Introduction

There is one constant in medicine: doctors play a central role in delivering care. And they will continue to do so, irrespective of any future changes to the federal regulatory landscape. However, recent studies have found a growing shortage of physicians in the United States. Considering that doctors occupy the apex of the medical system, this trend should represent a significant concern to nearly all of the stakeholders within the American healthcare industry.

Having an accurate view of how physicians are compensated across specialties is a starting point towards understanding the various factors at play in the market. But there are several key areas that are often overlooked, and that this report attempts to fill.

First, markets for medical services are deeply regional and unique to their various metropolitan statistical areas (MSAs). Medicine operates within tight-knit clusters of physicians and practices, hospital systems, state licensing and regulation, and networks of payers. Despite this, very few studies focus on compensation at the local level. That is why this report examines physician compensation across major American MSAs – a first in medical market analysis.

Second, there is a longstanding concern surrounding the gap in pay between male and female professionals.\(^1\) In this report, we analyze the gender gap in physician pay, and report its results across specialties, states, and metro areas. While it is beyond the scope of this study to offer explanations as to why this gap exists in the way that it does, we do hope that this information can shed more light on this important issue.

Lastly, this report draws on the responses of over 36,000 licensed doctors to produce the most comprehensive and in-depth look at absolute physician compensation across specialties, states, regions, and gender. With 70 percent of all U.S. doctors as members, Doximity is the largest social network in medicine and uniquely positioned to enable this type of analysis.
KEY FINDINGS

Geographic Differences in Physician Compensation

Doximity’s physician compensation report is based on over 36,000 respondents, drawn from the largest network of U.S. physicians. Because of that, we can map compensation by metro areas, the markets within which healthcare operates.

Primary Care Compensation

As the U.S. population ages, it is critical that we have primary care physicians in the areas across the country that need them most. While compensation for specialists is typically higher, we examined where differences in pay for primary care occurs most prominently. One trend we identified is that compensation generally tends to be higher in smaller MSAs, than in larger metro areas.

The metro areas with the overall HIGHEST compensation for primary care providers:
1. Charlotte, NC - $285,109
2. Bridgeport, CT - $279,138
3. Minneapolis, MN - $272,610
4. Indianapolis, IN - $270,468
5. Phoenix, AZ - $268,869
6. Dallas, TX - $264,771
7. Louisville, KY - $264,026
8. Orlando, FL - $260,645
9. Houston, TX - $257,304
10. Tampa, FL - $257,304

The metro areas with the LOWEST compensation for primary care providers:
1. Durham, NC - $200,594
2. Ann Arbor, MI - $210,911
3. Charleston, SC - $216,038
4. Baltimore, MD - $217,249
5. Washington, DC - $221,815
7. Philadelphia, PA - $223,688
8. Denver, CO - $226,282
9. New Haven, CT - $232,260
10. Columbus, OH - $233,436
KEY FINDINGS

Physician Compensation – All Specialties Together

Because specialists tend to earn more across the board, the combined average compensation for all physicians is higher than primary care physicians alone.

The metro areas in which all physicians are paid the HIGHEST average annual salary:
1. Charlotte, NC - $359,455
2. Bridgeport, CT - $353,925
3. Phoenix, AZ - $351,677
4. Milwaukee, WI - $345,831
5. Houston, TX - $345,079
6. Louisville, KY - $344,362
7. Minneapolis, MN - $343,548
8. Orlando, FL - $343,072
9. Indianapolis, IN - $342,699
10. Dallas, TX - $339,911

The metro areas in which physicians are paid the LOWEST average annual salary:
1. Durham, NC - $267,598
2. Ann Arbor, MI - $272,398
3. Baltimore, MD - $281,005
4. Charleston, SC - $285,933
5. Washington, DC - $286,242
6. Boston, MA - $286,971
7. Denver, CO - $288,095
8. Providence, RI - $294,103
10. Cincinnati, OH - $297,700
KEY FINDINGS

Compensation by Specialties

Ten highest and lowest medical specialty annual compensation

**HIGHEST** average annual compensation

**LOWEST** average annual compensation

- Neurosurgery $620K
- Thoracic Surgery $522K
- Orthopaedic Surgery $503K
- Vascular Surgery $446K
- Radiation Oncology $442K
- Plastic Surgery $420K
- Dermatology $420K
- Cardiology $415K
- Radiology $408K
- Gastroenterology $403K
- Family Medicine $231K
- Pediatric Gastroenterology $225K
- Pediatric Rheumatology $220K
- Pediatrics $219K
- Medical Genetics $217K
- Pediatric Nephrology $211K
- Pediatric Hematology & Oncology $210K
- Preventive Medicine $204K
- Pediatric Endocrinology $190K
- Pediatric Infectious Disease $186K

HIGHEST: Neurosurgery

LOWEST: Pediatric Infectious Disease
KEY FINDINGS

Gender Differences in Physician Compensation

• The average national gender gap among physicians is 26.5 percent less per year, meaning that on average, female doctors make $91,284 less than what the average male doctor makes. This topline number factors in all specialties examined, and regional differences.

• Compensation for female physicians, like their male colleagues, is significantly influenced by where they practice. Hence, we constructed a ranking of compensation based on MSAs.

The metro areas in which female physicians are paid the HIGHEST average annual salary:
1. Minneapolis, MN - $290,747
2. Phoenix, AZ - $290,536
3. Milwaukee, WI - $287,950
4. Indianapolis, IN - $281,987
5. Dallas, TX - $278,825
6. Sacramento, CA - $274,010
7. Hartford, CT - $267,891
8. Bridgeport, CT - $267,139
9. Houston, TX - $266,605
10. Tampa, FL - $264,377

The metro areas in which female physicians are paid the LOWEST average annual salary:
1. Durham, NC - $205,635
2. Charleston, SC - $219,112
3. Ann Arbor, MI - $225,004
4. Baltimore, MD - $226,048
5. Washington, DC - $227,263
6. Denver, CO - $228,684
8. Boston, MA - $234,447
9. Cincinnati, OH - $236,749
10. Providence, RI - $238,403
KEY FINDINGS

Gender Gaps by Specialty

There is no medical specialty in which women earn more than men.

The specialties with the largest wage gap between MEN and WOMEN

MEN average annual compensation

WOMEN average annual compensation
**KEY FINDINGS**

**Gender Gap Between Physicians by MSA**

- The Doximity analysis shows a significant gender pay gap across MSAs.

- To calculate the size of the gender gap, we examined what percentage of an average male physician’s salary does the average female physician make across specialties. If the average male physician earned $100,000 and the pay gap was 20 percent less, then it means that the average female physician made $80,000 per year (or an absolute difference of $20,000 less per year).

<table>
<thead>
<tr>
<th>Metro Area</th>
<th>Men Average Annual Compensation</th>
<th>Women Average Annual Compensation</th>
<th>Gender Pay Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charlotte, NC</td>
<td>$381K</td>
<td>$256K</td>
<td>33% less</td>
</tr>
<tr>
<td>Durham, NC</td>
<td>$296K</td>
<td>$206K</td>
<td>31% less</td>
</tr>
<tr>
<td>Orlando, FL</td>
<td>$365K</td>
<td>$257K</td>
<td>30% less</td>
</tr>
<tr>
<td>Pittsburgh, PA</td>
<td>$340K</td>
<td>$239K</td>
<td>30% less</td>
</tr>
<tr>
<td>Bridgeport, CT</td>
<td>$378K</td>
<td>$267K</td>
<td>29% less</td>
</tr>
<tr>
<td>Louisville, KY</td>
<td>$370K</td>
<td>$264K</td>
<td>29% less</td>
</tr>
<tr>
<td>Houston, TX</td>
<td>$373K</td>
<td>$267K</td>
<td>29% less</td>
</tr>
<tr>
<td>New Orleans, LA</td>
<td>$348K</td>
<td>$249K</td>
<td>29% less</td>
</tr>
<tr>
<td>Charleston, SC</td>
<td>$307K</td>
<td>$219K</td>
<td>29% less</td>
</tr>
<tr>
<td>Atlanta, GA</td>
<td>$342K</td>
<td>$244K</td>
<td>28% less</td>
</tr>
</tbody>
</table>
The **SMALLEST** gender wage gap is found in the Sacramento, Calif. metro area. There, female physicians on average make 19% less of what male physicians do. To understand what this difference means in real terms, consider that at $63,283, the difference is approximately the equivalent to paying the salaries of two medical assistants in that area ($35,000).²

The **LARGEST** gender wage gap is found in Charlotte, N.C., where the average female physician makes 33% less of what the average male doctor does. In absolute terms, this is $125,035. To put this in perspective, the average medical school graduate in 2016 left school with $189,165 in debt.³
KEY FINDINGS

The metro areas with the SMALLEST gender wage gap

1. Sacramento, CA - 19%
2. Minneapolis, MN - 20%
3. Portland, OR - 21%
4. Rochester, NY - 21%
5. Phoenix, AZ - 21%
6. Indianapolis, IN - 21%
7. Ann Arbor, MI - 22%
8. Hartford, CT - 22%
9. Milwaukee, WI - 22%
10. Boston, MA - 23%
11. Riverside, CA - 23%
12. San Francisco, CA - 23%
13. Dallas, TX - 23%
14. Baltimore, MD - 24%
15. Cincinnati, OH - 24%
16. Providence, RI - 24%
17. San Diego, CA - 24%
18. Austin, TX - 24%
19. New Haven, CT - 25%
20. San Antonio, TX - 25%
21. Miami, FL - 25%
22. Salt Lake City, UT - 25%
23. Philadelphia, PA - 26%
24. Virginia Beach, VA - 26%
25. Las Vegas, NV - 26%
KEY FINDINGS

The metro areas with the LARGEST gender wage gap

1. Charlotte, NC - 33%
2. Durham, NC - 31%
3. Orlando, FL - 30%
4. Pittsburgh, PA - 30%
5. Bridgeport, CT - 29%
6. Louisville, KY - 29%
7. Houston, TX - 29%
8. New Orleans, LA - 29%
9. Charleston, SC - 29%
10. Atlanta, GA - 28%
11. Nashville, TN - 28%
12. Columbus, OH - 28%
13. Kansas City, MO - 27%
14. New York, NY - 27%
15. Birmingham, AL - 27%
16. San Jose, CA - 27%
17. Jacksonville, FL - 27%
18. Cleveland, OH - 27%
19. Chicago, IL - 27%
20. Detroit, MI - 27%
21. Seattle, WA - 27%
22. Denver, CO - 27%
23. Washington, DC - 27%
24. Tampa, FL - 26%
25. Los Angeles, CA - 26%
Differences in Compensation Between Foreign and Domestic Trained Physicians

- There has been a significant debate recently over newly proposed immigration restrictions, and how these changes could impact medical labor markets. While the vast majority of physicians are U.S. trained, over 8 percent do train and come from outside the country.

- Further immigration restrictions could contribute to the growing shortage in the physician market at the margin.

On average, foreign-trained doctors make 2.5% less than U.S.-trained doctors, a difference of $8,300 a year.
Conclusion

Physician compensation is an important lens through which we can better understand labor market trends in the healthcare system.

It’s worth noting that some rural and midwestern markets are already seeing shortfalls large enough to significantly increase the average compensation for doctors relative to large metro markets where the cost of living can be significantly higher. The North Dakota market is one example, where it appears that the supply side of the market equation favors doctors. Despite these positive conditions, a talent shortage is still looming, so it is our view that more research should be done to understand the causal factors underpinning this trend.

Moreover, our study uncovered significant disparities in compensation between male and female physicians across specialties, metro areas, and all states. This data was consistent with previous studies in the physician labor market, and aligns with a persisting gap found between male and female employees in the general labor markets. It’s beyond our scope to speculate on causation of this effect, but our data indicates that this presents a very real trend that the system will need to address. Hopefully, our research can serve as a baseline for the size of the challenge, and prove helpful to employers, policymakers, and those interested in further study of this topic.

In closing, the Doximity data set represents the largest, self-reported sample for U.S. physician compensation available, and in the future, we plan to evaluate these trends over a multi-year time frame to understand how these markets evolve over time.
Methodology

Doximity’s study is drawn from self-reported compensation surveys of over 36,000 full-time, licensed U.S. physicians who practice at least 40 hours per week. The timeframe ranges from 2014-2017. Responses were mapped across metropolitan statistical areas, and the top 50 were ranked by the number of respondents in the data. For foreign-trained doctors, the subset includes U.S. citizens and nationals who have trained abroad.

To control for differences in specialty, geography, and other provider-specific factors that might influence spending, we estimated a multivariate regression with fixed effects for provider specialty and MSA. We also controlled for how long each provider has practiced medicine and their self-reported average hours worked per week. This regression was estimated using a generalized linear model with a log link and gamma distribution. For the geographic and specialty rankings, we used the predicted values from this regression. For the national numbers on the gap between average gender pay and average pay location of where trained, percentage changes were converted to dollar values by taking marginal effects.

References

The metro areas with the overall **HIGHEST** compensation for primary care providers:

1. Charlotte, NC - $285,109
2. Bridgeport, CT - $279,138
3. Minneapolis, MN - $272,610
4. Indianapolis, IN - $270,468
5. Phoenix, AZ - $268,869
6. Dallas, TX - $264,771
7. Louisville, KY - $264,026
8. Orlando, FL - $263,494
9. Houston, TX - $260,645
10. Tampa, FL - $257,304
11. Riverside, CA - $255,859
12. Sacramento, CA - $254,809
13. Milwaukee, WI - $253,821
14. Kansas City, MO - $253,815
15. Salt Lake City, UT - $251,704
16. Las Vegas, NV - $250,987
17. Miami, FL - $250,560
18. Cincinnati, OH - $249,875
19. Austin, TX - $248,458
20. New York, NY - $248,338
21. Virginia Beach, VA - $247,107
22. Rochester, NY - $246,280
23. Los Angeles, CA - $245,286
24. Birmingham, AL - $244,930
25. Seattle, WA - $244,869
APPENDIX

The metro areas with the LOWEST compensation for primary care providers

1. Durham, NC - $200,594
2. Ann Arbor, MI - $210,911
3. Charleston, SC - $216,038
4. Baltimore, MD - $217,249
5. Washington, DC - $221,815
7. Philadelphia, PA - $223,688
8. Denver, CO - $226,282
9. New Haven, CT - $232,260
10. Columbus, OH - $233,436
11. Portland, OR - $234,975
12. Providence, RI - $235,781
13. San Diego, CA - $236,494
14. Chicago, IL - $237,938
15. Cleveland, OH - $238,389
16. San Jose, CA - $238,996
17. New Orleans, LA - $239,292
18. Pittsburgh, PA - $242,010
19. Detroit, MI - $242,648
20. Atlanta, GA - $243,060
21. Jacksonville, FL - $243,090
22. Nashville, TN - $243,651
23. San Francisco, CA - $243,999
24. San Antonio, TX - $244,359
25. Hartford, CT - $244,418
APPENDIX

The metro areas in which all physicians are paid the HIGHEST average annual salary:

1. Charlotte, NC - $359,455
2. Bridgeport, CT - $353,925
3. Phoenix, AZ - $351,677
4. Milwaukee, WI - $345,831
5. Houston, TX - $345,079
6. Louisville, KY - $344,362
7. Minneapolis, MN - $343,548
8. Orlando, FL - $343,072
9. Indianapolis, IN - $342,699
10. Dallas, TX - $339,911
11. Tampa, FL - $333,591
12. Jacksonville, FL - $333,130
13. Kansas City, MO - $331,966
14. Miami, FL - $331,420
15. Salt Lake City, UT - $329,627
16. Birmingham, AL - $328,598
17. Hartford, CT - $324,790
18. Sacramento, CA - $323,659
19. New York City, NY - $323,313
20. Los Angeles, CA - $323,079
21. San Antonio, TX - $322,574
22. New Orleans, LA - $321,920
23. Pittsburgh, PA - $320,889
24. San Jose CA - $320,592
25. Riverside, CA - $320,030
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The metro areas in which physicians are paid the **LOWEST** average annual salary are:

1. Durham, NC - $267,598
2. Ann Arbor, MI - $272,398
3. Baltimore, MD - $281,005
4. Charleston, SC - $285,933
5. Washington, DC - $286,242
6. Boston, MA - $286,971
7. Denver, CO - $288,095
8. Providence, RI - $294,103
10. Cincinnati, OH - $297,700
11. New Haven, CT - $301,475
12. Columbus, OH - $305,553
13. Portland, OR - $306,195
14. San Diego, CA - $306,409
15. Austin, TX - $309,185
16. Rochester, NY - $311,545
17. San Francisco, CA - $311,829
18. Chicago, IL - $312,477
19. Virginia Beach, VA - $314,540
20. Nashville, TN - $314,653
21. Seattle, WA - $315,511
22. Detroit, MI - $315,680
23. Atlanta, GA - $316,488
24. Las Vegas, NV - $317,858
25. Cleveland, OH - $318,973
APPENDIX

The 24 specialties with the **HIGHEST** average annual compensation

- Neurosurgery $620K
- Thoracic Surgery $522K
- Orthopaedic Surgery $501K
- Vascular Surgery $446K
- Radiation Oncology $443K
- Plastic Surgery $420K
- Dermatology $420K
- Cardiology $415K
- Radiology $408K
- Gastroenterology $403K
- Urology $400K
- Otolaryngology (ENT) $390K
- Anesthesiology $384K
- General Surgery $367K
- Ophthalmology $357K
- Oncology $357K
- Hematology $353K
- Colon & Rectal Surgery $353K
- Pulmonology $330K
- Obstetrics & Gynecology $314K
- Emergency Medicine $314K
- Pathology $301K
- Nephrology $288K
- Neonat/Perinatology $287K
## APPENDIX

The 24 specialties with the **LOWEST** average annual compensation:

- Pediatric Infectious Disease $186K
- Pediatric Endocrinology $190K
- Preventive Medicine $204K
- Pediatric Hematology & Oncology $210K
- Pediatric Nephrology $211K
- Medical Genetics $217K
- Pediatrics $219K
- Pediatric Rheumatology $220K
- Pediatric Gastroenterology $225K
- Family Medicine $231K
- Medicine/Pediatrics $235K
- Pediatric Pulmonology $235K
- Endocrinology $239K
- Geriatrics $243K
- Pediatric Emergency Medicine $244K
- Psychiatry $244K
- Internal Medicine $246K
- Infectious Disease $247K
- Rheumatology $257K
- Pediatric Cardiology $257K
- Occupational Medicine $261K
- Neurology $269K
- Allergy & Immunology $283K
- Physical Medicine/Rehab $284K
**APPENDIX**

The metro areas in which FEMALE physicians are paid the **HIGHEST** average annual salary:

1. Minneapolis, MN - $290,747
2. Phoenix, AZ - $290,536
3. Milwaukee, WI - $287,950
4. Indianapolis, IN - $281,987
5. Dallas, TX - $278,825
6. Sacramento, CA - $274,010
7. Hartford, CT - $267,891
8. Bridgeport, CT - $267,139
9. Houston, TX - $266,605
10. Tampa, FL - $264,377
11. Louisville, KY - $263,811
12. Rochester, NY - $262,306
13. Miami, FL - $262,242
14. Salt Lake City, UT - $261,162
15. Kansas City, MO - $259,434
16. Riverside, CA - $257,963
17. Orlando, FL - $256,811
18. Charlotte, NC - $256,235
19. Jacksonville, FL - $255,776
20. San Jose, CA - $255,650
21. Portland, OR - $254,090
22. San Francisco, CA - $253,993
23. Los Angeles, CA - $253,937
24. New York, NY - $253,878
25. Birmingham, AL - $253,190
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The metro areas in which FEMALE physicians are paid the LOWEST average annual salary

1. Durham, NC - $205,635
2. Charleston, SC - $219,112
3. Ann Arbor, MI - $225,004
4. Baltimore, MD - $226,048
5. Washington, DC - $227,263
6. Denver, CO - $228,684
8. Boston, MA - $234,447
9. Cincinnati, OH - $236,749
10. Providence, RI - $238,403
11. Pittsburgh, PA - $239,047
12. Columbus, OH - $239,188
13. New Haven, CT - $240,887
14. Detroit, MI - $242,890
15. Nashville, TN - $243,227
16. Atlanta, GA - $244,346
17. Chicago, IL - $244,478
18. Seattle, WA - $244,746
19. Virginia Beach, VA - $245,070
20. Cleveland, OH - $246,209
21. San Diego, CA - $246,269
22. Las Vegas, NV - $247,641
23. New Orleans, LA - $248,947
24. Austin, TX - $250,424
25. San Antonio, TX - $252,864
Founded in 2011, Doximity connects physicians and advanced practice clinicians to make them more successful and productive. Doximity is the largest secure medical network with over 70 percent of all U.S. physicians as members, enabling collaboration across specialties and every major medical center. Doximity is based in San Francisco and was created by the founders of Epocrates and Rock Health.

WWW.DOXIMITY.COM