

State of the U.S. Maternal Health Workforce, 2024

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The United States has a high maternal mortality rate compared to other high-income nations.¹ Furthermore, as many as 60,000 U.S. women each year experience severe maternal morbidity, resulting in short- or long-term health problems.² This brief provides data on the maternal health workforce, including information on demographics and comparisons to the female population of childbearing age. The purpose of this data is to assist policymakers and other stakeholders in analyzing the maternal health workforce and developing workforce education, training, and other programs to improve maternal health outcomes.

About the National Center for Health Workforce Analysis

The National Center for Health Workforce Analysis informs public and private sector decision makers on health workforce issues by expanding and improving health workforce data, disseminating workforce data to the public, and improving and updating projections of the supply and demand for health workers.

For more information, visit the <u>Health</u> <u>Workforce Analysis</u> webpage.

Data

Various datasets were used by the National Center for Health Workforce Analysis (NCHWA) to prepare this brief. Data cover the 50 states and Washington, DC, unless otherwise noted. Sources and reference years are noted with each data point. Workforce data are presented as counts of health care providers unless otherwise noted.

Definitions

For this brief, the maternal health workforce includes physicians specializing in family medicine, general internal medicine, obstetrics and gynecology (OBGYN), and neonatology or perinatal health, as well as licensed and employed nurse midwives and registered nurses (RNs) in women's health or with a maternal or perinatal specialization who have patient care responsibilities. While doulas play an important and expanding role in maternal care, data on the number of doulas in the United States is not readily available. As such, doulas are excluded from the discussion of the size of the maternal health workforce below. Similarly, maternal care coordinators are important sources of information about care options and assist women with connecting with maternal health care providers. However, data on the number of care coordinators is also not readily available.

The size and composition of the maternal health workforce

 More than 308,000 physicians (family medicine, general internal medicine, OBGYN, and neonatal and perinatal medicine) and approximately 201,000 nurses (nurse midwives and RNs specializing in gynecology, obstetrics, labor and delivery, or neonatology) are considered part of the maternal health workforce (Table 1).

Occupation	Employment (Reference year)			
Family medicine physicians	119,800 (2022)			
General internal medicine physicians	138,550 (2022)			
Obstetrics and gynecology (OBGYN) physicians	43,889 (2022)			
Neonatal and perinatal physicians	6,381 (2022)			
Nurse midwives ^a	14,198 (2023)			
Maternal health registered nurses (RNs) ^b	200,733 (2021)			

Table 1. Enumeration of Current Maternal Health Workforce in the United States

Note. Data for physicians is adapted from the American Medical Association's (AMA) Physician Professional Data, 2022. Data for physicians includes hospitalists. Data for nurse midwives is adapted from the *2023 Demographic Report*, by the American Midwifery Certification Board (<u>https://www.amcbmidwife.org/docs/default-source/default-document-library/demographic-report-2023.pdf</u>). Data for RNs is adapted from the National Sample Survey of Registered Nurses (NSSRN), by the U.S. Health Resources and Services Administration, 2022 (<u>https://data.hrsa.gov/topics/health-workforce/nursing-workforce-survey-data</u>). ^a Total reflects the number of certified nurse-midwives and certified midwives. ^b Consists of employed and licensed nurse midwives and RNs specializing in gynecology, obstetrics, labor and delivery, or neonatology with patient care responsibilities. RNs includes advanced practice registered nurses (APRNs), which are nurse practitioners, certified nurse midwives, clinical nurse specialists, and nurse anesthetists.

- While the maternal health workforce is expected to grow over the next decade, there is
 projected to be a shortage of physicians in family medicine and general internal medicine in
 primary care as well as OBGYN physicians in women's health in 2037, based on current
 utilization patterns (Table 2). Assuming current patterns of care use continue in the future,
 there is a projected surplus in nurse midwives, nurse practitioners, and physician assistants
 in women's health services, after accounting for anticipated demographic changes.
- Meanwhile, the number of women of childbearing age is projected to grow from 75.4 million in 2023 to 78.0 million in 2037, an increase of 2.6 million (Table 3).

Occupation	Surplus or (Shortage)	Percent Adequacy
Family medicine physicians (primary care)	(43,220)	73%
General internal medicine physicians	(36,440)	72%
(primary care)		
Obstetrics and gynecology (OBGYN)	(9,890)	82%
physicians (women's health)		
Nurse midwives (women's health)	4,670	135%
Nurse practitioners (women's health)	8,470	201%
Physician assistants (women's health)	2,860	190%

Table 2. Projected Surplus or Shortage for the Maternal Health Workforce, 2037

Note. Adapted from the National Center for Health Workforce Analysis (NCHWA) Workforce Projections, Primary Care and Women's Health, by the U.S. Health Resources and Services Administration, 2024

(<u>https://data.hrsa.gov/topics/health-workforce/workforce-projections</u>). Projections reflect the impact of the COVID-19 pandemic. Demand and supply estimates and projections are in full-time equivalents (FTEs), defined as working 40 hours a week. Percent adequacy is calculated as projected supply divided by projected demand.

Table 3. Women of Childbearing Age (15-49 Years Old) in the United States, Selected Years

Year	Population
2023	75,383,576
2030 (projected)	77,811,406
2037 (projected)	78,008,616

Note. Adapted from the Annual Estimates of the Resident Population for Selected Age Groups by Sex for the United States: April 1, 2020 to July 1, 2023, by the U.S. Census Bureau, 2023 (<u>https://www.census.gov/data/tables/time-series/demo/popest/2020s-national-detail.html#v2023</u>) and the 2023 National Population Projections Datasets: Projected Population by Single Year of Age, Sex, Race, and Hispanic Origin for the United States: 2022 to 2100, Main Series, by the U.S. Census Bureau, various years

(https://www.census.gov/data/datasets/2023/demo/popproj/2023-popproj.html).

The geographic distribution of the maternal workforce

- In 2022, 10,331,055 women lived in U.S. counties with no OBGYN physicians, 4,103,391 of whom are of childbearing age (15-49 years old). This accounts for 6.1% of all women and 5.4% of women of childbearing age in the United States.³
- Maternal health physicians tend to be more concentrated in large and medium metropolitan areas than the female population of childbearing age (Table 4). As of 2022, 3.4% of internal medicine physicians and 4.1% of OBGYNs were located in micropolitan and noncore areas (i.e., areas with a population less than 50,000), compared to 10.3% of females ages 15-49. In contrast, the percent of family medicine physicians in micropolitan and noncore areas was similar to the percent of the female childbearing population within those areas. However, family medicine is a broad specialization that includes maternal health as well as other types of health care.
- In 2037, the supply of OBGYN physicians in metro areas is projected to meet 85% of demand. For nonmetro areas, that figure is 51%.⁴
- Analysis of 2014-2019 data from the National Plan and Provider Enumeration System (NPPES) and the American Board of Family Medicine finds there are 12.8 family physicians providing obstetrical services per 100,000 women of childbearing age across the U.S. This ratio is higher for family physicians practicing in nonmetropolitan areas (34.4), particularly noncore areas (49.0), than for their peers practicing in metropolitan areas (9.8).⁵

Rurality	Family Medicine Physicians	General Internal Medicine Physicians	Obstetrics and Gynecology (OBGYN) Physicians	Neonatal and Perinatal Physicians	Female Population of Childbearing Age, 15-49 Years Old
Large metropolitan area	26.3%	38.1%	36.5%	41.0%	30.6%
Medium metropolitan area	37.3%	42.3%	41.8%	44.9%	36.3%
Small metropolitan area	25.5%	16.2%	17.5%	12.7%	22.8%
Micropolitan area	9.7%	3.2%	4.0%	1.4%	9.3%
Noncore area	1.2%	0.2%	0.1%	0.05%	1.0%

Table 4. Rurality of Maternal Health Physicians Compared to Female Population ofChildbearing Age (15-49 Years Old), 2022

Note. Adapted from the American Medical Association's (AMA) Physician Professional Data, 2022, and the *Annual County and Puerto Rico Municipio Resident Population Estimates by Selected Age Groups and Sex: April 1, 2020 to July 1, 2023*, by the U.S. Census Bureau, 2022 (<u>https://www.census.gov/data/tables/time-series/demo/popest/2020s-counties-detail.html</u>). Numbers may not add to 100% due to rounding. Rurality based on the National Center for Health Statistics' Urban-Rural Classification Scheme. Large metropolitan areas are counties with a population of 1,000,000 or more. Medium metropolitan areas are counties with a population between 250,000 and 999,999. Small metropolitan areas are counties with a population between 10,000 and 49,999. Noncore areas are counties with a population less than 10,000. Rurality designations for Connecticut counties in the AMA Physician Professional Data used 2021 U.S. Census resident county estimates, due to the adoption of Connecticut's nine planning regions within the U.S. Census resident county estimates starting in 2022.

Patient care time among maternal health registered nurses

 Maternal health RNs generally spend a greater percent of their time on patient care than RNs with other specialties. In 2021, maternal health RNs spent an average of 70.0% of their time on patient care, compared to an average across all RNs with patient care responsibilities of 63.7%.⁶ In fact, the maternal specialties (gynecology, obstetrics, labor and delivery, and neonatology) are among the top five clinical specialties in terms of the average percent of time spent on patient care (Table 5a).

Table 5a. Registered Nurse Clinical Specialties with Highest Percent of Time Spent on Patient Care, 2021

Clinical Specialty	Percent of Time Spent on Patient Care
Labor and delivery or neonatology	70.7%
Gastrointestinal	70.5%
Surgery, preoperative, postoperative, post- anesthesia care unit (PACU) or anesthesia	70.0%
Obstetrics and gynecology (OBGYN)	69.1%
Critical care or intensive care	67.1%

Note. Adapted from the National Sample Survey of Registered Nurses (NSSRN), by the U.S. Health Resources and Services Administration, 2022 (<u>https://data.hrsa.gov/topics/health-workforce/nursing-workforce-survey-data</u>). Data consists of employed and licensed RNs with patient care responsibilities, including advanced practice registered nurses (APRNs), which are nurse practitioners, certified nurse midwives, clinical nurse specialists, and nurse anesthetists.

Table 5b. Registered Nurse Clinical Specialties with Lowest Percent of Time Spent on Patient Care, 2021

Clinical Specialty	Percent of Time Spent on Patient Care
Assisted living or nursing home	40.1%
Infectious or communicable disease	41.7%
Long term care	43.7%
Gerontology	45.5%
Occupational health	47.8%

Note. Adapted from the National Sample Survey of Registered Nurses (NSSRN), by the U.S. Health Resources and Services Administration, 2022 (<u>https://data.hrsa.gov/topics/health-workforce/nursing-workforce-survey-data</u>). Data consists of employed and licensed RNs with patient care responsibilities, including advanced practice registered nurses (APRNs), which are nurse practitioners, certified nurse midwives, clinical nurse specialists, and nurse anesthetists.

Conclusion

While the maternal health workforce is expected to grow over the next decade, there is projected to be a shortage of physicians in family medicine and general internal medicine in primary care as well as OBGYN physicians in women's health in 2037. Maternal health physicians tend to be more concentrated in large and medium metropolitan areas than the female population of childbearing age. As such, shortages are projected to be larger in rural areas.

Given the projected shortages in maternal health physicians and the maldistribution of the maternal health workforce across states and counties, it is important to focus on workforce issues, such as recruitment, placement, and retention, as well as ways to encourage maternal health care providers to locate to under-resourced areas.

¹ Gunja, M.Z., Gumas, E.D., & Williams, R.D. (2023, January). *U.S. health care from a global perspective, 2022: Accelerating spending, worsening outcomes.* The Commonwealth Fund. <u>https://doi.org/10.26099/8ejy-yc74</u>

² Declercq, E., & Zephyrin, L. (2021, October 28). *Severe maternal morbidity in the United States: A primer.* The Commonwealth Fund. <u>https://www.commonwealthfund.org/publications/issue-briefs/2021/oct/severe-maternal-morbidity-united-states-primer</u>

³ Note. Adapted from the American Medical Association's (AMA) Physician Professional Data, 2022, and the Annual County and Puerto Rico Municipio Resident Population Estimates by Selected Age Groups and Sex: April 1, 2020 to July 1, 2023, by the U.S. Census Bureau (<u>https://www.census.gov/data/tables/time-series/demo/popest/2020s-</u>counties-detail.html).

⁴ Health Resources and Services Administration. (n.d.). *Workforce projections* [Dashboard]. U.S. Department of Health and Human Services. Retrieved November 7, 2024, from <u>https://data.hrsa.gov/topics/health-</u>workforce-projections

⁵ Washington, Wyoming, Alaska, Montana, Idaho (WWAMI) Rural Health Research Center. (2020, June). *Policy brief* 168: *The supply and rural-urban distribution of the obstetrical care workforce in the U.S.: Table 1. Obstetrical service clinicians – total and ratios per 100,000 women of childbearing age in U.S. counties by urban influence category,* 2019. The University of Washington. Retrieved May 7, 2024, from <u>https://depts.washington.edu/fammed/rhrc/wp-</u> <u>content/uploads/sites/4/2020/06/RHRC_PB168_Patterson.pdf</u>

⁶ *Note.* Adapted from the National Sample Survey of Registered Nurses (NSSRN), by the U.S. Health Resources and Services Administration, 2022 (<u>https://data.hrsa.gov/topics/health-workforce/nursing-workforce-survey-data</u>). Data consists of employed and licensed RNs with patient care responsibilities, including advanced practice registered nurses (APRNs), which are nurse practitioners, certified nurse midwives, clinical nurse specialists, and nurse anesthetists. Maternal health RNs consists of employed and licensed nurse midwives and RNs specializing in gynecology, obstetrics, labor and delivery, or neonatology with patient care responsibilities.