

Estimating the Distribution of the U.S. Psychiatric Subspecialist Workforce

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Project Team

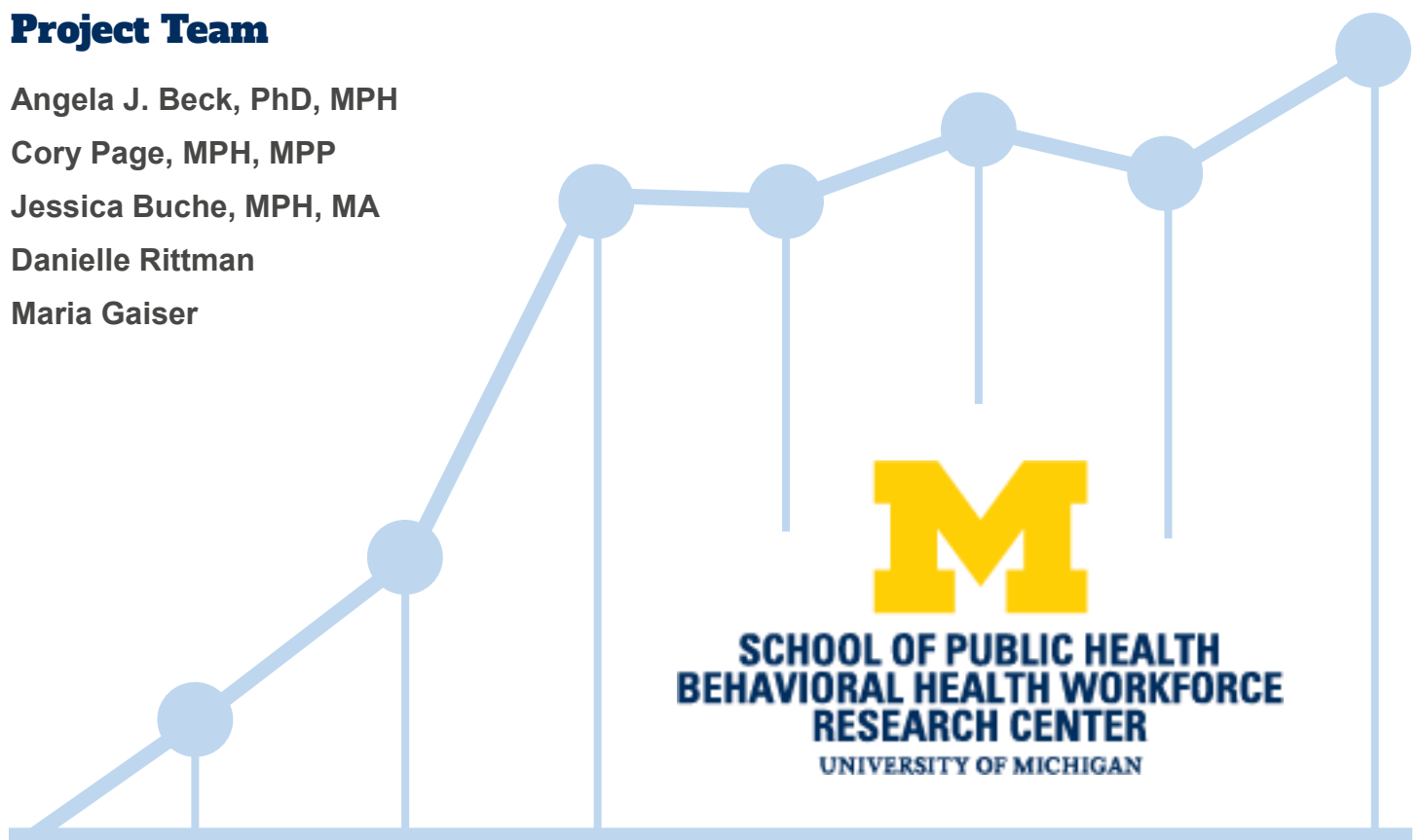
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Key Findings

After the passage of the Affordable Care Act and the Mental Health Parity and Addiction Equity Act, behavioral health coverage has expanded to cover more U.S. citizens. However, access to behavioral health services remains an issue, owing in part to maldistribution of the workforce. The psychiatric workforce, in particular, is in the middle of a professional shortage, which is projected to worsen by 2025. Rural populations appear to be more affected by this shortage than metropolitan populations. This study sought to map the precise amount of psychiatrists, child and adolescent psychiatrists (CAPs), geriatric psychiatrists (GPs), and addiction psychiatrists (APs) per county, and to test whether the proportion of these providers varied significantly between urban and rural areas.

Data for this study were purchased from the American Medical Association Masterfile in May 2018. County population estimates were drawn from the U.S. Census bureau. Rural/metropolitan designations were taken from the Federal Office of Rural Health Policy. Supply estimates for total psychiatrists, CAPs, GPs, and APs were mapped across U.S. counties. Maps depict the ratio of providers per 100,000 population at the county level for the four psychiatrist types and two-sample *t*-tests were conducted to compare the proportions of these providers in rural and urban counties.

Approximately 41,133 psychiatrists were actively practicing in the U.S. within 1,397 counties (44.4% of all counties), 9,956 CAPs were actively practicing within 828 counties (26.3% of all counties), 1,265 GPs were actively practicing within 321 counties (10.2% of all counties), and 836 APs were actively practicing within 230 counties (7.3% of all counties). Psychiatrists of all categories were primarily located within the northeastern U.S. and within some counties along the west coast. The difference in the average supply of each type of psychiatrist per 100,000 metropolitan and rural county residents was statistically significant ($p < 0.01$), suggesting that rural counties had a significantly lower proportion of psychiatrists per resident than metropolitan counties.

Studies suggest that psychiatrists are likely to practice in the state they completed their residency. To this end, the Health Resources and Services Administration has built several federal incentive programs to move psychiatric residents out into medically underserved and health professional shortage areas. Data from these programs could inform other potential policy interventions. Creating stronger partnerships among rural provider sites and medical programs could channel more psychiatric residents to rural areas, alleviating the country's maldistribution of psychiatric providers. Telepsychiatry could also leverage existing psychiatric capacity in a way that addresses issues of geographic maldistribution, provided its infrastructure and regulations are established and favorable.

Background

The Affordable Care Act has extended Medicaid to more recipients and increased coverage for mental health and substance use disorder treatment.¹⁻³ Although coverage has expanded, access to care remains an issue.⁴ Of the over 40,000 psychiatrists in the US workforce,⁵ three subspecialties serve particularly high-demand populations: child and adolescent psychiatrists (CAPs), geriatric psychiatrists (GPs), and addiction psychiatrists (APs). Given the current and projected psychiatrist shortages,⁵ these high-demand populations will suffer from an uneven geographical distribution of the few specialized psychiatrists in the country,⁶⁻⁸ with rural populations facing a greater proportion of shortages.⁶⁻⁹

Twenty percent of children have a behavioral health disorder.¹⁰ Child and adolescent psychiatrists receive training in comprehensive care since it is helpful to treat the developmental perspective throughout the lifecycle and "[CAP] subspecialty credentialing is increasingly requested by employers and insurance companies".^{7,11} There is also a chronic shortage of CAPs, especially in poor/rural areas.⁶ The American Association of Child and Adolescent Psychiatry reported that 41 states have severe CAP shortages (1-17 CAPs/100,000 children) and 9 states have high shortages (18-46 CAPs/100,000 children). Washington, D.C. is the only area in the U.S. with mostly sufficient supply (≥ 47 CAPs/100,000 children).⁷

Fifteen percent of adults over age 60 have a mental health disorder.¹² The demand for geriatric psychiatrists will continue to increase, as the proportion of the population over 65 is expected to be 20% by 2030. Completion of a geriatric psychiatry fellowship ensures that providers are able to provide comprehensive treatment for mental health and its comorbidities in conjunction with providing support for family caretakers who frequently suffer from depression.¹³⁻¹⁵ Over half of GPs live in one of only 7 states (CA, FL, MA, NJ, NY, PA, and TX), with 4 states having no American Board of Psychiatry and Neurology (ABPN)-certified geriatric psychiatrists (DE, MS, ND, and WY).⁸

Recent reports indicate that 21.5 million Americans ages 12+ have a substance use disorder.¹⁶ Meanwhile, many open psychiatry positions remain unfilled due to high demand and the lack of proper addiction training for providers.¹⁷ Only 0.9% of psychiatrists specialize in addiction, making it one of the rarest subspecialties, and most APs find employment in urban settings.⁹ Exacerbating a lack of access to addiction psychiatry is that counties with greater numbers of black, rural, and/or uninsured citizens are less likely to have an outpatient substance use disorder facility that accepts Medicaid.⁴

To better understand their geographic distribution, psychiatrists and psychiatric subspecialists need to be mapped across the country. Particular attention could be paid to tendency of these subspecialists to practice in urban or rural counties.

Methods

Data Sources

An American Medical Association (AMA) Masterfile data report was purchased in May 2018 from Medical Marketing Solutions, Inc.¹⁸ to calculate the number of psychiatrists, child and adolescent psychiatrists, geriatric psychiatrists, and addiction psychiatrists in each U.S. county, including the District of Columbia. These psychiatrists included both American Board of Medical Specialties (ABMS)-certified psychiatrists and psychiatric subspecialists, as well as physicians who were identified as psychiatrists or psychiatric subspecialists by their state licensing board. Inactive, retired, or deceased psychiatrists were excluded from the report. The AMA Masterfile is a comprehensive database, drawing provider information from state medical licensing boards, the American Board of Medical Specialties (ABMS) certification data, the Accreditation Council on Graduate Medical Education, and from the providers themselves.¹⁹ This data source was preferred to Bureau of Labor Statistics (BLS) data, as BLS does not track private practice psychiatrists. Similarly, the National Plan & Provider Enumeration System (NPPES) database was not used, as not all practicing psychiatrists accept Medicaid, and therefore would not have an NPPES number.

County population estimates and population sizes were taken from the United States Census Bureau, and are considered accurate as of July 1, 2017.²⁰ A list of U.S. counties by metropolitan status from the Health Resources and Services Administration's (HRSA's) Federal Office of Rural Health Policy.²¹

Analysis

Provider densities were calculated as the number of psychiatrists per 100,000 population. Population denominators for CAPs and GPs were also adjusted to the specific age ranges of their general treatment population (i.e. number of CAPs per 100,000 population under the age of 18; number of GPs per 100,000 population over the age of 64). These rates were transformed into choropleth maps using an Excel template.

To analyze variability in psychiatric provider rates in metropolitan and non-metropolitan (rural) counties, each county was coded with a binary "rural" variable. Two sample t-tests were conducted for each of the four psychiatrist categories in SAS (alpha = 0.05, two-tailed) comparing the mean ratio of the psychiatrist type per 100,000 population in metropolitan counties to the mean ratio of psychiatrist type per 100,000 population in rural counties. Again, CAP and GP densities were calculated using their specific treatment subpopulation.

Results

General Psychiatrists

According to the AMA Masterfile, 41,133 psychiatrists were actively practicing across the United States. The state with the highest number of psychiatrists was California (5,935) and the state with the fewest was Wyoming (42) (Table 1). The national average was 806.5 psychiatrists per state. The county with the most psychiatrists was New York, New York (1,802). Of 3,135 total counties in the United States, 1,446 had at least one psychiatrist (46.1%). The majority of counties had no psychiatrists.

Table 1: Highest/Lowest Counts of Psychiatrists by State and County

Highest Count of Psychiatrists, by State	Lowest Count of Psychiatrists, by State	Highest Count of Psychiatrists, by County
California (5934)	West Virginia (183)	New York, NY (1802)
New York (4979)	Nebraska (159)	Los Angeles, CA (1534)
Texas (2344)	Virginia (145)	Cook, IL (918)
Massachusetts (2025)	Delaware (104)	Middlesex, MA (770)
Florida (1902)	South Dakota (99)	San Diego, CA (602)
Pennsylvania (1887)	North Dakota (88)	Harris, TX (523)
Illinois (1552)	Idaho (86)	San Francisco, CA (499)
New Jersey (1323)	Alaska (78)	Westchester, NY (480)
Ohio (1258)	Montana (77)	Suffolk, MA (477)
Maryland (1217)	Wyoming (42)	King, WA (470)

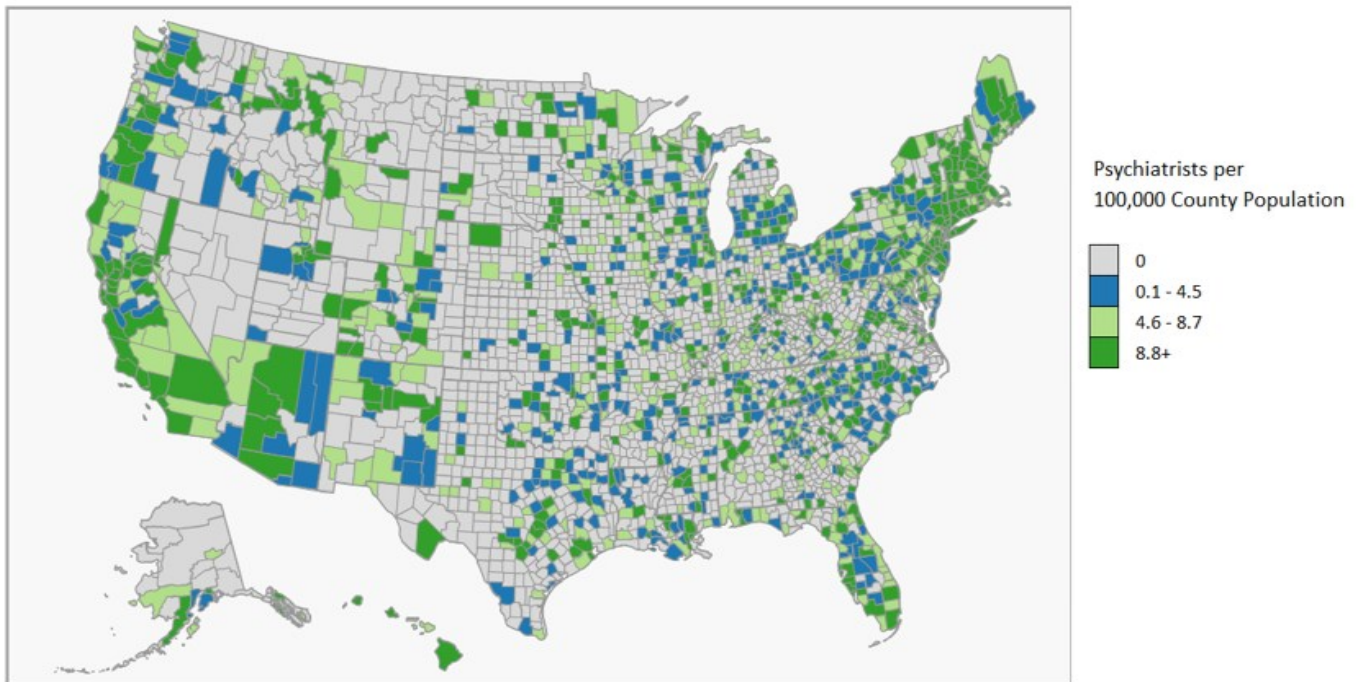
Compared to their state populations, the District of Columbia had the highest ratio of psychiatrists per 100,000 population (50.1) and Idaho had the lowest ratio (5.3) (Table 2). The national average was 12.9 psychiatrists per 100,000 state population. The county with the highest ratio of psychiatrists per 100,000 population was Charlottesville City, Virginia (127.4) which had 56 psychiatrists and 45,538 total population.

Table 2: Highest/Lowest Concentrations of Psychiatrists by State and County

Highest Ratios of Psychiatrists by State (providers/100,000 population)	Lowest Ratios of Psychiatrists by State (providers/100,000 population)	Highest Ratios of Psychiatrists by County (providers/100,000 population)
District of Columbia (50.1)	Arkansas (8.0)	Charlottesville (city), VA (127.4)
Massachusetts (30.0)	Iowa (7.9)	New York, NY (110.2)
New York (25.3)	Nevada (7.8)	Orange, NC (100.9)
Rhode Island (23.5)	Montana (7.5)	Augusta, VA (87.8)
Connecticut (23.4)	Utah (7.4)	Grafton, NH (80.8)
Vermont (23.1)	Wyoming (7.2)	Johnson, IA (80.3)
Maryland (20.4)	Alabama (7.0)	Lincoln, SD (70.0)
Hawaii (18.0)	Indiana (6.6)	Olmstead, MN (65.3)
Maine (17.1)	Mississippi (6.2)	Chatham, NC (64.0)
New Hampshire (15.7)	Idaho (5.3)	Suffolk, MA (62.1)

Figure 1 shows the relative concentration of psychiatrists per 100,000 population for all U.S. counties. The highest concentrations of psychiatrists could be found along the pacific coast and within the northeast. Large swaths of counties without psychiatrists were found throughout the center, northern, and southern states.

Figure 1. Map of Psychiatrists per 100,000 Population by U.S. County



Child and Adolescent Psychiatrists

Nationally, 9,956 child & adolescent psychiatrists were in active practice, with California having the most CAPs (1,215) and Wyoming having the fewest (8) (Table 3). The national average was 195.2 CAPs per state.

Table 3: Highest/Lowest Counts of Child and Adolescent Psychiatrists by State and County

Highest Count of CAPs, by State	Lowest Count of CAPs, by State	Highest Count of CAPs, by County
California (1215)	Nevada (45)	New York, NY (358)
New York (1191)	Vermont (37)	Los Angeles, CA (330)
Texas (690)	West Virginia (34)	Middlesex, MA (203)
Massachusetts (499)	Alaska (27)	Cook, IL (192)
Pennsylvania (447)	Delaware (26)	Harris, TX (172)
Florida (439)	Idaho (22)	Westchester, NY (151)
Maryland (347)	North Dakota (22)	Suffolk, MA (132)
New Jersey (333)	Montana (21)	San Diego, CA (131)
Illinois (323)	South Dakota (21)	New Haven, CT (116)
North Carolina/Ohio (319)	Wyoming (8)	Maricopa, AZ (111)

Of 3,135 total counties in the United States, 828 had at least one CAP (27.7%), meaning most counties did not have a single child & adolescent psychiatrist.

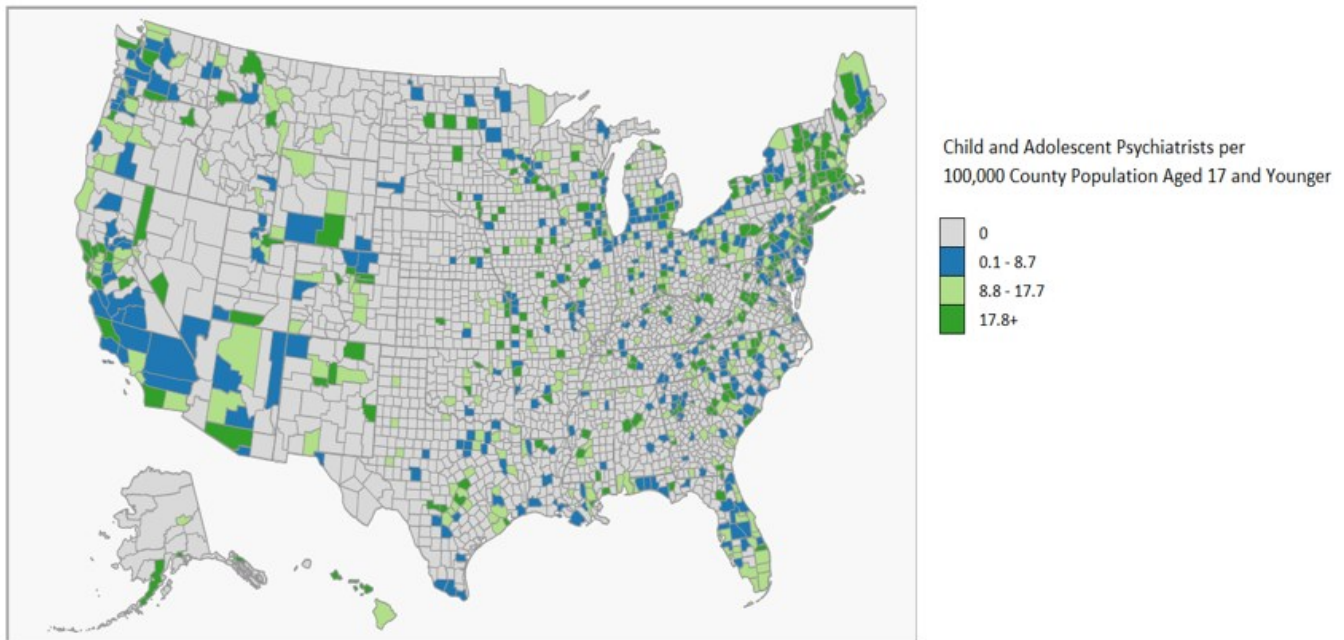
For the purpose of analyzing CAPs in the context of their typical service population, the amount of CAPs per county were compared to persons under the age of 18 in that county. Nationally, 73.6 million people were in this age group. The national average was 14.9 CAPs per 100,000 state population under the age of 18. The county with the highest ratio of CAPs per 100,000 population under the age of 18 was Esmeralda, Nevada (471.7) with 1 CAP servicing 212 population under the age of 18 (Table 4).

Table 4: Highest/Lowest Concentrations of Child & Adolescent Psychiatrists per 100,000 Population, by State and County

Highest Ratios of CAPs, by State	Highest Ratios of CAPs, by State (population < 18)	Lowest Ratios of CAPs, by State	Lowest Ratios of CAPs, by State (population < 18)	Highest Ratios of CAPs, by County	Highest Ratios of CAPs, by County (population < 18)
District of Columbia (11.4)	District of Columbia (65.4)	Alabama (2.0)	Georgia (8.2)	Esmeralda, NV (93.5)	Esmeralda, NV (471.7)
Rhode Island (8.1)	Rhode Island (40.0)	West Virginia (1.8)	Tennessee (7.7)	Bedford, VA (45.4)	Bedford, VA (280.4)
Massachusetts (7.4)	Massachusetts (35.9)	Oklahoma (1.8)	Iowa (7.6)	Jefferson, MT (34.5)	Orange, NC (164.9)
Connecticut (7.1)	Connecticut (32.7)	Iowa (1.8)	Oklahoma (7.2)	Orange, NC (33.6)	Jefferson, MT (163.9)
New York (6.0)	Vermont (30.4)	Tennessee (1.8)	Utah (7.1)	Pawnee, KS (29.2)	Charlottesville (city), VA (155.3)
Vermont (5.9)	New York (28.2)	Nevada (1.6)	Nevada (6.8)	Grand Isle, VT (28.8)	Grand Isle, VT (155.2)
Hawaii (5.9)	Hawaii (26.9)	Mississippi (1.6)	Mississippi (6.4)	Charlottesville (city), VA (24.1)	Pawnee, KS (151.9)
Maryland (5.8)	Maryland (25.7)	Indiana (1.4)	Indiana (5.8)	Augusta, VA (24.1)	New York, NY (149.6)
Maine (4.7)	Maine (24.3)	Wyoming (1.4)	Wyoming (5.8)	New York, NY (21.9)	Augusta, VA (114.2)
New Hampshire (3.8)	New Hampshire (19.1)	Idaho (1.3)	Idaho (5.1)	Lincoln, SD (21.4)	Grafton, NH (105.1)

Like psychiatrists, CAPs were mostly concentrated on the Pacific coast and within the northeast (Figure 2). Counties without any CAPs were spread throughout most of the middle of the country, predominately in non-metropolitan areas.

Figure 2. Map of Child & Adolescent Psychiatrists per 100,000 Population Under Age 18 by U.S. County



Geriatric Psychiatrists

The AMA Masterfile showed 1,265 geriatric psychiatrists active in the United States, with New York having the most GPs (218) and two states having none – Mississippi and North Dakota (Table 5). The national average was 24.8 GPs per state, and 330 counties had at least one GP (10.5%).

Table 5: Highest/Lowest Counts of Geriatric Psychiatrists by State and County

Highest Count of GPs, by State	Lowest Count of GPs, by State	Highest Count of GPs, by County
New York (218)	Montana (2)	New York, NY (53)
California (125)	Utah (2)	Nassau, NY (34)
Texas (84)	Vermont (2)	Los Angeles, CA (29)
Pennsylvania (82)	Alaska (1)	Queens, NY (29)
Florida (79)	Delaware (1)	Allegheny, PA (27)
New Jersey (60)	Oklahoma (1)	Westchester, NY (22)
Massachusetts (38)	South Dakota (1)	Middlesex, MA (21)
North Carolina (37)	Wyoming (1)	Kings, NY (21)
Michigan (36)	Mississippi (0)	King, WA (20)
Virginia (34)	North Dakota (0)	New Haven, CT (19)

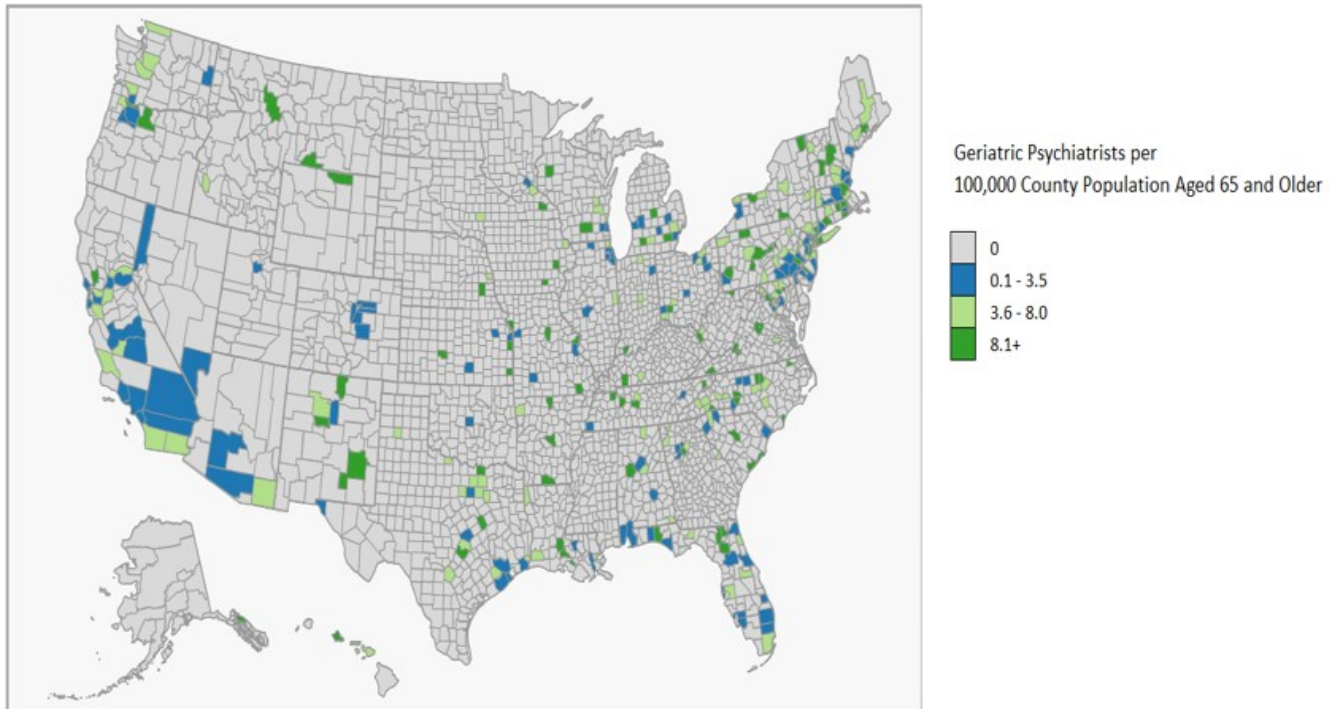
Geriatric medicine is not limited to a specific age range, as it focuses on the physiological process of aging. For the purpose of this analysis, the amount of GPs per county were compared to persons aged 65 and older in that county, of which there are over 46 million nationwide. Nationally, an average of 2.6 GPs practiced per 100,000 state population aged 65 and older (Table 6).

Table 6: Highest/Lowest Concentrations of Geriatric Psychiatrists per 100,000 Residents, by State and County

Highest Ratios of GPs, by State	Highest Ratios of GPs, by State (population ≥ 65)	Lowest Ratios of GPs, by State	Lowest Ratios of GPs, by State (population ≥ 65)	Highest Ratios of GPs, by County	Highest Ratios of GPs, by County (population ≥65)
Rhode Island (2.3)	Rhode Island (14.4)	Alaska (0.1)	Arizona (1.1)	Pawnee, KS (29.2)	Pawnee, KS (157.1)
Hawaii (1.1)	New York (7.5)	Indiana (0.1)	Indiana (1.0)	Craig, VA (19.2)	Craig, VA (98.4)
New York (1.1)	Hawaii (7.0)	Idaho (0.1)	Idaho (0.9)	Covington (city), VA (17.7)	Covington (city), VA (88.5)
Connecticut (0.9)	District of Columbia (6.7)	South Dakota (0.1)	South Dakota (0.8)	Salem (city), VA (11.9)	Salem (city), VA (66.6)
District of Columbia (0.8)	Connecticut (5.8)	Delaware (0.1)	Delaware (0.7)	Carbon, MT (9.7)	Carbon, MT (42.5)
New Hampshire (0.7)	New Jersey (4.6)	Utah (0.1)	Utah (0.7)	Bristol, RI (6.1)	Bristol, RI (32.3)
New Jersey (0.7)	New Hampshire (4.3)	Kentucky (0.1)	Kentucky (0.3)	Grafton, NH (5.6)	Grafton, NH (31.1)
Pennsylvania (0.6)	New Mexico (4.1)	Oklahoma (0.03)	Oklahoma (0.2)	Humphreys, TN (5.5)	Union, AR (29.9)
New Mexico (0.6)	Pennsylvania (3.8)	Mississippi (0)	Mississippi (0)	Montour, PA (5.4)	Juneau, AK (29.7)
Massachusetts (0.6)	Massachusetts (3.7)	North Dakota (0)	North Dakota (0)	Union, AR (5.0)	Humphreys, TN (29.3)

Figure 3 shows the relative concentration of geriatric psychiatrists per 100,000 population aged 65 and older for all U.S. counties. The highest concentrations of GPs could be found within the northeast.

Figure 3. Map of Geriatric Psychiatrists per 100,000 Population Over Age 64 by U.S. County



Addiction Psychiatrists

The least populous of the 4 categories of psychiatrists, addiction psychiatrists numbered 836 across the country, with New York having the most (170) and five states having none – Idaho, Iowa, Montana, Nevada, and Wyoming (Table 7). The national average was 16.4 APs per state. Only 237 counties had at least one AP, meaning 92.4% of the country did not.

Table 7: Highest/Lowest Counts of Addiction Psychiatrists by State and County

Highest Count of APs, by State	Lowest Count of APs, by State	Highest Count of APs, by County
New York (170)	Alaska (1)	New York, NY (73)
California (70)	Mississippi (1)	New Haven, CT (33)
Massachusetts (47)	Nebraska (1)	King, WA (25)
Florida (44)	North Dakota (1)	Los Angeles, CA (23)
Connecticut (41)	Tennessee (1)	Kings, NY (22)
Pennsylvania (34)	Iowa (0)	Queens, NY (19)
Texas (32)	Idaho (0)	Suffolk, MA (18)
Maryland (31)	Montana (0)	Cook, IL (17)
New Jersey (30)	Nevada (0)	Middlesex, MA (16)
Washington (28)	Wyoming (0)	Denver, CO (14)

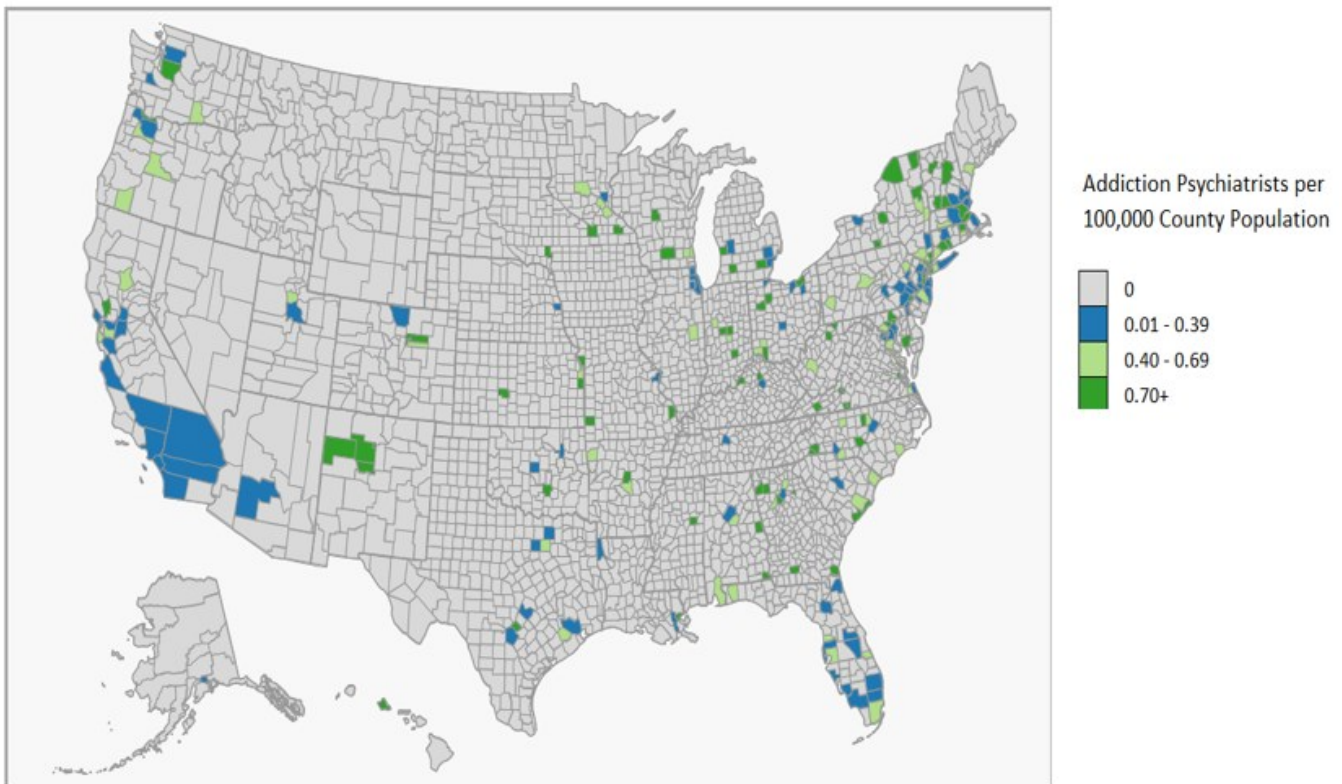
Compared to their state populations, Connecticut had the highest ratio of addiction psychiatrists per 100,000 population (1.1) (Table 8). The national average was 0.3 APs per 100,000 state population. The county with the highest ratio of APs was Pawnee, Kansas (15.0).

Table 8: Highest/Lowest Concentrations of Addiction Psychiatrists by State and County

Highest Ratios of Aps, by State (providers/100,000 population)	Lowest Ratios of Aps by State (providers/100,000 population)	Highest Ratios of APs by County (providers/100,000 population)
Connecticut (1.1)	Arizona (0.1)	Pawnee, KS (14.6)
New York (0.9)	Oklahoma (0.1)	Grand Isle, VT (14.4)
Massachusetts (0.7)	Nebraska (0.1)	Grafton, NH (6.7)
New Hampshire (0.7)	Mississippi (0.03)	Los Alamos, NM (5.6)
District of Columbia (0.6)	Tennessee (0.01)	Olmstead, MN (5.3)
Rhode Island (0.6)	Idaho (0)	Polk, NC (4.9)
Hawaii (0.6)	Iowa (0)	New York, NY (4.5)
Maryland (0.5)	Montana (0)	Lincoln, SD (3.9)
Vermont (0.5)	Nevada (0)	New Haven, CT (3.8)
Colorado (0.4)	Wyoming (0)	Smyth, VA (3.2)

Figure 4 shows the relative concentration of addiction psychiatrists per 100,000 residents for all U.S. counties. The highest concentrations of APs could be found within the northeast.

Figure 4. Map of Addiction Psychiatrists per 100,000 Population by U.S. County



Metropolitan and Rural County Differences

HRSA's Office of Rural Policy issues a list of counties it designates as "non-metropolitan counties." Table 9 shows the differences in mean supply per 100,000 population by rural/urban county status. Rurality was associated with a statistically significant difference in the ratios of these psychiatric subspecialists per 100,000 urban and rural county residents.

Table 9: Mean Supply of Psychiatrists per 100,000 Population by Rural/Urban County Status

	Urban Counties	Rural Counties	t Statistic	P-value
Counties (n)	567	2568		
Mean Ratio of Psychiatrists per 100,000 population (Standard deviation)	10.62 (13.99)	3.28 (10.46)	11.79	<0.00001
Mean Ratio of CAPs per 100,000 Population Aged 17 and Younger (Standard deviation)	12.06 (19.48)	3.50 (15.41)	9.81	<0.00001
Mean Ratio of GPs per 100,000 Population Aged 65 and Older (Standard deviation)	2.50 (6.70)	0.51 (4.29)	6.77	<0.00001
Mean Ratio of Aps per 100,000 Population (Standard deviation)	0.19 (0.77)	0.04 (0.42)	4.49	<0.00001

Conclusions and Policy Considerations

This study showed that, of the 3,135 counties in the United States, 1,522 had at least one psychiatrist of the four types included in this study (48.5%). Psychiatrists without a specific specialization were the most populous of four types studied, with at least one psychiatrist available in 46.1% of all U.S. counties. CAPs were the second most populous, with at least one CAP available in 27.7% of all U.S. counties, followed by GPs in 10.5%, and APs in 7.6%.

Predominately, psychiatrists were located within the northeast region of the United States and some concentrated areas along the west coast. Certain counties, like New York, NY, Los Angeles, CA, and Pawnee, KS, were within the lists of top ten counties both in terms of the number of psychiatrists practicing there, and the counties with the highest concentration of active psychiatrists per 100,000 population.

The maldistribution of psychiatrists across the country is not a new phenomenon. Shortages in the psychiatric workforce is well-documented,^{5, 22} as is the difference in access between rural and urban counties.²³ The federal government designates medically underserved areas (MUAs)²⁴ and Health Professions Shortage Areas (HPSAs)²⁵ for mental health. To qualify as a mental health HPSA, an area must have a population to psychiatrist ratio greater than 30,000 to 1. In the case of areas with exceptionally high need, the threshold is lowered to 20,000 to 1.²⁶ Since 51.5% of counties had no psychiatrists, the majority of counties in the United States would qualify for mental health HPSA status under the population-to-psychiatrist threshold.

Three methods for correcting the maldistribution of psychiatric providers are:

1. Developing/bolstering programs that recruit/incentivize providers to practice in underserved areas;
2. Strengthening ties between psychiatric residency programs and rural practice sites to encourage new psychiatrists to later practice in those sites; and
3. Removing barriers that prevent telepsychiatric services in rural areas.

Developing Programs to Recruit Psychiatrists to Underserved, Rural Areas

One federal program dedicated to reducing the number of MUAs in the country is the National Health Service Corps (NHSC). Historically, this program offered financial aid to primary care providers to serve in MUAs and rural areas.²⁷ Starting in fall 2018, the NHSC covers loan repayment to physicians, nurse practitioners, physician assistants who are eligible to administer medication-assisted treatment for SUD, behavioral health professionals, and substance use disorder counselors who spend three years serving in a MUA.²⁷ This initiative could prove successful in incentivizing new psychiatrists to establish practices in underserved areas.

Similarly, HRSA has several programs meant to move providers out to HPSAs. Such programs include their school-based scholarships and loans, which fund students' tuition as they go into medical school or nursing programs, and encourages them to later practice in "communities where people lack access to basic health care needs."²⁸ Unfortunately, none of those loans specifically target would-be psychiatrists. This could be changed, if only for a short window, to incentivize a generation of psychiatrists to practice in HPSAs.

HRSA also offers grants meant to develop the behavioral health workforce and public health workforce, as well as supporting a diverse health workforce in general, but none of the individual projects within these hubs specifically apply to psychiatrists.²⁹ Adding a psychiatrist-specific funding mechanism may further the goal of motivating future psychiatrists to work in mental health HPSAs.

Strengthening Psychiatric Residency Ties to Rural Practice Sites

Where psychiatrists practice is strongly associated with where they completed their residency. According to the Association of American Medical Colleges, more than half of the individuals who completed residency training between 2007 and 2016 are practicing in the state where they finished their residency.³⁰ Establishing/promoting more residencies in rural, underserved locations could more equitably distribute the future psychiatrist workforce. Partnerships between rural health provider locations, medical schools countrywide, and federal workforce development funders are key to this aim. The Accreditation Council for Graduate Medical Education, in particular, could prove instrumental in approving more resident program applications from rural/underserved locations, promoting these residencies on their website, and connecting medical programs to those residences.

Removing Barriers to Rural Telepsychiatry

For rural counties without psychiatrists, telepsychiatry could help increase access to psychiatric services.^{22, 31} This is contingent on each state's regulations, as certain provisions, such as how states treat out-of-state providers, can reduce the likelihood of providers adopting telepsychiatric services.³² Policies that could increase the provision of telepsychiatry include: passing license reciprocity laws, or expanding membership of the interstate licensing compact,³³ to more easily allow out-of-state psychiatrists to provide telepsychiatry; amending state Medicaid plans to reimburse for telepsychiatry; and increasing medical residents' exposure to telemedicine during training.

Telepsychiatry can be a crucial component in integrated care – the coupling of primary and behavioral health care services. If states make use of Section 2703 of the Affordable Care Act, they can use the 90% enhanced funding to create Medicaid Health Homes.³⁴ These locations specialize in treating patients with 2 or more chronic conditions. If Health Home funding were to become available for rural health centers that currently only offer primary care services, those centers could have an opportunity to begin offering telepsychiatric services.

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