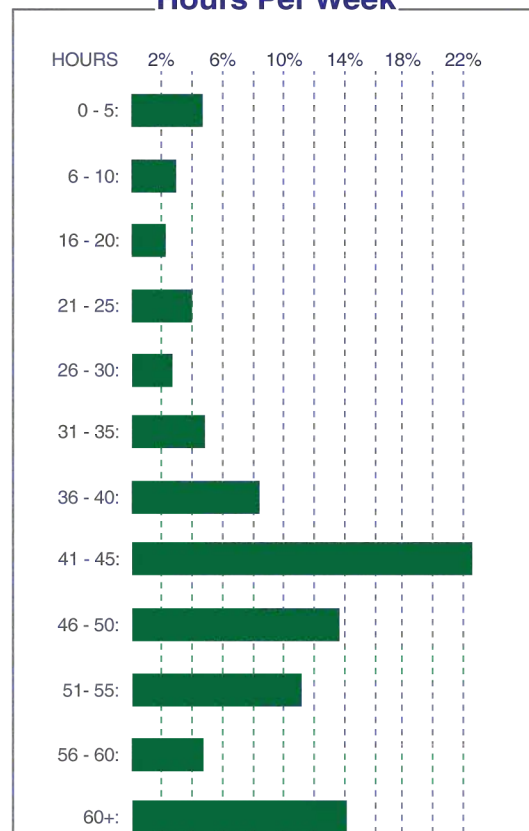
Primary Care*

*Physicians self identified as family medicine, internal medicine, or pediatrics specialists.

Patients Seen Per Week
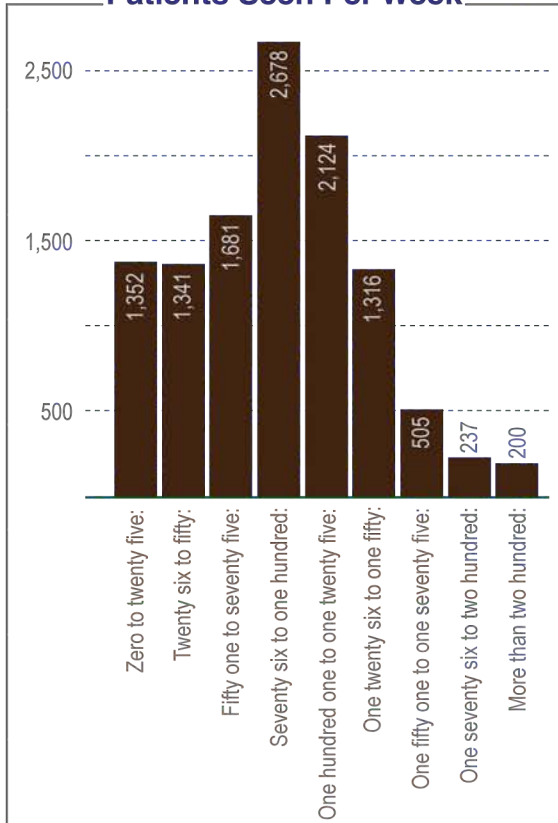
2,500	
1,500	
500	

Bar values:
- Zero to twenty five: 1,352
- Twenty six to fifty: 1,341
- Fifty one to seventy five: 1,681
- Seventy six to one hundred: 2,678
- One hundred one to one twenty five: 2,124
- One twenty six to one fifty: 1,316
- One fifty one to one seventy five: 505
- One seventy six to two hundred: 237
- More than two hundred: 200

*Physicians were evaluated on how many patients they see per week in the 2009 and 2010 surveys (of the 11,606 primary care respondents, 11,434 completed the question concerning patients per week). Survey data indicate the average number of patients per week is **87.28**. A 2001 American Medical Association survey reports a national average of **94** patients per week.*

Patient-Care Hours Per Week

HOURS — percentages: 2%, 6%, 10%, 14%, 18%, 22%

- 0 - 5:
- 6 - 10:
- 16 - 20:
- 21 - 25:
- 26 - 30:
- 31 - 35:
- 36 - 40:
- 41 - 45:
- 46 - 50:
- 51 - 55:
- 56 - 60:
- 60+:

Acceptance of New Medicare & Medicaid Patients

- Medicare Only: **3,887**
- Medicaid Only: **1,302**
- Both Medicare & Medicaid: **3,778**
- Neither Medicare nor Medicaid: **2,39**

(scale: 0, 1,000, 2,000, 3,000)

*Physicians were evaluated on their allocatation of weekly work hours in the 2009 and 2010 surveys (of the 11,606 primary care respondents, 11,356 completed the question concerning weekly patient-care hours). In a three-part question, respondents were asked about time spent on patient care (office and hospital), administrative matters, and research and training. Survey data indicate the average time spent on patient-care is **39.63**.*
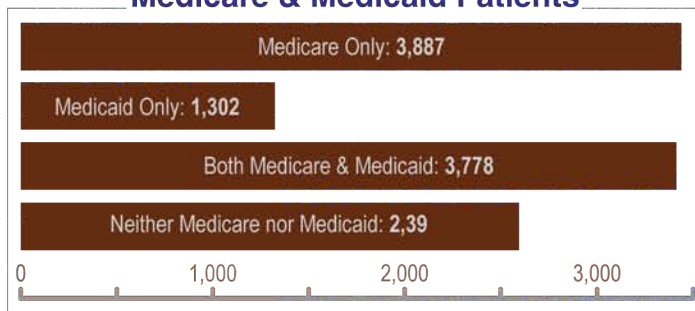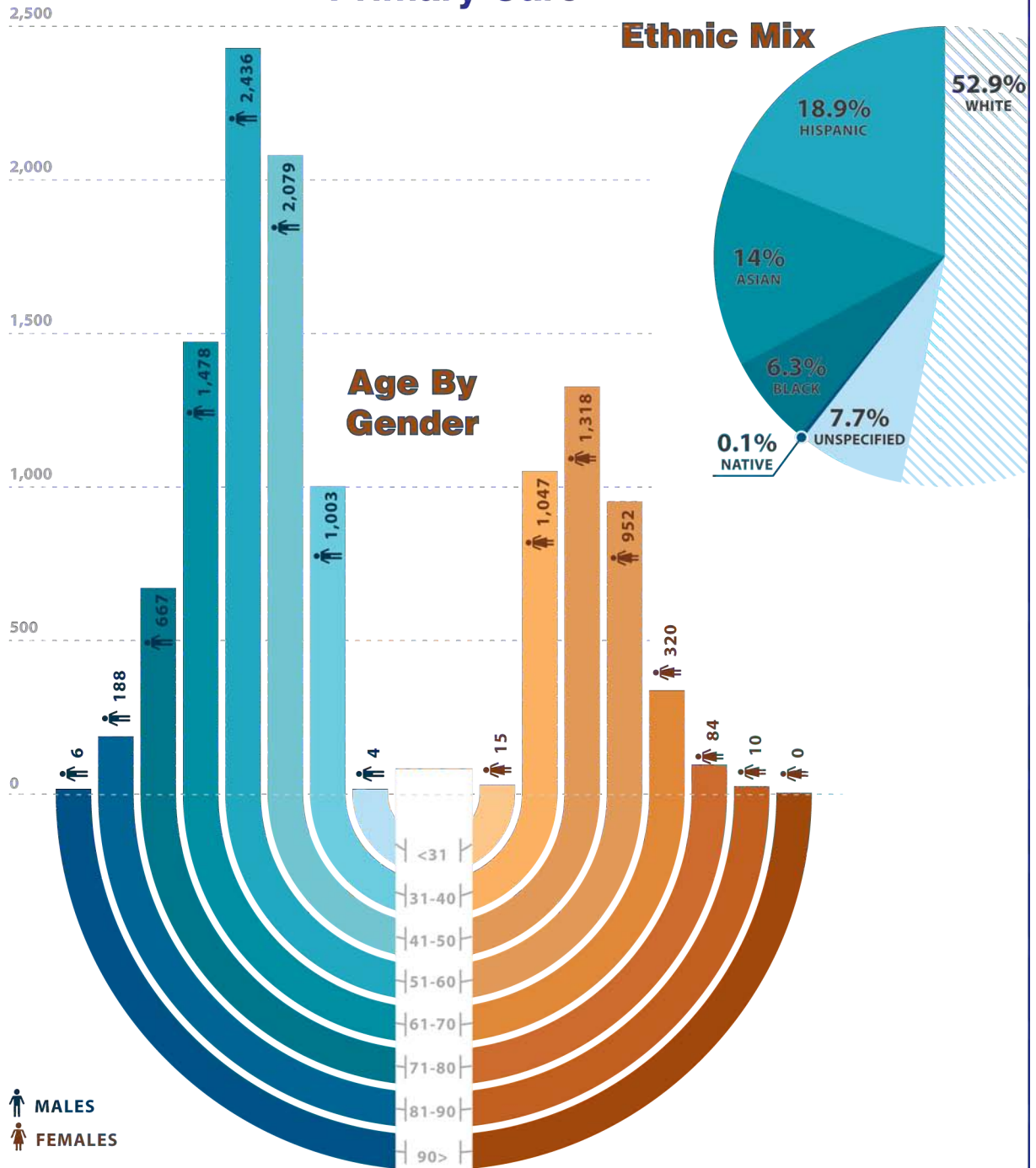
Average Student Loan Debt :

$46,875

Survey respondents were presented with a set of debt ranges from which to choose and the average presented here was computed based on the median of each range.

# Physician Workforce **DEMOGRAPHICS**

Primary Care*

Ethnic Mix

Ethnic Mix pie chart:
- 52.9% WHITE
- 18.9% HISPANIC
- 14% ASIAN
- 6.3% BLACK
- 7.7% UNSPECIFIED
- 0.1% NATIVE

Age By Gender

Age By Gender chart (Males blue / Females orange):

Age	Males	Females
<31	6	15
31-40	188	1,047
41-50	667	1,318
51-60	1,478	952
61-70	2,436	320
71-80	2,079	84
81-90	1,003	10
90>	4	0

♂ MALES
♀ FEMALES

*Physicians self identified as family medicine, internal medicine, or pediatrics specialists.

Physician Workforce Distribution:
PRIMARY CARE*
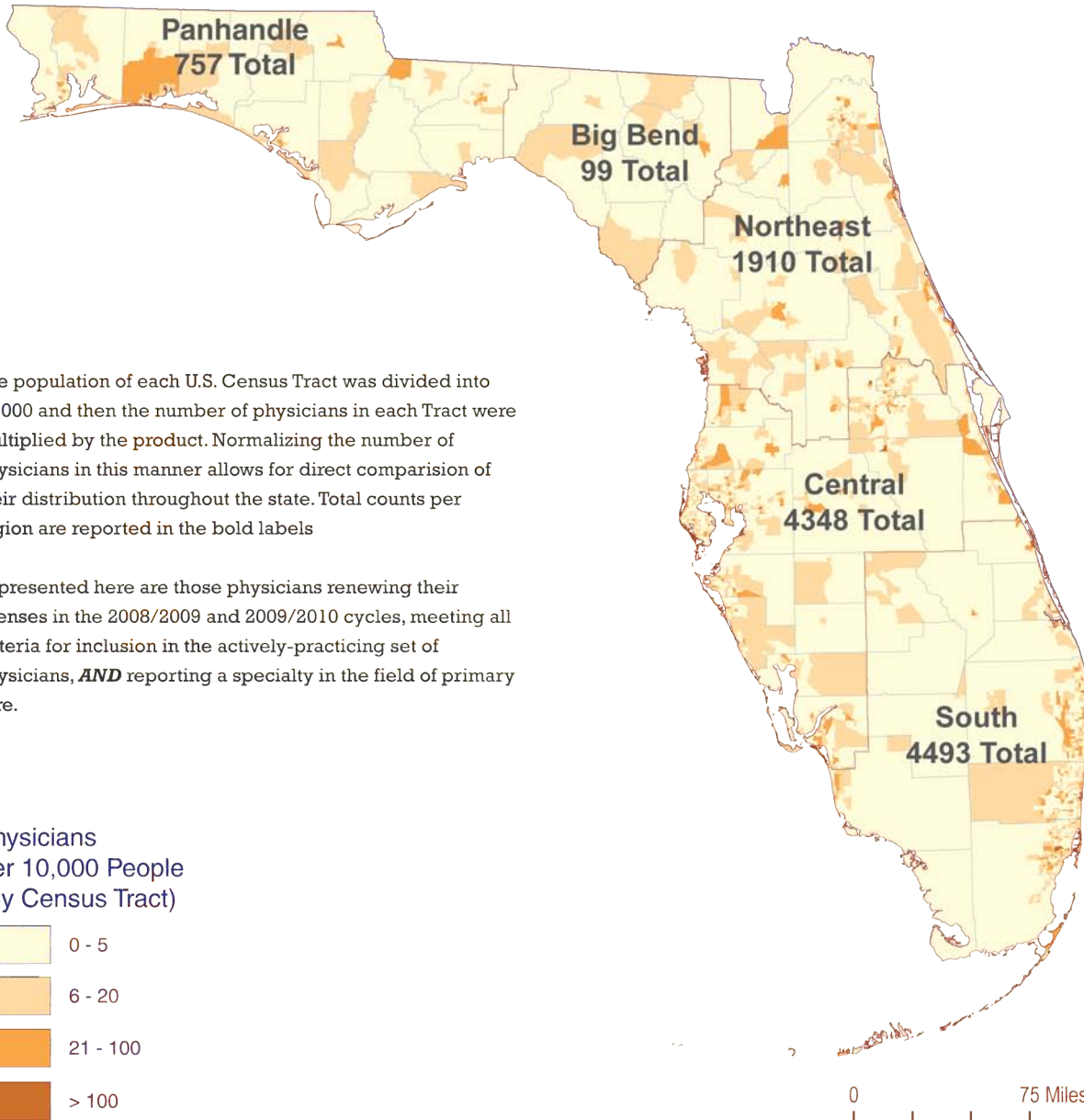
**Panhandle
757 Total**

**Big Bend
99 Total**

**Northeast
1910 Total**

The population of each U.S. Census Tract was divided into
10,000 and then the number of physicians in each Tract were
multiplied by the product. Normalizing the number of
physicians in this manner allows for direct comparision of
their distribution throughout the state. Total counts per
region are reported in the bold labels

Represented here are those physicians renewing their
licenses in the 2008/2009 and 2009/2010 cycles, meeting all
criteria for inclusion in the actively-practicing set of
physicians, **AND** reporting a specialty in the field of primary
care.
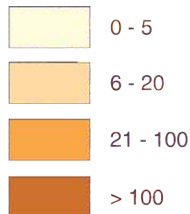
**Central
4348 Total**

**South
4493 Total**

Physicians
Per 10,000 People
(By Census Tract)

0 - 5

6 - 20

21 - 100

> 100

0   75 Miles

*Physicians self identified as family medicine, internal medicine, or pediatrics specialists.

Physician Workforce
POINT PATTERN ANALYSIS
Primary Care*

AVERAGE DENSITY (Physicians/Sq Mile)
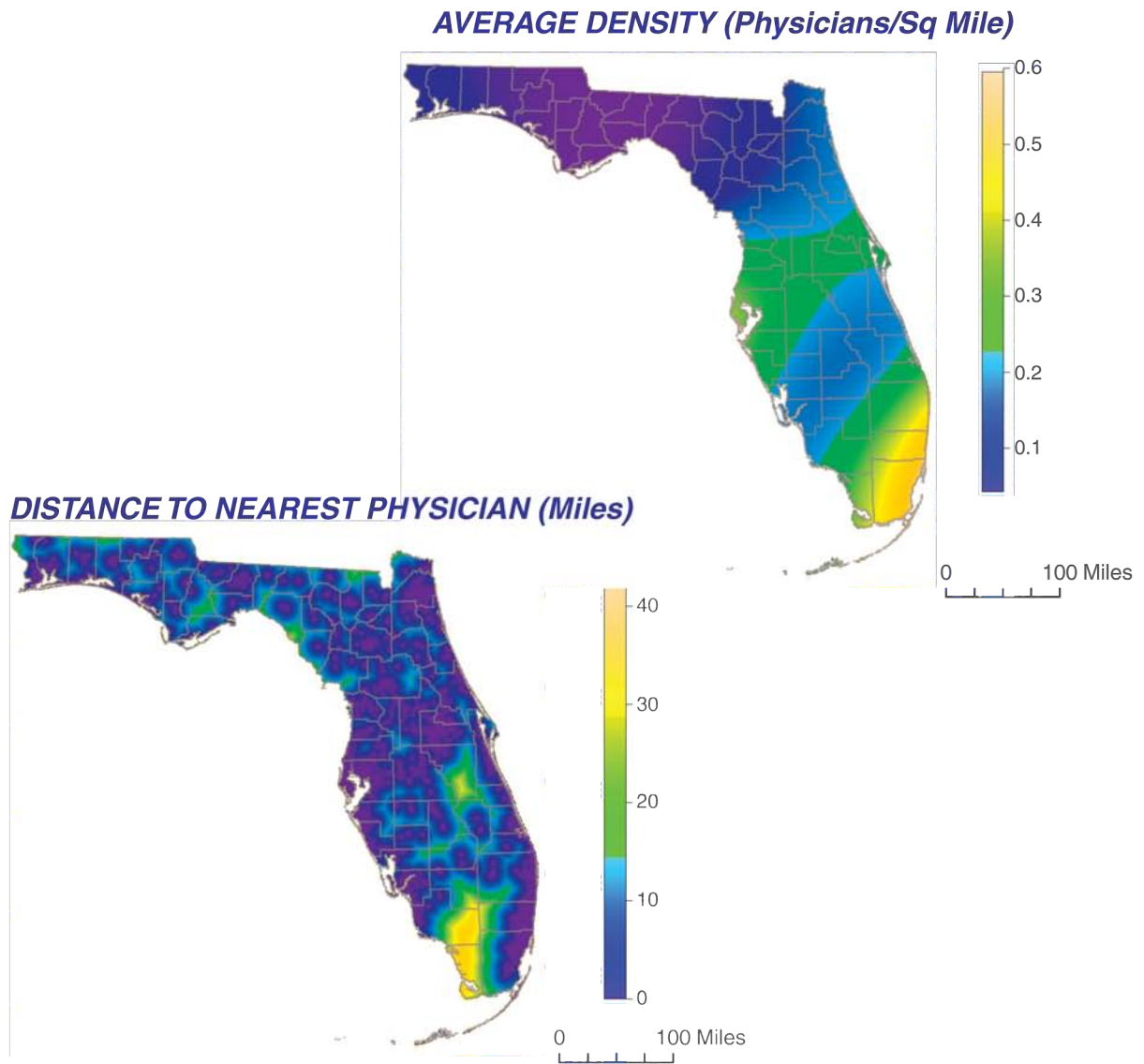
DISTANCE TO NEAREST PHYSICIAN (Miles)

*Physicians self identified as family medicine, internal medicine, or pediatrics specialists.

Sources: 2009 & 2010 Physician Workforce Survey results joined with the Licensure and Practitioner Profile Databases maintained by the Florida Department of Health, Division of Medical Quality Assurance. Population data and Census Tract boundaries from the U.S. Census Bureau's Census 2000.

Data processing and cartography: Florida Department of Health, Office of Medical Education, October 2010.

Projected Coordinate System: NAD 83 / Florida Albers Conic Equal Area.