



2018 OB-GYN Workforce Study

Looming Physician
Shortages: A Growing
Women's Health Crisis

JUNE 2018



Introduction

Observers of the U.S. healthcare system have long cautioned that the country is facing a potentially large shortage of physicians across a variety of medical specialties and practice areas. In obstetrics and gynecology, the problem is particularly pronounced. The American Congress of Obstetricians and Gynecologists (ACOG) projects there will be a shortage of up to 8,800 obstetricians and gynecologists (OB-GYNs) by 2020, and a shortfall of up to 22,000 by 2050.¹

To understand the broader implications of these estimates, it's worth noting that OB-GYNs are the main source of care to women during pregnancy and childbirth. Beyond pre-natal care and delivery, they also provide a range of gynecological care throughout women's lives, including reproductive cancer screenings and other preventive services.

A shortage of OB-GYNs in line with ACOG's estimates could prove devastating to women's healthcare in the US.

Yet, next to emergency room doctors, OB-GYNs have the highest burn-out rate of all medical specialties.² The nature of obstetrics, and childbirth in particular, is especially demanding, often requiring OB-GYNs to work at

unpredictable hours. This lifestyle can lead OB-GYNs to retire at younger ages than physicians in other specialties.³

In this report, we have built on a body of data that we began collecting in 2017 that detailed workload and demographic variations for OB-GYNs nationally. We examined the maternity workload distribution 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 43,000 licensed OB-GYNs.

We've also created a shortage risk index, in which we identify those U.S. cities where we anticipate OB-GYN workforce shortages will crop up first. Lastly, we looked at additional factors, such as source of insurance coverage for expecting mothers in order to better assess how local market conditions might contribute to the shortage of OB-GYNs.

With over 70 percent of all U.S. doctors as members, Doximity is the country's largest medical social network. As such, we are uniquely positioned to study these phenomena not just on the national level, but also, and more importantly, on the local level where healthcare is practiced and delivered.

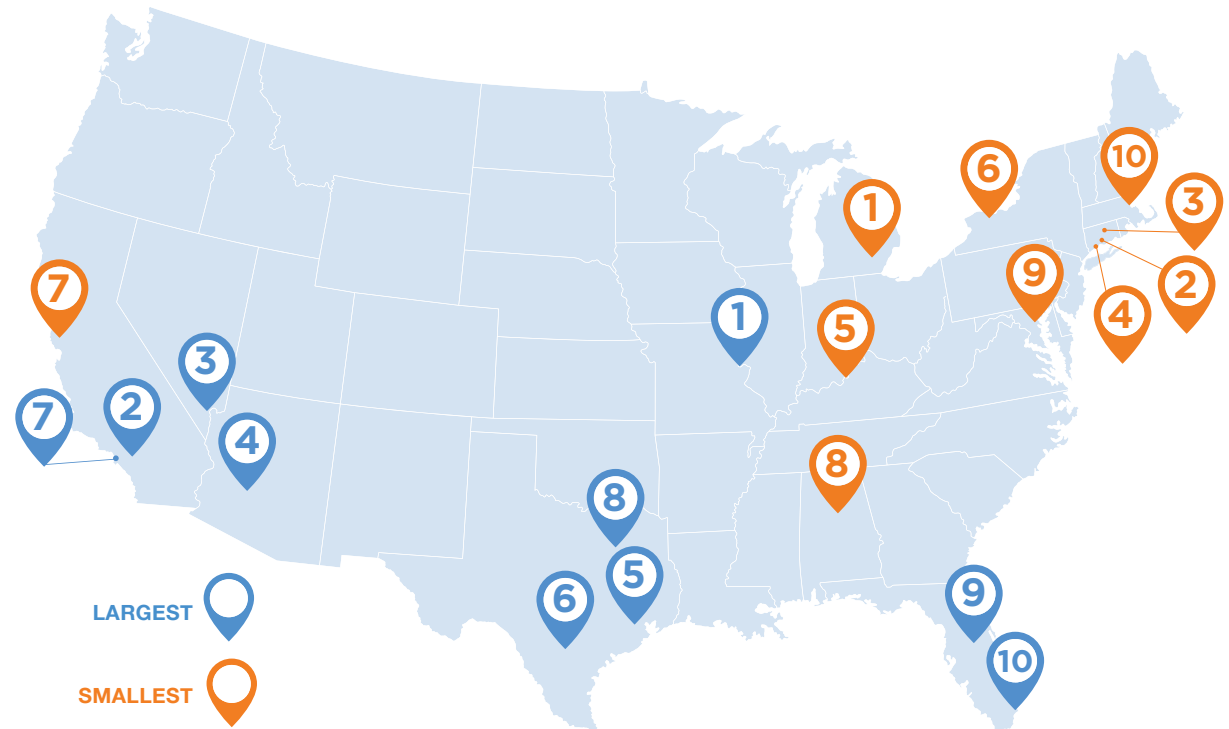
KEY FINDINGS

Seven-fold variation in OB-GYN workload

For 2018, 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 in each of the 50 largest metros. The ratio ranged from 247 births per OB-GYN in St. Louis to 32 in Ann Arbor, Mich., a seven-fold variation in OB-GYNs workloads. Nationally, there are – on average – 100 births per OB-GYN annually.

We continue to expect that MSAs 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 the demand for women’s health care services.



THE LARGEST OB-GYN WORKLOAD:

Metros with the Highest Birth to OB-GYN Ratios

1	St. Louis	247.23
2	Riverside, Calif.	237.28
3	Las Vegas	164.99
4	Phoenix	135.64
5	Houston	135.59
6	San Antonio	123.57
7	Los Angeles	122.49
8	Dallas	122.44
9	Orlando, Fla.	115.55
10	Miami	115.31

THE SMALLEST OB-GYN WORKLOAD:

Metros with the Lowest Birth to OB-GYN Ratios

1	Ann Arbor, Mich.	32.96
2	New Haven, Conn.	52.27
3	Hartford, Conn.	53.58
4	Bridgeport, Conn.	54.11
5	Louisville, Ky.	64.05
6	Rochester, N.Y.	64.76
7	San Jose, Calif.	65.27
8	Birmingham, Ala.	69.01
9	Baltimore	69.84
10	Boston	70.38

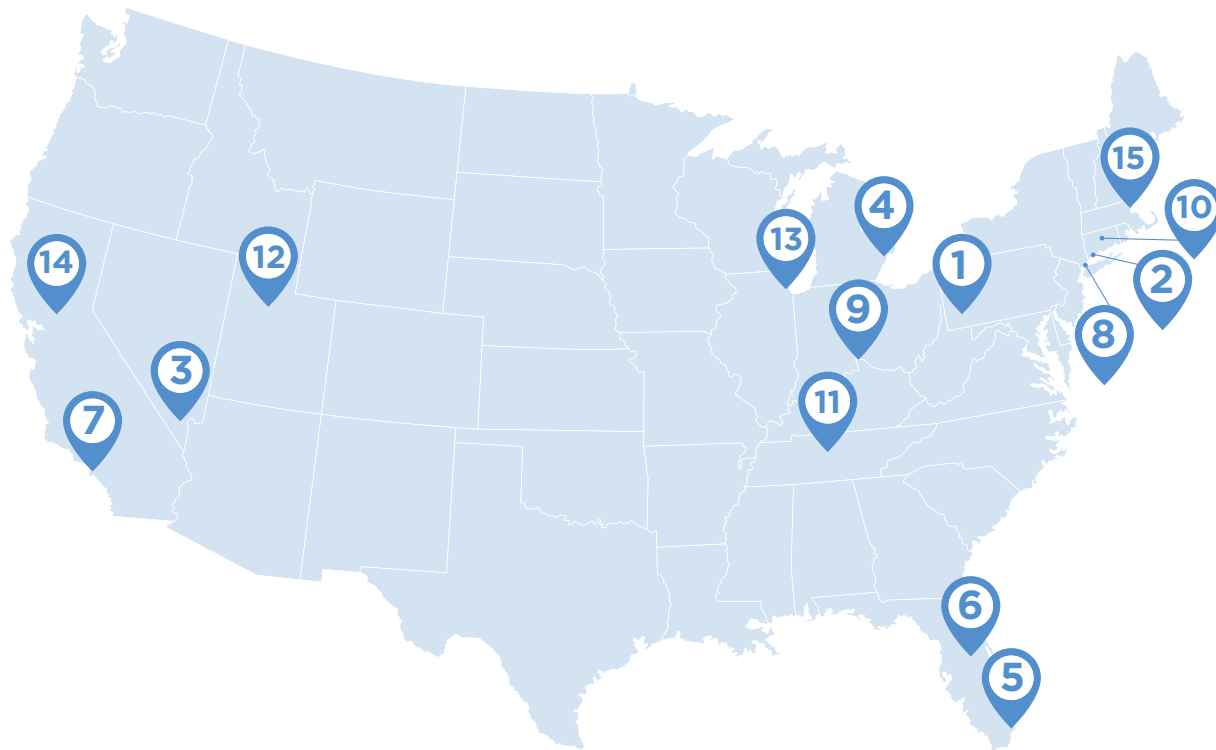


KEY FINDINGS

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 tend to retire between the ages of 59-69 years, with the median retirement age being 64 years old.⁴ Our analysis found that nationally, the average age of OB-GYNs is 51. This average age ranged from 52.32 in Pittsburgh to 48.38 in Houston.



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

1	Pittsburgh	52.32
2	Bridgeport, Conn.	52.12
3	Las Vegas	51.98
4	Detroit	51.66
5	Miami	51.48
6	Orlando, Fla.	51.45
7	Los Angeles	51.26
8	New York	51.17
9	Cincinnati	51.16
10	Hartford, Conn.	51.16

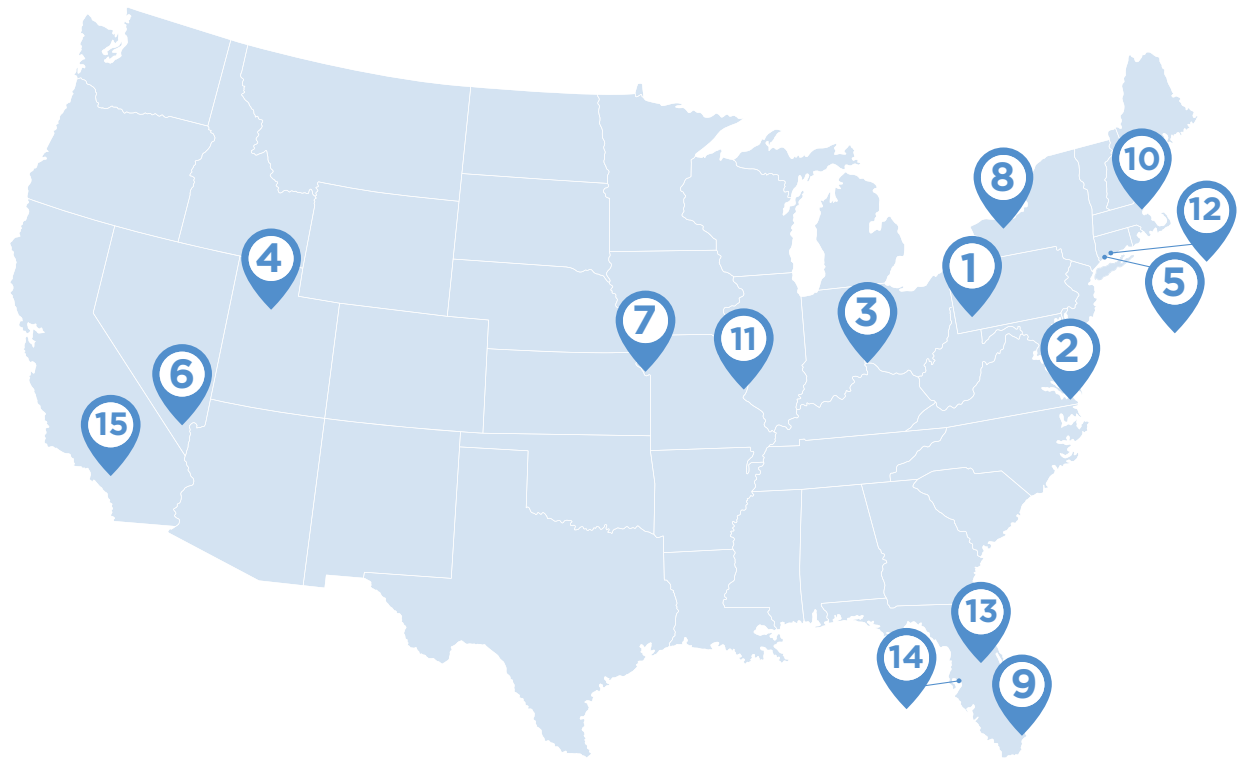
11	Nashville, Tenn.	51.15
12	Salt Lake City	51.13
13	Chicago	51.05
14	Sacramento, Calif.	50.98
15	Boston	50.97



KEY FINDINGS

Coming OB-GYN Retirement Wave

Drilling down, the age distribution of OB-GYNs trends older. Nationally, 36 percent of OB-GYNs are 55 years-old or older and of the 50 metropolitan areas evaluated in this survey, Doximity found 32 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	41.92%
2	Virginia Beach, Va.	40.93%
3	Cincinnati	39.43%
4	Salt Lake City	39.38%
5	Bridgeport, Conn.	39.25%
6	Las Vegas	38.69%
7	Kansas City, Mo.	38.68%
8	Rochester, N.Y.	38.13%
9	Miami	37.58%
10	Boston, Mass.	37.50%

11	St. Louis	37.10%
12	New Haven, Conn.	37.06%
13	Orlando, Fla.	36.90%
14	Tampa, Fla.	36.77%
15	Riverside, Calif.	36.74%

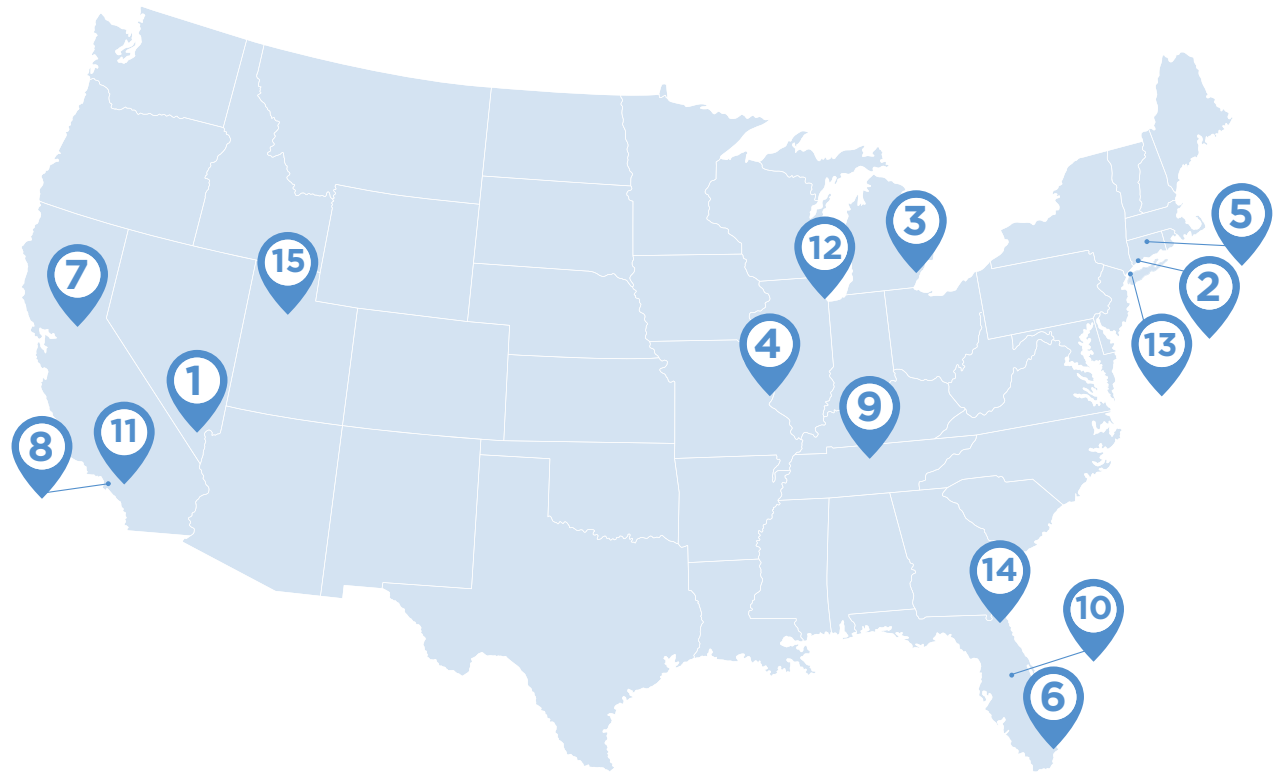


KEY FINDINGS

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 16 percent of all U.S. OB-GYNs are 40 years of age or younger, while 36 percent are 55 years or older.

While there are 32 metro areas where at least one third of OB-GYNs are in the oldest age bracket (55 years old or older), 12 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	10.12%
2	Bridgeport, Conn.	10.22%
3	Detroit	12.40%
4	St. Louis	12.90%
5	Hartford, Conn.	13.84%
6	Miami	14.05%
7	Sacramento, Calif.	14.29%
8	Los Angeles	14.40%
9	Nashville, Tenn.	14.62%
10	Orlando, Fla.	14.68%

11	Riverside, Calif.	14.77%
12	Chicago	14.97%
13	New York	15.46%
14	Jacksonville, Fla.	15.57%
15	Salt Lake City	15.63%

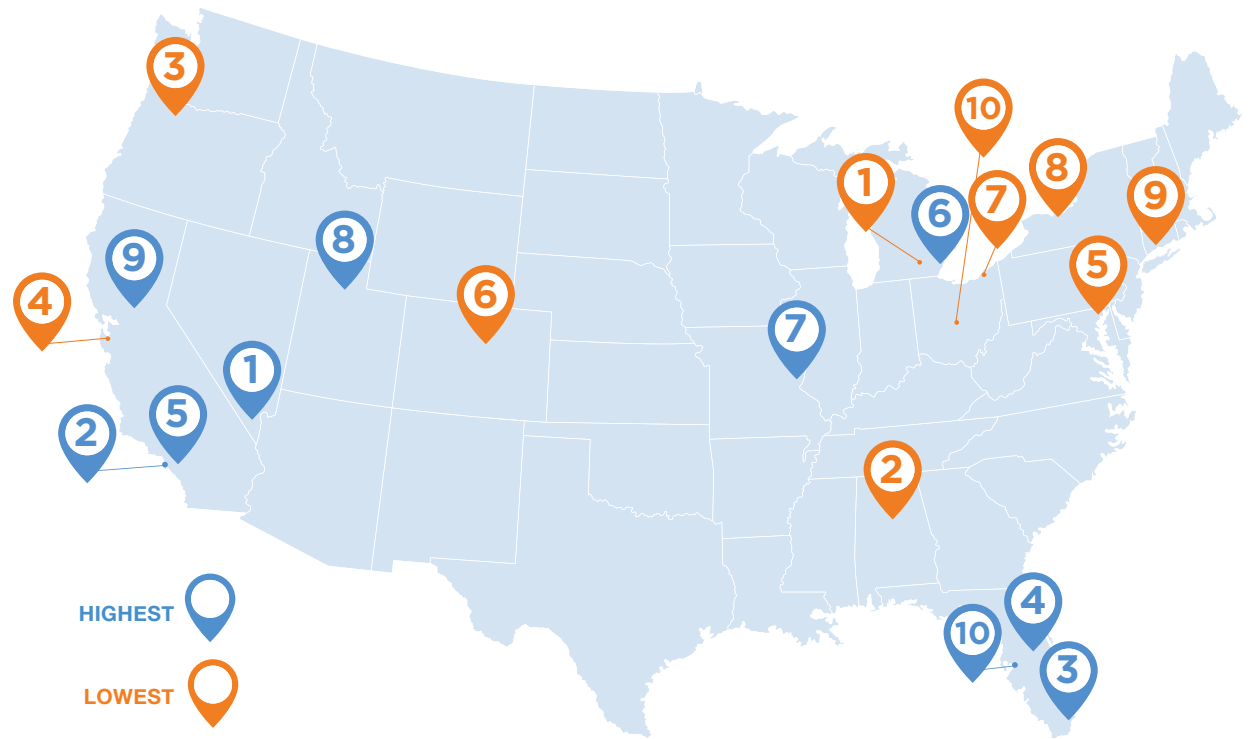


KEY FINDINGS

Risk Index: Highest and Lowest Risk Metros for OB-GYN Shortages

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-GYNs 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
2	Los Angeles
3	Miami
4	Orlando, Fla.
5	Riverside, Calif.
6	Detroit
7	St. Louis
8	Salt Lake City
9	Sacramento, Calif.
10	Tampa, Fla.

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

1	Ann Arbor, Mich.
2	Birmingham, Ala.
3	Portland, Ore.
4	San Jose, Calif.
5	Baltimore
6	Denver
7	Cleveland
8	Rochester, N.Y.
9	New Haven, Conn.
10	Columbus, Ohio

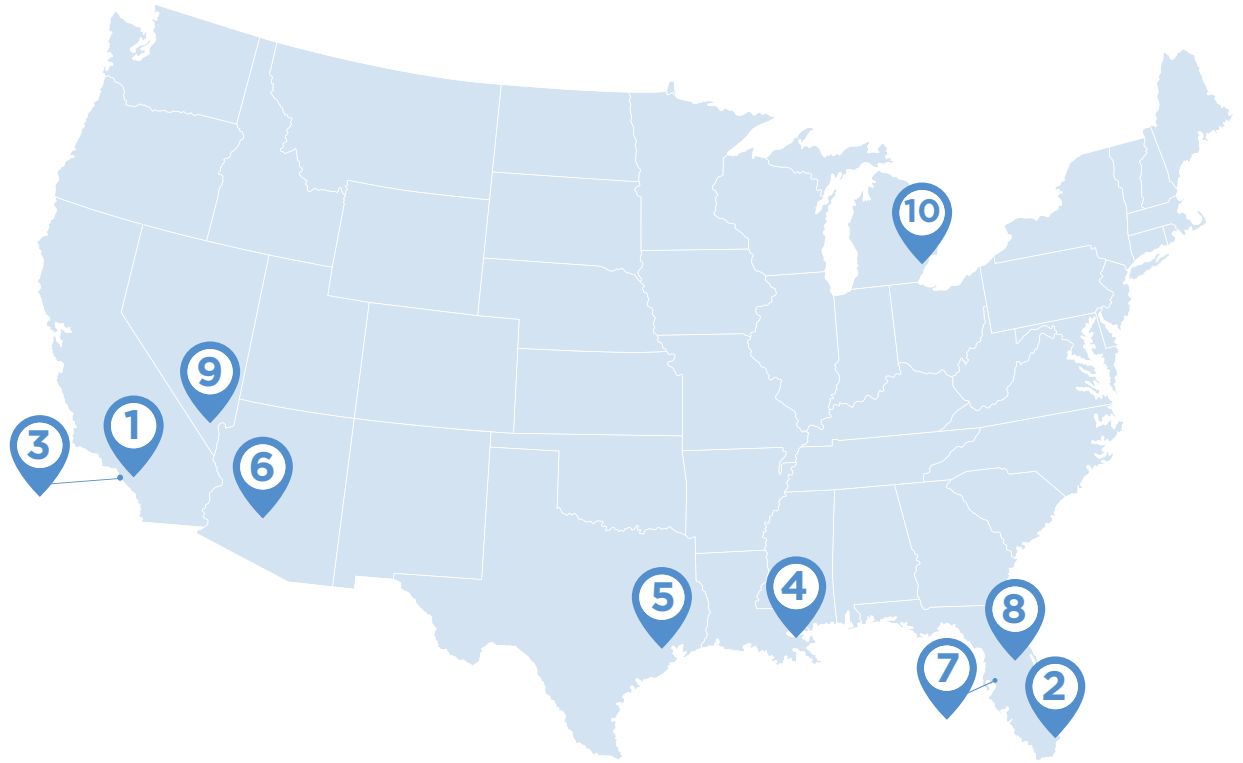
KEY FINDINGS

Metropolitan Areas – Source of Insurance

Nationally, roughly 50 percent of all births are covered by Medicaid.⁵ However, when breaking down insurance sources by MSAs, we found that regions with the largest OB-GYN workloads also tended to have the highest number of women of child-bearing age covered by Medicaid or uninsured relative to the privately insured population. Simultaneously, regions with fewer patients on Medicaid or uninsured tend to have lower workloads and a younger distribution of OB-GYNS.

Given that Medicaid reimbursements often trail those of private insurance carriers, it's possible that OB-GYNs in high Medicaid regions experience flat or lower compensation as a result of the concentration of these patients in their respective areas.

So, while it's critically important that expecting women are provided appropriate pre-natal care services, regardless of income status, workload considerations imply that higher reimbursements for maternity services may be necessary in order to maintain a market equilibrium nationally.



Below are the **TOP 10 MEDICAID MSAs**.

Medicaid Rank	MSAs	% of Women on Medicaid vs. Private Insurance
1	Riverside, Calif.	82.3%
2	Miami	70.4%
3	Los Angeles	68.3%
4	New Orleans	65.0%
5	Houston	64.1%
6	Phoenix	59.9%
7	Tampa	58.7%
8	Orlando, Fla.	57.7%
9	Las Vegas	57.4%
10	Detroit	55.8%

Conclusion

Potential shortages of OB-GYNs, increasing workload demands and compensation issues are critical concerns for the delivery of women's healthcare services. Recognizing local market circumstance across major U.S. MSAs will help cities address disparities within their communities. Ideally, measures will be taken both at the national and local level to address the growing shortfall of OB-GYNs.

While this study cannot determine causation for the variation in workloads, compensation or shortages across metropolitan areas, we hope it will continue to serve as a baseline for the size of the challenge, and prove helpful to healthcare 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.



Methodology

Doximity's study is drawn from CMS data, board certification data, and self-reported data on approximately 43,000 full-time, board-certified OB-GYN practitioners. To avoid including retired OB-GYNs, physicians older than 70 were removed from the data set.

Responses were mapped across 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 Centers for Disease Control and Prevention's WONDER database.

Data on the Medicaid, uninsured, and privately insured population comes from the American Community Survey (ACS). For each MSA, we limited the population to women aged 15-45. We calculated the Medicaid and uninsured rate as the number of women aged 15-45 either enrolled in Medicaid or uninsured relative to the number of women aged 15-45 with private insurance.

References

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4. American Congress of Obstetricians and Gynecologists. *The Obstetrician–Gynecologist Workforce in the United States 2017*. Washington, DC: American Congress of Obstetricians and Gynecologists; 2017. <https://www.acog.org/Resources-And-Publications/The-Ob-Gyn-Workforce/The-Obstetrician-Gynecologist-Workforce-in-the-United-States>.
5. Smith, Vernon K., Kathleen Gifford, Eileen Ellis, and Barbara Edwards, Health Management Associates; and Robin Rudowitz, Elizabeth Hinton, Larisa Antonisse and Allison Valentine, Kaiser Commission on Medicaid and the Uninsured. "Implementing Coverage and Payment Initiatives: Results from a 50-State Medicaid Budget Survey for State Fiscal Years 2016 and 2017," The Henry J. Kaiser Family Foundation, October 2016.

APPENDIX

Full OB-GYN Shortages Index, Highest to Lowest Risk

1	Las Vegas
2	Los Angeles
3	Miami
4	Orlando, Fla.
5	Riverside, Calif.
6	Detroit
7	St. Louis
8	Salt Lake City
9	Sacramento, Calif.
10	Tampa, Fla.
11	Pittsburgh
12	San Diego
13	Chicago
14	Phoenix
15	Cincinnati
16	New York
17	Dallas
18	Charlotte, N.C.
19	Kansas City, Mo.
20	Jacksonville, Fla.
21	Nashville, Tenn.
22	Bridgeport, Conn.
23	Philadelphia
24	San Antonio
25	Providence, R.I.
26	Seattle
27	Atlanta
28	Houston
29	Boston
30	Austin, Texas
31	Hartford, Conn.
32	Virginia Beach, Va.
33	Charleston, S.C.
34	Minneapolis
35	San Francisco
36	Milwaukee
37	New Orleans
38	Louisville, Ky.
39	Washington, D.C.
40	Indianapolis
41	Columbus, Ohio
42	New Haven, Conn.
43	Rochester, N.Y.
44	Cleveland
45	Denver
46	Baltimore
47	San Jose-Sunnyvale-Santa Clara, Calif.
48	Portland, Ore.
49	Birmingham-Hoover, Ala.
50	Ann Arbor, Mich.

APPENDIX

Full list of MSAs ranked by births per OB-GYNs

1	St. Louis	247.23
2	Riverside, Calif.	237.28
3	Las Vegas	164.99
4	Phoenix	135.64
5	Houston	135.59
6	San Antonio	123.57
7	Los Angeles	122.49
8	Dallas	122.44
9	Orlando, Fla.	115.55
10	Miami	115.31
11	San Diego	113.02
12	Salt Lake City	111.47
13	Sacramento, Calif.	108.94
14	Tampa, Fla.	106.2
15	Jacksonville, Fla.	106.15
16	Austin, Texas	103.85
17	Charlotte, N.C.	100.99
18	Detroit	99.4
19	Minneapolis	98.82
20	Charleston, S.C.	96.66
21	Seattle	95.07
22	Columbus, Ohio	94.76
23	Atlanta	94.61
24	Chicago	93.57
25	Kansas City, Mo.	92.67
26	Indianapolis	89.69
27	Denver	89.24
28	Milwaukee	89.19
29	Cincinnati	87.18
30	Philadelphia	86.98
31	Washington, D.C.	80.87
32	New York	80.32
33	Pittsburgh	79.61
34	Virginia Beach, Va.	79.3
35	Cleveland	78.13
36	Providence, R.I.	77.84
37	Nashville, Tenn.	77.53
38	New Orleans	75.88
39	San Francisco	74.23
40	Portland, Ore.	72.42
41	Boston	70.38
42	Baltimore	69.84
43	Birmingham, Ala.	69.01
44	San Jose-Sunnyvale-Santa Clara, Calif.	65.27
45	Rochester, N.Y.	64.76
46	Louisville, Ky.	64.05
47	Bridgeport, Conn.	54.11
48	Hartford, Conn.	53.58
49	New Haven, Conn.	52.27
50	Ann Arbor, Mich.	32.96
National Average		100

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
Ann Arbor, Mich.	26.09%	45.22%	28.70%
Atlanta	15.97%	50.22%	33.81%
Austin, Texas	16.46%	53.09%	30.45%
Baltimore	16.56%	50.52%	32.92%
Birmingham, Ala.	19.88%	47.83%	32.30%
Boston	16.85%	45.65%	37.50%
Bridgeport, Conn.	10.22%	50.54%	39.25%
Charleston, S.C.	16.16%	54.55%	29.29%
Charlotte, N.C.	16.38%	52.26%	31.36%
Chicago	14.97%	48.30%	36.73%
Cincinnati	20.79%	39.78%	39.43%
Cleveland	18.82%	48.43%	32.75%
Columbus, Ohio	20.68%	51.88%	27.44%
Dallas	17.33%	48.75%	33.92%
Denver	20.78%	49.35%	29.87%
Detroit	12.40%	52.20%	35.40%
Hartford, Conn.	13.84%	51.34%	34.82%
Houston	22.98%	50.89%	26.13%

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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
Indianapolis	18.63%	52.85%	28.52%
Jacksonville, Fla.	15.57%	50.30%	34.13%
Kansas City, Mo.	18.93%	42.39%	38.68%
Las Vegas	10.12%	51.19%	38.69%
Los Angeles	14.40%	48.94%	36.65%
Louisville, Ky.	18.33%	47.22%	34.44%
Miami	14.05%	48.37%	37.58%
Milwaukee	18.69%	47.20%	34.11%
Minneapolis	21.90%	47.93%	30.17%
Nashville, Tenn.	14.62%	49.62%	35.77%
New Haven, Conn.	15.88%	47.06%	37.06%
New Orleans	16.30%	52.17%	31.52%
New York	15.46%	48.95%	35.59%
Orlando, Fla.	14.68%	48.41%	36.90%
Philadelphia	17.89%	47.20%	34.91%
Phoenix	15.86%	52.41%	31.72%
Pittsburgh	16.84%	41.24%	41.92%
Portland, Ore.	16.67%	53.61%	29.72%

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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
Providence, R.I.	15.66%	49.49%	34.85%
Riverside, Calif.	14.77%	48.48%	36.74%
Rochester, N.Y.	17.99%	43.88%	38.13%
Sacramento, Calif.	14.29%	50.40%	35.32%
Salt Lake City	15.63%	45.00%	39.38%
San Antonio	18.90%	51.18%	29.92%
San Diego	16.27%	48.03%	35.70%
San Francisco	15.75%	50.49%	33.76%
San Jose-Sunnyvale-Santa Clara, Calif.	16.95%	53.11%	29.94%
Seattle	18.18%	47.83%	33.99%
St. Louis	12.90%	50.00%	37.10%
Tampa, Fla.	17.42%	45.81%	36.77%
Virginia Beach, Va.	18.14%	40.93%	40.93%
Washington, D.C.	17.16%	50.53%	32.32%
National Average	15.95%	48.53%	35.52%



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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