doximity

OB-GYN Workload & Potential Shortages:

The Coming U.S. Women's Health Crisis

JULY 2017

Introduction

Obstetricians and Gynecologists (OB-GYNs) are a critical part of the health care provider community. In addition to providing care to women during pregnancy and labor, OB-GYNs provide a variety of gynecological care services throughout women's lives, screen for cancer, and, in many cases, provide the only primary and preventive care a woman receives. To say that OB-GYNs are critical to women's health and health care is an understatement.

Yet, next to emergency room doctors, OB-GYNs have the highest burn-out rate of all medical specialties.[1] Moreover, due to the nature of obstetrics, and child birth in particular, this job is especially demanding, often requiring OB-GYNs to work at unpredictable hours of the day. This lifestyle can lead OB-GYNs to retire at younger ages than physicians in other specialties.[2]

These factors, in turn, contribute to a documented shortage in OB-GYNs. According to the American Congress of Obstetricians and Gynecologists (ACOG), there will be 6,000 to 8,800 fewer OB-GYNs than needed by 2020 and as many as 22,000 fewer by 2050.[3]

At the same time, there appears to be no meaningful increase in the number of OB-GYNs to make up for the increasing workload. According to ACOG, there are now 1,287 first year OB-GYN residency positions, a number that has increased only minimally in the past few decades, while the number of adult U.S. women has increased much more significantly, stretching the ratio of OB-GYNs to patients.[4]

These factors – the high burn-out rate, the small number of physicians beginning careers as OB-GYNs, and the high number of OB-GYNs retiring, in addition to natural population growth – are combining to create a gap in women's health care. In the United States, women already experience higher rates of pregnancy-related deaths than in any other developed country.[5] A shortage of OB-GYNs is one of the causes cited in discussions of this troubling situation.

This report examines the number and ages of OB-GYNs across the largest 50 U.S. metropolitan statistical areas (MSAs) by population, drawing on the Doximity profiles of more than 30,000 licensed OB-GYNs. With 70 percent of all U.S. doctors as members, Doximity is the country's largest social medical network. It is uniquely positioned to study these phenomena not just on the national level, but also, and more importantly, on the local level where physician and patient relationships are forged.

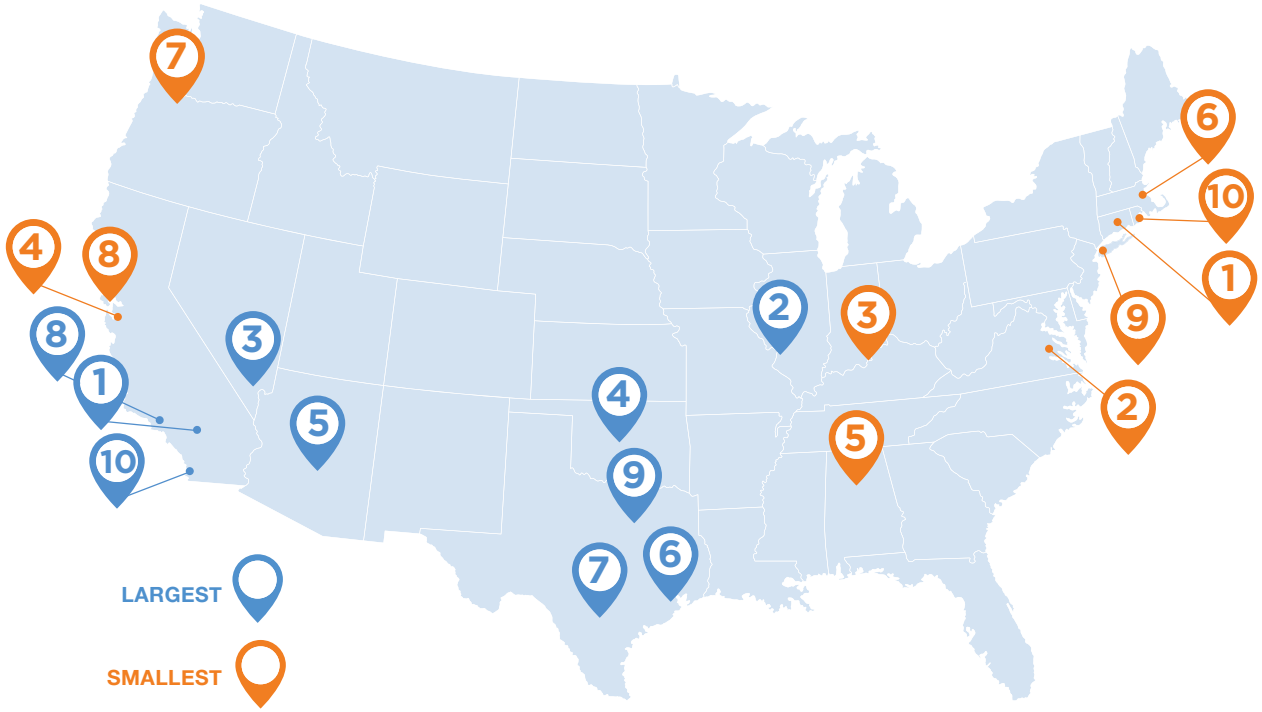
KEY FINDINGS

Four-fold variation in OB-GYN maternity workload

As a starting point, we evaluated how many live births are performed on average by OB-GYNS in various U.S. MSAs, to better understand the workload variations within the specialty. Interestingly, we found that the frequency in the number of live births performed by an OB-GYN is largely determined by where they practice.

Doximity compared the number of OB-GYNs with the number of births annually in each of the 50 largest metros. The ratio ranged from 248 births per OB-GYN annually in Riverside, Calif. to 58 in Hartford, Conn., a four-fold variation in OB-GYNs workloads. Nationally, there are – on average – 105 births per OB-GYN per year.

We expect that metropolitan areas with a smaller birth-to-OB-GYN ratio can better withstand an increase in retiring OB-GYNs, as they may have capacity for an increased workload. Conversely, in areas where the ratio is already strained, an increase in retiring OB-GYNs could challenge the local workforce to keep up with demand for women's health care services.



THE LARGEST OB-GYN WORKLOAD:

Metros with the Highest Birth to OB-GYN Ratios

1. Riverside, CA - 248.05
2. St. Louis, MO - 232.94
3. Las Vegas, NV - 170.69
4. Oklahoma City, OK - 147.80
5. Phoenix, AZ - 145.42
6. Houston, TX - 141.85
7. San Antonio, TX - 136.44
8. Los Angeles, CA - 129.28
9. Dallas, TX - 125.93
10. San Diego, CA - 122.40

THE SMALLEST OB-GYN WORKLOAD:

Metros with the Lowest Birth to OB-GYN Ratios

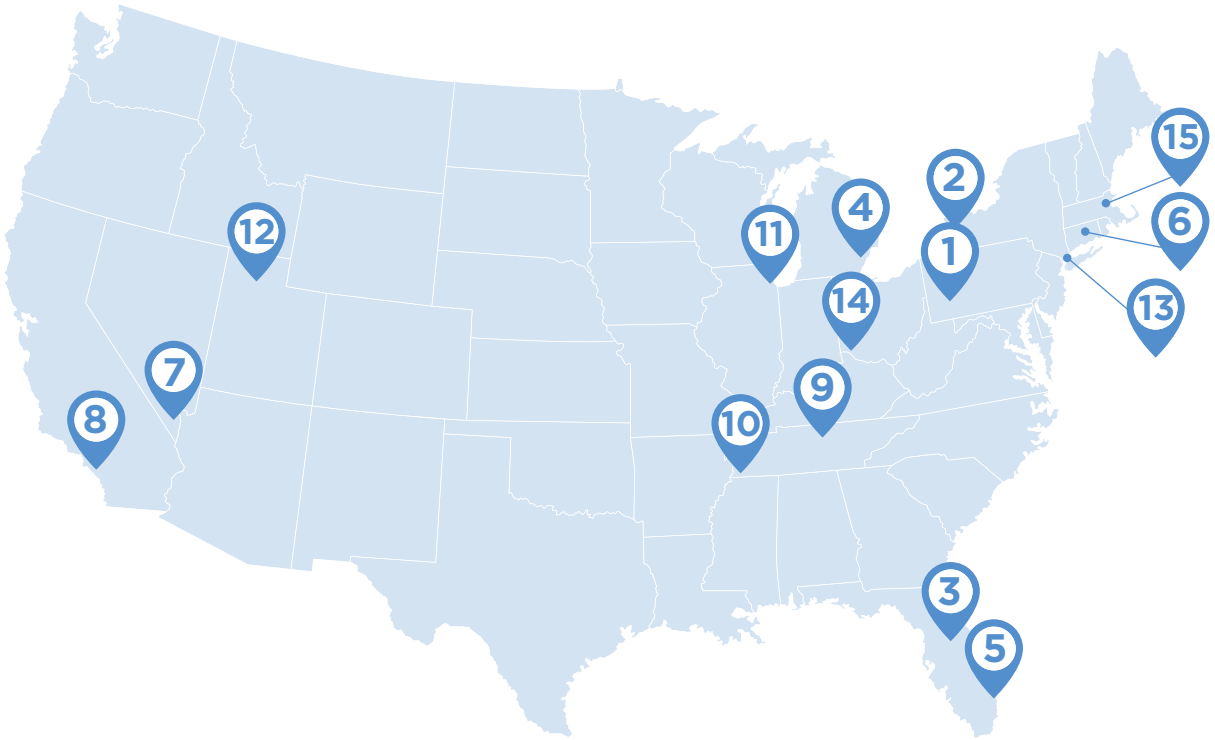
1. Hartford, CT - 58.84
2. Richmond, VA - 68.62
3. Louisville, KY - 69.69
4. San Jose, CA - 70.04
5. Birmingham, AL - 74.61
6. Boston, MA - 75.05
7. Portland, OR - 77.28
8. San Francisco, CA - 80.63
9. New York, NY - 80.98
10. Providence, RI - 81.15

KEY FINDINGS

Metropolitan Areas with the Oldest OB-GYNs

In many areas, not only are there larger birth to OB-GYN ratios, but a large portion of the population of OB-GYNs is nearing retirement age.

According to research by ACOG, most OB-GYNs begin to retire at 59, with the median retirement age being 64 years old. Our analysis found that nationally, the average age of OB-GYNs is 51.39. This average age ranged from 52.69 in Pittsburgh to 48.93 in Houston.



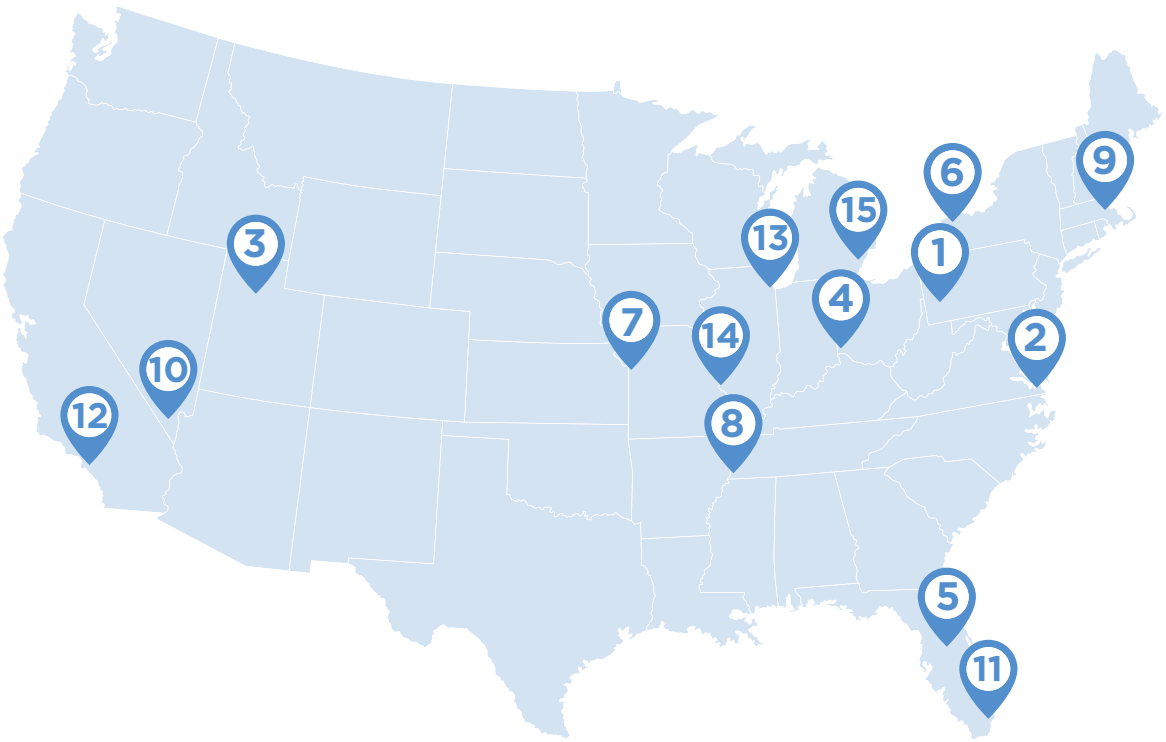
TOP 15 metropolitan areas with **OLDEST** average OB-GYN age

1. Pittsburgh, PA - 52.69
2. Buffalo, NY - 52.41
3. Orlando, FL - 52.34
4. Detroit, MI - 52.34
5. Miami, FL - 51.86
6. Hartford, CT - 51.86
7. Las Vegas, NV - 51.86
8. Los Angeles, CA - 51.83
9. Nashville, TN - 51.82
10. Memphis, TN - 51.76
11. Chicago, IL- 51.62
12. Salt Lake City, UT - 51.59
13. New York, NY - 51.59
14. Cincinnati, OH - 51.56
15. Boston, MA - 51.47

KEY FINDINGS

Coming OB-GYN Retirement

Drilling down, the age distribution of OB-GYNs tilts older. Nationally, 37 percent of OB-GYNs are 55 years-old or older and of the 50 metropolitan areas evaluated in this survey, Doximity found 38 metro areas where at least one third of OB-GYNs are 55 years-old or older.



TOP 15 metropolitan areas ranked by **HIGHEST** percentage of OB-GYNs older than 55

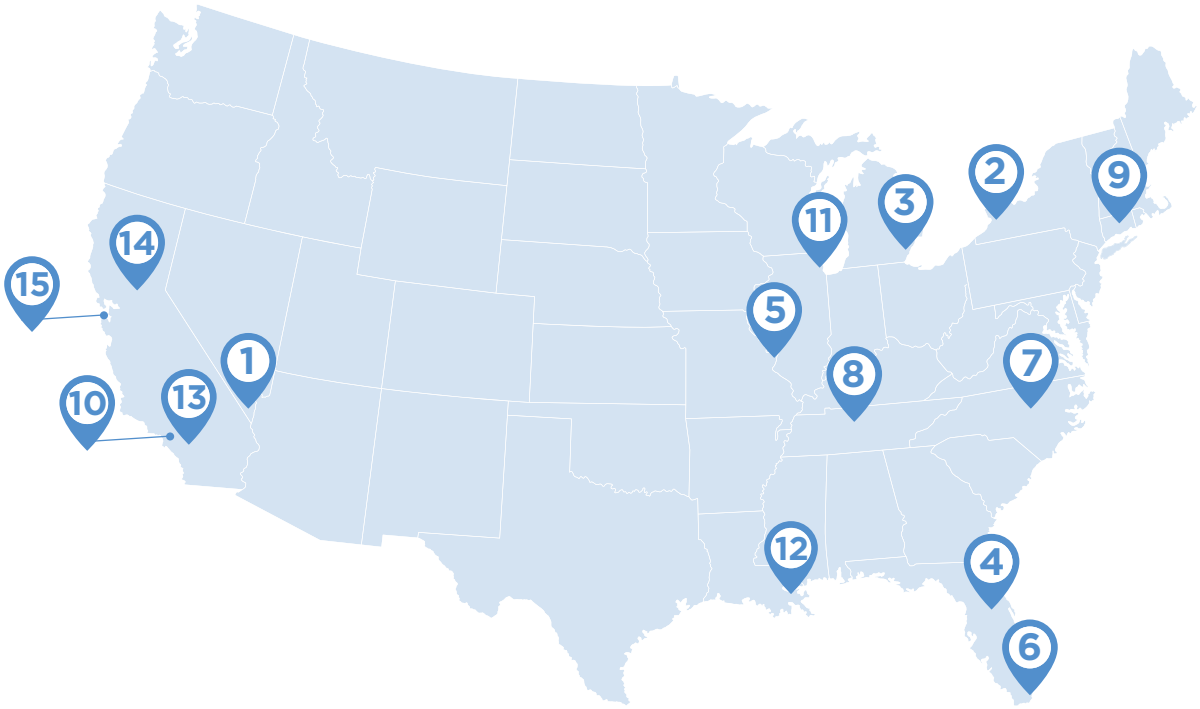
1. Pittsburgh, PA - 44.20%
2. Virginia Beach, VA - 44.20%
3. Salt Lake City, UT - 41.18%
4. Cincinnati, OH - 41.00%
5. Orlando, FL - 40.42%
6. Buffalo, NY - 39.67%
7. Kansas City, MO - 39.42%
8. Memphis, TN - 39.29%
9. Boston, MA - 38.90%
10. Las Vegas, NV - 38.89%
11. Miami, FL - 38.61%
12. Los Angeles, CA - 38.49%
13. Chicago, IL - 38.27%
14. St. Louis, MO - 38.26%
15. Detroit, MI - 38.14%

KEY FINDINGS

Metropolitan Areas With the Youngest OB-GYNs

An aging OB-GYN population would not be as severe a problem if there were a growing cohort of younger OB-GYNs. However, only 14 percent of all U.S. OB-GYNs are 40 years old or younger, while 37 percent are 55 years old or older.

While there are 38 metro areas where at least one third of OB-GYNs are in the oldest age bracket (55 years old or older), 24 metro areas have less than 15 percent of their OB-GYNs in the youngest age bracket (under 40).



TOP 15 metro areas ranked by **LOWEST** percentage of OB-GYNs younger than 40

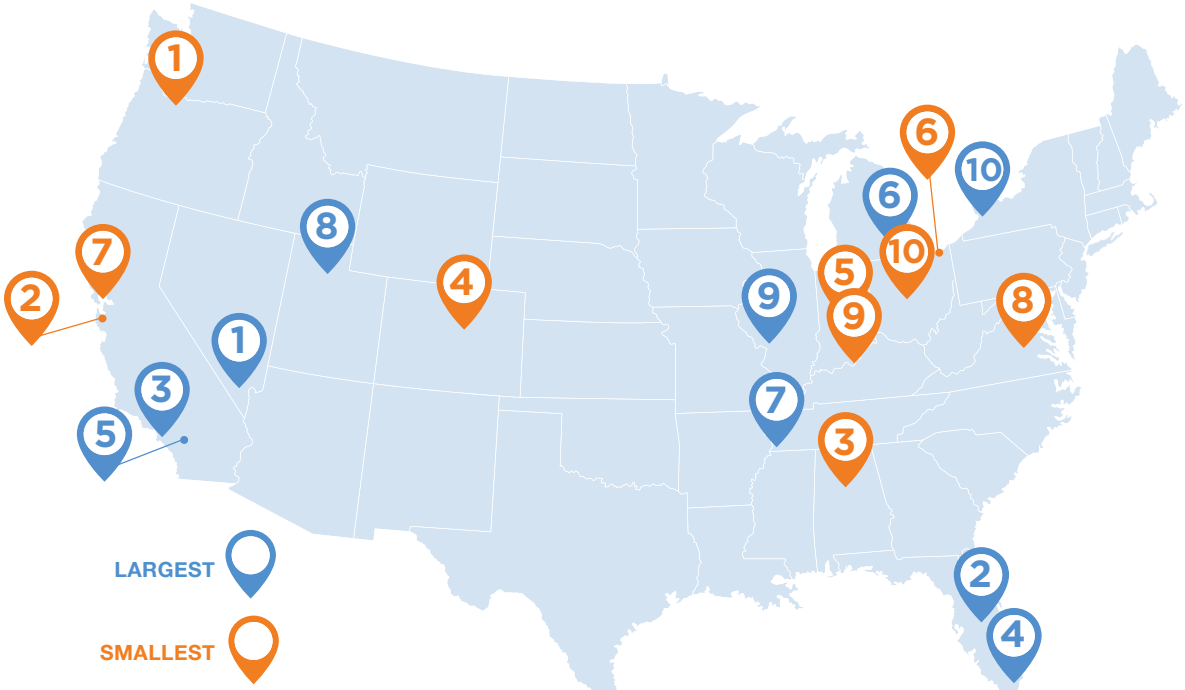
1. Las Vegas, NV - 9.88%
2. Buffalo, NY - 9.92%
3. Detroit, MI - 11.02%
4. Orlando, FL - 11.67%
5. St. Louis, MO - 12.17%
6. Miami, FL - 12.24%
7. Raleigh, NC - 12.32%
8. Nashville, TN - 12.35%
9. Hartford, CT - 12.38%
10. Los Angeles, CA - 12.62%
11. Chicago, IL - 12.79%
12. New Orleans, LA - 13.21%
13. Riverside, CA - 13.55%
14. Sacramento, CA - 13.55%
15. San Francisco, CA - 13.66%

KEY FINDINGS

OB-GYN Shortages Vary Across Metropolitan Areas

Combining these factors, Doximity developed a composite index score to assess how severe the risk of OB-GYN shortages is in each of the top 50 metropolitan areas, considering the average age of their workforces and the number of births per OB-GYN per year.

In the metropolitan areas with older OB-GYNs and higher workloads, we expect that they have a greater risk of shortages. In the metropolitan areas with younger OB-GYNs and lower workloads, we expect that they have a lower risk of shortages.



Metropolitan Areas with the **HIGHEST RISK OF SHORTAGES**

1. Las Vegas, NV
2. Orlando, FL
3. Los Angeles, CA
4. Miami, FL
5. Riverside, CA
6. Detroit, MI
7. Memphis, TN
8. Salt Lake City, UT
9. St. Louis, MO
10. Buffalo, NY

Metropolitan Areas with the **LOWEST RISK OF SHORTAGES**

1. Portland, OR
2. San Jose, CA
3. Birmingham, AL
4. Denver, CO
5. Indianapolis, IN
6. Cleveland, OH
7. San Francisco, CA
8. Richmond, VA
9. Louisville, KY
10. Columbus, OH

Conclusion

The increasing demands on OB-GYNs and the growing shortage of OB-GYNs are critical issues for the entire health care system. Understanding the situation across metropolitan areas will help address disparities at a more local level and ensure more women have better health outcomes.

While this study cannot determine causation for the variation in workloads or shortages across metropolitan areas, we hope it can serve as a baseline for the size of the challenge, and prove helpful to employers, policymakers, patient advocates, and others interested in further study of this topic. This information may also be helpful for OB-GYNs looking to live in areas with an increasing need for their expertise.

The Doximity data set represents the most comprehensive set of physician information available, and in the future, we plan to evaluate these physician shortage trends in more depth.

Methodology

Doximity's study is drawn from CMS data, board certification data, and self-reported data on more than 30,000 full-time, board-certified OB-GYN practitioners. To avoid including retired OB-GYNs, physicians older than 70 were removed from the dataset.

Responses were mapped across metropolitan statistical areas (MSAs), and the top 50 MSAs were selected by population according to 2010 Census data. Population growth data is based on comparisons with Census 2016 population estimates.

The number of births in each metropolitan area comes from the 2015 National Center for Health Statistics and the Center for Disease Control's WONDER database.

References

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APPENDIX

Full OB-GYN Shortages Index, Highest to Lowest Risk

1. Las Vegas, NV
2. Orlando, FL
3. Los Angeles, CA
4. Miami, FL
5. Riverside, CA
6. Detroit, MI
7. Memphis, TN
8. Salt Lake City, UT
9. St. Louis, MO
10. Buffalo, NY
11. Tampa, FL
12. Chicago, IL
13. San Diego, CA
14. Sacramento, CA
15. Pittsburgh, PA
16. Phoenix, AZ
17. Dallas, TX
18. Cincinnati, OH
19. Nashville, TN
20. Philadelphia, PA
21. Oklahoma City, OK
22. San Antonio, TX
23. New York, NY
24. Houston, TX
25. Raleigh, NC
26. Jacksonville, FL
27. Hartford, CT
28. Charlotte, NC
29. Atlanta, GA
30. Kansas City, MO
31. New Orleans, LA
32. Milwaukee, WI
33. Virginia Beach, VA
34. Providence, RI
35. Boston, MA
36. Minneapolis, MN
37. Seattle, WA
38. Washington, DC
39. Austin, TX
40. Baltimore, MD
41. Columbus, OH
42. Louisville, KY
43. Richmond, VA
44. San Francisco, CA
45. Cleveland, OH
46. Indianapolis, IN
47. Denver, CO
48. Birmingham, AL
49. San Jose, CA
50. Portland, OR

APPENDIX

Full list of MSAs ranked by births per OB-GYNs

1. Riverside, CA - 248.05
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5. Phoenix, AZ - 145.42
6. Houston, TX - 141.85
7. San Antonio, TX - 136.44
8. Los Angeles, CA - 129.28
9. Dallas, TX - 125.93
10. San Diego, CA - 122.40
11. Miami, FL - 120.04
12. Orlando, FL - 119.82
13. Salt Lake City, UT - 115.22
14. Memphis, TN - 112.38
15. Tampa, FL - 111.55
16. Raleigh, NC - 110.46
17. Jacksonville, FL - 109.58
18. Sacramento, CA - 109.10
19. Detroit, MI - 106.20
20. Columbus, OH - 105.56
21. Minneapolis, MN - 105.51
22. Austin, TX - 105.46
23. Chicago, IL - 104.89
24. Charlotte, NC - 103.90
25. Buffalo, NY - 103.53
26. Atlanta, GA - 99.66
27. Seattle, WA - 96.88
28. Philadelphia, PA - 96.33
29. Denver, CO - 95.09
30. Milwaukee, WI - 95.00
31. Indianapolis, IN - 94.75
32. Kansas City, MO - 94.53
33. Cincinnati, OH - 93.98
34. New Orleans, LA - 90.21
35. Washington, DC - 87.25
36. Pittsburgh, PA - 86.52
37. Virginia Beach, VA - 85.15
38. Nashville, TN - 83.55
39. Baltimore, MD - 82.68
40. Cleveland, OH - 81.70
41. Providence, RI - 81.15
42. New York, NY - 80.98
43. San Francisco, CA - 80.63
44. Portland, OR - 77.28
45. Boston, MA - 75.05
46. Birmingham, AL - 74.61
47. San Jose, CA - 70.04
48. Louisville, KY - 69.69
49. Richmond, VA - 68.62
50. Hartford, CT - 58.84

National Average - 105.37

APPENDIX

Full list of MSAs with age brackets

MSA	PERCENT OB-GYNS YOUNGER THAN 40	PERCENT OB-GYNS 40-55	PERCENT OB-GYNS OLDER THAN 55
Atlanta, GA	14.07%	50.15%	35.78%
Austin, TX	15.77%	53.11%	31.12%
Baltimore, MD	14.25%	50.97%	34.78%
Birmingham, AL	15.03%	49.02%	35.95%
Boston, MA	15.27%	45.82%	38.90%
Buffalo, NY	9.92%	50.41%	39.67%
Charlotte, NC	15.16%	52.71%	32.13%
Chicago, IL	12.79%	48.94%	38.27%
Cincinnati, OH	19.92%	39.08%	41.00%
Cleveland, OH	17.69%	48.01%	34.30%
Columbus, OH	19.34%	50.62%	30.04%
Dallas, TX	16.54%	48.19%	35.27%
Denver, CO	19.17%	48.61%	32.22%
Detroit, MI	11.02%	50.85%	38.14%
Hartford, CT	12.38%	49.50%	38.12%
Houston, TX	19.89%	52.75%	27.36%
Indianapolis, IN	16.60%	53.36%	30.04%
Jacksonville, FL	14.91%	50.31%	34.78%

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Full list of MSAs with age brackets

MSA	PERCENT OB-GYNS YOUNGER THAN 40	PERCENT OB-GYNS 40-55	PERCENT OB-GYNS OLDER THAN 55
Kansas City, MO	17.84%	42.74%	39.42%
Las Vegas, NV	9.88%	51.23%	38.89%
Los Angeles, CA	12.62%	48.90%	38.49%
Louisville, KY	15.79%	48.54%	35.67%
Memphis, TN	18.57%	42.14%	39.29%
Miami, FL	12.24%	49.15%	38.61%
Milwaukee, WI	16.75%	46.80%	36.45%
Minneapolis, MN	19.33%	48.20%	32.47%
Nashville, TN	12.35%	50.21%	37.45%
New Orleans, LA	13.21%	53.46%	33.33%
New York, NY	13.89%	49.17%	36.95%
Oklahoma City, OK	21.55%	45.69%	32.76%
Orlando, FL	11.67%	47.92%	40.42%
Philadelphia, PA	16.31%	47.21%	36.47%
Phoenix, AZ	14.18%	53.30%	32.52%
Pittsburgh, PA	16.67%	39.13%	44.20%
Portland, OR	16.22%	54.28%	29.50%
Providence, RI	14.06%	50.00%	35.94%

APPENDIX

Full list of MSAs with age brackets

MSA	PERCENT OB-GYNS YOUNGER THAN 40	PERCENT OB-GYNS 40-55	PERCENT OB-GYNS OLDER THAN 55
Raleigh, NC	12.32%	52.90%	34.78%
Richmond, VA	14.81%	51.23%	33.95%
Riverside, CA	13.55%	48.61%	37.85%
Sacramento, CA	13.55%	49.80%	36.65%
Salt Lake City, UT	13.73%	45.10%	41.18%
San Antonio, TX	15.45%	53.22%	31.33%
San Diego, CA	14.52%	48.77%	36.71%
San Francisco, CA	13.66%	51.90%	34.45%
San Jose, CA	16.32%	53.41%	30.27%
Seattle, WA	17.18%	47.24%	35.58%
St. Louis, MO	12.17%	49.57%	38.26%
Tampa, FL	15.56%	46.36%	38.08%
Virginia Beach, VA	15.53%	41.75%	42.72%
Washington, DC	15.47%	49.54%	34.99%
National Average	**14.35%**	**48.62%**	**37.03%**

doximity

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.

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