

# 2018 Physician Workforce Annual Report

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Rick Scott Governor

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# **Key Definitions**

**Medical Specialist:** Physicians indicating that they practice a specialized or subspecialized branch of medicine. This includes internal medicine subspecialties (0502-0522), medical genetics (0600-0605), neurology (0700-0710), nuclear medicine (0800-0804), ophthalmology (1100), orthopedic medicine (1100-1103), otolaryngology (1200-1205), pathology (1300-1312), physical medicine & rehabilitation (1500-1506), preventive medicine (1600-1607), proctology (1700), and urology (2100-2101).

**Physicians Not Actively Practicing in Florida:** Physicians holding a Florida medical license who took the survey and indicated that they did not practice medicine in Florida during the twelve months prior to taking the survey, physicians with inactive licenses, physicians whose primary practice location is not in Florida (based on county and ZIP code responses), and physicians whose license status as of May 31, 2018, does not authorize them to practice (administrative suspension, delinquent, emergency suspension, military active, retired, suspended, temporary military active, and voluntary withdrawal).

**Physician Workforce Survey:** The survey completed by all medical doctors (allopathic and osteopathic) biennially during the Florida medical license renewal process.

**Physicians Actively Practicing in Florida:** Physicians who are actively practicing medicine in Florida, have a valid practice address in a Florida county, possess a valid license in active status, and are not classified as a current medical resident, intern, or fellow.

**Primary Care Physicians:** Physicians indicating that they practice general internal medicine (0500-0501), family medicine (0400-0406), or pediatrics (1400-1427) as a primary practice specialty, as defined by the American Academy of Family Physicians.

Primary Specialty: The primary practice specialty reported by the physician.

### **Executive Summary**

The 2018 Physician Workforce Annual Report presents a summary and analysis of the 2017 and 2018 Physician Workforce Surveys.<sup>1</sup> Physicians are required to complete the survey every two years when they renew their license to practice; two years of survey responses represent the majority of physicians in the state of Florida.<sup>2</sup> This report helps policymakers make informed decisions and policies about Florida's current and future physician workforce and access to care.

A total of 78,018 physicians possess a license that allows them to practice in Florida. Of these physicians, 70,159 renewed their medical license during 2017 and 2018 and responded to the workforce survey. Of the physicians renewing their medical license, 51,582 (73.5%) were practicing in Florida; survey results presented in this report are based on these physicians, unless otherwise specified.

- Nearly two-thirds (60.3% or 31,076) of physicians are age 50 and older (page 10).
- The top three specialty groups for physicians in Florida are internal medicine (28.6% or 14,232), family medicine (14.5% or 7,236), and pediatrics (7.6% or 3,802) (page 12).
- Primary care physicians account for 36.9% of the physician workforce (page 13).
- More than half (58.2% or 30,002) of physicians work in an office practice setting, and 27.9% (14,371) practice in a hospital (page 15).
- More physicians are accepting new Medicare patients (81.2%) compared to physicians accepting new Medicaid patients (62.5%) (pages 19–21).
- A total of 16.6% (8,572) of physicians plan to retire in the next five years (page 22).
- There are generally more physicians per capita in areas with large population centers (Appendix A).
- During the last ten-year period, the total number of physicians licensed in Florida increased 38.8%, the number of physicians actively practicing in Florida increased 36.2%, and the total population of Florida increased 13.7% (page 41).
- Both the number and percentage of female physicians is increasing. For physicians under age 40, the percentage of female physicians is almost half (48.7%) (pages 8–12).
- The percentage of minority physicians has been steadily increasing since 2008 (page 9).

<sup>&</sup>lt;sup>1</sup> The 2017–2018 biennial survey cycle is from June 1, 2016 through May 31, 2018.

<sup>&</sup>lt;sup>2</sup> Newly licensed physicians do not complete a survey.

# 2017 Florida Physician Workforce Annual Report

### Introduction

The 2018 Physician Workforce Annual Report is based on responses to the Florida Physician Workforce Survey. The survey is part of the licensure renewal process for physicians and is administered by the Florida Department of Health's (the Department) Division of Medical Quality Assurance. Physicians must renew their license every other year. This includes allopathic physicians (M.D.) and osteopathic physicians (D.O.). Newly licensed physicians are not included in the analysis, because the survey is only administered upon licensure renewal.<sup>3</sup>

A total of 78,018 physicians possess a license that allows them to practice in Florida. Of these physicians, 70,159 renewed their medical license during 2017 and 2018 and responded to the workforce survey. Of those surveyed, 51,582 are actively practicing medicine in Florida. Unless otherwise noted, this report presents survey results and analyzes this group of physicians. From the 2012–2013 survey cohort to the 2017–2018 survey cohort, the number of actively practicing physicians increased 19%, from 43,406 to 51,582.<sup>4</sup> During this same time, the population of Florida increased 8.5%, from 19.3 million to 21.0 million.<sup>5</sup>

<sup>&</sup>lt;sup>3</sup> In 2017, the licensure renewal survey data storage platform transitioned to a new platform. Although the survey content remained consistent, the survey response options in the new platform were different from the response options in the old platform. Approximately half of the surveys were completed using the new platform. To ensure the data remained accurate, the Department converted the responses from the old platform to the new platform, and the integrated results are presented in this report. In addition, while the Department's Division of Medical Quality Assurance reports a 3.8% increase in the number of new licenses issued, the number of physicians who completed the survey online increased 9.5%.

<sup>&</sup>lt;sup>4</sup> In addition, four counties—Hamilton, Hardee, Madison, and Washington—have experienced at least a 30% decrease in the number of practicing physicians. See Appendix B for information on changes in the number and percentages of practicing physicians by county.

<sup>&</sup>lt;sup>5</sup> The 2017 Florida population number is published on the United States Census Bureau's QuickFacts webpage (<u>www.census.gov/quickfacts/fact/table/fl/PST045217</u>).

### Physician Workforce Advisory Council

The Physician Workforce Advisory Council (the Council) is established in Section 381.4018, Florida Statutes, and is charged with advising the State Surgeon General and the Department about the current and future physician workforce needs in the state. As shown in the table below, the Council comprises of medical and academic stakeholders, and serves as a coordinating and strategic planning body to assess the state's physician workforce needs.

Council Member	Name
State Surgeon General & Secretary – Council Chair	Celeste Philip, MD, MPH
An individual recommended by the Florida Alliance for Health Professions Diversity – Council Vice Chair	Alma Littles, MD
A designee from the Department who is a physician licensed under chapter 458 or chapter 459 and recommended by the State Surgeon General.	Kevin Sherin, MD, MPH, MBA
An individual who is affiliated with the Science Students Together Reaching Instructional Diversity and Excellence program and recommended by the area health education center network.	Thesla Berne-Anderson, MS
An individual recommended by the Council of Florida Medical School Deans representing a college of allopathic medicine.	James O'Leary, MD, FACS
An individual recommended by the Council of Florida Medical School Deans representing a college of osteopathic medicine.	James T. Howell, MD, MPH
One individual recommended by the Florida Hospital Association, representing a hospital that is licensed under chapter 395, has an accredited graduate medical education program and is not a statutory teaching hospital.	Saima Chaudhry, MD
One individual representing a statutory teaching hospital as defined in s. 408.07 and recommended by the Safety Net Hospital Alliance.	Edward Jimenez, MBA
An individual recommended by the Florida Medical Association representing a primary care specialty.	Sergio Seoane, MD
An individual recommended by the Florida Medical Association representing a nonprimary care specialty.	Ralph Nobo, MD
An individual recommended by the Florida Osteopathic Medical Association representing a primary care specialty.	Linda Delo, DO
An individual recommended by the Florida Osteopathic Medical Association representing a nonprimary care specialty.	Brett Scotch, DO
An individual who is a program director of an accredited graduate medical education program, representing a program accredited by the Accreditation Council for Graduate Medical Education.	Gary Goforth, MD
An individual who is a program director of an accredited graduate medical education program representing a program that is accredited by the American Osteopathic Association.	Mark Gabay, DO
An individual recommended by the Florida Association of Community Health Centers representing a federally qualified health center located in a rural area as defined in s. 381.0406(2)(a).	Michael Gervasi, DO

#### Physician Workforce Advisory Council Membership

Council Member	Name
An individual recommended by the Florida Academy of Family Physicians.	Dennis Saver, MD
The Chancellor of the State University System or his or her designee.	Emily Sikes
A layperson member as determined by the State Surgeon General.	Michael Curtis, MBA

The Council has recently focused on making revisions to the Physician Licensure Survey to capture additional relevant information to assess the Florida physician workforce and advise policymakers. The Physician Licensure Survey supplies data for the Physician Workforce Annual Report. The Council recommended revisions to the survey to capture information that will enhance the Council's ability to assess future workforce needs and identify gaps and trends. The Council approved revisions and recommended that the Department initiate the rule revision process to update the survey. The Department conducted a field test of the revised questions and oversaw the rule revision process to incorporate the new survey questions.

The Council continues to monitor the status of Graduation Medical Education programs in Florida. Graduate Medical Education and residency programs are an important component of Florida's physician workforce. In 2013, the Florida Legislature created the Statewide Medicaid Residency Program and appropriated \$80 million in recurring state and matching federal funds to the program. In 2015, the Legislature also created the Graduate Medical Education Startup Bonus Program to provide resources for educating and training physicians in specialties which are in a statewide supply-and-demand deficit and appropriated \$100 million to the program. The 2018 Legislature appropriated a total of \$242.3 million to these programs.

### Physician Workforce Demographics

#### <u>Gender</u>

As shown in Figure 1, based on the 2017–2018 survey cohort, approximately 30% of Florida's actively practicing physicians are female, which is a 74% increase from 2008–2009.



The gender ratio of actively practicing physicians in Florida is approaching the state population average. In April 2010, the U.S. Census Bureau reported that Florida's population was 51.1% female, which is the same percentage for its 2017 estimated population.<sup>6</sup> The male-to-female ratio of physicians in the 2008–2009 survey cohort was 3.3:1; the ratio for the 2017–2018 cohort was declined to 2.4:1. The *Association of American Medical Colleges' 2017 State Physician Workforce Data Report* states that 29.4% of Florida's active physicians are female, which ranks Florida 39<sup>th</sup> in the country; the nationwide average percentage of female physicians is 33.8%.<sup>7, 8</sup> As shown in Figure 2, the percentage of female physicians has steadily increased from 23.1% in 2008–2009 to 29.6% in 2017–2018.

<sup>&</sup>lt;sup>6</sup> The 2017 Florida gender percentages are published on the United States Census Bureau's QuickFacts webpage (<u>www.census.gov/quickfacts/fact/table/fl/PST045217</u>).

<sup>&</sup>lt;sup>7</sup> This figure was found on pages 20 and 21 of the 2017 State Physician Workforce Data Book (www.aamc.org/data/workforce/reports/484392/2017-state-physician-workforce-data-report.html).

<sup>&</sup>lt;sup>8</sup> The percentage is slightly higher than the numbers in this report, because it includes all physicians, not just those renewing their licenses.



#### Ethnicity

As shown in Figure 3, almost 60% of Florida's physician workforce is White, 17.2% is Hispanic, 12.9% is Asian, and 5.4% is African American.



The percentage of minority physicians in Florida has been increasing since reporting began in 2008 (see Figure 4).<sup>9</sup> In the 2008–2009 cohort, minority physicians comprised 37% of all physicians, and in the 2017–2018 cohort, minority physicians increased to 42.5%.



Florida's population is increasing, as is the number of physicians in the state, especially minority physicians. It is important to have a sufficient number of minority physicians, because studies have shown that people prefer to see physicians of similar ethnicity.<sup>10</sup> This has been attributed to cultural and linguistic similarities creating a good patient-physician relationship. In addition, a study in the *Journal of Public Health Policy* found that "patients who are of the same racial or ethnic group as their physicians were more likely to use needed health services; were less likely to postpone or delay seeking care; and reported a higher volume of use of health services."<sup>11</sup>

<sup>&</sup>lt;sup>9</sup> The category "Other" includes those who selected Native American, Other, or did not provide an ethnicity.

<sup>&</sup>lt;sup>10</sup> For example, a study in the June 2010 issue of *Health Services Research*, pages 792–805, concluded that "Studies on patient preferences for a same race/ethnicity physician have found that African American and Hispanic patients who have a choice are more likely to choose a same-race physician." (www.onlinelibrary.wiley.com/doi/10.1111/j.1475-6773.2010.01086.x).

<sup>&</sup>lt;sup>11</sup> LaVeist, T. A., Nuru-Jeter, A., & Jones, K. E. (2003). The Association of Doctor-Patient Race Concordance with Health Services Utilization. *Journal of Public Health Policy*, 24(3/4), 312-323 (<u>www.doi.org/10.2307/3343378</u>).

Since the 2008–2009 cohort, the percentage of African American physicians has increased 1.1%; the percentage of Hispanic physicians has increased 2.7%; and the percentage of Asian physicians has increased 2.1%. The percentage of Asian physicians exceeds the percentage in the population, not only for Florida but for the United States as well.

#### <u>Age</u>

The average age of practicing physicians is 54. The youngest physician renewing a license was 28 years old and the oldest was 96.<sup>12</sup> The percentage of physicians working past typical retirement age (over 65) is 17.9%. In addition, one-third (17,208) of practicing physicians are age 60 and older, and 26.9% (13,868) are between age 50 and 59. Figure 5 shows gender distribution by age group, and Figure 6 shows age groups within each gender.



<sup>&</sup>lt;sup>12</sup> There were 41 physicians age 90 and older who renewed their license.



The average age of all practicing physicians in Florida has been relatively consistent since the 2012–2013 survey cohort. In the 2012–2013 cohort, the average age was 53 years old; it increased to 54 years old in the 2014–2015 cohort, and has not changed.

The average practicing physician age for each gender has also increased one year since 2012-2013. In the 2012–2013 cohort, the average age for a female physician was 48 years old, and the average age for a male physician was 55 years old. The average age for a female physician increased to 49 years old in the 2013-2014 cohort, and the average age for a male physician increased to 56 years old in the 2014-2015 cohort. The average age has remained constant since then.

Approximately 49% of physicians under age 40 are female, and 51.3% are male; this distribution is similar to the total population of Florida. The percentage of female physicians under age 40 has increased 2.1% from 2013–2014 to 2017–2018 (see Figure 7).



Since the 2012-2013 report, the percentage of male physicians has been decreasing and the percentage of female physicians has been increasing in all age groups except for the 80 and over group.

### Physician Workforce Practice Characteristics

#### Primary Specialty

Figure 8 shows the distribution of physicians by 21 specialties at the physician's primary (main office) location.<sup>13</sup> The top three specialty groups—internal medicine, family medicine, and pediatrics—compose just over 50% of the total physician workforce. See Appendix C for information regarding physician specialty by county.

Figure 8: 2017-2018 Physicians by Primary Specialty							
Primary Specialty	Number	Percentage					
Internal Medicine	14,232	28.6%					
Family Medicine	7,236	14.5%					
Pediatrics	3,802	7.6%					
Surgery	3,153	6.3%					
Emergency Medicine	3,077	6.2%					
Anesthesiology	3,043	6.1%					
Radiology	2,500	5.0%					
Obstetrics & Gynecology	2,255	4.5%					
Psychiatry	2,194	4.4%					
Orthopedic Medicine	1,496	3.0%					
Ophthalmology	1,270	2.6%					
Neurology	1,207	2.4%					
Dermatology	1,069	2.2%					
Pathology	907	1.9%					
Otolaryngology	646	1.3%					
Physical Medicine & Rehabilitation	648	1.3%					
Urology	652	1.3%					
Preventive Medicine	306	0.6%					
Medical Genetics	50	0.1%					
Nuclear Medicine	32	0.1%					
Proctology	3	0.0%					
TOTAL	49,778	100%					

<sup>\*</sup>This table does not include the 1,804 physicians who did not answer this question.

Primary care physicians are defined as those practicing in the areas of general internal medicine, family medicine, and pediatrics.<sup>14</sup> As shown in Figure 9, primary care physicians make up over one-third of the active physician workforce (36.9% or 18,349). Approximately 80%

<sup>&</sup>lt;sup>13</sup> Due to the change in the survey platform, the choice of specialties was different, and data from the prior year were adjusted to reflect the new options. See Appendix E for a list of specialty and subspecialty choice codes.

<sup>&</sup>lt;sup>14</sup> Results for general internal medicine are based on respondents who selected 2 of the 22 internal medicine subspecialty codes (0500-0501), family medicine includes all subspecialty codes (0400–0406), and pediatrics includes all subspecialty codes (1400-1427). See Appendix E for a list of specialty and subspecialty choice codes.

of primary care physicians specialize in internal medicine or family medicine, and approximately 21% specialize in pediatrics.



Physicians were asked about secondary and tertiary specialties at their primary (main office) location. Just over one quarter (26.3%) of physicians reported a secondary specialty at the main location, and 8.9% reported a tertiary specialty at their main location. A small percentage of physicians have secondary and tertiary office locations (14.5% report a secondary location and 3.0% report a tertiary office location).

Examining the percentages of Florida's primary care physicians from 2008–2009 to 2017–2018 shows a range of participation percentages from a low of 32.4% in the 2009–2010 cohort to a high of 38.2% in the 2016–2017 cohort.

Only two specialties—medical specialties and surgery—have changed more than 2% from the 2008–2009 survey cohort to 2017–2018 cohort. The percentage of medical specialists increased from 16.5% to 24.2%, and the percentage of surgery specialists has decreased from 15.9% to 6.3%.

For specialties broken out by gender, the greatest fluctuation from the 2008–2009 survey cohort to 2017–2018 cohort for females was an almost 3.0% decrease in pediatrics; for males, the greatest fluctuation was a 4.1% decrease in surgeons. Otherwise, specialties by gender have been relatively stable with no more than 2% fluctuation in either direction.

Over the last five cohorts, four specialties have reported a 10% or greater intention of retiring in the next five years—family medicine, general internal medicine, medical specialist, and surgery (see Figure 10).



The four specialties with the highest reported percentages of physicians indicating their intention to relocate out of state in the next five years are emergency medicine (3.9%), family medicine (4.0%), general internal medicine (4.6%), and medical specialist (5.1%).

#### Practice Setting

The three practice settings where physicians are in an office encompasses almost 60% of all physicians (see Figure 11). Of those physicians in an office practice in the 2017–2018 survey cohort, two thirds are working in a group practice setting (67%) and 33% are working in a solo practice setting. As shown in Figure 12, most physicians practice in an office practice setting. Almost 45% of physicians either practice alone or with others of the same specialty. The smallest percentages of physicians work in county health departments, nursing homes/extended care facilities, and volunteer free clinics.





Figure 13 shows the trends of physician practice locations since 2013 when the survey began asking this question. In the last five survey cohorts, two of the three general practice locations changed more than one percent; hospitalists increased 1.6% and solo office practice decreased 3.5%.



Physicians under age 40 in Florida are split almost evenly between hospital practice and office practice, as shown in Figure 14. However, the trend seems to show a shift with the percentage of physicians practicing in hospitals increasing and the percentage in office settings decreasing, which mirrors national trends.<sup>15</sup>



<sup>&</sup>lt;sup>15</sup> Information retrieved from the article "Why Private Practice is Dying" by Reed Wilson (<u>http://www.forbes.com/sites/realspin/2016/09/07/why-private-practice-is-dying/#5229e3ca27c8</u>) and The Physicians Foundation 2016 Physician Survey (<u>http://www.physiciansfoundation.org/press-releases/the-physicians-foundation-2016-physician-survey/</u>).

#### Practice Hours

The workforce survey asked physicians to report the average number of patients they see per week. As shown in Figure 15, just over 40% of physicians report seeing between 1 and 50 patients per week, and just over 36% report seeing between 51 and 100 patients. For physicians that reported seeing an average number of patients between one and 250, the average was 69.



As shown in Figure 16 and Figure 17, the majority of physicians reported spending between one and nine hours on administrative matters, research, or teaching. Almost 86% of physicians report spending less than 20 hours on administrative work, and approximately 80% spend less than 10 hours on research and teaching.





As shown in Figure 18, most physicians spend between 40 and 59 hours per week on patient care (41.5% or 20,611). Physicians who reported spending between one and 99 hours per week on patient care provide an average 39.5 hours of patient care per week.



A national study that was published in 2010 showed that physician hours declined 7.2% from 1996 to 2008.<sup>16</sup> In Florida, the workforce survey began asking about patient care hours per week in 2013. Contrary to the national trend, the average number of patient care hours in Florida have been consistently between 39 and 41 hours per week. During this same time

<sup>&</sup>lt;sup>16</sup> Staiger, D.O., Auerbach, D.I., & Buerhaus, P.I. (2010). Trends in the Work Hours of Physicians in the United States. *Journal of the American Medical Association*, 303(8), 747–753. doi:10.1001/jama.2010.168 (www.jamanetwork.com/journals/jama/fullarticle/185433).

period, the average number of patients per week has slightly decreased from 72 patients per week in 2012–2013 to 69 patients per week in 2017–2018.

#### Medicare Patients

In 2009, the Centers for Medicare and Medicaid Services reported that three million Floridians were enrolled in Medicare Part A or B. According to the 2017–2018 Medicare Enrollment Dashboard, the number of Floridians on Medicare has increased to over 4.4 million.<sup>17</sup> Over 80% of physicians responded that they are accepting **new** Medicare patients (see Figure 19).



Physicians who stated they were not accepting new Medicare patients could select the main reason they were not. The most selected main reason they are not taking new Medicare patients is that their practice is at full capacity, as demonstrated in Figure 20.



<sup>&</sup>lt;sup>17</sup> This information is published on the Centers for Medicare and Medicaid Services' Medicare Enrollment Dashboard on their website (<u>www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/CMSProgramStatistics/Dashboard.html</u>).

According to *The Physicians Foundation's 2016 Survey of America's Physicians Practice Pattern & Perspectives* report, 86.3% of physicians responded that they saw Medicare patients, which represents an almost 1% decrease from 2014 results.<sup>18</sup> As shown in Figure 21, in Florida the percentage of physicians **accepting new** Medicare patients decreased from 78% in 2008– 2009 to 70% 2009–2010. Since that time, the percentage increased to 81% in 2017-2018.



#### Medicaid Patients

The percentage of Florida physicians who reported accepting new Medicaid patients was 62.5% (see Figure 22).



<sup>&</sup>lt;sup>18</sup> Information retrieved from The Physicians Foundation 2016 Physician Survey (<u>http://www.physiciansfoundation.org/press-releases/the-physicians-foundation-2016-physician-survey/</u>).

The most common reason given for not accepting new Medicaid patients was because of low compensation (58.0%) (see Figure 23).



As shown in Figure 24, despite fluctuation between 2008–2009 and 2010–2011, the percentage of physicians accepting new Medicaid patients has increased almost 10% since 2008–2009. The average percentage of physicians accepting new Medicaid patients over this time period is 57.8%.



#### <u>Retirement</u>

The 2017–2018 survey responses revealed that 16.6% of practicing physicians reported that they are planning to retire within the next five years. The average age of physicians planning to retire is 66. Over two-thirds of the physicians planning on retiring reported that it was time to retire as the reason. Figure 25 shows the main reasons for retirement. (Appendix D shows the counties in which these physicians are currently located.) Of those physicians who said they would be retiring within the next five years, almost 60% report that they are planning to change their license to a limited license in order to volunteer.



On January 1, 2011, the Baby Boomer generation began turning 65, which is typically thought of as retirement age.<sup>19</sup> The percentage of physicians responding that they will retire in the next five years has increased from 10.9% in the 2009–2010 survey cohort to 16.6% in 2017–2018, with the last two cohorts increasing by 3% (see Figure 26). According to a *Pew Research* article, this generation does not feel that they are "old" until they reach age 72, which is the milestone they hit in 2018. Over one-third of Florida's physicians are age 60 and older, and in that group 31.8% (or 5,483) are age 70 or older.<sup>20</sup>

<sup>&</sup>lt;sup>19</sup> Information retrieved from the article "Baby Boomers Retire" by Russell Heimlich (<u>http://www.pewresearch.org/fact-tank/2010/12/29/baby-boomers-retire/</u>).

<sup>&</sup>lt;sup>20</sup> There are 9,685 physicians who are not actively practicing in Florida that stated they plan to relocate to Florida within the next four years; 58.8% of them are age 59 or younger. If they all move to Florida, they would exceed the number of physicians planning to retire within the next five years.



#### **Relocation**

In the 2017–2018 survey cohort, approximately 5% (2,676) of physicians responded that they plan to relocate out of Florida in the next five years. As shown in Figure 27, the physicians who said that they were relocating selected "family" as the most popular reason (28.9%).<sup>21</sup> The second and third most popular reasons were "compensation" (18.2%) and "looking for a change" (17.9%).



<sup>&</sup>lt;sup>21</sup> An additional 40 physicians selected a reason as to why they are relocating but did not indicate they were planning on moving to work outside of Florida in the prior question; these responses are included.

In the United States, data from 2016 and 2017 show that approximately 11% of the population moves every year. Florida is the 9<sup>th</sup> most popular state to which Americans are moving.<sup>22</sup> However, Florida physicians reporting they are relocating has been consistent (see Figure 28), with an average percentage of only 4.1% planning on relocating over the ten-year cohort period.



Figure 29 shows the five-year trend of physicians under age 70 who are planning on moving out of Florida by age group. <sup>23</sup> For physicians under age 40, the percentage reporting that they would relocate out of Florida has increased almost 5% from 2013–2014 to 2017–2018.



<sup>&</sup>lt;sup>22</sup> Information retrieved from the article "The State of the American Mover: Stats and Facts" by Colin Holmes (<u>https://www.move.org/moving-stats-facts/</u>) and from a 2016 press release from the United States Census Bureau (<u>https://www.census.gov/newsroom/press-releases/2016/cb16-189.html</u>).

<sup>&</sup>lt;sup>23</sup> Physicians age 70 and older are not included because less than 5% said they are planning to relocate out of state.

Figure 30 shows the five-year trend of those physicians under age 70 who said they were relocating with the reason for the relocation. Family reasons, financial reasons, and "other" are the top three reasons physicians state they will be relocating out of Florida.<sup>24</sup>



<sup>&</sup>lt;sup>24</sup> The financial category includes: Compensation, Malpractice Insurance Rates, Medicare/Medicaid Reimbursement Rates, and Private Health Plan Reimbursement Rates. The reason "other" is a distinct choice and not a compilation of options. The Education/Training in Another State choice was not included in Figure 30 as the percentages were very small, with a range from 1.4% to 2.5%.

#### Changing Specialty

Unless a physician is changing from a subspecialty to the general specialty (for example, cardiology to internal medicine), changing specialties requires a physician to complete a new residency. Since residency programs can last from three to five years, most physicians in Florida do not change. This explains why there were only 415 (0.8%) physicians who responded that they plan to change their specialty. The most common reason for changing was "Compensation" (33.7%), as illustrated in Figure 31.



Of the 415 physicians who stated they were changing their specialty, two-thirds were male and one-third were female, as shown in Figure 32. The percentage of females changing specialty is 4.1% more than the percentage of total female physicians.



Figure 33 shows the percentage of physicians by age group stating they are planning on changing their specialty compared to the percentage by age group for all actively practicing physicians. Physicians 40 to 59 years old account for just over 50% of those changing specialties.



As shown in Figure 34, the five-year trend of physicians who reported they were changing specialties shows a decline from 2013–2014 through 2016–2017, with an increase in 2017–2018. However, a very small percentage of actively practicing physicians report that they plan on changing their specialty.



#### Obstetrics and Gynecology Specialty Questions

There were 2,255 physicians who reported that their primary specialty was obstetrics & gynecology (OB/GYN), of which 2,083 (or 92.4%) responded to the specialty questions.

The first specialty question was "Do you deliver babies?" As shown in Figure 35, 61.8% of those who responded report delivering babies as part of their practice in the 2017–2018 cohort.



In the 2008–2009 cohort, just over half of OB/GYNs reported that they delivered babies. This increased to almost three-quarters in 2011–2012 and then decreased in 2012–2013, where it has remained at approximately two-thirds (see Figure 36).



The next specialty question was "Are you planning to discontinue obstetric care in the next two years?" Only 14.8% plan to discontinue obstetrical care in the next two years, as shown in Figure 37.



Figure 38 shows the reasons for physicians who reported that they would be discontinuing obstetric care within the next two years. The most cited reason was "other;" the next highest category selected was "liability exposure" followed by "retired." The top five reasons for discontinuing obstetric care have been the same for the last eight survey cohorts.<sup>25</sup>



<sup>25</sup> The 2010–2011 report was where these responses were first reported.

Figure 39 shows the number of obstetricians in Florida who perform cesarean sections (C-sections) within each specified range. Of the 1,859 responses, 61.3% (1,139) responded that they perform an average of 1-10 cesarean sections per month.



The percentage of physicians performing between 1 and 10 C-sections per month has remained consistent over the past five cohorts, averaging just over 60%. For the last five survey cohorts, the average percentage of physicians performing more than ten C-sections per month is less than 10%. These results are consistent with the average number of C-sections per month per physician, which is six. The average annual percentage of C-section births during the last ten years is 37.7%.<sup>26, 27</sup>

#### Radiology Specialty Questions

There were 2,500 physicians who reported their primary specialty was radiology, of which 2,321 (92.8%) answered the specialty questions.

As shown in Figure 40, just over 40% indicate practicing in a hospital and just under a quarter (22.9%) indicate practicing at a stand-alone imaging center.

<sup>&</sup>lt;sup>26</sup> This information can be found on FLHealthCharts under the health indicator of Maternal & Child Health and the category of delivery (<u>www.flhealthcharts.com/charts/MaternalAndChildHealth/default.aspx</u>).

<sup>&</sup>lt;sup>27</sup> This calculation is based on the total number of physicians who reported they performed at least one C-Section per month.



Comparing practice settings across eight survey cohorts shows that the top three settings represent approximately 80% of all practice settings, as presented in Figure 41.<sup>28</sup> The top three settings are hospital, stand-alone imaging center, and hospital-based imaging center, respectively.



<sup>&</sup>lt;sup>28</sup> The 2010–2011 report was where these responses were first reported.

Radiologists selected each different type of patient they see, as shown in Figure 42. Almost 70% of radiologists reported that they saw general radiology patients, 42.7% of radiologists reported seeing GI radiology patients, and 41.9% reported seeing neuroradiology patients.



As shown in Figure 43, in four of the five questions, over half of the 792 physicians who indicated mammography as part of their practice reported that they perform the specified procedure.



### **Physicians Not Actively Practicing in Florida**

A total of 17,049 physicians are licensed but not actively practicing in Florida, representing 24.3% of the physicians who renewed their licenses in the 2017–2018 cohort.<sup>29</sup> Understanding the reasons why physicians did not practice in Florida in the last 12 months is useful when considering physician attraction and retention initiatives. As shown in Figure 44, 70.2% of physicians responded that they are "Planning to move to Florida" as the main reason why they have a Florida license but do not practice medicine in Florida. The physicians were asked if they planned on relocating to Florida, and 64% who answered said they plan to relocate to Florida within four years.



<sup>&</sup>lt;sup>29</sup> See definition in section iii.

Figure 45 shows the specialties of the physicians who said they were planning to move to Florida within the next 4 years. Almost one-quarter reported internal medicine as their specialty.



As shown in Figure 46, 57% of non-practicing physicians are between the ages of 50 and 69.



### Department Programs to Support Physician Workforce Development

The Department administers three programs that support the physician workforce in Florida: The State Primary Care Office, the Office of Rural Health, and the Office of Volunteer Health Services.

#### The State Primary Care Office

The goals of the State Primary Care Office are to attract and retain physicians to work in Health Professional Shortage Areas (HPSAs). Florida has 381 HPSAs: 134 are primary care, 58 are mental health, 111 are dental, and 78 are at state correctional institutions. As of August 28, 2018, there are 569 approved National Health Service Corps (NHSC) sites, with 195 of those sites having program participants. There are 332 participants in NHSC programs: 84 physicians (25.3%) who participate in the NHSC loan repayment program in medically underserved areas in Florida and 8 physicians who are NHSC Scholars. Since the inception of the State Conrad 30 Waiver Program in 1994, more than 70%, or nearly 450 physicians, continue to practice in Florida. In addition, approximately 125 National Interest Waiver foreign physicians practice in Florida; these physicians are required to practice in underserved areas for five years.

#### The Office of Rural Health

The Department's Office of Rural Health provides statewide assistance on rural health issues and assists in developing and sustaining systems of care in rural communities. The office operates the National Rural Recruitment and Retention Network (3RNet) for the state of Florida. 3RNet is a national, federally supported web-based program that assists states in matching health professionals with available practice or job opportunities in both urban and rural Health Professional Shortage Areas (HPSAs). Facilities that utilize 3RNet include county health departments, federally qualified health centers, rural hospitals, behavioral health centers, and rural health clinics. While there were 7,536 hits to the website in 2017, 3RNet currently has 405 candidates and 52 active opportunities in Florida.

#### The Volunteer Health Care Provider Program

The Volunteer Health Care Provider Program improves access to medical care for uninsured and underserved low-income residents by allowing licensed health care professionals to become agents of the state. In exchange for the professional services they donate to financially eligible clients referred by the Department's agents and employees, participating medical professionals are protected by state sovereign immunity. There are currently 13,872 health care professionals serving in the Volunteer Health Care Provider Program.

### Summary of 2017 Recommendations and 2018 Updates

In the 2017 Physician Workforce Annual Report, the Council recommended that the Florida Department of Health take the following actions. Each 2017 recommendation is followed by 2018 updates.

1. Implement the changes to the Physician Licensure Survey as proposed by the Physician Workforce Advisory Council in 2017.

**2018 Update**: The Department proposed several changes to the physician licensure renewal survey based on the recommendations of the Council. The survey changes are intended to provide more focused and specific data regarding specialty types and practice patterns of Florida's physician workforce. The Department conducted the rule revision process to achieve the survey revisions.

2. Enhance collaboration with the Health Resources and Services Administration (HRSA) through continued promotion of the National Health Service Corps Loan Repayment Program via partnerships with the Florida Association of Community Health Centers, rural hospital outpatient practices, federally qualified health centers, community health centers, and the colleges of medicine.

**2018 Update:** The Department, through the Primary Care Office, promotes the benefits of the National Health Service Corps by providing ongoing technical assistance to clinicians and practice sites interested in the program. The Primary Care Office works collaboratively with the Florida Association of Community Health Centers, the Offices of Rural Health, and the Volunteer Health Services Program to promote the National Health Service Corps to eligible clinics and clinicians. In addition, the Department has increased collaboration with the Physician Workforce Advisory Council and the Council of Florida Medical School Deans (CFMSD) to further promote the National Health Service Corps. For example, the Department participates in the monthly CFMSD conference call in an effort to expand collaboration.

 Seek technical assistance from HRSA to determine action steps that will enhance applicants' success in being awarded loan repayment status as part of the NHSC Loan Repayment Program.

**2018 Update:** The Primary Care Office provides technical assistance during each NHSC loan repayment and site designation application cycle. The Primary Care Office works collaboratively with the federal regional coordinators during application periods, and

provides guidance and support to individual applicants to achieve successful site designation and loan repayment awards. In 2017–18 in Florida, there were 17 new sites that were National Health Service Corps designated and 65 physicians were accepted into the Loan Repayment Program.

4. Establish and maintain a database of all physicians practicing under the visa waiver programs in the state and monitor the long-term licensure status and practice locations of these physicians to determine the retention of these physicians in the state's health professional shortage areas.

**2018 Update:** The Department's Primary Care Office maintains a database of all physicians who have participated in the Conrad 30 and National Interest Waiver programs previously or who are currently active in the programs. Physicians practicing under the Unites States Citizen and Immigration Services programs are required to provide care for obligated periods of time to Florida's medically underserved. Currently there are 90 physicians in the Conrad 30 program and over 145 physicians in the National Interest Waiver program who are practicing in health professional shortage areas. The Department has determined that over 70% of physicians who have served in these programs continue practicing medicine in Florida.

 Identify Volunteer Health Services Program clinics that could serve as rotation sites for medical students and primary care residents to provide experience working with underserved populations and supplement the physician workforce in key areas of the state.

**2018 Update:** The Department's Primary Care Office has managed a legislative appropriation to the Alachua County Organization for Rural Needs, Inc. for the past five years. The appropriation funds the training of University of Florida health care student clinicians, including medical students, as they participate in clinical rotations at various free clinics in the rural areas of Alachua, Gilchrist, Putnam, and Duval counties. The appropriation also funds the faculty supervision of these clinicians. The long-term goal of the clinical training is to familiarize the students with the health care needs of the medically underserved and encourage them to practice in these clinics upon graduation. The clinics receiving funding under the management of the Alachua County Organization for Rural Needs, Inc. are participants in the Department's Volunteer Health Services Program and provide valuable care to the medically underserved.

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 Develop student diversity pipeline best practices, based on successful measures in practice throughout the state and nation, for use as a resource by Florida medical schools when implementing, improving, or measuring the impact of their pipeline programs.

**2018 Update:** Florida's nine medical schools have provided feedback about their pipeline programs to the Department and the Physician Workforce Advisory Council. Florida's medical schools have pipeline programs which target students in elementary school, middle school, high school, college, and at the post-graduate levels. Pipeline program activities for students prior to college include coaching and inspiring disadvantaged and/or minority students to go to college with skills, knowledge, and interests in math and science. The pipeline programs for the college and graduate levels also target disadvantaged and minority students with math and science majors to prepare for and pursue application for entrance to medical school. Pipeline activities include participation in community health fairs, summer programs, mentoring, shadowing in the clinical setting, academic coaching, field trips, international medical mission trips, and research projects. Florida's medical schools report their pipeline programs to be successful and essential to the goal of creating socioeconomic and gender diversity in the physician workforce of the future.

7. Collaborate with the Council of Florida Medical School Deans to develop and maintain a comprehensive database of current Graduate Medical Education (GME) residency positions in Florida with the goal of describing the current and projected areas of need that can be addressed by creating or expanding GME programs.

**2018 Update:** The Council of Florida Medical School Deans formed the GME Working Group in 2016. It comprises the Associate or Senior Associate Deans for Graduate Medical Education at the medical schools in Florida. The goal of the group is to collaborate on GME-related issues across the state, including workforce issues, physician wellness, research, and faculty development. As such, the GME Counting Group was tasked with gathering and verifying the data concerning the number of residents and fellows training in GME programs in the state. The group used a variety of resources to count the GME trainees. The largest data set used is available on the Accreditation Council for Graduate Medical Education (ACGME) website. Listed by sponsoring institution and then by program, the data are a retrospective account of trainees who have trained in the last academic year. These data are provided to the ACGME between August and September each year. For the osteopathic medicine programs, data were obtained from the GME Counting Group's members who sponsored educational programs for the American Osteopathic Association (AOA) sponsored programs. The group verified these numbers through website review of the programs' match data. Overall, Florida saw an increase of 351 GME positions between 2016–2017 and 2017–2018. The data reflect the continued growth in GME in the state, as well as the transfer of the AOA accredited programs into the ACGME. These data were reported to the Council of Florida Medical School Deans and provided to the State Surgeon General. The plan is to continue with this effort, and to add the data from the National Resident Matching Program (NRMP) regarding categorical positions in the residency match process each year.

2016–2017	Number of Positions
Accreditation Council for Graduate Medical Education	5,347
American Osteopathic Association	487
TOTAL	5,834
2017–2018	Number of Positions
Accreditation Council for Graduate Medical Education	5,922
American Osteopathic Association	263
TOTAL	6,185
2016–2017 vs 2017–2018	Number of Positions
Accreditation Council for Graduate Medical Education	+575
American Osteopathic Association	-224
TOTAL	+351

#### Figure 47: Count of GME Positions

Source: Council of Florida Medical School Deans

 Share the Florida Telehealth Advisory Council 2017 Report with state licensing and regulatory boards, the Council of Florida Medical School Deans, as well as other relevant stakeholders.

**2018 Update:** The Telehealth Advisory Council Report from 2017 included an analysis of current uses of telehealth in Florida as well as recommendations for expanding the use of telehealth to increase access to health care for more Floridians. The report was available to stakeholders and policymakers.

### Conclusion

The Florida Department of Health renews its commitment to review and assess current and future physician workforce needs in Florida. Physician workforce assessment and planning in this state has resulted in new information for policymakers on clinical practice, geographic location, and scope of practice for Florida physicians. The continuing refinement, evaluation, and reporting of this information will assist in the state's effort to meet current and future physician workforce needs.

Key information from this report for policy consideration includes:

- During the last ten-year period, the number of active and practicing physicians increased almost 37%, from 37,860 as reported in 2008–2009 to 51,582 in 2017–2018. During this same time, the population of Florida increased almost 14%, from 18.5 million to 21.0 million
- Physicians are generally concentrated in populous counties and within large, urban population centers. Physicians working in rural areas are more likely to be primary care providers. Survey results indicated that 97.7% of physicians work in urban counties while 2.3% work in Florida's 30 rural counties. See Appendix A for details.
- Gender and ethnic diversity of Florida's physician workforce has increased since 2008–2009. The percentage of female physicians has increased from 23.1% in 2008–2009 to 29.6% in 2017–2018, and the percentage of Hispanic, Asian, African American, and Native American physicians has increased.
- Physicians continue to specialize, with more physicians practicing in specialties than in primary care. However, the percentage of primary care physicians in 2017–2018 (35.6%) has increased slightly from what it was in 2012–2013 (33.4%).
- Each year more physicians report that they are planning to retire. The percentage of physicians who reported that they are planning to retire within the next five years has increased from 13.2% in 2012–2013 to 16.6% in 2017–2018.

### Appendix A: Physician Workforce per Capita by County, 2017–2018

This map illustrates a per capita distribution of practicing physicians at the county level. Miami-Dade, Broward, and Palm Beach Counties combined have almost one-third (32.2%) of all practicing physicians in Florida. Miami-Dade County alone has 14.5% of all practicing physicians. Even though these are the three most populous counties, when looking at the per capita distribution of physicians, Alachua, Duval, Sarasota, and Escambia counties have the highest per capita rate.



# Appendix B: Change in Practicing Physicians by County

County	2012–2013	2013–2014	2014–2015	2015–2016	2016–2017	2017–2018
Alachua	1,324	1,370	1,426	1,443	1,429	1,615
Baker	43	42	38	37	39	46
Bay	349	380	380	395	400	424
Bradford	26	23	21	24	25	21
Brevard	1,230	1,240	1,231	1,260	1,254	1,333
Broward	4,214	4,209	4,269	4,346	4,342	4,767
Calhoun	9	9	9	8	8	11
Charlotte	367	348	338	348	332	361
Citrus	253	238	249	245	225	258
Clay	262	283	285	315	322	349
Collier	808	823	819	829	835	954
Columbia	152	136	139	144	137	142
Desoto	29	31	31	27	25	25
Dixie	8	10	12	11	15	13
Duval	2,648	2,707	2,762	2,828	2,851	3,093
Escambia	836	841	878	885	881	952
Flagler	123	121	129	139	139	150
Franklin	13	15	14	10	8	12
Gadsden	37	40	40	39	35	34
Gilchrist	7	8	8	5	7	6
Glades	6	8	7	7	8	6
Gulf	14	16	18	15	13	19
Hamilton	10	7	7	5	4	3
Hardee	16	13	13	14	12	9
Hendry	26	23	24	25	25	33
Hernando	298	300	300	313	324	334
Highlands	178	190	197	195	189	195
Hillsborough	3,363	3,356	3,470	3,611	3,696	4,041
Holmes	15	16	16	13	11	16
Indian River	360	369	371	379	370	425
Jackson	61	60	57	52	47	52
Jefferson	8	6	8	8	6	7
Lafayette	3	4	4	2	2	3
Lake	593	618	642	684	671	704
Lee	1,232	1,254	1,275	1,336	1,332	1,483
Leon	660	661	632	656	667	750
Levy	19	15	15	15	15	14
Liberty	2	0	1	2	1	2
Madison	13	10	8	9	8	9
Manatee	565	592	591	611	631	689
Marion	588	593	618	601	598	680
Martin	345	358	367	388	398	443
Miami-Dade	6.477	6.535	6.648	6.697	6.726	7.313

#### Figure 1-B: Change in Number of Practicing Physicians by County

County	2012–2013	2013–2014	2014–2015	2015–2016	2016–2017	2017–2018
Monroe	172	171	180	180	181	187
Nassau	85	85	83	80	76	76
Okaloosa	406	412	414	419	430	460
Okeechobee	52	57	56	49	58	61
Orange	2,707	2,808	2,844	2,977	3,079	3,473
Osceola	434	454	477	515	530	650
Palm Beach	3,654	3,710	3,804	3,919	3,901	4,262
Pasco	803	820	824	828	835	923
Pinellas	2,536	2,555	2,568	2,620	2,613	2,874
Polk	971	941	945	975	1,001	1,121
Putnam	97	107	97	84	88	98
Santa Rosa	159	174	165	172	171	193
Sarasota	1,066	1,074	1,092	1,119	1,126	1,267
Seminole	661	666	660	687	712	774
St. Johns	324	327	339	347	338	385
St. Lucie	410	414	426	428	410	447
Sumter	108	123	126	148	161	188
Suwannee	27	22	17	22	28	25
Taylor	18	16	17	20	22	18
Union	28	14	13	22	25	26
Volusia	1,002	1,015	1,051	1,049	1,040	1,140
Wakulla	7	9	10	9	8	9
Walton	68	87	91	89	89	94
Washington	21	18	19	12	10	14
State Totals	43,406	43,957	44,685	45,746	45,995	50,561

#### Figure 2-B: Percentage Increase or Decrease by County

	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2012-2013
County	to	to	to	to	to	to
	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2017-2018
Alachua	3.5%	4.1%	1.2%	-1.0%	13.0%	22.0%
Baker	-2.3%	-9.5%	-2.6%	5.4%	17.9%	7.0%
Bay	8.9%	0.0%	3.9%	1.3%	6.0%	21.5%
Bradford	-11.5%	-8.7%	14.3%	4.2%	-16.0%	-19.2%
Brevard	0.8%	-0.7%	2.4%	-0.5%	6.3%	8.4%
Broward	-0.1%	1.4%	1.8%	-0.1%	9.8%	13.1%
Calhoun	0.0%	0.0%	-11.1%	0.0%	37.5%	22.2%
Charlotte	-5.2%	-2.9%	3.0%	-4.6%	8.7%	-1.6%
Citrus	-5.9%	4.6%	-1.6%	-8.2%	14.7%	2.0%
Clay	8.0%	0.7%	10.5%	2.2%	8.4%	33.2%
Collier	1.9%	-0.5%	1.2%	0.7%	14.3%	18.1%
Columbia	-10.5%	2.2%	3.6%	-4.9%	3.6%	-6.6%
Desoto	6.9%	0.0%	-12.9%	-7.4%	0.0%	-13.8%
Dixie	25.0%	20.0%	-8.3%	36.4%	-13.3%	62.5%
Duval	2.2%	2.0%	2.4%	0.8%	8.5%	16.8%
Escambia	0.6%	4.4%	0.8%	-0.5%	8.1%	13.9%
Flagler	-1.6%	6.6%	7.8%	0.0%	7.9%	22.0%
Franklin	15.4%	-6.7%	-28.6%	-20.0%	50.0%	-7.7%
Gadsden	8.1%	0.0%	-2.5%	-10.3%	-2.9%	-8.1%
Gilchrist	14.3%	0.0%	-37.5%	40.0%	-14.3%	-14.3%
Glades	33.3%	-12.5%	0.0%	14.3%	-25.0%	0.0%
Gulf	14.3%	12.5%	-16.7%	-13.3%	46.2%	35.7%
Hamilton	-30.0%	0.0%	-28.6%	-20.0%	-25.0%	-70.0%
Hardee	-18.8%	0.0%	7.7%	-14.3%	-25.0%	-43.8%
Hendry	-11.5%	4.3%	4.2%	0.0%	32.0%	26.9%
Hernando	0.7%	0.0%	4.3%	3.5%	3.1%	12.1%
Highlands	6.7%	3.7%	-1.0%	-3.1%	3.2%	9.6%
Hillsborough	-0.2%	3.4%	4.1%	2.4%	9.3%	20.2%
Holmes	6.7%	0.0%	-18.8%	-15.4%	45.5%	6.7%
Indian River	2.5%	0.5%	2.2%	-2.4%	14.9%	18.1%
Jackson	-1.6%	-5.0%	-8.8%	-9.6%	10.6%	-14.8%
Jefferson	-25.0%	33.3%	0.0%	-25.0%	16.7%	-12.5%
Lafayette	33.3%	0.0%	-50.0%	0.0%	50.0%	0.0%
Lake	4.2%	3.9%	6.5%	-1.9%	4.9%	18.7%
Lee	1.8%	1.7%	4.8%	-0.3%	11.3%	20.4%
Leon	0.2%	-4.4%	3.8%	1.7%	12.4%	13.6%
Levv	-21.1%	0.0%	0.0%	0.0%	-6.7%	-26.3%
Liberty	-100.0%	100.0%	100.0%	-50.0%	100.0%	0.0%
Madison	-23.1%	-20.0%	12.5%	-11.1%	12.5%	-30.8%
Manatee	4.8%	-0.2%	3.4%	3.3%	9.2%	21.9%
Marion	0.9%	4.2%	-2.8%	-0.5%	13.7%	15.6%
Martin	3.8%	2.5%	5.7%	2.6%	11.3%	28.4%
Miami-Dade	0.9%	1.7%	0.7%	0.4%	8.7%	12.9%
Monroe	-0.6%	5 3%	0.0%	0.4%	3 3%	8.7%
Nassau	0.0%	-2 /0/-	-3 6%	-5 0%	0.0%	-10.6%
143320	0.070	-2.4/0	-0.070	-0.070	0.070	-10.070

County	2012–2013 to 2013–2014	2013–2014 to 2014–2015	2014–2015 to 2015–2016	2015–2016 to 2016–2017	2016–2017 to 2017–2018	2012–2013 to 2017–2018
Okaloosa	1.5%	0.5%	1.2%	2.6%	7.0%	13.3%
Okeechobee	9.6%	-1.8%	-12.5%	18.4%	5.2%	17.3%
Orange	3.7%	1.3%	4.7%	3.4%	12.8%	28.3%
Osceola	4.6%	5.1%	8.0%	2.9%	22.6%	49.8%
Palm Beach	1.5%	2.5%	3.0%	-0.5%	9.3%	16.6%
Pasco	2.1%	0.5%	0.5%	0.8%	10.5%	14.9%
Pinellas	0.7%	0.5%	2.0%	-0.3%	10.0%	13.3%
Polk	-3.1%	0.4%	3.2%	2.7%	12.0%	15.4%
Putnam	10.3%	-9.3%	-13.4%	4.8%	11.4%	1.0%
Santa Rosa	9.4%	-5.2%	4.2%	-0.6%	12.9%	21.4%
Sarasota	0.8%	1.7%	2.5%	0.6%	12.5%	18.9%
Seminole	0.8%	-0.9%	4.1%	3.6%	8.7%	17.1%
St. Johns	0.9%	3.7%	2.4%	-2.6%	13.9%	18.8%
St. Lucie	1.0%	2.9%	0.5%	-4.2%	9.0%	9.0%
Sumter	13.9%	2.4%	17.5%	8.8%	16.8%	74.1%
Suwannee	-18.5%	-22.7%	29.4%	27.3%	-10.7%	-7.4%
Taylor	-11.1%	6.3%	17.6%	10.0%	-18.2%	0.0%
Union	-50.0%	-7.1%	69.2%	13.6%	4.0%	-7.1%
Volusia	1.3%	3.5%	-0.2%	-0.9%	9.6%	13.8%
Wakulla	28.6%	11.1%	-10.0%	-11.1%	12.5%	28.6%
Walton	27.9%	4.6%	-2.2%	0.0%	5.6%	38.2%
Washington	-14.3%	5.6%	-36.8%	-16.7%	40.0%	-33.3%
Statewide	1.3%	1.7%	2.4%	0.5%	9.9%	16.5% <sup>30</sup>

<sup>&</sup>lt;sup>30</sup> This percentage is different from the percentage increase of all practicing physicians listed on page 4 (19%) because 1,021 physicians in the 2017–2018 cohort did not provide a county in their survey response.

# Appendix C: Specialty Group Counts by County, 2017–2018

County	Anesthesiology (0100-0104)	Dermatology (0200-0204)	Emergency Medicine (0300-0306)	Family Medicine (0400-0406)	Internal Medicine (0500-0501)	Medical Specialist <sup>31</sup>	OB/GYN (0900-0905)	Pediatrics (1400-1427)	Psychiatry (1800-1809)	Radiology (1900-1912)	Surgeons (2000-2011)	County Total
Alachua	24	21	83	175	186	469	47	145	99	97	98	1,444
Baker	1	1	3	13	6	4	0	1	14	1	1	45
Bay	6	7	32	60	57	119	19	21	18	21	36	396
Bradford	0	0	4	5	1	4	1	2	2	0	1	20
Brevard	17	30	79	194	212	392	54	73	53	72	66	1,242
Broward	73	123	296	543	716	1,326	258	357	173	233	303	4,401
Calhoun	0	0	1	6	3	0	1	0	0	0	0	11
Charlotte	5	7	23	43	53	109	7	13	19	19	29	327
Citrus	1	7	16	55	27	86	9	5	6	12	14	238
Clay	8	5	22	74	38	89	16	29	8	8	20	317
Collier	13	29	62	124	165	277	39	52	39	36	50	886
Columbia	2	1	16	23	23	32	4	9	8	6	6	130
Desoto	1	1	5	3	5	2	4	3	0	0	0	24
Dixie	0	0	1	7	1	2	0	0	1	1	0	13
Duval	48	49	225	431	360	912	141	251	94	148	188	2,847
Escambia	18	21	55	127	105	271	53	82	40	41	72	885
Flagler	1	2	11	36	18	41	5	3	2	8	8	135
Franklin	1	0	3	5	1	1	0	0	0	0	0	11
Gadsden	0	0	5	13	4	1	0	0	10	0	0	33
Gilchrist	0	0	0	3	0	0	0	2	0	0	0	5
Glades	0	0	1	3	1	0	0	0	0	1	0	6
Gulf	0	0	4	4	1	1	0	2	1	2	2	17
Hamilton	0	0	0	0	2	1	0	0	0	0	0	3
Hardee	0	0	2	3	2	0	0	2	0	0	0	9
Hendry	0	0	4	9	7	1	1	5	2	1	2	32
Hernando	6	5	28	59	68	84	11	19	16	11	20	327
Highlands	3	2	19	25	27	63	7	10	2	15	11	184
Hillsborough	62	70	222	423	611	1,171	185	293	184	201	293	3,715
Holmes	0	0	0	9	2	1	0	0	0	1	3	16
Indian River	3	12	31	50	56	131	15	21	20	25	18	382
Jackson	0	1	5	11	9	8	2	3	1	5	4	49
Jefferson	0	0	0	2	1	1	0	0	2	0	1	7
Lafayette	0	0	0	0	1	0	0	0	1	0	0	2

<sup>31</sup> Medical Specialist includes Internal Medicine (0502-0522), Medical Genetics (0600-0605), Neurology (0700-0710), Nuclear Medicine (0800-0804), Ophthalmology (1100), Orthopedic Medicine (1100-1103), Otolaryngology (1200-1205), Pathology (1300-1312).

County	Anesthesiology (0100-0104)	Dermatology (0200-0204)	Emergency Medicine (0300-0306)	Family Medicine (0400-0406)	Internal Medicine (0500-0501)	Medical Specialist <sup>31</sup>	OB/GYN (0900-0905)	Pediatrics (1400-1427)	Psychiatry (1800-1809)	Radiology (1900-1912)	Surgeons (2000-2011)	County Total
Lake	16	14	38	117	114	216	28	33	23	35	24	658
Lee	25	36	73	215	228	423	62	92	60	68	97	1,379
Leon	12	17	40	158	87	167	31	50	46	53	39	700
Levy	0	0	1	7	2	0	0	3	1	0	0	14
Liberty	0	0	0	1	0	1	0	0	0	0	0	2
Madison	0	0	1	4	0	2	0	0	1	1	0	9
Manatee	9	17	49	122	95	199	31	39	26	22	44	653
Marion	13	13	44	119	111	186	18	28	21	41	44	638
Martin	6	15	32	48	66	130	19	14	20	29	30	409
Miami-Dade	84	134	344	958	1,108	1,934	320	677	383	333	466	6,741
Monroe	0	4	25	30	29	43	7	7	11	6	12	174
Nassau	1	1	9	20	13	19	2	5	6	0	2	78
Okaloosa	5	7	36	72	48	109	19	25	19	33	41	414
Okeechobee	0	0	2	13	9	16	2	6	1	4	3	56
Orange	54	39	183	496	433	825	202	440	136	183	226	3,217
Osceola	7	10	61	133	88	157	31	48	22	14	41	612
Palm Beach	80	150	213	382	668	1,274	205	280	187	238	253	3,930
Pasco	18	18	59	160	169	256	30	50	42	29	48	879
Pinellas	43	64	178	443	420	803	111	229	107	132	161	2,691
Polk	18	22	81	159	190	276	50	71	44	56	63	1,030
Putnam	0	0	10	21	17	17	5	10	1	9	3	93
Santa Rosa	2	1	12	58	23	35	11	23	5	1	5	176
Sarasota	11	36	65	185	199	393	53	44	59	61	84	1,190
Seminole	11	20	46	173	97	181	38	68	33	23	49	739
St. Johns	4	8	29	95	43	88	10	26	17	17	21	358
St. Lucie	5	5	31	70	64	123	20	31	21	15	33	418
Sumter	2	11	8	52	45	42	3	3	4	12	3	185
Suwannee	0	0	5	10	3	3	0	1	2	0	0	24
Taylor	0	0	1	10	1	1	0	3	0	0	1	17
Union	0	0	1	11	2	2	0	2	4	2	0	24
Volusia	16	17	88	243	155	294	41	50	43	57	68	1,072
Wakulla	0	0	0	7	1	0	0	0	0	0	0	8
Walton	1	4	13	22	11	18	3	7	4	1	5	89
Washington	0	0	7	6	0	0	0	0	0	0	1	14
State Totals	736	1,057	3,043	7,158	7,308	13,832	2,231	3,768	2,164	2,440	3,113	46,850

### Appendix D: Physicians Planning to Retire in the Next Five Years

Of the 51,582 practicing physicians, 16.6% (8,572) said that they were planning on retiring in the next five years. This map illustrates the percentage of practicing physicians in each county who reported that they are planning on retiring.



### Appendix E: List of Survey Specialty and Subspecialty Codes

#### 01 Anesthesiology 0100 Anesthesiology, General 0101 Addiction Medicine 0102 Critical Care Medicine 0103 Hospice & Palliative Medicine 0104 Pain Medicine 02 Dermatology 0200 Dermatology, General 0201 Dermatological Immunology 0202 Dermatopathology 0203 MOHS Micrographic Surgery 0204 Pediatric Dermatology **03 Emergency Medicine** 0300 Emergency Medicine, General 0301 Emergency Medical Services 0302 Hospice & Palliative Medicine 0303 Medical Toxicology 0304 Pediatric Emergency Medicine 0305 Sports Medicine 0306 Undersea & Hyperbaric Medicine **04 Family Medicine** 0400 Family Medicine, General 0401 Addiction Medicine 0402 Adolescent Medicine 0403 Geriatric Medicine 0404 Hospice & Palliative Medicine 0405 Sleep Medicine 0406 Sports Medicine **05 Internal Medicine** 0500 Internal Medicine, General 0501 Addiction Medicine 0502 Allergy & Immunology 0503 Advanced Heart Failure & Transplant Cardiology 0504 Cardiology 0505 Clinical Cardiac Electrophysiology 0506 Critical Care Medicine 0507 Endocrinology 0508 Gastroenterology 0509 Geriatric Medicine 0510 Hematology 0511 Hematology & Oncology 0512 Hospice & Palliative Medicine 0513 Infectious Disease 0514 Interventional Cardiology 0515 Oncology 0516 Nephrology

0517 Pulmonary Disease

	0518	Rheumatology
	0519	Sleep Medicine
	0520	Sports Medicine
	0521	Transplant Hepatology
	0522	Undersea & Hyperbaric Medicine
06 I	Medic	al Genetics
	0600	Medical Genetics, General
	0601	Clinical Biochemical Genetics
	0602	Clinical Cytogenetics
	0603	Clinical Molecular Genetics
	0604	Medical Biochemical Genetics
	0605	Molecular Genetic Pathology
07 I	Neuro	ology
	0700	Neurology, General
	0701	Addiction Medicine
	0702	Clinical Neurophysiology
	0703	Epilepsy
	0704	Hospice & Palliative Medicine
	0705	Neurodevelopmental Disabilities
	0706	Neuromuscular Medicine
	0707	Pain Medicine
	0708	Pediatric Neurology
	0709	Sleep Medicine
001		
00 1		Nuclear Medicina, Conoral
	0000	Nuclear Medicine, General
	0001	Nuclear Cardiology
	0002	Nuclear Radiology
	0803	In Vivo & In Vitro Nuclear Medicine
09 0	Obste	trics & Gynecology
	0900	Obstetrics & Gynecology, General
	0901	Critical Care Medicine
	0902	Gynecologic Oncology
	0903	Hospice & Palliative Medicine
	0904	Maternal & Fetal Medicine
	0905	Reproductive Endocrinology
10 0	Ophth	nalmology
	1000	Ophthalmology, General
11 (	Ortho	pedic Medicine
	1100	Orthopedic Medicine, General
	1101	Hand Surgery
	1102	Orthopedic Sports Medicine

12 Otolaryngology 1200 Otolaryngology, General 1201 Neurotology 1202 Pediatric Otolaryngology 1203 Facial Plastic Surgery 1204 Otolaryngic Allergy 1205 Sleep Medicine 13 Pathology 1300 Pathology, General 1301 Anatomic Pathology 1302 Blood Banking & Transfusion Medicine 1303 Chemical Pathology 1304 Clinical Pathology 1305 Cytopathology 1306 Dermatopathology 1307 Hematologic Pathology 1308 Immunopathology 1309 Medical Microbiology 1310 Molecular Genetic Pathology 1311 Neuropathology 1312 Pediatric Pathology **14 Pediatrics** 1400 Pediatrics, General 1401 Adolescent Medicine 1402 Child Abuse Pediatrics 1403 Developmental & Behavioral Pediatrics 1404 Hospice & Palliative Medicine 1405 Neonatal & Perinatal Medicine 1406 Neurodevelopmental Disabilities 1407 Pediatric Allergy & Immunology 1408 Pediatric Cardiology 1409 Pediatric Critical Care Medicine 1410 Pediatric Dermatology 1411 Pediatric Emergency Medicine 1412 Pediatric Endocrinology 1413 Pediatric Gastroenterology 1414 Pediatric Hematology & Oncology 1415 Pediatric Infectious Diseases 1416 Pediatric Nephrology 1417 Pediatric Neurology 1418 Pediatric Otolaryngology 1419 Pediatric Pathology 1420 Pediatric Pulmonology 1421 Pediatric Radiology 1422 Pediatric Rehabilitation Medicine 1423 Pediatric Rheumatology 1424 Pediatric Transplant Hepatology

1425 Pediatric Urology

1426 Sleep Medicine 1427 Sports Medicine **15 Physical Medicine & Rehabilitation** 1500 Physical Medicine & Rehabilitation, General 1501 Hospice & Palliative Medicine 1502 Neuromuscular Medicine 1503 Pain Medicine 1504 Pediatric Rehabilitation Medicine 1505 Spinal Cord Injury Medicine 1506 Sports Medicine **16 Preventive Medicine** 1600 Preventive Medicine, General 1601 Aerospace Medicine 1602 Environmental Medicine 1603 Medical Toxicology 1604 Public Health 1605 Occupational Medicine 1606 Sports Medicine 1607 Undersea & Hyperbaric Medicine 17 Proctology 1700 Proctology, General **18 Psychiatry** 1800 Psychiatry, General 1801 Addiction Medicine 1802 Adolescent Psychiatry 1803 Forensic Psychiatry 1804 Geriatric Psychiatry 1805 Hospice & Palliative Care 1806 Pain Medicine 1807 Pediatric Psychiatry 1808 Psychosomatic Medicine 1809 Sleep Medicine 19 Radiology 1900 Radiology, General 1901 Body Imaging 1902 Diagnostic Radiology 1903 Diagnostic Roentgenology 1904 Diagnostic Ultrasound 1905 Hospice & Palliative Medicine 1906 Neuroradiology 1907 Nuclear Radiology 1908 Pediatric Radiology 1909 Radiation Oncology 1910 Radiation Therapy 1911 Roentgenology 1912 Vascular & Interventional

Radiology

#### 20 Surgery

2000 Surgery, General 2001 Colon & Rectal Surgery 2002 Congenital Cardiac Surgery 2003 Hand Surgery 2004 Neurological Surgery 2005 Orthopedic Surgery 2006 Pediatric Surgery 2007 Plastic & Reconstructive Surgery 2008 Surgical Critical Care 2009 Thoracic Surgery 2010 Urological Surgery 2011 Vascular Surgery

#### 21 Urology

2100 Urology, General 2101 Pediatric Urology