# **POLICY BRIEF**

# Mapping Supply of the U.S. Psychiatric Workforce

SCHOOL OF PUBLIC HEALTH BEHAVIORAL HEALTH WORKFORCE RESEARCH CENTER UNIVERSITY OF MICHIGAN

### **Project Team**

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### Background

Nearly 60 million Americans saw their doctor for a mental health disorder in 2015,<sup>1</sup> and these disorders cost America \$187.8 billion a year.<sup>2</sup> Yet, the Health Resources and Services Administration reports 5,112 mental health professional shortage areas in the country,<sup>3</sup> 55% of counties in the continental U.S. have no psychiatrists, and that the current 6.4% shortage in the psychiatric workforce will grow to 25% by 2025.<sup>4</sup> Physician assistants in psychiatry (psychiatric PAs), psychiatric nurses, and board-certified psychiatric pharmacists (BCPPs) could expand access to psychiatric services and mitigate this care gap. But first, an understanding of the supply distribution of these psychiatric providers across the country is required.

### Methods

Given the necessity of healthcare providers to obtain specialty board certification in order to receive hospital privileges or purchase malpractice insurance,<sup>5</sup> the Behavioral Health Workforce Research Center chose to estimate much of the size of the psychiatric workforce through board certification counts. The American Board of Medical Specialties provided estimates for psychiatrists, psychiatric nurse estimates were from the American Nurses Credentialing Center, and the College of Psychiatric and Neurologic Pharmacists provided BCPP supply data. Psychiatric PAs do not have a broadly accepted national specialty certification like the other occupations, so workforce estimates were provided by the American Academy of Physician Assistants. All 50 states and the District of Columbia were included in the workforce estimates. To add context to the psychiatrist and psychiatric nurse estimates from the U.S. Census Bureau.<sup>6</sup> Psychiatric PA and BCPP workforces have much smaller supply; thus, rates of PAs and BCPPs were calculated by the number of providers per 1,000,000 population in each state.

### **Key Findings**

#### **All Psychiatric Providers**

According to the combined data, the size of the psychiatric workforce is 66,740 total providers. The states with the highest rate of psychiatric providers per 100,000 population were the District of Columbia (63.84), Massachusetts (54.14), Connecticut (48.91), Rhode Island (47.66), and Vermont (46.66). The states with the lowest rates were Alabama (12.64), Indiana (12.61), Idaho (12.17), Oklahoma (9.77), and Nevada (9.67).

#### **Psychiatrists**

Data from the American Board of Medical Specialties revealed 47,046 board-certified psychiatrists across the U.S. The states with the highest rate of psychiatrists per 100,000 population were the District of Columbia

(58.79), Massachusetts (35.98), Connecticut (32.02), Vermont (30.63), and Rhode Island (29.92). The states with the lowest rates were Oklahoma (7.48), Nevada (6.40), Mississippi (6.27), Idaho (5.88), and Wyoming (5.70). Psychiatrists were most highly concentrated in the Northeast region of the U.S. (Figure 1). Hawaii also has a notable higher-than-average concentration of psychiatrists.

#### **Psychiatric Nurses**

Data from the American Nurses Credentialing Center enumerated 17,534 board-certified psychiatric nurses across the U.S. The states with the highest rate of psychiatric nurses per 100,000 population were Maine (22.01), Massachusetts (17.61), Rhode Island (16.61), Connecticut (16.22), and Vermont (14.91). The states with the lowest rates were Illinois (2.79), Nevada (2.77), West Virginia (2.48), California (2.15), and Oklahoma (1.53). Psychiatric nurses were most highly concentrated in the Northeast region of the U.S. (Figure 2). Alaska and states in the Pacific Northwest also has a notable higher-than-average concentration of psychiatric nurses.

### **Psychiatric Physician Assistants**

Data from the American Academy of Physician Assistants revealed 1,164 psychiatric PAs across the U.S. The states with the highest rate of psychiatric PAs per 1,000,000 population were South Dakota (14.95), Maine (14.22), Idaho (13.40), West Virginia (13.22), and North Carolina (10.90). The states with the lowest rates were Indiana (1.20), Tennessee (1.19), Hawaii (0.70), and Alabama (0.62). Psychiatric PAs were not concentrated in any one particular geographic area, although higher-than-average concentrations can be seen throughout the middle of the country (Figure 3).

### **Psychiatric Pharmacists**

Data from the College of Psychiatric and Neurologic Pharmacists revealed 996 board certified psychiatric pharmacists across the U.S. The states with the highest rate of BCPPs per 1,000,000 population were South Dakota (10.35), North Dakota (9.27), Rhode Island (7.55), Minnesota (7.53), and South Carolina (5.77). The states with the lowest rates were Georgia (1.34), Oklahoma (0.76), Mississippi (0.67), West Virginia (0.55), and Louisiana (0.43). BCPPs were not concentrated in any one particular geographic area, although higher-than-average concentrations can be seen to the north and center of the country (Figure 4).

# **Conclusions & Policy Implications**

Psychiatrists made up the largest proportion of the psychiatric workforce (70.5%), followed by advanced practice psychiatric nurses (26.3%), psychiatric PAs (1.7%), and BCPPs (1.5%). The Northeast region and the Pacific Northwest contain the highest rates of psychiatric providers per 100,000 population, whereas central and southern continental states contain the lowest.

Key findings of this study show nationwide maldistribution of psychiatrists, psychiatric nurses, psychiatric PAs, and BCPPs, which could be remedied by the following policies:

- Building residency pipelines between graduate programs in states densely populated with psychiatric providers and provider locations in states with professional shortages.
- Increased funding into the federal programs incentivize psychiatric providers to serve in Mental Health Professional Shortage Areas.
- Expanding scopes of practice to ensure prescribers have authorization to practice to the level of their training.





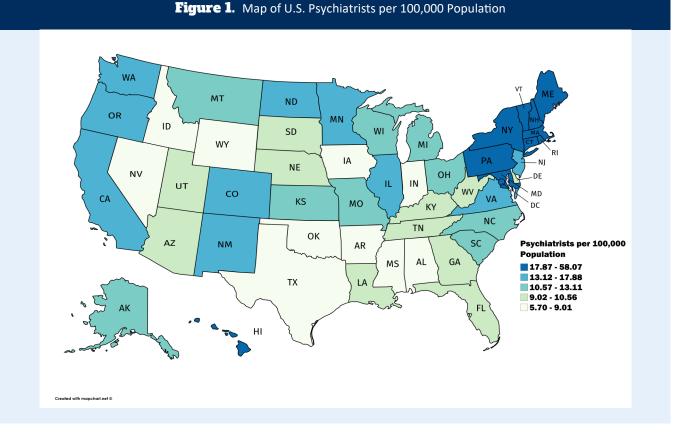
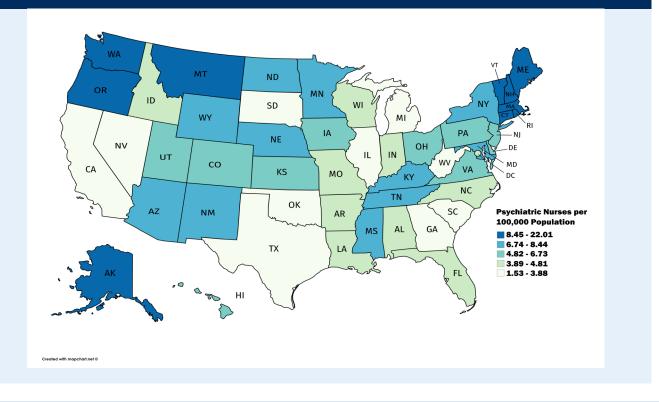


Figure 2. Map of U.S. Psychiatric Nurses per 100,000 Population





#### Figure 3. Map of U.S. Psychiatric Physician Assistants per 1,000,000 Population

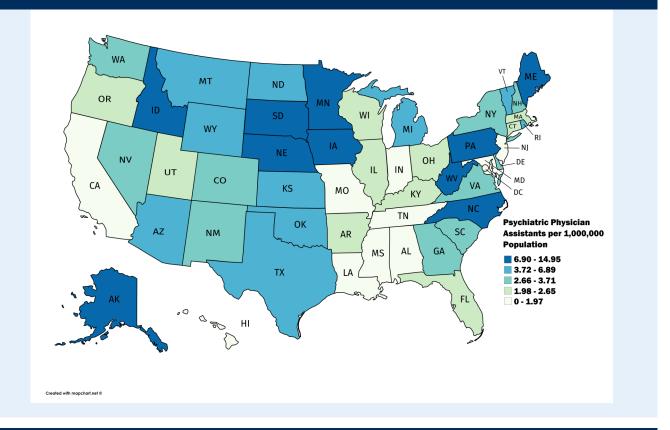
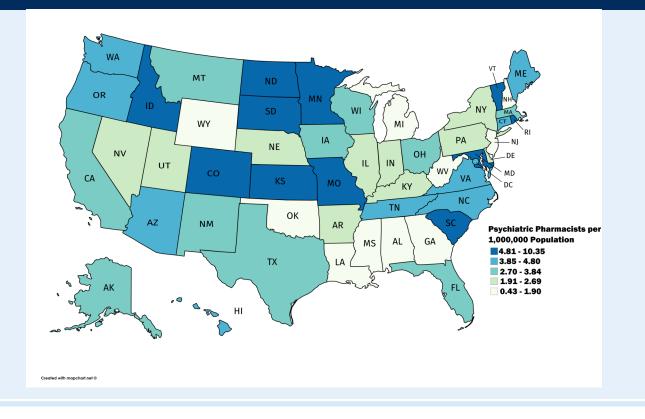


Figure 4. Map of U.S. Psychiatric Pharmacists per 1,000,000 Population



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