2019 SURVEY | FINAL-YEAR MEDICAL RESIDENTS

A Survey Examining the Career Preferences, Plans and Expectations of Physicians Completing Their Residency Training.

MERRITT HAWKINS
an AMN Healthcare company

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Summary Report

2019 Survey of Final-Year Medical Residents

OVERVIEW

Merritt Hawkins is a national healthcare search and consulting firm specializing in the recruitment of physicians in all medical specialties, physician leaders and advanced practice clinicians. Now marking 32 years of service to the healthcare industry, Merritt Hawkins is a company of AMN Healthcare (NYSE: AMN), the nation's largest healthcare staffing organization and the industry innovator of healthcare workforce solutions.

As part of its thought leadership efforts, Merritt Hawkins regularly conducts a variety of surveys and studies regarding a wide range of physician related topics. Prior surveys and reports conducted by Merritt Hawkins include its annual *Review of Physician and Advanced Practitioner Recruiting Incentives, Survey of Physician Inpatient/Outpatient Revenue, Survey of Physician Appointment Wait Times,* and its *Physician Access Index* rating each state on the basis of patient access to physicians.

In addition, Merritt Hawkins is frequently retained to conduct surveys and research reports for third party organizations seeking information regarding physician practice patterns, physician morale, physician career plans, compensation and related topics. Organizations for which Merritt Hawkins has conducted research include **The Physicians Foundation**, a non-profit grant-making organization composed of over 20 state and regional medical societies, **The Indian Health Service**, **Trinity University**, the **American Academy of Physician Assistants**, the **American Association of Surgical Administrators**, the **North Texas Regional Extension Center/Office of the National Coordinator of Health Information Technology**, **The Maryland State Medical Society**, the **Society for Vascular Surgery**, and the **Association of Managers of Gynecology and Obstetrics**. In addition, Merritt Hawkins has twice provided expert testimony to **Subcommittees of the Congress of the United States**.

This report summarizes results of Merritt Hawkins' *2019 Survey of Final-Year Medical Residents*. Merritt Hawkins has conducted this survey periodically since 1991 to determine the level of demand for graduating medical residents and a variety of other factors pertaining to the career preferences and practice plans of physicians completing their medical training.

Survey information is offered as a tool to help hospitals, health networks, medical groups and other health care organizations to recruit medical residents. It also may assist policy analysts, academics, journalists and others who follow physician workforce trends to assess the changing priorities and preferences of newly trained physicians entering the medical field.

METHODOLOGY

The *2019 Survey of Final-Year Medical Residents* was conducted via email. Merritt Hawkins emailed the survey to approximately 20,000 final-year residents and fellows in a wide range of specialties using a randomly selected email list provided by a third party data base vendor. Surveys were emailed to residents on the list in March of 2019. A total of 391 responses were received for a response rate of 2%. Survey results were compiled in April, 2019, and this report was completed and released in May, 2019.

Questions asked in the survey have varied over the years. Comparisons to responses received in the last several years that the survey was conducted are included where relevant.

MARGIN OF ERROR ASSESSMENT

Survey results were submitted to experts in statistical response analysis at the University of Tennessee to develop a margin of error assessment describing the accuracy and reliability of the survey. Following is an excerpt from their report:

General Assessment

"…The overall margin of error for the entire survey is (μ ± 4.864%), indicating only a moderate sampling error for a survey of this type. There is roughly a 1 in 21 chance that a random physician not selected to participate in the survey would give responses that fall systematically outside the distribution of the sample frame."

"…As a result, (we) suggest that this survey is usable to support fairly strong assertions about the subjects addressed therein."

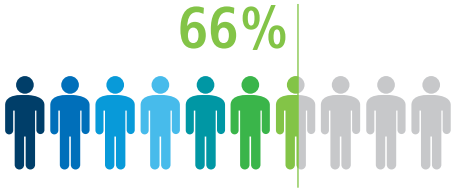
College of Business Adminstration, University of Tennessee

A complete copy of the margin of error assessment is available upon request.

Key Findings

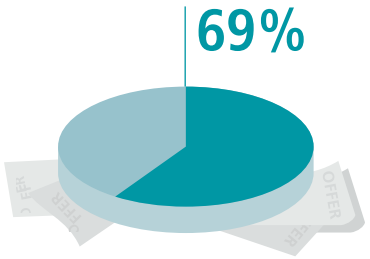
Merritt Hawkins' 2019 Survey of Final-Year Medical Residents reflects the concerns and expectations of physicians who are about to complete their final year of training and enter the employment market.

KEY FINDINGS OF THE SURVEY INCLUDE



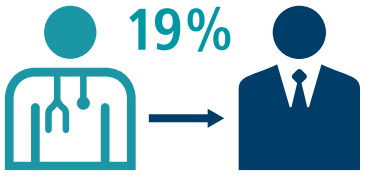
RESIDENTS APPROACHED BY RECRUITERS **51 OR MORE TIMES**

- **Medical residents completing their training are inundated with recruiting offers. Two thirds (66%) received 51 or more recruiting offers during their training, while 45% received more than 100.**
- The majority of final-year residents (63%) said they received too much contact from recruiters during their training, while only 7% said they received too little.
- Residents cited "geographic location" as their number one priority when considering a practice opportunity, followed by "a good financial package" and the availability of "personal time."



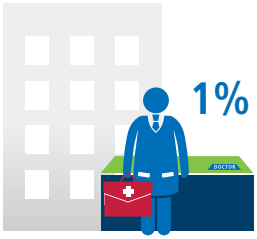
PRIMARY CARE RESIDENTS RECEIVED **51 OR MORE RECRUITING OFFERS DURING THEIR TRAINING**

- **Both primary care and specialists residents receive multiple recruiting offers. 69% of primary care residents received 51 or more recruiting offers during their training, as did 69% of internal medicine subspecialists and 64% of surgical specialists.**
- Residents cited "earning a good income" as the factor that causes them the most concern as they start their first practice, followed by "educational debt" and "availability of free time."



RESIDENTS SAID THEY **WOULD NOT CHOOSE MEDICINE AS A CAREER**

- **Though swamped with recruiting offers, 19% of residents said they would not choose medicine as a career if they could have a do-over. However, only 13% of residents who are international medical school graduates (IMGs) would not choose medicine as a career again, compared to 21% of U.S. medical graduates.**

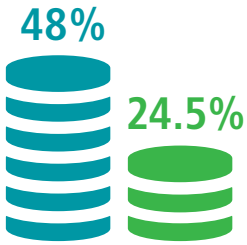


RESIDENTS WHO PREFER TO PRACTICE IN A TOWN OF **25,000 PEOPLE OR LESS**

- **Only 1% of residents who are U.S. medical school graduates would prefer to practice in a town of 25,000 people or less. The number is somewhat higher (4%) for international medical school graduates.**
- More residents (43%) indicated they would prefer to be employed by a hospital than any other practice option. Only 2% percent indicated they would prefer a solo setting as their first practice.

RESIDENTS WHO PREFER TO BE EMPLOYED AT A **HOSPITAL, MEDICAL GROUP OR OTHER FACILITY**

- **The great majority of residents (91%) would prefer to be an employee of a hospital, medical group or other facility than to be in independent private practice.**
- Over one-third of residents (38%) said they are unprepared to handle the business side of medicine. Only 8% of residents said they are very prepared to handle the business side of medicine.
- Over half of residents (53%) said they received no formal instruction during their medical training regarding medical business issues such as contracts, compensation arrangements, and reimbursement methods.



U.S. GRADUATES COMPARED TO IMGs WITH >**$200,000 EDUCATIONAL DEBT**

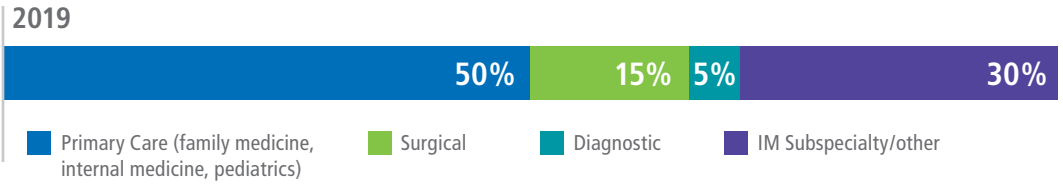
- **Residents who graduated from international medical schools carry significantly less educational debt than U.S. medical school graduate residents. Almost half of U.S. graduates (48%) said they carry $200,000 or more of educational debt compared to 24.5% of IMGs. Over 57% of IMGs said they carry no educational debt compared to only 22% of U.S. graduates.**
- The majority of residents (79%) expect to make $176,000 or more in their first practice.
- The majority of residents (74%) begin a serious job search either within one year of completing their training or more than one year before completing their training. 26% percent wait until six months before completing their training to start a serious job search.

Following is a breakdown of questions asked in the survey and responses received.

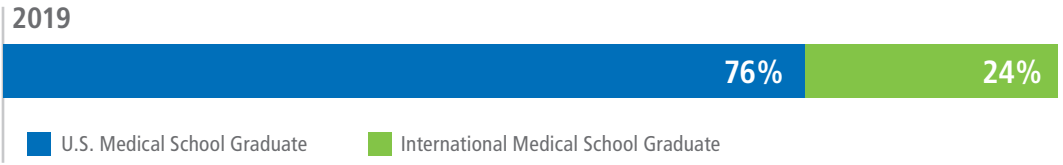
Questions Asked and Responses Received

(all responses rounded to the nearest full digit)

1 What is your medical specialty?



2 Are you a:*



**Question asked for the first time in 2019*

3 About how many times during the course of your residency have you been solicited about medical practice job opportunities by recruiters, hospitals, medical groups, or others? Please include all recruiting letters, phone calls, personal conversations, emails or other forms of communication you may have received.

	2019	2017	2014	2011	2008
0 to 10	8%	4%	12%	2%	6%
11 to 25	10%	10%	11%	9%	14%
26 to 50	16%	16%	14%	11%	40%
51 to 100	21%	20%	17%	31%	34%
Over 100	45%	50%	46%	47%	6%

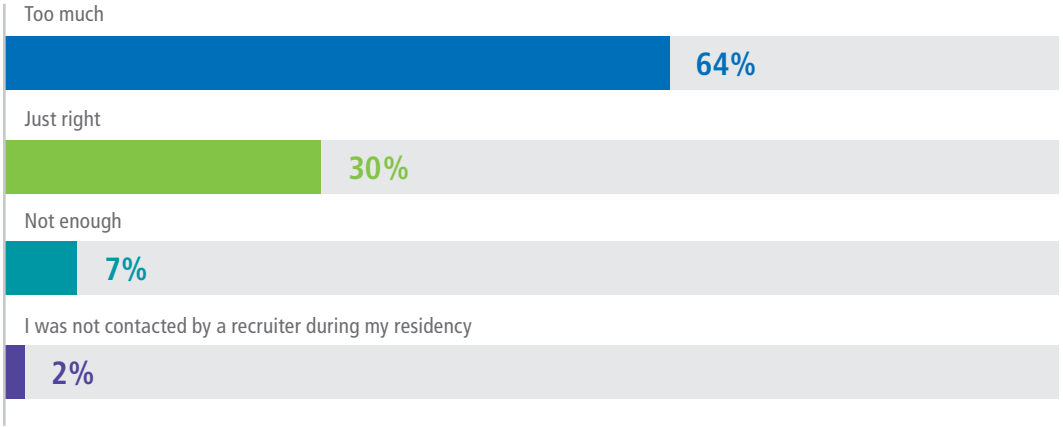
Number of recruitment solicitations by primary care, surgical, diagnostic and IM sub/other specialists.

	Primary Care	Surgical	Diagnostic	IM/Other
0 to 10	6%	4%	42%	9%
11 to 25	9%	11%	21%	10%
26 to 50	16%	21%	16%	12%
51 to 100	23%	25%	5%	20%
Over 100	46%	39%	16%	49%

Number of recruitment solicitations by U.S. Medical School graduates and International Medical School (IMG) graduates.

	U.S. Grads	IMGs
0 to 10	7%	13%
11 to 25	10%	11%
26 to 50	16%	16%
51 to 100	21%	19%
Over 100	46%	41%

4 How would you consider your level of contact from recruiters during your residency?*



**Question asked for the first time in 2019*

By primary care, surgical, diagnostic and IM sub/other

	Primary Care	Surgical	Diagnostic	IM sub/Other
Too much	62%	64%	21%	70%
Just right	32%	31%	42%	24%
Not enough	5%	4%	26%	4%
I was not contacted by a recruiter during my residency	1%	1%	11%	2%

By U.S. Medical Graduates and International Medical Graduates (IMGs)

	US Grads	IMGs
Too much	67%	51%
Just right	26%	42%
Not enough	6%	4%
I was not contacted by a recruiter during my residency	1%	3%

5 What is your preferred method of dealing with recruiters?*

**Question asked for the first time in 2019*

6 At what point in your residency did you begin to seriously examine practice opportunities -- actually obtaining information, arranging interviews, etc?

	2019	2017	2014	2011	2008
Six Months Before Completion	26%	27%	32%	28%	1%
One Year Before Completion	49%	45%	45%	51%	17%
Over One Year Before Completion	25%	28%	23%	21%	82%

7 What is important to you as you consider practice opportunities?

	VERY IMPORTANT		SOMEWHAT IMPORTANT		NOT IMPORTANT	
	2019	2017	2019	2017	2019	2017
Geographic location	77%	75%	21%	23%	2%	2%
Adequate personal time	74%	78%	24%	21%	2%	1%
Lifestyle	71%	74%	27%	25%	2%	1%
Good financial package	75%	69%	24%	30%	1%	1%
Proximity to family	48%	51%	38%	38%	14%	11%
Good medical facilities/ equipment	41%	55%	54%	42%	5%	3%
Specialty support	36%	39%	53%	52%	11%	9%
Low malpractice area	13%	16%	55%	57%	32%	27%
Educational loan forgiveness	25%	22%	28%	43%	47%	35%

8 Which of the following practice settings would you be most open to? *(indicate one only)*

	2019	2017	2014	2011	2008
Hospital Employee	45%	41%	36%	32%	22%
Partner With Another Physician	7%	8%	20%	28%	24%
Single Specialty Group Employee	20%	18%	11%	10%	23%
Multi-Specialty Group Employee	16%	16%	14%	10%	16%
Outpatient Clinic	N/A%	N/A	8%	6%	8%
Locum Tenens	2%	2%	2%	1%	0%
Solo	2%	1%	2%	1%	1%
Association	N/A%	N/A	2%	>1%	4%
HMO	N/A%	2%	1%	>1%	1%
Urgent Care Center	1%	1%	N/A	N/A	N/A
Community Health Center (CHC)	3%	5%	N/A	N/A	N/A
Unsure	4%	5%	2%	9%	1%
Other (Student Health, Corporate, etc.)	N/A%	2%	2%	N/A	>1%

9 Based on population, in what size community would you most like to practice?

	2019	2017	2014	2011	2008
10,000 or less	1%	1%	1%	>1%	3%
10,001 – 25,000	1%	2%	2%	4%	1%
25,001 – 50,000	5%	5%	4%	2%	13%
50,001 – 100,000	10%	9%	10%	10%	19%
100,001 – 250,000	18%	15%	16%	15%	23%
250,001 – 500,000	23%	20%	20%	21%	20%
500,001 – 1 million	22%	24%	23%	20%	15%
Over 1 million	20%	24%	24%	28%	6%

By primary care, surgical, diagnostic, and IM sub/other.

	Primary Care (FM, Gen IM, Peds)	Surgical	Diagnostic	Other
10,000 or less	2%	0%	0%	0%
10,001 – 25,000	2%	0%	0%	0%
25,001 – 50,000	5%	7%	5%	4%
50,001 – 100,000	11%	11%	21%	8%
100,001 – 250,000	20%	5%	6%	21%
250,001 – 500,000	22%	23%	26%	25%
500,001 – 1 million	22%	25%	21%	19%
Over 1 million	16%	29%	21%	23%

By U.S. Medical Graduates and International Medical Graduates (IMGs).

	US Grads	IMGs
10,000 or less	<1%	1%
10,001 – 25,000	<1%	3%
25,001 – 50,000	4%	8%
50,001 – 100,000	9%	13%
100,001 – 250,000	17%	22%
250,001 – 500,000	24%	20%
500,001 – 1 million	24%	15%
Over 1 million	21%	18%

10 Which of the following types of compensation would you prefer at the start of your first professional practice?

	2019	2017	2014	2011	2008
Salary w/Production Bonus	63%	66%	73%	78%	78%
Salary	31%	28%	19%	16%	18%
Income Guarantee	6%	6%	8%	6%	2%
Bank Loan	0%	<1%	<1%	N/A	0%

11 What level of compensation do you anticipate achieving in your first professional practice?

	2019	2017	2014	2011
Less than $50,000	0%	<1%	<1%	<1%
$50,000-$75,000	2%	1%	1%	1%
$76,000-$100,000	2%	2%	2%	1%
$101,000-$125,000	3%	4%	3%	5%
$126,000-$150,000	6%	7%	7%	8%
$151,000-$175,000	9%	7%	9%	13%
$176,000-$200,000	13%	15%	16%	15%
$201,000-$225,000	12%	15%	14%	15%
$226,000-$250,000	12%	10%	10%	9%
$251,000-$275,000	8%	9%	10%	23%
$276,000 to $300,000	7%	7%	7%	N/A
$301,000 to $325,000	5%	6%	7%	N/A
$326,000 or more	21%	17%	14%	N/A

Level of expected compensation by primary care, surgical, diagnostic, IM sub/other.

	Primary Care (FM, Gen IM, Peds)	Surgical	Diagnostic	Other
Less than $50,000	0%	0%	0%	0%
$50,000-$75,000	3%	0%	0%	1%
$76,000-$100,000	2%	0%	0%	2%
$101,000-$125,000	4%	0%	5%	2%
$126,000-$150,000	11%	2%	0%	2%
$151,000-$175,000	13.5%	2%	10%	7%
$176,000-$200,000	15.5%	5%	16%	13%
$201,000-$225,000	14%	9%	5%	9%
$226,000-$250,000	13%	7%	16%	12%
$251,000-$275,000	10%	5%	5%	5%
$276,000 to $300,000	6%	11%	0%	9%
$301,000 to $325,000	1%	7%	11%	10%
$326,000 or more	7%	52%	32%	28%

Level of expected compensation by US Medical Graduates and International Medical Graduates (IMGs)

	US Grads	IMGs
Less than $50,000	0%	0%
$50,000-$75,000	1%	2%
$76,000-$100,000	2%	0%
$101,000-$125,000	4%	1%
$126,000-$150,000	7%	4%
$151,000-$175,000	9%	7%
$176,000-$200,000	12%	17%
$201,000-$225,000	10%	17%
$226,000-$250,000	11%	16%
$251,000-$275,000	8%	8%
$276,000 to $300,000	7%	9%
$301,000 to $325,000	6%	3%
$326,000 or more	23%	16%

12 What do you owe in student loans?

	2019	2017	2014	2011	2008
$0	31%	24%	25%	25%	10%
$50,000 or less	6%	10%	9%	10%	17%
$50,001-$100,000	6%	7%	9%	13%	19%
$100,001-$150,000	6%	7%	8%	11%	29%
$150,001-$200,000	9%	11%	14%	22%	19%
$200,001 or more	42%	41%	35%	19%	6%

Owed in student loans by primary care, surgical, diagnostic and IM sub/other.

	Primary Care	Surgical	Diagnostic	IM Sub/Other
$0	31%	34%	21%	31%
$50,000 or less	5%	11%	0%	6%
$50,001-$100,000	6%	2%	5%	8%
$100,001-$150,000	7%	4%	5%	7%
$150,001-$200,000	10%	9%	16%	5%
$200,001 or more	41%	40%	53%	43%

Owed in student loans, U.S. Medical Graduates and International Medical Graduates (IMGs)

	US Grads	IMGs
$0	22%	58%
$50,000 or less	5%	6%
$50,001-$100,000	7%	3%
$100,001-$150,000	8%	2%
$150,001-$200,000	10%	6%
$200,001 or more	48%	25%

13 Are you concerned about educational loan repayment/forgiveness?

	2019	2017	2014	2011	2008
It is a major concern	34%	37%	38%	28%	35%
It is somewhat of a concern	18%	23%	20%	26%	24%
It is a minor concern	11%	11%	10%	11%	19%
It is not a concern	37%	29%	32%	35%	22%

Concerned about educational loan repayment/forgiveness by primary care, surgical, diagnostic and IM sub/other.

	Primary Care)	Surgical	Diagnostic	IM Sub/Other
It is a major concern	38%	29%	36%	31%
It is somewhat of a concern	21%	14%	16%	14%
It is a minor concern	9%	5%	26%	14%
It is not a concern	32%	52%	22%	41%

Concerned about educational loan repayment/forgiveness by U.S. Medical Graduates and International Medical School Graduates (IMGs).

	US Grads	IMGs
It is a major concern	38%	21%
It is somewhat of a concern	20%	10%
It is a minor concern	10%	12%
It is not a concern	32%	57%

14 How prepared are you to handle the "business side" of your medical career, including employment contracts, compensation arrangements, and other facets of employment?

	2019	2017	2014	2011	2008
Very prepared	8%	10%	10%	9%	16%
Somewhat prepared	54%	52%	51%	43%	66%
Unprepared	38%	38%	39%	48%	18%

15 During the course of your medical training did you receive any formal instruction regarding "employment" issues such as contracts, compensation arrangements, interviewing techniques, reimbursement methods, etc?

	2019	2017	2014	2011	2008
Yes, some formal training	47%	51%	44%	46%	56%
No, no formal training	53%	49%	56%	54%	44%

16 What causes you the most concern as you enter your first professional practice? Please rate the following factors, with one being the most concerning and three being the least concerning.

	VERY CONCERNING		SOMEWHAT CONCERNING		NOT CONCERNING	
	2019	2017	2019	2017	2019	2017
Availability of free time	33%	48%	55%	42%	12%	10%
Dealing with payers (Medicare, etc.)	20%	28%	52%	54%	28%	18%
Earning a good income	43%	40%	45%	45%	12%	15%
Malpractice	18%	24%	57%	55%	25%	21%
Health Reform	10%	23%	57%	55%	33%	22%
Educational debt	38%	41%	26%	30%	36%	29%
Ability to find a practice	16%	14%	38%	36%	46%	50%
Insufficient practice management knowledge	23%	23%	54%	60%	23%	17%
Insufficient medical knowledge	12%	8%	41%	43%	47%	49%
Dealing with patients	5%	5%	27%	28%	68%	67%

17 If you were to begin your education again, would you study medicine or would you select another field?

	2017	2017	2014	2011	2008
Medicine	81%	78%	75%	71%	82%
Another Field	19%	22%	25%	29%	18%

Would study medicine again by primary care, surgical, diagnostic, IM sub/other.

	Primary	Surgical	Diagnostic	IM Sub/Other
Medicine	83%	71%	74%	83%
Another Field	17%	29%	26%	17%

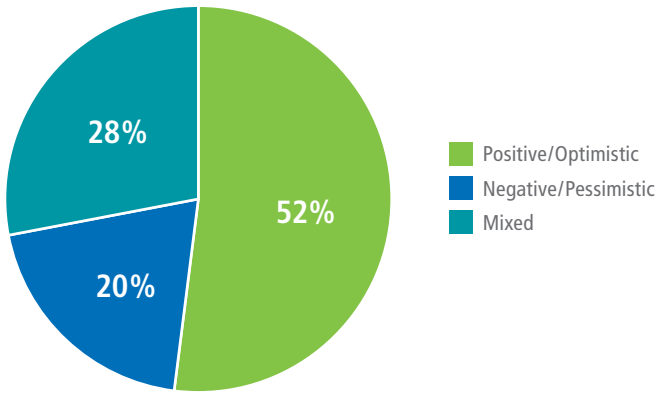
Would study medicine again by US Medical Graduates and International Medical School Graduates (IMGs).

	US Grads	IMGs
Medicine	79%	87%
Another Field	21%	13%

In Their Own Words

Final-year medical residents responding to the survey were asked to indicate their general feelings about their medical training and becoming a practicing physician, including whether they are optimistic, pessimistic, positive, discouraged, etc. Two-hundred and one medical residents provided written comments that can be generally categorized as positive and optimistic, negative and pessimistic, or mixed. The chart below indicates how these written comments breakout in these categories:

Written Comments by Category



Slightly over half of medical residents (52%) who provided written comments expressed a positive mindset about their medical training and the prospect of becoming a practicing physician. An almost equal number (48%) expressed either a negative mindset or mixed feelings about their training and the prospect of becoming a practicing physician. Below are sample comments from each group.

POSITIVE/OPTIMISTIC

1. I am optimistic and excited.

2. Positive and optimistic. I'm excited to begin practicing as an independent physician. I feel my training has prepared me well for both the science and art of medicine. I believe a medical degree provides a lot of flexibility in terms of employment opportunities. Personally, I am looking to join a group practice rather than an HMO in order to avoid the bureaucracy of being an employee.

3. Positive. Now that I am nearly done with residency, I am excited to have more control over my medical decision making. I'm also looking forward to having more free time and a more stable salary.

4. Excited to do what I want.

5. Optimistic, excited, enthusiastic.

6. Optimistic and ready to work independently.

7. Optimistic. I still have more to learn but I feel prepared to engage and continue to grow as a physician.

8. Optimistic. Looking forward to it.

NEGATIVE/PESSIMISTIC

1. Discouraged. Too many rules, expectations for physicians compared to regular society.

2. I'm anxious about the future of medicine. I see it straying further and further away from being patient centered and being more of a business transaction. There's a false air that patient satisfaction is the same as patient centered care and it's not. Patient satisfaction has little to do with what is best for caring for the patient.

3. Discouraged with how the future of healthcare is looking. A lot of physician burnout and extra administrative work.

4. I'm discouraged. I've worked by tail off for over seven years plus undergraduate school. I've accrued a large amount of student debt. And I'm unable to find the job that I want to do for an adequate compensation. You go into becoming a doctor to help people. But the business aspect sure does play a major role in my job search. The odds are definitely stacked against us. And they will continue to be as long as our healthcare system remains broken.

5. Pessimistic and discouraged. I feel like doctors can no longer practice medicine, or do the job that we are trained for. Most of our management decisions are based around insurance coverage, defensive medicine and extraneous button clicks that are not related whatsoever to patient care. It is ridiculous and I hate it.

6. Pessimistic, discouraged, disillusioned, burned out.

7. The further I advance in my medical career the more discouraged I am by the state of the health care system in this country. I feel my ability to practice is compromised weekly by insurance companies. There are many aspects of being a practicing physician that I never considered when going through medical school.

8. I would discourage others from becoming a doctor.

MIXED

1. Eager to earn, but feel somewhat inadequate.

2. Optimistic yet wary of burnout.

3. I am smothered by federal student loans and their compounding interest. Employers should understand young MDs would benefit from private loans (call them bonuses) to pay off their debt quickly, saving us dollars over our career by avoiding compounding interest. I am overall feeling positive though.

4. Anxious regarding changes in access to patients, liability/malpractice. Concerned about finding a job with appropriate support. But positive to start my career in my field after long training program.

5. The road has been long, and perhaps too long to yield a fruitful gain. Came at a cost to family, but hopeful for the future.

6. Hopeful but pessimistic. I would go into medicine again myself but would discourage my children from going into medicine.

7. Positive, optimistic but also anxious due to amount of loans I have and my ability to pay it off and still have a good lifestyle.

8. I'm neutral. Prior to starting training I would have considered myself an optimistic person, but his has certainly changed and I do not always have such a positive outlook. That being said, the closer I have come to finishing the more I have started to enjoy things again.

Trends and Observations

OVERVIEW: MEDICAL RESIDENTS AND THE PHYSICIAN WORKFORCE

The bar to becoming a practicing physician in the United States is set high. Aspirants to a medical career must complete four years of college, four years of medical school in either an allopathic (M.D.) program or an osteopathic (D.O.) program. They then typically must complete three to seven years of residency training, and also pass the U.S. Medical Licensing Exam (USMLE). Further optional training in a specialty or in specific techniques may be obtained through a fellowship.

Residency training evolved in the late 19th Century and began as brief and informal programs for extra training in a special area of interest. The first formal residency programs were established by Sir William Osler and William Stewart Halsted at Johns Hopkins Hospital. Residency programs at other hospitals were subsequently established for many medical specialties and were in place by the early 20th century. For many years, however, residency training was not seen as necessary for general practice and most primary care physicians did not complete a residency program.

Today, however, all physicians intending to practice medicine in the United State must complete a residency program. This includes international medical school graduates (IMGs) who must complete a U.S.-based residency program in order to obtain a state medical license, whether or not they have completed a residency in their home countries. The exception is physicians educated and trained in Canada, who are not considered IMGs and can be licensed in the U.S. based on their Canadian training.

Residency training today is still mostly hospital-based, though other sites of service also train residents, including community health centers (CHCs) and physician group practices. The term resident is derived from the fact that for decades physicians in training would "reside" at their teaching hospitals, taking night duty ("call") every second or third night for years on end. Pay was minimal beyond room and board and work time was exorbitant – often exceeding 100 hours a week. In 2003, however, resident hours were limited to 80 per week by law. Residents today typically are paid between $50,000 and $60,000 a year.

DUTIES AND RESPONSIBILITIES

Customary resident duties include assessing patients who are admitted to the hospital, performing physical exams, ordering appropriate diagnostic tests and consulting with specialists. Residents also round on patients and may perform treatments and diagnostic procedures. In addition, residents provide patient education and write discharge summaries. In some specialties, residents help with surgeries and respond to emergencies, such as trauma pages or codes.

During the first year of residency (known as internship), residents are supervised by senior residents and "attending" physicians. Residents are given more independence and responsibility as they advance through the program. In the second year of residency, residents may supervise medical students. By the third year of residency, residents may supervise first-year residents and will have many of the same responsibilities as attending physicians.

While residency no longer is the relentless grind it used to be, it remains a considerable physical, intellectual and emotional challenge, more akin to a marathon than a sprint.

RESIDENT MATCHING

Both U.S. and international medical school graduates submit their names to the National Residency Matching Program (NRMP) in the hope of being accepted to the residency program of their choice. Results of the Match typically are announced in March or April of each year.

The 2019 Match included 32,194 year one (PGY-1) positions, for which 36,194 medical school graduates applied. The chart below indicates the percent of applicants who were matched based on where they completed medical school.

2019 Match Rates by Medical School Type

	Applicants	Matched
U.S. medical school graduates (allopathic)	18,935	93.9%
U.S. medical school graduates (osteopathic)	6,001	84.6%
U.S. citizen international medical school graduates	5,080	59.0%
Non-U.S. citizen international medical school graduates	6,869	58.8%

Source: National Resident Matching Program (NRMP)

As these numbers indicate, the supply of U.S. medical school graduates, both M.D. and D.O., is insufficient to fill all available PGY-1 resident positions. About one-quarter of these positions are filled by IMGs, who may be either U.S. citizens who graduated from "off-shore" medical schools or non-citizen graduates of international medical schools, the majority of them from India, Pakistan, China or the Philippines. The number of non-citizen IMGs participating in the match declined over the last three years. In 2019, 6,869 non-citizen IMGs applied for the

match, down by 198 from 2018, down by 415 from 2017 and down by 501 from 2016, according to the National Resident Matching Program (NRMP).

It is notable that each year a significant number of IMGs do not match. In 2019, about 41% of U.S. and non-U.S. IMG applicants did not match. Though this is a decrease from previous years, it remains true that many IMG applicants to the Match, having put in the time, effort and expense of completing medical school, will not match and so will find their way to the medical profession blocked, at least in the United States.

Even some U.S. medical school graduates do not match. The match rate is high for U.S. allopathic graduates (93.9%), but nevertheless several hundred do not match each year. The match rate also is fairly high for U.S. osteopathic graduates (84.6%) though close to 1,000 did not match in 2019. Those applicants who do not match may apply for the supplemental match or apply in the following year, but the chance of being matched diminishes with each year one applies so even some U.S. medical graduates ultimately are unable to work as practicing physicians.

RESIDENT SUPPLY AND DISTRIBUTION

There are approximately 128,000 residents and fellows in the U.S. today, unevenly distributed over the 50 states. Of these, the majority are male, though the gender composition of physicians in training is changing. In 2017, females made up the majority of U.S. medical school matriculants for the first time, according to the Association of American Medical Colleges (AAMC). This trend continued in 2018, when 51.6% of students in medical school were female, according to the AAMC. If this trend persists, the majority of medical residents in the U.S. will be female within a decade.

Currently, gender disparities among medical residents in various medical specialties remain pronounced. For example, approximately 85% of orthopedic surgery residents are male, as are approximately 71% of radiology residents, 61% of anesthesiology residents and 61% of emergency medicine residents, according to the AAMC. By contrast, women make up approximately 86% of Ob/Gyn residents, 76% of pediatric residents, 57% of psychiatry residents, and 58% of family medicine residents.

From 2006 – 2016, the numbers of residents and fellows increased by 14%, according to the AAMC's 2017 *State Physician Workforce Data Book*. However, the number of U.S. medical school graduates increased by approximately 30% in the same time frame and there remain fewer residency positions than applicants to fill them. This has been a cause of concern for many healthcare policy makers

and healthcare professionals, as the AAMC projects a shortage of up to 122,000 too few physicians by 2032.

The number of residents in the U.S. has been inhibited by the cap Congress placed on funding for physician graduate medical education (GME) in 1997. The federal government now spends $14.5 billion per year on physician GME, through five different programs (see chart below):

Federal GME Funding by Program

	Matched
Medicare	$10.3 billion
Medicaid (Federal share)	$2.3 billion
Children's Hospital GME Payment Program	$249 million
Children's Hospital GME Payment Program	$76 million
Veterans Administration	$1.49 billion
Total:	**$14.5 billion**

Source: Government Accounting Office (GAO)

State-derived Medicaid funds also contribute $1.8 billion to physician GME annually, bringing total government spending on GME a year to $16.3 billion.

A number of bills have been summited to Congress that would remove the 22-year-old cap on federal GME funding (primarily through Medicare and Medicaid) but none have gained traction. The growth in residency positions from 2006- 2016 has been almost entirely achieved through private funding and state-level funding. However, it is unlikely that the supply of residents can be increased to keep pace with the growth in medical school graduates and Match applicants unless federal GME funding is increased.

Today, approximately 30,000 residents and fellows complete their training per year and join the workforce as fully trained physicians. For the purposes of physician workforce studies, residents in the latter stages of training often are counted as a .50 full-time equivalent (FTE).

RESIDENT RETENTION

Some states are more successful than others in retaining the residents they train. About two-thirds (67.1%) of residents who complete both medical school and residency in a given state stay in that state, according to the AAMC. Overall, 47.5% of residents who complete residency in a state stay in that state.

The chart on page 23 indicates the states with the highest and lowest resident retention rates.

In general, resident retention rates are low in Northeastern states where the number of physicians per population is high and competition may be greater, and are often higher in states with fewer physicians per capita, or in places like Florida and Texas that have comparatively few residency programs relative to their large populations.

A SELLER'S MARKET

Given the shortage of physicians nationwide, residents completing their training (most of whom are in need of a place where they can begin practice) are prime targets of recruitment by hospitals, medical groups,

Resident Retention Rate by State

	Highest	
1	California	70.4%
2	Alaska	64.8%
3	Montana	61.6%
4	Florida	58.8%
5	Texas	58.7%

	Lowest	
46	Vermont	32.9%
47	Rhode Island	30.4%
48	Wyoming	29.7%
49	Delaware	28.6%
50	New Hampshire	28.1%

Source: Association of American Medical Colleges 2017 State Physician Workforce Data Book

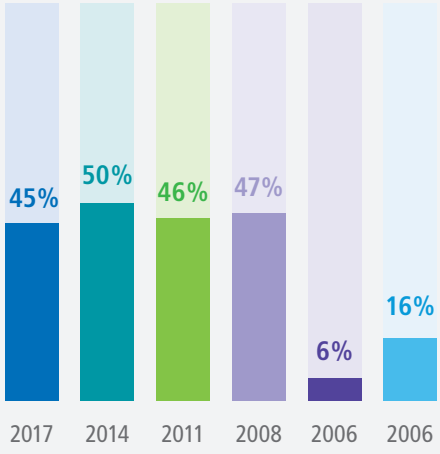
community health centers, urgent care centers, and other facilities that employ doctors. As Merritt Hawkins' *2019 Survey of Final-Year Medical Residents* indicates they have many job prospects to choose from and the competition for their services is intense. Results from the survey reviewed below offer insights into the current practice preferences, career plans and perspectives of final-year medical residents and may prove useful to those seeking to recruit and retain them.

MORE THAN ENOUGH RECRUITING ACTIVITY

Merritt Hawkins' *2019 Survey of Final-Year Medical Residents* quantifies the level of recruiting activity directed at medical residents who are completing their training. The survey asked final-year residents to estimate the number of times they were contacted by recruiters during the course of their training in an effort to interest them in job opportunities.

The great majority (92%) said they had been contacted at least 10 times. Eighty-two percent said they had been contacted 26 or more times, while 66% said they had been contacted 51 or more times. Forty-five percent said they had been contacted over 100 times by recruiters during the course of their training, a number somewhat lower than in 2017 though considerably higher than was seen in similar Merritt Hawkins surveys conducted more than ten years ago (see chart below).

More Than 100 Job Solicitations



About two thirds of residents (64%) said they had been contacted too many times

by recruiters, while only 7% said they had not been contacted enough

Primary care physicians (those in family medicine, internal medicine and pediatrics) reported a relatively high number of recruiting offers. Sixty-nine percent of primary care physicians said they received 51 or more recruiting offers during their training. Primary care physicians are in high demand due to their role as leaders of interdisciplinary clinical teams and because they are the indispensable managers of care and resources in emerging quality driven healthcare delivery models such as accountable care organizations (ACOs).

However, surgical specialists such as general surgeons, orthopedic surgeons, cardiothoracic surgeons, neurosurgeons and others also reported a high number of recruiting offers, with 64% indicating they received 51 or more recruiting offers during their training.

Physicians in the "other" category, who are mostly internal medicine subspecialists such as gastroenterologists, cardiologists, rheumatologists and others, also reported a high number of recruiting offers, with 69% receiving 51 or more recruiting offers during their training.

Diagnostic specialists, including radiologists, pathologists and others, reported a relatively low number of recruiting offers, with only 21% receiving 51 or more such offers during their training.

These results underscore the fact that it is not just primary care physicians who are in high demand. In its 2019 report *The Complexities of Physician Supply and Demand*, the AAMC projects a shortage of up to 121,900 physicians by 2032, including over 55,000 too few primary care physicians, but an even larger shortage of over 66,000 specialists. The shortage of specialists will be driven in large part by population aging as over 10,000 baby boomers turn 65 every day, requiring the services of specialists to maintain declining bodies and address mental health conditions (for additional information on this topic, see Merritt Hawkins' white paper *The Emerging Shortage of Medical Specialists*).

Residents who are U.S. medical school graduates reported more recruiting offers than international medical school graduates. Over 67% of U.S. graduates reported 51 or more recruiting offers, compared to 60% of IMGs. In the past there was a marked preference among Merritt Hawkins' clients and among healthcare facilities generally for U.S. medical graduates, but that preference is declining as IMGs have been a significant percentage of the physician workforce for decades and are widely accepted by U.S. trained physicians and by patients. For more information on the growing role and number of IMGs see Merritt Hawkins' white paper *International Medical Graduates: Qualifications Needed to Practice in the U.S. and Related Considerations*.

Though primary care physicians may receive more job solicitations than do some specialists, both types of physicians are the subject of intense recruiting activity, as are both U.S. and international medical school graduates. An old adage in physician recruitment – *there is no such thing as an unemployed physician* – is as true today as it has ever been.

LOCATION, LOCATION, LOCATION

Residents were asked to rate those factors they look for when assessing practice opportunities, with one being the most important factor and three the least important. Clearly reflecting the priorities of today's medical residents, 77% indicated that "geographic location" is their most important consideration when evaluating a practice opportunity, a higher ranking than any other factor. It superseded "adequate personal time", which was rated the number one factor physicians look for in a practice in Merritt Hawkins' 2017 *Survey of Final-Year Medical Residents*.

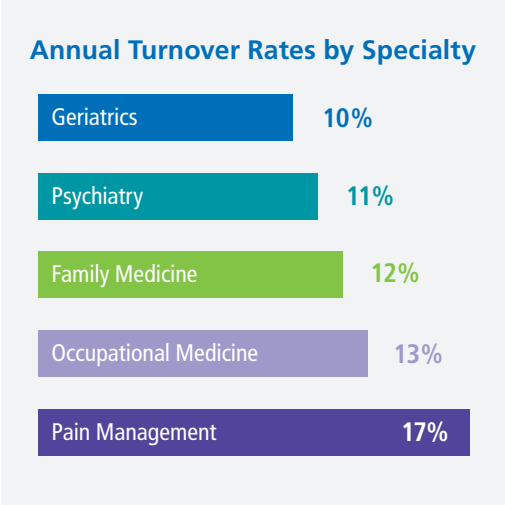
In recruiting circles it has long been observed that many residents coming out of training have a geographic area in mind when they complete their training, often with a preference for where they or their spouse grew up or where they were trained. Not having practiced outside of a residency program, many residents are not as focused on the work environment and characteristics of a potential practice setting as they are on a location in which they would prefer to live.

A geographic preference may override more practical considerations such as community need for their services, income potential, and general practice compatibility. Like many young professionals, some residents view their prospective careers from the vantage point of what they want, rather than what they may need. For example, they may want to live in a beachside community but may need a highly remunerative practice to pay off their loans, a practice with an adequate patient base, compatible associates, efficient electronic health records, etc.

One of the first priorities for recruiters working with residents, therefore, is to broaden their geographic parameters so that they consider practices with which they are compatible, even if those practices are not located in geographic areas they initially may prefer. For this reason, Merritt Hawkins has created an ebook (*Launching a Medical Career: an Ebook for Newly Trained Physicians*) for the purpose of educating newly trained physicians regarding the business aspects of medicine and practice opportunity selection.

A MATTER OF RETENTION

Retention often becomes an issue for residents who may embrace a practice opportunity in the geographic location of their choice, only to later discover it does not meet their personal or professional needs. In an era where more physicians are employed and fewer are private practice owners, turnover is becoming a more pressing problem. Employed physicians typically find it easier to relocate than do practice owners, who have deeper financial and emotional ties to their practices than employed doctors often do. The chart below indicates annual turnover/relocation rates for various specialties:



Source: SKA Healthcare Professional Move and Growth Rates. February 18, 2018

Turnover rates for physicians in their first or second year of practice often can be considerably higher than the numbers cited above. The recruitment process for residents, and for physicians generally, therefore must go deeper than matching physicians with the geographic area of their choice.

THE IMPORTANCE OF PERSONAL TIME AND LIFESTYLE

Residents today are clearly committed to reserving personal time for their families and interests. "Adequate personal time" was rated as a very important factor when considering a job by 74% of residents, making it the third highest rated factor noted in the survey. This confirms a common perception about younger physicians today, which is that they are seeking a controllable lifestyle that allows for a balance between their practice and their personal life. "Lifestyle" was rated a most important factor by 71% of residents, further confirming the perception that newly trained physicians are motivated to find practices that offer a favorable work/life balance.

Today, practice hours, call schedules and vacation times often are the key factors in physician contract discussions, supplanting salaries or bonuses as the primary points over which residents and hospitals, medical groups,or other employers tend to negotiate.

FINANCES A TOP CONSIDERATION

Seventy-five percent of residents responding to the 2019 survey rated "a good financial package" as a very important consideration when evaluating a practice opportunity. This is a higher ranking for this factor than has been

seen in years past. This could suggest that residents are adopting a more acquisitive attitude to their profession, but more likely reflects their concern about reimbursement constraints they see affecting physicians and the general direction of health system payment models, which are moving from volume-based metrics to value-based metrics.

Other factors, such as "proximity to family," "specialty support," "medical facilities/equipment," and "malpractice rates" are considered important to somewhat important by many residents, but do not rate as highly as location, financials, personal time and lifestyle considerations.

WHAT TYPES OF SETTINGS DO THEY PREFER?

Residents were asked which type of practice setting they would be most open to as they enter the job market. Only 2% indicated they would be most open to a solo practice while seven percent said they would prefer to partner with another physician. These findings underscore the fact that few residents are interested in the traditional medical career path in which doctors came out of training and entered practice as independent practice owners or partners, running their practice like a small business.

In an indicator of shifting practice preferences, more residents (45%) said they would be most open to becoming a hospital-employee than any other option. This is the highest number that has indicted this preference since the survey was first conducted in 1991.

Hospital employment offers residents a safe harbor from many of the burdens of independent practice ownership, including financial risk, and high levels of electronic health records (EHR) expertise and expense. Hospital employment also offers the strength in numbers, management savvy and service integration required to compete in emerging value-based reimbursement models. It also offers a more set schedule with regular vacations and extensive call coverage than is typically offered by independent practice.

Employment with either a single specialty or multi-specialty group also may offer some of these advantages. Employment with either type of group is the preferred practice setting of 34% of residents, second to hospital employment, the survey indicates. Today, many medical groups are owned by hospitals or are themselves large enough to act like hospital systems, employing thousands of physicians and operating numerous facilities. Both hospitals and medical groups now often represent the "corporatization" of

medicine in which physicians, like other types of professionals, are employees of large, multi-faceted enterprises rather than independent contractors.

Five percent of residents responding to the 2019 survey indicated they would prefer a Federally Qualified Health Center (FQHC) as their first practice setting. Now operating over 9,000 sites of service, these federally subsidized, primary care, mental health and dental clinics offer services to traditionally underserved patients and accept all patients regardless of ability to pay. That five percent of residents would prefer FQHCs as a practice setting indicates that some newly trained doctors seek settings with a strong mission to serve all patients. It is unclear, however, how many residents are familiar with the FQHC model, which they may not encounter during their training as FQHCs are not hospital-based.

Only one percent of residents expressed a preference for an urgent care center as their first practice setting. These "convenient care" locations are rapidly proliferating and offer the set schedules and the free time that many residents seek. However, most residents are unlikely have any direct experience with them as they typically are not affiliated with teaching facilities. Locum tenens, in which physicians take temporary assignments ranging from a few days to one year, was the preferred setting of 2% of residents responding to the survey. Locum tenens offers newly trained physicians the opportunity to "test drive" various practice settings, and some residents may have encountered locum tenens doctors where they trained, piquing their interest in this alternative practice style.

A STEEP CHALLENGES FOR RURAL COMMUNITIES

The 2019 survey holds unfortunate if unsurprising implications for communities in rural areas and the hospitals, medical practices, FQHCs and other facilities that serve them. Only 1% of final-year medical residents surveyed would prefer to practice in a community of 10,000 people or fewer, and only 2% would prefer to practice in a community of 25,000 people or fewer.

However, lack of affinity for small towns is somewhat less pronounced among international medical graduates, 4% of whom indicated they would prefer a community of 10,000 or fewer people, compared to less than 1% of U.S. graduates. Many IMGs are obligated to practice in a federally designated underserved area in order to remain in the U.S. on "J-1 visas." They also may be more culturally attuned to small towns than are U.S. medical school graduates. For more information on IMG immigration requirements see Merritt Hawkins' white paper *Immigration Law and the Recruitment of Internationally Trained Physicians.*

Primary care physicians also are more receptive to practicing in small communities than are surgical or other types of specialists. No surgical, diagnostic, or other type of specialist responding to the 2019 survey indicated a preference for a community of 10,000 people or less, compared to 4% of primary care doctors. This is to be expected, however, as many specialists require a larger patient base to sustain their practices than do primary care physicians.

The Affordable Care Act included provisions to address rural physician shortages, including additional funding for the National Rural Health Corps, FQHCs, and for the development of rurally-based resident training programs. Rurally-based training sites and rotation programs are designed to give residents a taste for rural practice and to reduce the reservations they may have about living and practicing in small communities.

These reservations often are related to residents' concerns about being on a clinical "island" without specialty support, information technology and other resources than they may be about the amenities of rural communities. They also often are centered around the lack of coverage in rural areas and the challenge of maintaining a reasonable work/life balance. Lack of employment for the physician's spouse in rural areas is an additional concern.

While recent initiatives to increase resident interest in rural areas may eventually succeed in attracting more residents, the 2019 survey suggests that recruiting residents to traditionally underserved settings will remain extremely challenging for the foreseeable future.

The great majority of residents responding to the survey (83%) would prefer to practice in a community of 100,000 people or more, while 20% would prefer to practice in a community of one million people or more. Among surgical specialists, 29% would prefer communities of one million or more compared to 16% of primary care doctors.

This expands the pool of candidates for larger communities but does not mean that healthcare facilities in these communities do not face challenges in recruiting residents and in-practice physicians. Merritt Hawkins' 2018 *Review of Physician and Advanced Practitioner Recruiting Incentives* indicates that 62% of Merritt Hawkins' recruiting assignments now take place in communities of 100,000 people or more, up from 41% in 2014, suggesting that even health care facilities in larger communities require physician recruiting assistance. Competition for physicians has become more pronounced in larger communities which puts even more pressure on smaller communities seeking to compete in a national market.

RECRUITING RESIDENTS SHOULD BEGIN EARLY

The *2019 Survey of Final-Year Medical Residents* indicates that most residents are proactive in their job searches. Twenty-five percent of residents said they began to seriously examine practice opportunities over one year before completing their training, while 49% said they began a serious job search within a year of completing their training. About one-fourth (26%) said they waited until six months before completing their training before beginning a serious job search.

It is probable that at least some of these residents are confident enough in their ability to secure a job in today's market that they do not see the need to begin looking a long time in advance. Others may simply be too preoccupied with their training and duties to devote time to a job search prior to completing residency.

The 2019 survey reinforces the fact that recruiters generally need to contact medical residents about job opportunities within or before their final year, or risk being too late to be considered.

MANY RESIDENTS UNDERESTIMATE THEIR MARKET VALUE

Residents were asked what level of compensation they expect to earn in their first year of professional practice. Seventy-nine percent said they expect to make at least $176,000 or more, while the remaining 21% expect to make $175,000 or less. Financial expectations are somewhat lower for primary care physicians, 67% of whom expect to make $176,000 or more and 33% of whom expect to make $175,000 or less.

According to Merritt Hawkins' 2018 Review of Physician and Advanced Practitioner Recruiting Incentives, average starting salaries for primary care physicians (including family physicians, general internists and pediatricians) exceed $200,000 (see chart onpage 31).

About half of primary care residents (49%) expect to earn $200,000 or less in their first year of practice, which in many cases is well below their current market value. Some residents surveyed may intend to work part-time, and therefore have adjusted down their financial expectations accordingly. Part-time practice is a growing preference among younger physicians, many of whom are starting families at the same time they are entering the job market and require additional personal time.

However, the 2019 survey suggests many primary care residents are not aware of their market value and tend to underestimate it, probably based on

their relative lack of experience. However, in today's market, starting salaries for physicians generally don't vary greatly based on years of experience, but are more likely to vary based on location of the practice and its particular reimbursement potential and other market variables.

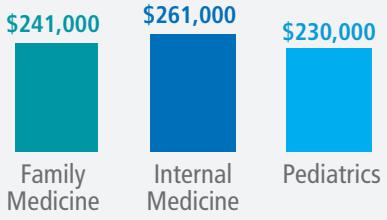
Forty-one percent of all residents surveyed expect to earn $251,000 or more in their first year of practice, while 21% expect to earn $326,000 or more. Financial expectations are generally higher for surgical specialists, 75% of whom expect to make $251,000 or more in their first year of practice and 52% of whom expect to make $326,000 or more.

Below are average starting salaries for three types of surgical specialists as tracked in Merritt Hawkins' *Incentive Review*.

These numbers suggest that many surgical specialists also underestimate their market value, given that 36% anticipate earning $275,000 or less in their first year of practice, well below average starting salaries in their fields. The same may be said for diagnostic and internal medicine subspecialists, many of whom anticipate earning less than their current market value.

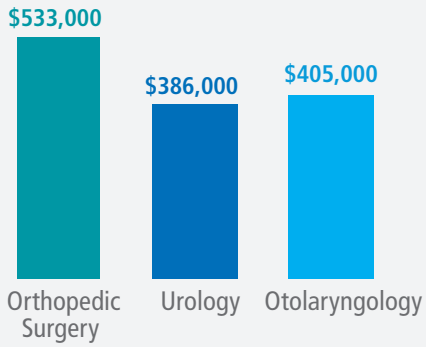
As noted above, most types of specialists are in strong demand today given both the shortage of candidates and the fact that specialists continue to be key revenue generators for their employers. Merritt Hawkins' 2019 *Physician Inpatient/ Outpatient Revenue Survey*, which tracks average annual net revenue generated by physicians in various specialties for their affiliated hospitals, indicates that cardiovascular surgeons generate over $3.6 million a year in net revenue on behalf of their affiliated hospitals, while gastroenterologists generate over $2.9 million.

Average Starting Salaries/ Primary Care



Source: Merritt Hawkins 2018 Review of Physician and Advanced Practitioner Recruiting Incentives

Average Starting Salaries/ Select Specialties



Source: Merritt Hawkins 2018 Review of Physician and Advanced Practitioner Recruiting Incentives

International medical school graduates may be less inclined to underestimate their market value than are U.S. medical graduates. Eighty-five percent of IMGs expect to make $176,000 or more per year in their first practice, compared to 76% of US graduates. However, at the higher end of the pay scale, 23% of U.S. graduates expect to make $326,000 or more a year in their first practice, compared to 16% of IMGs, which may be explained by the fact that IMGs are more likely to fill lower paying primary care positions than are U.S. graduates.

THE SECURITY OF SALARIES

The great majority of final-year residents surveyed (94%) would prefer a straight salary or a salary with a production bonus in their first year of practice. Only 6% would prefer an income guarantee, a type of compensation structure usually offered in independent rather than employed practice settings. A preference for salaries suggests most residents seek the security and clarity of a paycheck rather than the uncertainty inherent to practice ownership in which physicians pay themselves after labor, equipment and other expenses are met. With a salary, residents are ensured of reaching a specified financial threshold, which may not be the case in a private practice.

Sixty-three percent of residents responding to the survey said they would prefer a salary with production bonus in their first year of practice. This income structure

offers both the bottom line security of a salary and the ability to make more through a production formula, which typically is based on how many relative value units (RVUs) the physician generates, on net collections and/or on a variety of quality-based metrics such as patient satisfaction. Salaries plus production bonuses are the prevalent form of income structure featured in physician contracts today and were offered in 75% of Merritt Hawkins' recruiting assignments as tracked in our 2018 *Review of Physician and Advanced Practitioner Recruiting Incentives*. The majority of hospitals and medical groups offer this type of structure, while urgent care centers and FQHCs are more likely to offer straight salaries.

IMGS HAVE LESS BURDEN OF DEBT THAN U.S. GRADUATES

Residents responding to the survey were asked how much they owe in student loans. Thirty-one percent indicated they owe nothing in student loans, though there were significant disparities between U.S. graduates and IMGs to this question. Medical education is much less expensive

in the home countries of many IMGs than it is in the U.S. In India, for example, one year of medical school tuition costs the equivalent of $1,100 or $4,400 over four years, according to the website Quora.com. By contrast, the median cost for four years of medical school in the U.S. is $278,000 for private schools and $207,866 for public schools, according to the Association of American Medical Colleges

About one-half (48%) of U.S. medical school graduates responding to the survey indicated they carry $200,000 or more in student loan debt, compared to just 25% of IMGs. The latter number would no doubt be lower if broken out for non-U.S. citizen IMGs who often come from countries where medical education is comparatively inexpensive compared to U.S. medical schools and most off-shore medical schools where the majority of U.S. citizen IMGs graduate from medical school.

Thirty-eight percent of U.S. graduate residents responding to the survey said that repayment of their educational debt is a major concern, compared to 21% of IMGs. Some hospitals and other organizations offer to repay residents all or a portion of their educational debt as part of the recruiting incentive package. Merritt Hawkins' 2018 *Review of Physician Recruiting Incentives* indicates that educational loan forgiveness was an incentive offered in 18% of the physician search assignments Merritt Hawkins conducted last year.

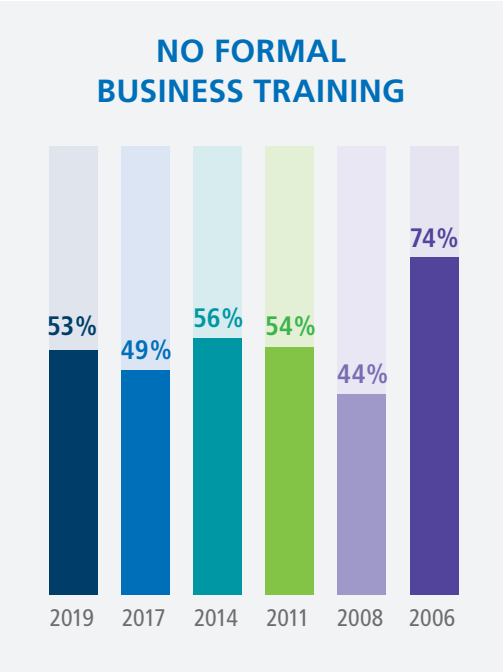
Student loan repayment therefore may be an incentive hospitals and other employers should consider when recruiting medical residents for whom debt forgiveness is a priority, and these residents are more likely to be U.S. medical school graduates than IMGs.

HOW PREPARED ARE RESIDENTS FOR THE BUSINESS OF MEDICINE?

Final-year residents were asked how prepared they are to handle the business side of medicine, including such factors as employment contracts and compensation arrangements. Only 8% said they are very prepared to handle such matters, 54% said they are somewhat prepared and 38% said they are unprepared, percentages very similar to those in Merritt Hawkins' *2017 Survey of Final-Year Medical Residents*.

Traditionally, medical students and residents have received little instruction in the business of medicine as the preponderance of their education and training is focused on clinical issues. In recent years, however, a number of medical schools and residency programs have reportedly added at least some instruction in medical economics and practice management (the medical school at Texas Tech, for example, offers a

"virtual practice" that allows students to experience a medical work environment online). Nevertheless, may residents report they receive no formal business training (see chart).



In Merritt Hawkins' experience, many residents remain unfamiliar with the basic terms and conditions of medical employment and therefore may be at a disadvantage when evaluating practice opportunities. A great deal of care should be taken by the recruiting party to educate residents regarding the features, benefits, and drawbacks of the growing number of financial arrangements available to physicians in today's recruiting market (see Merritt Hawkins' white paper *How to Assess a Medical Practice Opportunity* for more information on this topic). Without such guidance, residents are more likely to accept a practice offer coming out of training that may not suit their needs, leading to a high level of turnover.

WHAT CONCERNS RESIDENTS?

Residents were asked to rate those factors causing them the most concern as they prepare to enter their first professional practice, with one being the most concerning and three the least concerning.

"Earning a good income" was listed as most concerning by 43% of residents, higher than any other factor and up from 40% in 2017, followed by "educational debt," "availability of free time," and "insufficient practice management knowledge." "Earning a good income" supplanted "availability of free time" in 2019 as the most pressing concern facing medical residents. As referenced above, residents may be feeling more insecure financially than they have in the past due to the evolving nature of physician reimbursement, which is shifting away from fee-for-service models and toward fee-for-value models. The academic centers where residents typically train are facing increasing financial pressures as they adjust to reimbursement changes and other challenges, and residents may be absorbing the ambient stress over these matters.

It is therefore important to demonstrate when recruiting residents that they are being offered competitive incentives, using benchmarks such as Merritt Hawkins' *Review of Physician Recruiting Incentives* and physician compensation data compiled by other sources such as the

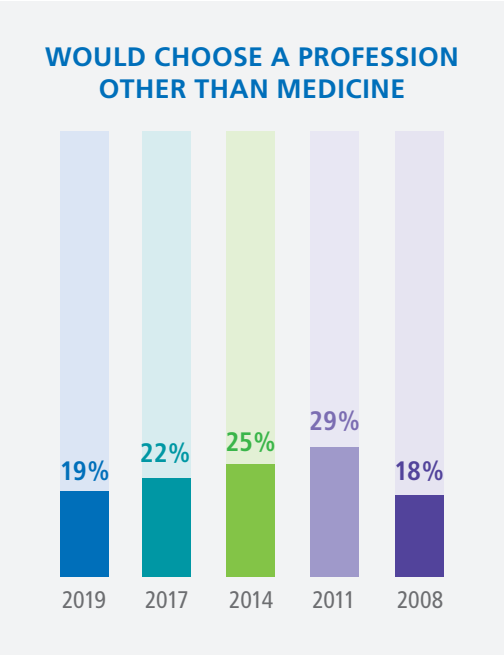
Medical Group Management Association (MGMA) and the American Medical Group Association (AMGA).

By contrast, fewer residents are concerned about their medical knowledge or ability to interact with patients. Only 12% listed "insufficient medical knowledge" as most concerning and only 5% listed "dealing with patients" as most concerning. Concerns about medical knowledge may be minimal because most residents surveyed expressed a desire to work in settings such as hospitals or medical groups, where specialty and information technology support generally are readily available.

HAVING SECOND THOUGHTS

Residents were asked if they would study medicine again if they had their education to do over, or if they would select some other field. The majority (81%) said that they would choose medicine if they could have a do-over, while 19% said they would select another field. U.S. medical graduates were more likely to indicate they would not choose medicine again than were IMGs. Twenty-one percent of U.S. medical graduates indicated they would not choose medicine as a career again compared to 13% of IMGs. This could be attributed in part to the fact that IMGs typically carry considerably less educational debt than do U.S. medical school graduates.

The following chart indicates how residents have responded to this question in past years.



The fact that one in five newly trained physicians expressed "buyer's remorse" over their choice of career is in part a reflection of the current turbulent state of the medical profession and the unsettled state of the healthcare system as a whole.

Rather than being eager to begin their medical careers, some residents today are troubled by the length, expense, and intensity of their training, and by the conditions that may greet them in their first professional practice. The survey therefore reflects a larger fact about the medical profession, which is that many in-practice doctors also are disaffected by the current medical practice environment and are experiencing high rates of burnout.

These issues are explored in more detail in a biennial survey of physicians Merritt Hawkins conducts on behalf of

The Physicians Foundation (*Survey of America's Physicians: Practice Patterns and Perspectives*). Of the approximately 9,000 physicians who responded to the 2018 version of this survey, 78% indicated that they sometimes, often or always experience feelings of professional burnout. Such feelings also are not uncommon among medical residents.

Residents in primary care who responded to the survey have fewer feelings of "buyer's remorse" regarding their choice of a career than do surgical or diagnostic specialists. Eighty-three percent of primary care residents indicated they would choose medical as a career if they were to begin their education again, compared to only 71% of surgical specialists and 74% of diagnostic specialists. Surgical and diagnostic specialists spend several more years in training than do primary care physicians and may be experiencing higher levels of burnout than primary care doctors as their training ends. However, internal medicine subspecialists also spend more years in training than do primary care residents, yet 83% of these physicians said they would choose medicine as a career if they had their education to begin again.

Conclusion

Medical residents completing their training represent an important segment of the physician workforce, bringing new talent and fresh perspectives to their chosen specialties. Merritt Hawkins' *2019 Survey of Final-Year Medical Residents* indicates that newly trained physicians are inundated with recruiting offers but that many have received no formal training in the business aspects of medicine. They therefore may make decisions about where to practice based more on geographic or lifestyle considerations than on the financial, operational and cultural dynamics of given practice opportunities. Hospitals, medical groups, and other healthcare organizations that recruit medical residents therefore should review with them the realities of today's physician job market and provide them with the data and framework they need to make an informed decision about where they will begin their careers post-training.

About Merritt Hawkins

Established in 1987, Merritt Hawkins is the leading physician search and consulting firm in the United States and is a company of AMN Healthcare (NYSE: AMN), the largest healthcare workforce solutions organization in the nation. Merritt Hawkins' provides physician and advanced practitioner recruiting services to hospitals, medical groups, community health centers, telehealth providers and many other types of entities nationwide.

The thought leader in our industry, Merritt Hawkins produces a series of surveys, white papers, books, and speaking presentations internally and also produces research and thought leadership for third parties. Organizations for which Merritt Hawkins has completed research and analysis projects include **The Physicians Foundation, the Indian Health Service, Trinity University, the American Academy of Physician Assistants, the Association of Academic Surgical Administrators, and the North Texas Regional Extension Center**.

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