New York State Comptroller
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The Doctor is … Out

Shortages of Health Professionals in Rural Areas

August 2025

Message from the Comptroller

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New York's rural communities are impacted by issues that are similar to those faced by more urban or suburban communities, but the rural nature of these areas frequently requires different approaches to finding solutions. Following my office's 2023 report on rural New York that detailed the declining and rapidly aging populations of rural counties and a host of other challenges, I convened rural roundtables in the Hudson Valley and Finger Lakes regions to hear from rural New Yorkers and stakeholders about their perspective on challenges they face.

One topic that consistently came up was health care access. Even in the Hudson Valley, where the healthcare sector is a major employer, concerns around the care economy emerged. In the Finger Lakes, primary care staffing shortages and a severe shortage of dentists that accept Medicaid were prominent concerns.

This report examines healthcare professional shortages in 16 rural counties throughout New York, looking at a range of primary care, dental health, mental health, and other professionals. Shortages in primary care, pediatric and Ob/Gyn doctors, dentists, mental health professionals, physician assistants and nurse practitioners are severe. Some counties have no pediatricians or Ob/Gyn doctors at all. Many of these counties are designated as Health Professional Shortage areas, and the experience is not unique to these 16 counties. It is a common problem in many rural communities throughout the nation.

The ability to access health care is an essential quality of life issue. Without access, rural New Yorkers may have worse health outcomes and have difficulty attracting people to live in these regions of the state that have so much to offer.

As the population of rural areas of the state ages at a faster rate, the healthcare needs of these New Yorkers will increase, and if unaddressed, shortages will get worse. Addressing gaps in the rural healthcare workforce to alleviate current shortages and plan for future demand will not only positively impact the health of rural New Yorkers, but also has the potential to create new jobs and bolster rural economies.

Thomas P. DiNapoli
State Comptroller

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Executive Summary

Introduction

New York's rural communities face a range of challenges when it comes to availability of health care. As detailed in the Office of the New York State Comptroller's 2023 report Rural New York: Challenges and Opportunities, these are often rooted in low population densities over vast geographic areas, leading to a heavy reliance on personal vehicles due to limited availability of public transportation. In recent years, many of these areas have also contended with population losses, an aging population and decreases in labor force.

This report examines 16 counties that are home to 748,093 people, just 3.8 percent of New York's population, but over 37 percent of its land area. The report finds low rates of health care providers, and an alarming lack of access to basic care in many counties. In some, there are no physicians for basic care such as pediatrics or obstetrics and gynecology (Ob/Gyn), and shortages for many specialties go beyond physicians.

Rural Counties Examined

Allegany
Cattaraugus
Chenango
Delaware
Essex
Franklin
Greene
Hamilton
Herkimer
Lewis
Schuyler
Steuben
Sullivan
Washington
Wyoming
Yates

The ratios of physicians to the population in the area they serve can fall far below many commonly accepted guidelines. One of these, developed in 1980 by the Graduate Medical Education National Advisory Committee (GMENAC), is based on the projected healthcare needs in 1990. While the health care needs of Americans have changed significantly since 1980, the GMENAC guidelines are still commonly used as a basis of comparison for physician supply.[1]

The U.S. Health Resources and Services Administration designates Health Professional Shortage Areas (HPSAs), which can be defined as geographic areas, population groups (typically Medicaid-eligible or low-income[2]) within an area, or health care facilities having a shortage of health professionals. Ten of the 16 rural counties covered in this report have shortage designations for Primary Care, Dental and Mental Health; all 16 counties examined have shortage designations for at least two of these fields of medicine.

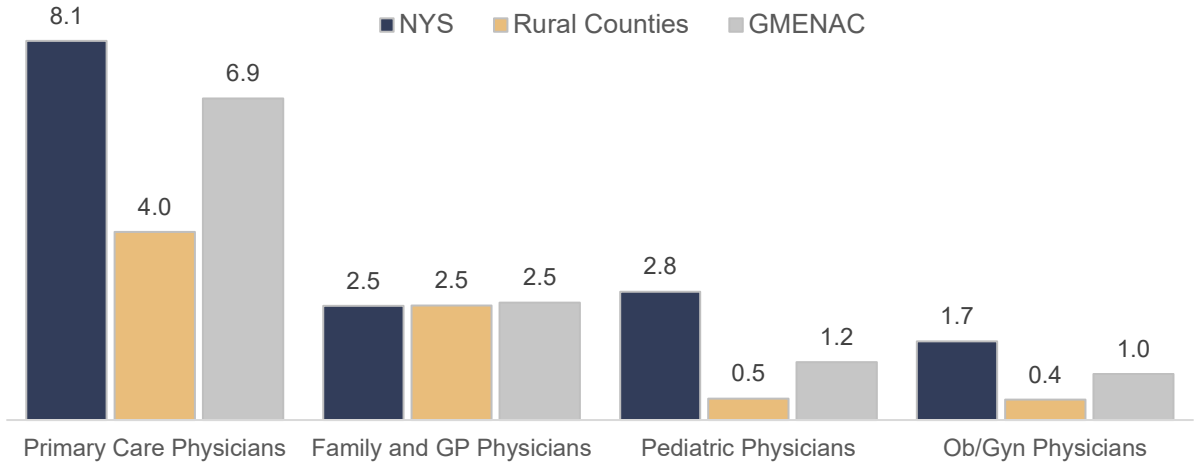
Each designation is also assigned an HPSA score that takes into account the percentage of the population that is below the Federal Poverty Level; the travel time to the nearest source of care outside of the HPSA designation; the population to provider ratio; and other considerations. Many healthcare professional-to-population ratios in rural counties are drastically lower than the statewide ratios, and within HPSAs, the ratios are far worse for the designated populations.

All three metrics are used in this assessment: a provider-to-population ratio to describe and compare the prevalence of care, formal HPSA designations of shortages, and HPSA scores that consider the severity of the shortages.

Key Findings

- On average, the 16 rural counties examined in this report have 4.0 primary care physicians per 10,000 people – a ratio that is less than half that of the state (8.1) and the U.S. (8.4), and falls below the GMENAC guideline (6.9). For the nearly 173,000 people within designated Primary Care HPSAs who are underserved (23 percent of these rural counties' population), these shortages are far more acute – as low as 0.12 physicians per 10,000 people in the populations that are underserved.[3]
- The 16 rural counties have 0.5 pediatricians for every 10,000 people – less than one-fifth of the state ratio (2.8), one-third of the U.S. (1.8), and less than half the GMENAC guideline (1.2). There are no pediatric physicians in three of the counties.
- The Ob/Gyn physician to 10,000 population ratio of the 16 rural counties is 0.4 – meaning there roughly is 1 Ob/Gyn physician for every 23,000 people. This is less than half the GMENAC guideline of 1. Four counties – Hamilton, Herkimer, Schuyler and Yates – have no Ob/Gyn physicians at all.

Figure 1
Physicians per 10,000 People, 2022



Note: Primary Care Physicians Include both Medical Doctors and Doctors of Osteopathic Medicine practicing Family Medicine, General Practice, General Internal Medicine, and General Pediatric Medicine.

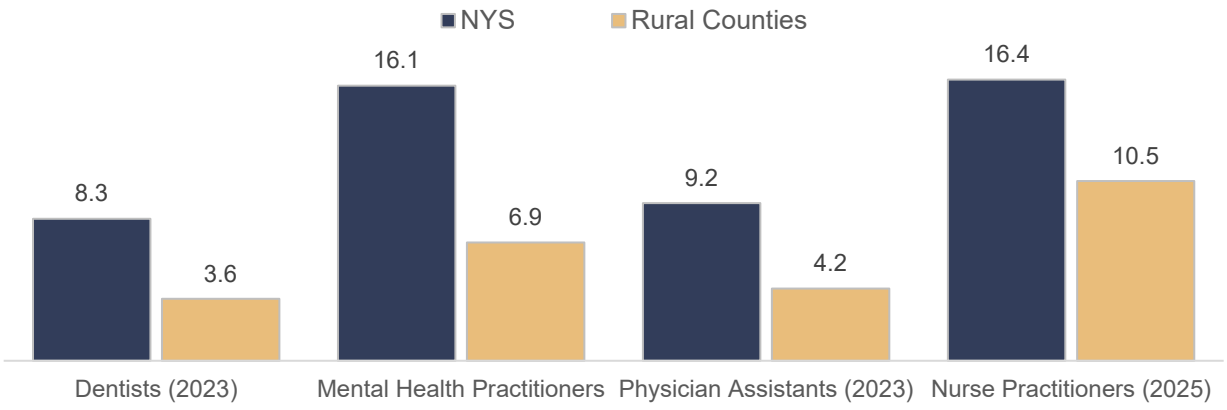
Source: HRSA Area Health Resource Files

- The 16 rural counties' dentist to 10,000 population ratio (3.6) is less than half of the state ratio (8.3). There are no dentists in Hamilton County. Ten of the sixteen rural counties have Dental HPSAs for the Medicaid eligible population with a combined underserved population of 134,248 people, nearly 18 percent of the population of the 16-county total.
- Based on the number of counties designated as Mental Health HPSAs, the total underserved population, and the Mental Health HPSA scores, mental health professional shortages may be the most severe faced by rural New York. The rural counties' Mental Health Practitioner to 10,000 population ratio (6.9) is less than half that of the state (16.1). All of the rural counties are designated as Mental Health HPSAs either for the

entire population, or for portions of the population such as the low income or Medicaid eligible portions of the population. In the 16 rural counties, there are 305,265 people within Mental Health HPSAs who are designated as underserved by the HRSA, nearly 41 percent of the population.

- The professions of physician assistants and nurse practitioners came about in the 1960's in response to physician shortages. By 2019, as many as 25 percent of health visits in the United States were delivered by physician assistants (PAs) or nurse practitioners (NPs).[4] Nurse practitioners and physician assistants see patients, provide care, and prescribe medication. Experienced nurse practitioners may practice independently, while PAs work under the supervision of a physician. The 16 rural counties' physician assistant to 100,000 population ratio (4.2) is less than half that of the state (9.2). Additionally, the number of nurse practitioners per 100,000 population (10.5) in rural counties is significantly lower than the ratio for the state (16.4).

Figure 2
Healthcare Professionals per 10,000 People



Note: Mental health practitioners includes Licensed Mental Health Counselors, Licensed Psychologists, Licensed Psychoanalysts, Licensed Marriage and Family Therapists, Licensed Creative Art Therapists, Psychiatrists, and Child Psychiatrists. The Psychiatrists are from AHRF and represent 2022 data. The other mental health practitioners are as of January 2025.

Source: Dentists and Psychiatrists: HRSA AHRF. All others New York State Education Department (NYSED)

- Even in counties where the shortages do not appear to be particularly acute, the distances involved and lack of mass transportation can limit access to health care. Hamilton County, for instance, has a pediatrician ratio that is more than four times the average for the rural counties, but has only one pediatrician, located in the far southeast corner of the county. This ratio is highly influenced by Hamilton County's small population (5,082).

- Shortages in individual counties may be far worse than the rural county average suggests for a specialty. For example, Sullivan County's mental health practitioner ratio (8.1) is higher than the rural counties average (6.9), but for the Medicaid eligible population of the county, the shortage, based on the Mental Health Professional Shortage Area score (19), is among the worst in the state. The Family and General Practice physician-to-population ratio for Green (1.0), Sullivan (1.4), Alleghany (1.5), Herkimer (1.7), and Wyoming (1.7), is nearly half the GMENAC ratio of (2.5).

Impact of Federal Actions

Reductions in eligibility for Medicaid and the Essential Plan in the recently enacted Public Law No: 119-21 are expected to greatly impact rural hospitals. New York State has six rural hospitals that are in the top 10 percent for Medicaid payer mix in the nation and an additional five that have experienced three consecutive years of negative margins.[5] In the 16 rural counties studied, 204,899 people, or 27 percent of the population, were enrolled in Medicaid as of May 2025.[6]

It is unclear at this time the extent to which the impact of Medicaid cuts on rural healthcare systems will be offset by funding made available through the federal Rural Hospital Transformation Program. Public Law No: 119-21 allocated $10 billion a year from federal fiscal years 2026 to 2030 to support rural hospitals, clinics, federally qualified health centers, and community mental health centers, but it is not guaranteed that all states that apply will receive funding.[7]

Recommendations

Policies to alleviate rural healthcare professional shortages vary but can broadly be categorized in three ways:

- **Bringing more healthcare to people** by identifying ways to open new healthcare offices and facilities, which could also include creating mobile clinics and school-based health centers.
- **Enhancing and expanding ways to bring people to existing care**, including expanded and multi-county paratransit, transportation vouchers where private transportation companies exist, and expanding opportunities for telemedicine.
- **Pursuing policies to bolster the rural healthcare workforce**. One policy to consider would be incentivizing the training of new healthcare professionals to serve in rural New York through loan forgiveness programs and rural stipends/subsidies for salaries and attracting existing professionals to rural areas through similar programs or implement reciprocity programs for out-of-state professionals to serve in rural areas.

Access to healthcare for all New Yorkers is critical for the health, wellbeing, and future of the State. Disparities in healthcare access for rural New Yorkers are persistent, though with sustained effort using a variety of approaches, can be overcome.

Introduction

Among the challenges rural New Yorkers face are shortages of healthcare professionals that threaten their access to healthcare and the timeliness of its delivery. As detailed in the Office of the New York State Comptroller's 2023 report Rural New York: Challenges and Opportunities, the challenges rooted in low population densities over vast geographic areas, compound the shortages of healthcare professionals, and pose barriers to bolstering rural healthcare. In recent years many of these areas have also contended with population losses, an aging population and decreases in the labor force, all of which make the problem more acute.

This analysis expands on the 10 counties that were the focus of the previous report which were selected based on multiple criteria: classification by the U.S. Census Bureau as "unaffiliated", not being a part of a Metropolitan Statistical Area, a Micropolitan Statistical Area, a Combined Statistical Area (CSA), or a Core-Based Statistical Area (CBSA), not having a city of over 10,000 people, and having been identified as non-metro counties by the U.S. Office of Management and Budget.

Six additional counties were selected based primarily on population density. Other factors such as whether the county is in and of itself a CBSA, or if the largest population center in a county is the core of a CBSA were also used. Consideration was also given to ensure a geographically diverse sample of rural counties in New York State. Other rural counties face similar issues.

Figure 3
Population, Land Area, and Population Density in the 16 Rural Counties, 2024

County	Land Area (Sq. Mile)	2024 Population	2024 Population Density (Pop/Sq. Mile)
Hamilton	1,717.4	5,082	2.96
Essex	1,794.1	36,744	20.48
Lewis	1,276.5	26,570	20.82
Franklin	1,629.3	47,086	28.90
Delaware	1,442.6	44,191	30.63
Herkimer	1,410.6	59,585	42.24
Allegany	1,029.4	47,299	45.95
Chenango	893.4	45,776	51.24
Schuyler	328.3	17,121	52.14
Cattaraugus	1,308.2	75,457	57.68
Steuben	1,390.5	92,015	66.17
Wyoming	592.8	39,588	66.79
Washington	831.2	59,839	71.99
Yates	338.1	24,387	72.12
Greene	647.2	46,903	72.47
Sullivan	968.1	80,450	83.10

Source: U.S. Census Vintage 2024 Population Estimates, U.S. Census TIGER

Healthcare Professional Ratios

This report compares the healthcare professional to population ratios of the rural counties in aggregate to the ratios statewide. This comparison, however, does not necessarily indicate if there is a shortage of healthcare professionals. There are no current federal government-issued metrics of what the ideal healthcare professional to population ratios would be, and many that do exist, primarily for physicians, are demand-based models used to determine staffing levels.

The Graduate Medical Education National Advisory Committee (GMENAC) is an epidemiologically based set of specialty specific physician-to-population ratios developed in 1980 for the Secretary of the U.S. Department of Health and Human Services based on the projected healthcare needs of the U.S. in 1990.[8] The healthcare needs of Americans have changed significantly since 1980, and the GMENAC guidelines do not consider geographic imbalances of physicians, or the substitution of professionals such as Physician Assistants and Nurse Practitioners who serve a role in the healthcare system that otherwise would be provided by physicians. Nonetheless, the GMENAC ratios, still widely used, are based on projected healthcare needs, and although they are likely underestimated,[9] a county falling below the GMENAC guideline would indicate that there is an even more pronounced shortage of physicians.

This report uses the GMENAC physician to 10,000 population ratios as a basis of comparison for four groups of physicians practicing: primary care[10] (6.9 physicians per 10,000 people), family and general practice (2.5), pediatrics (1.2), and obstetrics and gynecology (Ob/Gyn, 1.0).

The healthcare professional ratios for the 16 rural counties and the state presented in this report are from one of two data sources. For physicians and physician assistants, the number of professionals per county is from the U.S. Health Resources and Services Administration (HRSA) 2023 Area Health Resource Files (2022 data). All other health-professional-per-county counts are from the New York State Education Department (NYSED) Licensed Professions License Statistics for January 1, 2025.

Health Professional Shortage Areas

The U.S. Health Resources and Services Administration designates Health Professional Shortage Areas (HPSAs), which can be defined as geographic areas, population groups (typically Medicaid-eligible or low-income) within an area, or health care facilities having a shortage of health professionals. HPSAs are designated for shortages in primary care, dental health, and mental health. Maternity Care Target Areas (MTCAs) are a subset of primary care HPSAs and indicate the level of unmet need for maternity care within the shortage area. These designations are used by the National Health Service Corps to deploy participating healthcare professionals where they are needed most, and by federal programs such as the Indian Health Service Loan Repayment Program, and the Centers for Medicare and Medicaid Services Rural Health Clinic Program to distribute resources.[11]

The primary criterion for HPSA designation is the population to provider ratio, which is a calculation of the population of the geography or sub-group to the number of full-time-equivalent physicians. The population is calculated using a methodology that adjusts the count based on components of the population's anticipated need for care. For instance, those under six years

old and those over 64 years old have higher weightings.[12] Each type of HPSA also has lower ratios where areas and populations that have been determined to have unusually high needs may also be designated. Based on the weighting of the population, and the potential to have calculated less than one FTE physician, dentist, etc., the formal ratio of people to providers may exceed the population of the county and the calculated underserved population of the HPSA.

Figure 4
HPSA Designation Population to Provider Ratios

HPSA Type	Ratio
Primary Care	3,500:1
Dental Health	5,000:1
Mental Health	9,000:1

Source: HRSA

HPSA Scoring

Each designation is also assigned an HPSA score where a higher score indicates more need. Primary care HPSAs are scored out of a possible 25. Maternity Care Target Areas (MCTAs) are a subset of primary care HPSAs and are also scored out of a possible 25 points. Dental health HPSAs are scored out of 26 points based on the same criteria as primary care HPSAs, with one additional point for the water fluoridation status. Mental health HPSAs are scored out of a possible 25 points. For more information about HPSA scoring see Appendix A. Areas that are not designated as HPSAs do not receive a score.

Primary Care

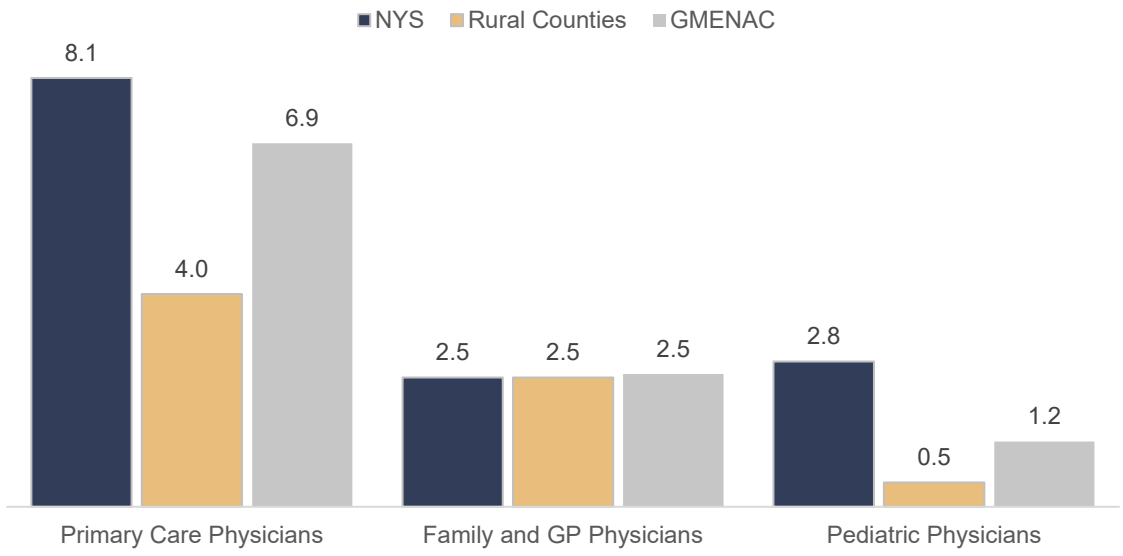
In 1931, 75.3 percent of physicians in the U.S. were in primary care, most in general practice. In 2024, only 24 percent of U.S. physicians were in primary care specialties.[13] Primary care physicians include family and general practice doctors, pediatricians and doctors of general internal medicine, and are the doctors most people see for routine medical care and preventative medicine.[14] Regular access to primary care helps people to live healthier lives; through preventative care and screenings, illnesses can be diagnosed at earlier stages, leading to better health outcomes. Research has also shown that more primary care visits are associated with lower total patient care costs, especially among high-risk or high-cost patients.[15]

All of the 16 rural counties examined except Essex have Primary Care Health Professional Shortage Area designations, and the physician-to-population ratio of these rural counties is less than half that of the state.

Physician Shortages

Rural counties are suffering from primary care physician shortages. On average, the 16 rural counties have four primary care physicians per 10,000 people – a ratio that is less than half that of the state (8.1) and the U.S. (8.4) and falls below the GMENAC guideline (6.9). Only Lewis County (7.5) has a ratio that is above the GMENAC guideline. Chenango (2.5), Sullivan (2.5), Greene (2.7) and Allegany (2.8) have the lowest ratios among the rural counties. See Appendix B for details.

Figure 5
Physicians per 10,000 People, 2022



Note: Primary Care Physicians Include both Medical Doctors and Doctors of Osteopathic Medicine practicing Family Medicine, General Practice, General Internal Medicine, and General Pediatric Medicine.

Source: HRSA AHRF

Pediatric medicine is a subset of primary care, and the shortage of pediatric physicians is even more acute. Three of the rural counties, Chenango, Schuyler and Yates Counties, have no pediatric physicians. The rural counties collectively have a pediatric physician to 10,000 population ratio of 0.5, less than one-fifth of the state ratio (2.8), one-third of the U.S. (1.8), and less than half the GMENAC guideline (1.2). Only Hamilton County has a pediatrician-to-population ratio (2.0) that is above the GMENAC guideline, but in Hamilton County there is only one pediatric physician, and access can be difficult given the size and terrain of the county.

In terms of the ratios of family and general practice physicians, the 16 rural counties (2.5) are on par with the state's physician-to-population ratio (2.5) and the GMENAC guideline (2.5), but shortages in individual rural counties exist. Greene County (1.0) has a ratio that is less than half the GMENAC guideline, and Sullivan (1.4), Allegany (1.5), Wyoming (1.7), Chenango (1.9) and Washington (2.3) counties have pediatric physician shortages.

Primary Care Health Professional Shortage Areas

While the 16 rural counties in aggregate have primary care physician shortages, within the geographies of Health Professional Shortage Areas (HPSAs) these shortages are more acute for some designated populations. Each of these rural counties except Essex is designated as a Health Professional Shortage Area. Chenango, Hamilton and Yates counties are geographically designated, meaning that the entire populations of the counties are affected. The rest of the rural counties are designated for the Medicaid eligible populations of the counties.

In total, 172,818 people, or 23 percent of the population of the rural counties, are underserved. Sullivan County has the largest number of people underserved (25,650), and Hamilton the fewest (150). The Medicaid eligible population of Washington County has a population-to-provider ratio of 85,166 to one, the highest among the 16 rural counties, and third highest in the state, equating to 0.12 physicians per 10,000 people.

Primary care HPSA scores for these rural counties range from six in Yates County to 17 in Sullivan County. The highest HPSA scores in the state are in Niagara Falls, Syracuse and a portion of the Bronx with 19. Half of the rural counties have HPSA scores of 16 or above, and only three have scores below 14.

Figure 6
Primary Care Health Professional Shortage Areas in the 16 Rural Counties, 2025

County	Designation Group	Underserved Population	HPSA Score
Allegany	Medicaid Eligible Population	11,887	16
Cattaraugus	Medicaid Eligible Population	19,944	16
Chenango	Geographic Population	12,154	8
Delaware	Medicaid Eligible Population	10,864	16
Franklin	Medicaid Eligible Population	9,385	14
Greene	Medicaid Eligible Population	12,372	16
Hamilton	Geographic Population	150	7
Herkimer	Medicaid Eligible Population	14,475	16
Lewis	Medicaid Eligible Population	4,675	14
Schuyler	Medicaid Eligible Population	5,063	15
Steuben	Medicaid Eligible Population	18,514	13
Sullivan	Medicaid Eligible Population	25,650	17
Washington	Medicaid Eligible Population	17,797	16
Wyoming	Medicaid Eligible Population	6,938	16
Yates	Geographic Population	2,950	6

Note: Essex County is not designated as a Primary Care HPSA, and has been omitted from the table.

Source: U.S. HRSA

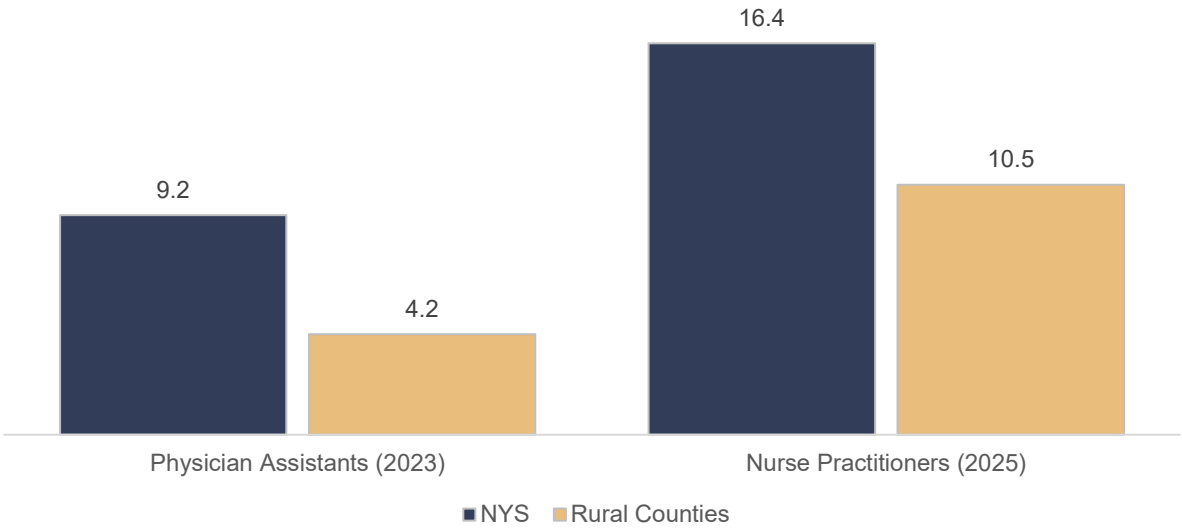
Physician Assistants and Nurse Practitioners

The professions of physician assistants and nurse practitioners were established in the 1960's in response to physician shortages and are increasingly relied upon for primary care. With the popularity of urgent care clinics and a general shift towards more utilization, by 2019 as many as 25 percent of health visits in the United States were delivered by physician assistants (PAs) or nurse practitioners (NPs).[16] Nurse practitioners and physician Assistants see patients, provide care, and prescribe medication. Nurse practitioners may practice independently after completing 3,600 hours of experience overseen by a physician, while PAs work under the supervision of a physician.[17]

The 16 rural counties' physician assistant to 10,000 population ratio (4.2) is less than half that of the state (9.2). Franklin (8.7) and Cattaraugus (8.4) counties have ratios that are just below that of the state. Herkimer (1.0), Yates (1.6) and Delaware (2.2) counties have the lowest ratios among the rural counties.

Additionally, the number of nurse practitioners per 10,000 population (10.5) in rural counties is lower than the ratio for the state (16.4). Yates County (20.1) is the only one of the rural counties that has a nurse practitioner to 10,000 population ratio that is higher than the state, perhaps partially compensating for the extremely low physician assistant to population ratio.

Figure 7
Physician Assistants and Nurse Practitioners to 10,000 Population Ratios, 2025



Source: NYSED

Maternity Care and Reproductive Health

The Office of the State Comptroller has reported on the maternal health crisis in New York, and one of the most acute physician shortages in the rural counties is of Ob/Gyn physicians, impacting access to maternity care and reproductive healthcare. Four of the 16 rural counties have no Ob/Gyn physicians, and many women need to travel far from their homes to other counties to deliver their children and for postpartum care.

The Ob/Gyn physician to 10,000 population ratio of the 16 rural counties is 0.4, roughly 1 Ob/Gyn physician for every 23,000 people. This is less than a quarter of the state's ratio (1.7), and less than half the GMENAC guideline of 1. Greene and Washington counties have ratios that are half that of the 16 rural counties, and four counties, Hamilton, Herkimer, Schuyler and Yates, have no Ob/Gyn physicians at all.

Maternity Care Target Areas

Maternity Care Target Areas (MCTAs) are a subset of Primary Care Health Professional Shortage Areas and are used to provide assistance in the form of deploying the National Health Service Corps certified nurse-midwives and Ob/Gyn physicians to these areas.

Hamilton and Chenango Counties have the highest MCTA score of the rural counties with 10. Herkimer and Allegany counties (9) and Cattaraugus, Greene and Yates counties (8) also have relatively high MCTA scores. Wyoming County has the lowest MCTA score (2), but this county's data has not been updated since 2021. On June 1, 2023, the Wyoming County Community Health System suspended its maternal/obstetrics program.[18]

Figure 8
MCTA Scores in the 16 Rural Counties, 2025

County	MCTA Score	County	MCTA Score
Allegany	9	Lewis	5
Cattaraugus	8	Schuyler	5
Chenango	10	Steuben	5
Delaware	7	Sullivan	7
Franklin	7	Washington	6
Greene	8	Wyoming	2
Hamilton	10	Yates	8
Herkimer	9		

Note: Essex County is not designated as a Primary Care HPSA, and does not have an MCTA. It has been omitted from the table.

Source: U.S. HRSA

Dental Health

One concern that emerged from the Comptroller's Rural Roundtables was a shortage of dental care. Concerns from stakeholders included shortages of dentists that accept Medicaid, as well as extreme wait times for those that do.

The ratio of dentists per 10,000 people in rural counties (3.6) is less than half of the state ratio (8.3), indicating that the shortage of dentists is not limited to those that accept Medicaid, and despite not being designated a Dental Health Professional Shortage Area, there are no dentists in Hamilton County. Lewis (1.9), Delaware (2.0), and Washington (2.1) counties also have very low ratios, and none of the rural counties have ratios equal to or greater than the statewide ratio.

Dental Health Professional Shortage Areas

Ten of the 16 rural counties are designated as Dental Health Professional Shortage Areas for the Medicaid eligible populations, with 134,248 people underserved. The formal ratios of number of people per dentist for the underserved population of the designated counties ranges from 9,994 in Greene County to 106,321 in Franklin County, which is the equivalent of 0.09 dentists per 10,000 people. Cattaraugus, Delaware, Franklin, and Steuben counties have a Dental HPSA score of 18. The rest of the designated counties have scores of 16, except for Greene County that has a score of 14.

It is unclear why Hamilton County, which has no dentists, is not designated as a Dental HPSA. It used to be included in a low-income Dental HPSA that covered Essex, Hamilton, Saratoga, Warren, and Washington Counties, but that designation was withdrawn in 2012. One provider operates a mobile children's school-based dental program in the County, as well as a dental clinic in neighboring Warren County.

Figure 9
Dental Health Professional Shortage Areas in the 16 Rural Counties, 2025

County	Designation Group	Underserved Population	HPSA Score
Cattaraugus	Medicaid Eligible Population	15,534	18
Chenango	Medicaid Eligible Population	14,761	16
Delaware	Medicaid Eligible Population	12,786	18
Essex	Medicaid Eligible Population	9,416	16
Franklin	Medicaid Eligible Population	13,629	18
Greene	Medicaid Eligible Population	8,572	14
Herkimer	Medicaid Eligible Population	18,483	16
Lewis	Medicaid Eligible Population	7,958	16
Schuyler	Medicaid Eligible Population	5,723	16
Steuben	Medicaid Eligible Population	27,386	18

Note: Allegany, Hamilton, Sullivan, Washington, Wyoming and Yates counties are not designated as Dental HPSAs, and have been omitted from the table.

Source: U.S. HRSA

Mental Health

Based on the number of counties designated as Mental Health HPSAs, the total underserved population, and the Mental Health HPSA scores, mental health professional shortages may be the most severe shortages faced by rural New York. The U.S. Centers for Disease Control and Prevention reports that for 20 years suicide rates in rural America have consistently been higher than in urban areas of the country, and that rural residents have a 1.5 times higher rate of non-fatal self-harm than urban residents in the U.S.[19]

The 16 rural counties have 6.9 mental health practitioners[20] per 10,000 people, a ratio that is less than half that of the state (16.1). Herkimer County has the most severe shortage with a ratio of 2.5 mental health practitioners per 10,000 people, and Allegany has the highest ratio with 12.1.

Mental Health Professional Shortage Areas

All 16 rural counties are designated as Mental Health HPSAs with a total underserved population of 305,265. Cattaraugus, Essex, Franklin and Hamilton counties are geographic designations for the entire population of the counties. Lewis County is designated for the low-income population of the county.[21] The remainder are designated for the Medicaid eligible populations of the counties. Mental Health HPSA scores for the rural counties range from 10 for Hamilton County to 19 for Sullivan County.

Figure 10
Mental Health Professional Shortage Areas in the 16 Rural Counties, 2025

County	Designation Group	Underserved Population	HPSA Score
Allegany	Medicaid Eligible Population	12,687	17
Cattaraugus	Geographic Population	53,679	16
Chenango	Medicaid Eligible Population	14,761	16
Delaware	Medicaid Eligible Population	13,786	17
Essex	Geographic Population	34,792	15
Franklin	Geographic Population	14,890	13
Greene	Medicaid Eligible Population	14,292	16
Hamilton	Geographic Population	4,479	10
Herkimer	Medicaid Eligible Population	20,630	16
Lewis	Low Income Population	9,319	15
Schuyler	Medicaid Eligible Population	5,723	12
Steuben	Medicaid Eligible Population	23,346	17
Sullivan	Medicaid Eligible Population	28,001	19
Washington	Medicaid Eligible Population	38,433	16
Wyoming	Medicaid Eligible Population	9,819	15
Yates	Medicaid Eligible Population	6,628	14

Source: U.S. HRSA

Discussion

Bolstering rural healthcare is a challenge that will require solutions that consider the unique nature of rural communities. Low population density and long travel times to a population center, a lack of public transportation options, a limited number of healthcare providers, and areas with lower rates of broadband availability all compound the lack of access. Healthcare professional shortages are not limited to a single type of profession or specialty, and require a more systemic approach to the problem.

The Impact of Federal Actions

The limited number of providers and physical facilities in New York's rural counties presents an additional barrier to recruiting healthcare professionals. Not all counties have hospitals or rural health clinics, and those that do operate on tight margins, or at a loss.[22] Reductions in eligibility for Medicaid and the Essential Plan made in the recently enacted federal Public Law No: 119-21 (PL 119-21) may further exacerbate the issue, potentially forcing some rural hospitals to close. New York State has six rural hospitals that are in the top 10 percent for Medicaid payer mix in the nation and an additional five that have experienced three consecutive years of negative margins.[23] In the 16 rural counties 204,899 people, or 27 percent of the population, were enrolled in Medicaid as of May 2025.[24] (Appendix C provides information for the 16 counties.)

It is unclear at this time the extent to which the impact of Medicaid cuts on rural healthcare systems will be offset by funding made available through the Rural Hospital Transformation Program. PL 119-21 allocated $10 billion a year from federal fiscal years 2026 to 2030 to support rural hospitals, clinics, federally qualified health centers, and community mental health centers; however, in addition to uncertainty about the timing of payments, it is not guaranteed that all states that apply will receive funding.

An additional issue related to rural health professional shortages stemming from PL 119-21 is the annual federal student loan limit of $50,000 for professional students (which applies to medical school students) and the aggregate professional student limit of $200,000.[25] According to the Association of American Medical Colleges, the median four-year cost of attendance of medical school for doctors who graduated in 2024 was $286,454.[26] The difference between the cost of attending medical school and the maximum limit on federal student loans for medical school may be a barrier to enrollment, and could potentially make programs to recruit new physicians to rural areas through loan forgiveness less effective.

Overcoming Rural Barriers to Healthcare Access

One potential strategy is to increase transportation linkages to existing healthcare providers. Most rural counties have limited public transportation options. Most have some form of bus or paratransit systems, but it is not unusual for fixed route systems to only offer weekday service, with a limited number of routes, and some systems have routes where buses only do one loop per stop. Inter-county networks are rare, and those that exist offer limited geographic coverage.[27] Paratransit for the elderly is relatively common, and there may be opportunities to expand services to other demographics where such services do not exist.[28] Transporting people

to healthcare, particularly those with limited or no access to private automobiles, is particularly challenging.

The expansion of telemedicine for certain types of care is another option to bolster rural health systems, but is not a complete solution. Physical examination is more difficult, when possible, through telemedicine and many necessary services like bloodwork and other testing require physical access to patients. For other types of care, such as mental health counseling, telemedicine has the potential to increase access to providers, but challenges remain.

Prescribing medications through telehealth may require an in-person examination, and in these cases an initial examination would still be necessary, creating barriers for patients who have limited access to providers. As the Office of the State Comptroller reported in 2021, reliable, high-speed broadband remains unavailable to many rural New Yorkers, another limiting factor for telemedicine.[29]

Other strategies to increase access to healthcare involve meeting people where they are. Mobile clinics exist in few rural counties, indicating that this is an area with the potential for expansion. Mobile clinics can be deployed on a regular schedule to underserved rural communities, alleviating transportation barriers to access without the cost of opening and maintaining brick and mortar clinics.

School-based health centers are another option to expand healthcare access to rural New York. There are currently school-based health centers operating in some of the rural counties, but these facilities remain relatively rare.[30] Research has shown that school-based health centers may also decrease absenteeism among students in rural communities.[31]

Bolstering the Rural Health Professional Workforce

Attracting healthcare professionals to practice in rural areas has been difficult. New York produces more physicians than any other state,[32] but fewer than 5 percent of New York medical school graduates indicate when surveyed that they intend to go into rural practice, and only a fraction of those intend to practice in New York.[33] Federal programs such as the Teaching Health Center Planning and Development program and the Rural Residency Planning and Development program support primary care education and training programs, and through these programs, 18 residency programs in New York offered rural rotations.[34]

Loan Forgiveness Programs

Programs such as the National Health Service Corps offer Rural Community Loan Repayment Programs to incentivize physicians to serve in rural communities to combat the opioid epidemic, and New York State through programs like the Regents Loan Forgiveness Program and Doctors Across New York benefit rural communities by offering loan forgiveness to physicians who serve in shortage areas. Loan forgiveness programs may be made less impactful in rural communities, however, because many of the healthcare providers in rural New York are non-profits, and there may be significant overlaps with the federal Public Service Loan Forgiveness program for those who have taken federal loans.[35]

Loan forgiveness programs also exist for other healthcare professionals. Nurses Across New York offers awards to registered nurses and licensed practical nurses that serve in underserved communities, and the Primary Care Service Corps Loan Forgiveness Program does the same

for nurse practitioners, physician assistants, midwives, clinical psychologists, and mental health counselors who practice at any of the 1,711 National Health Service Corps sites throughout the state, and 152 in the 16 rural counties.[36] Programs such as these are important but more efforts are needed to eliminate rural health professional shortages. With rural New Yorkers aging at a rate that is greater than the state, increasing the demand for healthcare, lawmakers should consider ways these types of plans could be expanded in rural areas.

The Nursing Education Pipeline

The 16 rural counties' Registered Nurse (RN) ratio (135.1) is on par with that of the state (137), and the Licensed Practical Nurse (LPN) ratio (57) is nearly double that of the state (29.2).[37] At the same time, the Nurse Practitioner to 10,000 population ration (10.5) is significantly lower than the state (16.4). Given the increased reliance on Nurse Practitioners for primary care, and the expansion of Nurse Practitioner's scope of practice to allow them to practice medicine without the oversight of a physician, there may be an opportunity to establish educational pipelines to upskill across the nursing spectrum.

One explanation for the relatively strong ratios of RNs and LPNs in the rural counties may be that training for these professions is offered at community colleges, while the Master of Science for Nurse Practitioners are offered at institutions of higher education that are in more urban areas of the state. One solution for consideration could be to offer satellite programs for more advanced nursing degrees offered at a four-year SUNY institution through hybrid online and in-person classes at a local community college. This could create an educational pipeline to upskill the existing rural healthcare nursing workforce, while offering registered nurses in particular the ability to pursue these degrees while continuing their employment in the rural healthcare systems.

Conclusion

Healthcare professional shortages in rural New York persist despite efforts to address them. Without access to primary and preventative care, the rapidly aging populations of rural communities will require more specialty care and may suffer worse health outcomes. Existing programs for telehealth, mobile clinics, and school-based health centers offer models to improve healthcare access to rural communities that can be expanded on. New incentives for rural service can be created, and existing programs made more effective. Educational pipelines should be created to provide more opportunities to the existing healthcare workforce to develop their skills, in parallel with efforts to attract and retain more healthcare professionals to rural areas.

Appendix A

Health Professional Shortage Areas (HPSA) Scoring

Each designation is assigned an HPSA score where a higher score indicates more need. Primary care HPSAs are scored out of a possible 25 based on the population to provider ratio, the percentage of the population below the federal poverty level, the Infant Health Index score (based on the infant mortality rate and the low-birth-weight rate), and the amount of time to travel to the nearest source of care outside of the HPSA.

Maternity Care Target Areas (MCTAs) are a subset of primary care HPSAs and are also scored out of a possible 25 points. MCTA scoring is based on the population to maternity care health professional ratio, the percentage of the population below 200% of the federal poverty level, the travel time to the nearest source of care outside of the MCTA, the fertility rate, social vulnerability, the pre-pregnancy obesity, diabetes, hypertension and cigarette smoking rates, the rate of prenatal care initiation in the first trimester, and a behavioral health factor score.

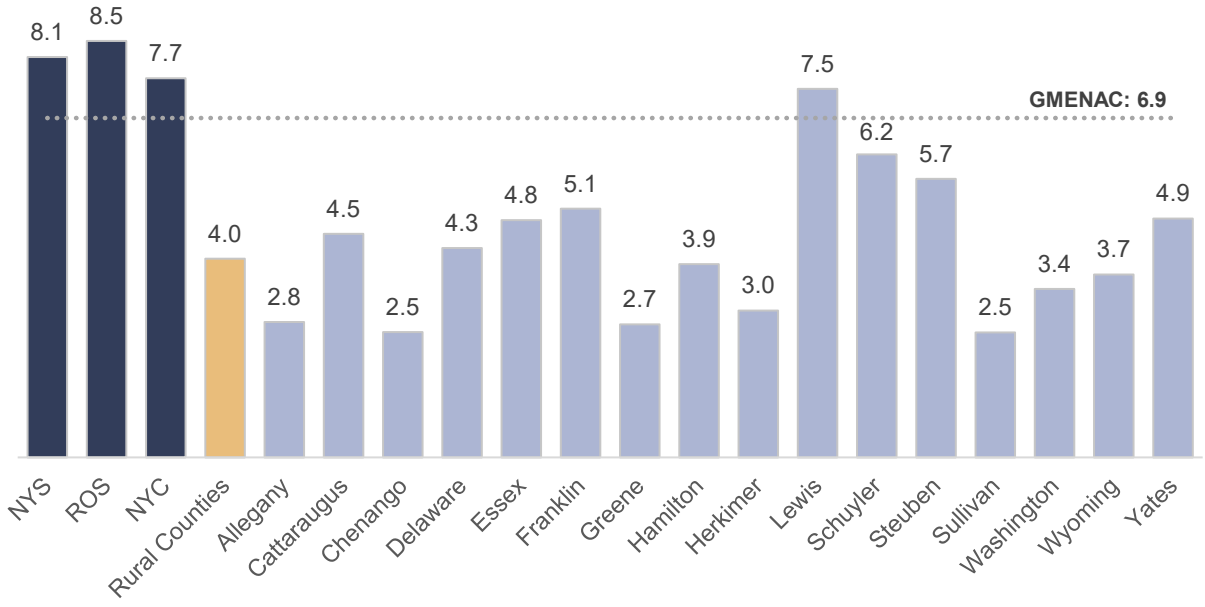
Dental health HPSAs are scored out of 26 points based on the same criteria as primary care HPSAs, with one additional point for the water fluoridation status.

Mental health HPSAs are scored out of a possible 25 points based on the population to provider ratio, the percent of the population below the federal poverty level, the elderly ratio, the youth ratio, the prevalence of substance and alcohol abuse, and the travel time to the nearest source of care outside of the HPSA.[38]

Appendix B

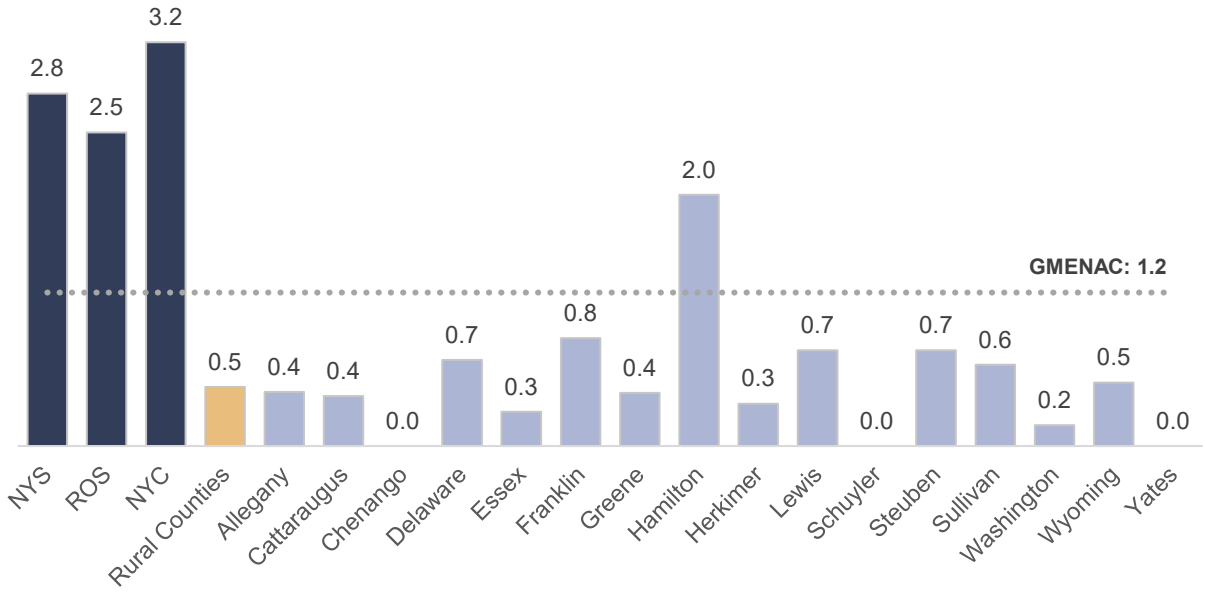
16 Rural Counties Health Professional to 10,000 Population Ratios

Primary Care Physicians to 10,000 Population, 2022



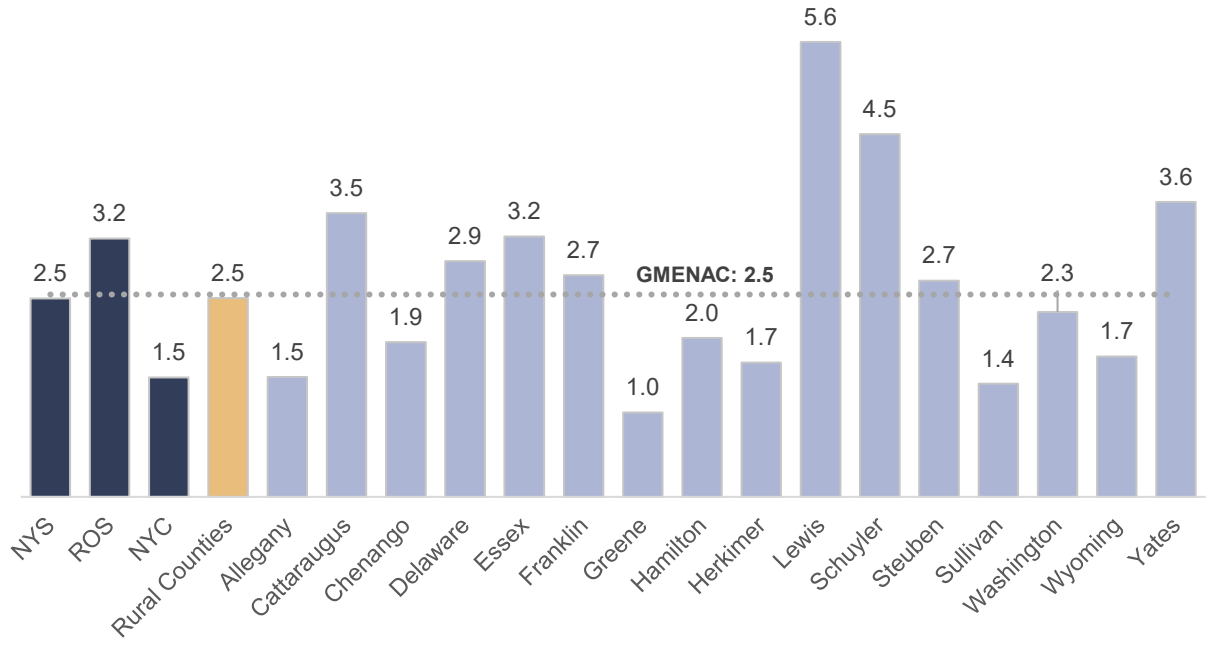
Source: U.S. HRSA AHRF

Pediatric Physicians to 10,000 Population, 2022



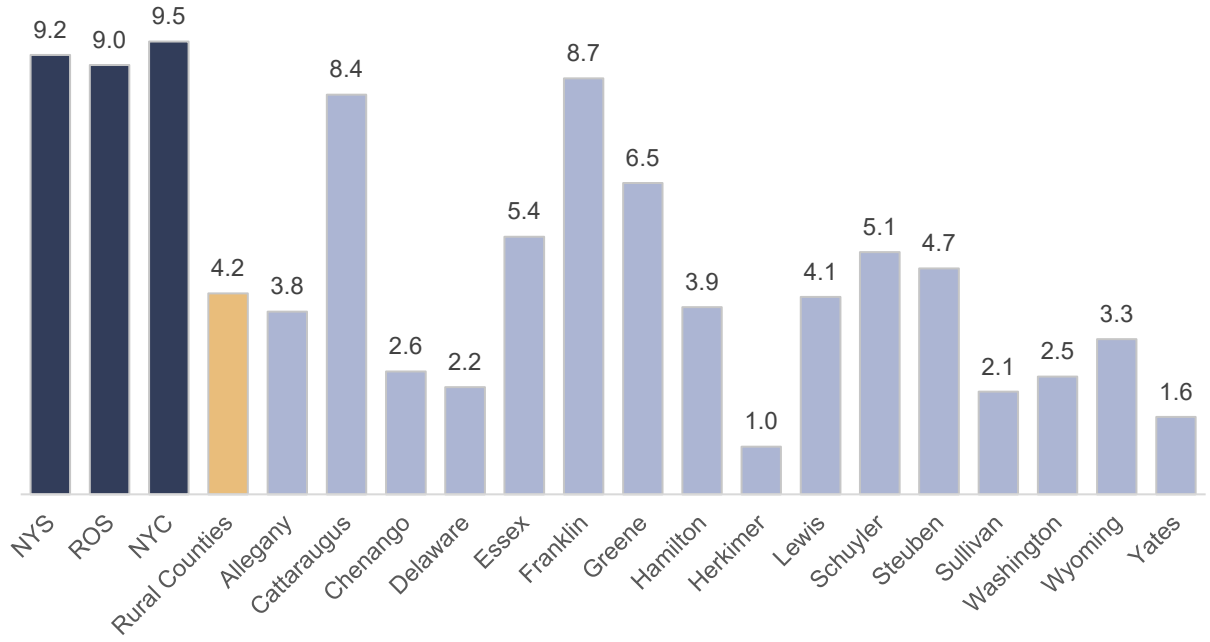
Source: U.S. HRSA AHRF

Family and General Practice Physicians to 10,000 Population, 2022



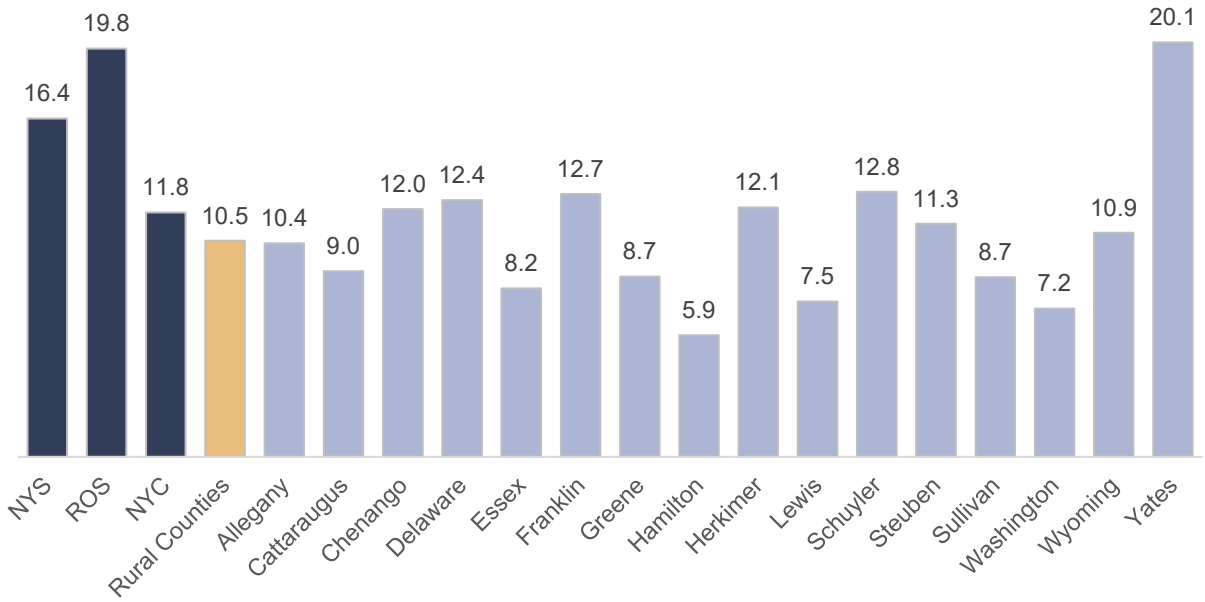
Source: U.S. HRSA AHRF

Physician Assistants to 10,000 Population, 2023



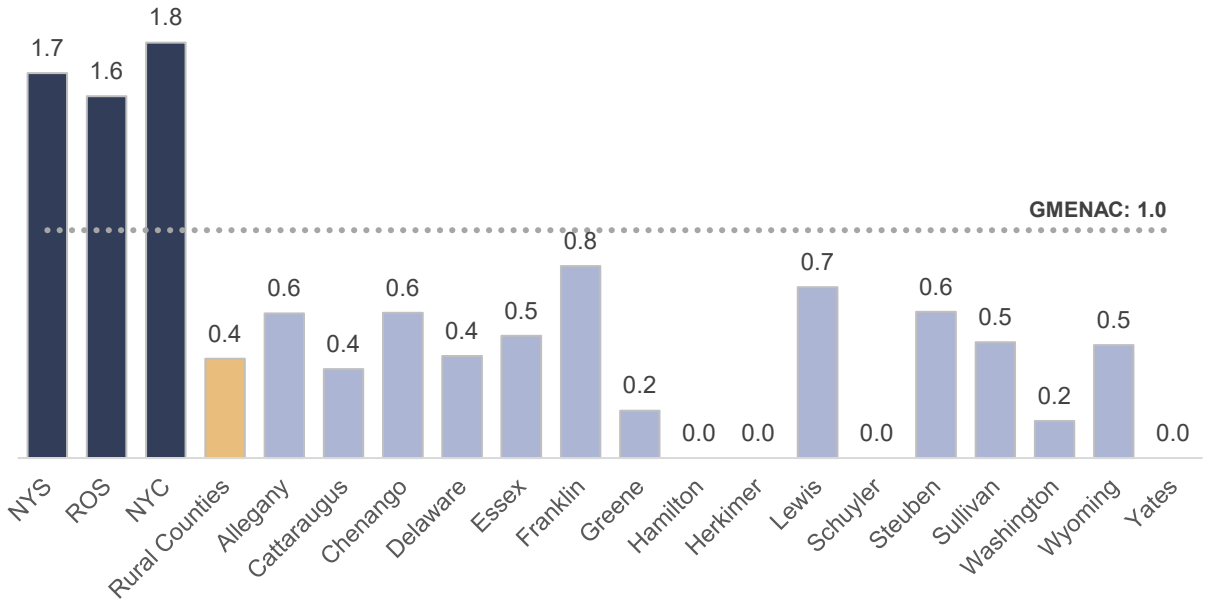
Source: U.S. HRSA AHRF

Nurse Practitioners to 10,000 Population, 2025



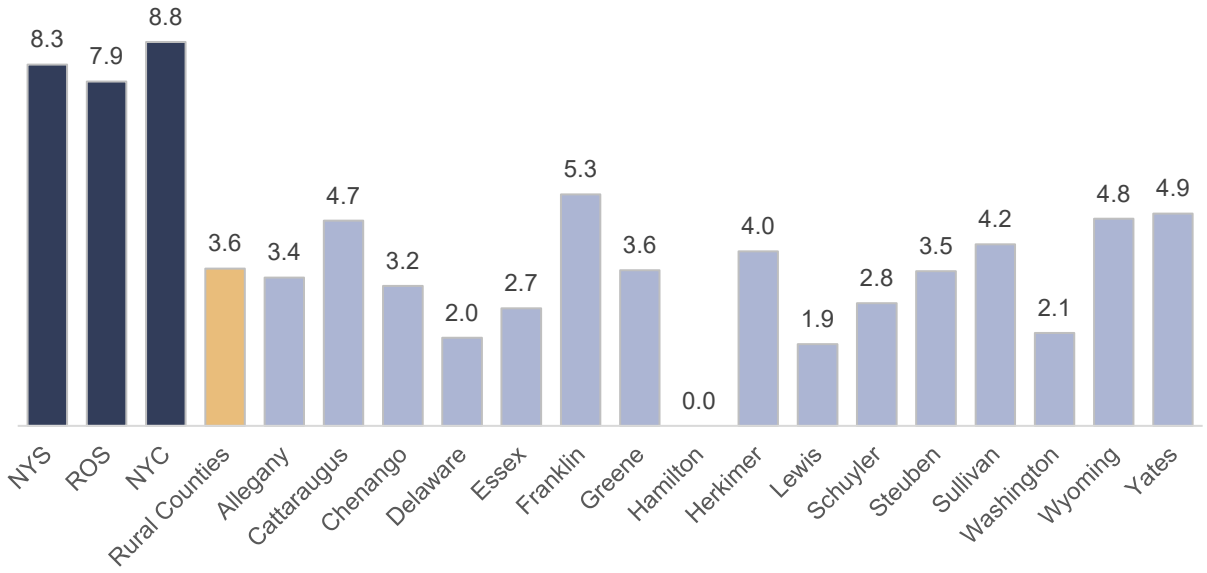
Source: NYSED

Ob/Gyn Physicians to 10,000 Population, 2022



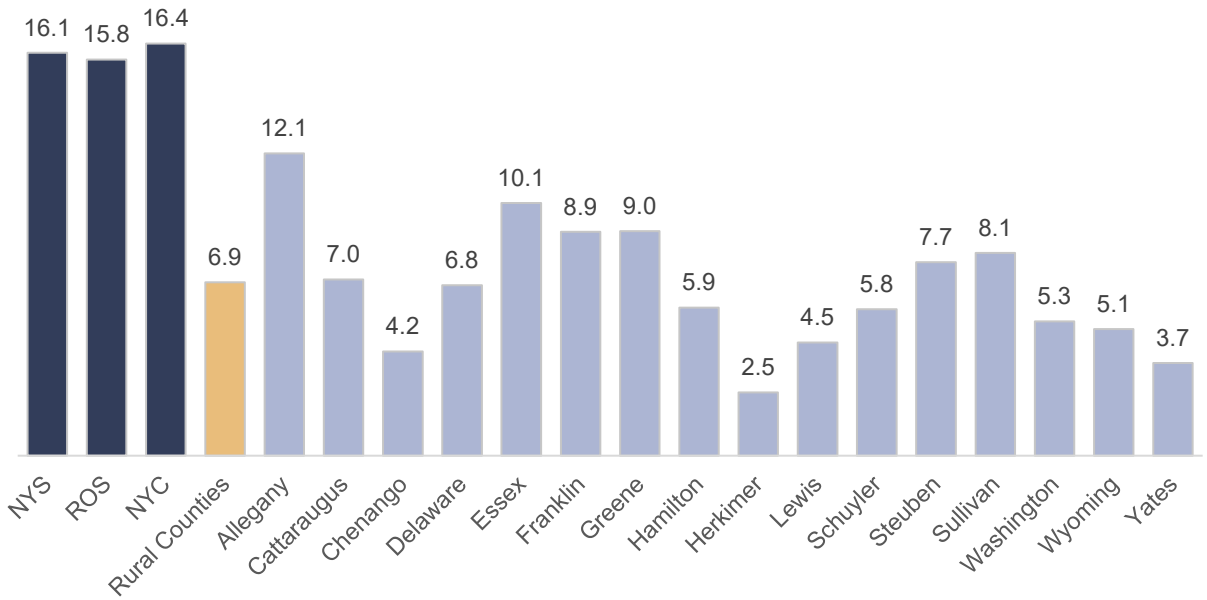
Source: U.S. HRSA AHRF

Dentists to 10,000 Population, 2022



Source: U.S. HRSA AHRF

Mental Health Practitioners to 10,000 Population, 2022



Note: Mental Health Practitioners includes Licensed Mental health Counselors, Licensed Psychologists, Licensed Psychoanalysts, Licensed Marriage and Family Therapists, Licensed Creative Art Therapists, Psychiatrists, and Child Psychiatrists. The Psychiatrists are from AHRF and represent 2022 data. The remaining are from NYSED and are as of January 2025.

Sources: U.S. HRSA AHRF and NYSED

Appendix C

Medicaid Enrollment as a Share of County Population

County	Enrollment	Percent of Population Enrolled in Medicaid
Allegany	12,647	26.7%
Cattaraugus	21,579	28.6%
Chenango	14,333	31.3%
Delaware	10,395	23.5%
Essex	8,094	22.0%
Franklin	14,844	31.5%
Greene	12,218	26.0%
Hamilton	703	13.8%
Herkimer	16,475	27.6%
Lewis	5,223	19.7%
Schuyler	3,513	20.5%
Steuben	26,320	28.6%
Sullivan	28,279	35.2%
Washington	16,437	27.5%
Wyoming	8,905	22.5%
Yates	4,934	20.2%

Note: Enrollment as of May 2025.

Source: NYSDOH, U.S. Census Bureau

Endnotes

[1] It has been asserted that at the time they were developed, GMENAC underestimated physician need, projecting future surpluses of physicians; this may have played a role in policies that contributed to physician shortages. See: Cooper, Richard A et al, Economic and Demographic Trends Signal and Impending Physician Shortage, Health Affairs, Volume 21 Number 1, January/February 2002, pp. 155-7. doi: 10.1377/hlthaff.21.1.158

[2] The low-income population is defined as the population living below 200 percent of the Federal Poverty Level.

[3] Health Professional Shortage Area formal ratios are calculated using a different methodology than the

[4] Patel, Sadiq Y et. al., Provision of evaluation and management visits by nurse practitioners and physician assistants in the USA from 2013 to 2019: cross-sectional time series study, BMJ 2023;382:e073933 at https://www.bmj.com/content/382/bmj-2022-073933.

[5] Senators Edward J. Markey, Ron Wyden, Jeffery A Merkley and Charles E. Schumer, letter to President Donald Trump, Majority Leader John Thune, and Speaker Mike Johnson, analysis by the Cecil G. Sheps Center for Health Services Research at The University of North Carolina at Chapel Hill, accessed July 7, 2025, at https://www.markey.senate.gov/imo/media/doc/letter_on_rural_hospitals.pdf.

[6] New York State Department of Health, NYS Medicaid Enrollment Databook, May 2025 at https://www.health.ny.gov/health_care/medicaid/enrollment/docs/by_resident_co/2025/2025-05-01.pdf.

[7] One Big Beautiful Bill Act, H.R. 1, 119th Congress (2025) at https://www.congress.gov/bill/119th-congress/house-bill/1/text.

[8] Report of the Graduate Medical Education National Advisory Committee to the Secretary, Department of Health and Human Services. Volume II: Modeling, Research, and Data Technical Panel, page 269, at https://eric.ed.gov/?id=ED203766

[9] Cooper (2002)

[10] Includes both Medical Doctors and Doctors of Osteopathic Medicine in Family and General Practice, General Internal Medicine, and General Pediatrics.

[11] U.S. Health Resources and Services Administration (HRSA), What is a Shortage Designation?, accessed May 29, 2025 at https://bhw.hrsa.gov/workforce-shortage-areas/shortage-designation.

[12] U.S. Code of Federal Regulations, Title 42, Chapter 1, Subchapter A, Part 5, Designation of Health Professional Shortage Areas, last amended on June 3, 2025. Accessed on June 16, 2025, at https://www.ecfr.gov/current/title-42/chapter-I/subchapter-A/part-5.

[13] Hoffer, Edward P, Primary Care in the United States: Past, Present and Future, American Journal of Medicine, Volume 137, Issue 8, August 2024, pp. 702−705.

[14] American Association of Family Physicians, Definition of Primary Care, accessed July 18, 2025 at https://www.aafp.org/about/policies/all/primary-care.html.

[15] Gao J, Moran E, Grimm R, Toporek A, Ruser C. The Effect of Primary Care Visits on Total Patient Care Cost: Evidence from the Veterans Health Administration. J Prim Care Community Health. 2022 Jan-Dec; 13:21501319221141792. doi: 10.1177/21501319221141792.

[16] Patel et. al. (2023)

[17] New York State Education Law, Title 8, Article 139, § 6902(3)(b).

[18] Harris, John. “Having a Baby in Wyoming County? Prepare to Drive,” *The Buffalo News*, April 28, 2023, https://buffalonews.com/having-a-baby-in-wyoming-county-prepare-to-drive/image_97877bdf-8a15-5c70-97c6-75ec5d7a66bf.html.

[19] Centers for Disease Control, Suicide in Rural America, May 16, 2024, at https://www.cdc.gov/rural-health/php/public-health-strategy/suicide-in-rural-america-prevention-strategies.html.

[20] Mental health practitioners includes Licensed Mental Health Counselors, Licensed Psychologists, Licensed Psychoanalysts, Licensed Marriage and Family Therapists, Licensed Creative Art Therapists, Psychiatrists, and Child Psychiatrists.

[21] The U.S. HRSA defines “low-income” as the population living below 200% of the Federal Poverty Level.

[22] Center for Healthcare Quality & Payment Reform, Data on rural Hospitals: Size and Financial Status of Rural Hospitals, accessed July 9, 2025, at https://ruralhospitals.chqpr.org/Data1.html.

[23] Senators Edward J. Markey, Ron Wyden, Jeffery A Merkley and Charles E. Schumer, letter to President Donald Trump, Majority Leader John Thune, and Speaker Mike Johnson, analysis by the Cecil G. Sheps Center for Health Services Research at The University of North Carolina at Chapel Hill, accessed July 7, 2025, at https://www.markey.senate.gov/imo/media/doc/letter_on_rural_hospitals.pdf.

[24] New York State Department of Health, NYS Medicaid Enrollment Databook, May 2025 at https://www.health.ny.gov/health_care/medicaid/enrollment/docs/by_resident_co/2025/2025-05-01.pdf.

[25] Section 455(a) of the Higher Education Act of 1965 as amended by PL 119-21, 2025

[26] American Association of Medical Colleges, Medical Student Education: Debt, Costs and Loan Repayment Fact Card for the Class of 2024, October 2024, at https://store.aamc.org/medical-student-education-debt-costs-and-loan-repayment-fact-card-for-the-class-of-2024.html.

[27] This information is derived from an examination of the bus schedules and services for the aging web sites of the 16 rural counties, where available.

[28] Ibid.

[29] While progress has been made since 2021, the percentage of unserved addresses in many rural New York counties remains high. See New York State Public Service Commission 2025 Broadband report at: https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={E0106597-0000-C638-95EF-099CC99CDFD2}.

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[32] Center for Workforce Studies, School of Public Health, SUNY Albany, Graduate Medical Education in New York: The Nation's Largest Supplier of Physicians, January 2023 at https://www.chwsny.org/wp-content/uploads/2023/01/CHWS-GME-Brief_FINAL_01192391.pdf

[33] Forte, Gaetano, Current Approaches to Rural Health Workforce Challenges Need Improvement, American Association of Medical Colleges, May 1, 2025 at https://www.aamc.org/about-us/mission-areas/health-care/rural-health-workforce-challenges-need-improvement.

[34] Ibid.

[35] Public Service Loan Forgiveness (PSLF) is a loan forgiveness program operated by the U.S. Department of Education. Under this program, qualifying federal loans are forgiven after the borrower has made 120 payments under a qualifying payment plan while working for a government or not-for-profit organization. See: https://studentaid.gov/manage-loans/forgiveness-cancellation/public-service.

A 2024 American Associate of Medical Colleges survey found that 63 percent of graduating Medical School Students indicated that they planned to enter a loan-forgiveness program, and 88 percent of those indicated that they intended to pursue federal Public Service Loan Forgiveness. See American Associate of Medical Colleges 2024 Graduate Questionnaire All Schools Summary Report at https://www.aamc.org/data-reports/students-residents/report/graduation-questionnaire-gq;

Regents Physician Loan Forgiveness Program provides up to $10,000 per year for two years of service commitment. See New York State Education Department, Regents Loan Forgiveness Program (LF), at https://www.nysed.gov/postsecondary-services/regents-physician-loan-forgiveness-program-lf;

For Doctors Across New York Loan Repayment Program, the program can overlap with Public Service Loan Forgiveness, but not Regents Physician Loan Forgiveness, see New York State Department of Health Center for Health Care Policy and Resource Development, Division of Workforce Transformation Doctors Across New York Loan Repayment Program – Cycle 11 Questions and Answers, July 7, 2025, pg. 11, at https://www.health.ny.gov/professionals/doctors/graduate_medical_education/doctors_across_ny/docs/dany_qa.pdf.

[36] U.S. HRSA, Health workforce Connector, Accessed July 21, 2025, at https://connector.hrsa.gov/connector/search?program=NHSC.

[37] Licensed Practical Nurses (LPNs) administer medications, administer bedside nursing care, record and report data on patient health, and perform clinical procedures, and are supervised and directed by registered Nurses or other qualified practitioners.

[38] U.S. HRSA, , Scoring Shortage Designations, accessed May 15, 2025 at https://bhw.hrsa.gov/workforce-shortage-areas/shortage-designation/scoring#mcta-scoring.

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