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Mental Health Policies and Outcomes: A State by State Comparison

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Key Findings

- Regional and geographic patterns emerged in mental health policies and outcomes
- There was no overlap between states with the highest mental health policy and outcome scores
- Only one state - Idaho - was among the lowest scoring in both mental health policy and outcome
- Secondary analysis suggests a bidirectional relationship between mental health policy and outcomes, in which the need for mental services may contribute to advancement of mental health policy

What is this?

State policy decisions play a critical role in the access of mental health services including state insurance benefit mandates, Medicaid expansion, and investing in mental health programs. We wanted to better understand the relationship between state policies that expand mental health services and key mental health outcomes. We developed two composite scores to compare the mental health policy and outcomes across the 50 states and the District of Columbia.

What are the State Mental Health Scores?

We created two mental health composite scores per state. The first was a policy score indicating the degree to which a state is advancing policies that increase access to mental health services. The second was a mental health outcome score based on key performance metrics. The mental health policy score was determined by looking at: (1) mental health parity score established by the Kennedy Forum, (2) mental health services provided per capita, (3) uninsured rate for individuals under 65 years old, (4) telehealth policies, and (5) mental health grant opportunities [Table 1]. The state mental health outcome scoring measures included: (1) prevalence of individuals who had thoughts of suicide, (2) prevalence of completed suicides, (3) change in

suicide from 1999–2001 to 2014–2016, (4) adults with any mental illness reporting unmet need, and (5) children with any mental illness reporting unmet need [Table 2].

State Variable Scoring in Standard Deviations

Score	Details
5	2+ SDs of national mean (better)
4	1-2 SDs of national mean
3	Within 1 SD of national mean
2	1-2 SDs of national mean
1	2+ SDs of national mean (worse)

The measurement of each variable to create composite policy and outcome scores per state were based on distance in standard deviation (SD) from the national mean. We standardized this measurement by using a scoring system from 1-5 for each variable. A score of 3 represents a state variable within 1 SD of the national mean. Higher scores (4 and 5) represent scores better than the national average and lower scores (1 and 2) represent scores worse than the national average. Scores of 2 and 4 were between 1 and 2 SDs from the national mean, while scores of 1 and 5 were greater than 2 SDs from the national mean.

What Did We Find?

Some very interesting geographic patterns emerged in both policy and outcome scores. The six New England states (ME, VT, MA, NH, RI, CT) accounted for the top seven policy scores in the country. However, mid-Atlantic states (NJ, MD, DE) accounted for the top 3 outcomes scores. In contrast, western rural states (AK, WY, CO, ID, UT, MT) accounted for the lowest outcome scores – indicating the highest need for mental health services. None of the states with the highest mental health policy scores were among the states with the highest outcome scores. Additionally, only Idaho was common among the lowest policy and outcomes scores– ranked 47th across both measures.

We found regional influence in both mental health policy and outcome scores. Of particular note is the low outcome scores for western rural states. This is likely attributed to the high prevalence of suicide in these states.

Top and Bottom Five Mental Health Policy Scores

Rank	State	Score	Rank	State	Score
1	Maine	4.11	47	Hawaii	2.42
2	Vermont	3.74	47	Idaho	2.42
3	Massachusetts	3.68	47	Nebraska	2.42
4	New Hampshire	3.58	47	Texas	2.42
4	Rhode Island	3.58	51	Arizona	2.26

Top and Bottom Five Mental Health Outcome Scores

Rank	State	Score	Rank	State	Score
1	New Jersey	3.47	47	Colorado	2.00
2	Maryland	3.35	47	Idaho	2.00
2	Delaware	3.35	47	Utah	2.00
2	Minnesota	3.35	50	Wyoming	1.88
2	Iowa	3.35	51	Alaska	1.71

Further, we started with an assumption that state mental health policy would impact state mental health outcomes. However, the review offers no content to the direction of the policy and outcome relationship.

There is some suggestion of a bidirectional relationship between policy and outcome in our secondary analysis, which included substance use disorder (SUD) variables [Table 1,2]. The most clear example of this was in Texas. Texas had the 51st (lowest) mental health policy score in our secondary analysis. However, Texas also had the 2nd highest mental health outcome score. This indicates that compared to other states, Texas was not expanding mental health services, but was meeting the demand for mental health care. This movement to the top and bottom of the composite scoring in the secondary analysis highlights that the opioid epidemic has disportionally impacted communities across the country. Texas ranks 45th in age-adjusted drug overdose deaths. Therefore, the state has not had a high demand (compared to other states and regions) to put in place policies that expand SUD treatment. Introducing SUD variables into the scoring appears to highlight that mental health outcomes may impact the advancement of policies that expand mental health services.

Summing Up and What's Next?

The intent of this review was to provide a snapshot of the national mental health landscape and generate discussion on state mental health policy and outcomes. We did not find that state mental health policies alone predict mental health outcomes. However, we suggest that state policies increasing mental health services–including technology solutions–are still valuable. Despite little overlap among the highest and lowest performing states, states that had policies that expanded mental health services generally had better outcomes compared to those that did not (although we would have to run more analysis to say this with scientific certainty). However, the variation throughout the rankings indicate there are a multitude of other factors influencing the mental health in the states.

The development of the mental health policy and outcome composite scores started as an internal project here at NeuroFlow to help us better understand the communities we serve. We would love to hear from you about what methodologies or variables you would utilize to create your own mental health scoring system. Any questions, comments, thoughts or collaboration ideas can be sent to our Senior Policy Consultant, Matt Miclette, at matthew@neuroflowsolution.com.

Table 1. State Mental Health Policy Score Variables

Variable	Details	Weight
Mental Health Services Provided Per Capita	Prevalence of individuals that received Mental Health Services in the Past Year per 100,000; 18 years or older[1]	29.4% 20.0%*
Mental Health Parity Score	A Statutory Coding Instrument providing a quantitative, comparative assessment of state parity statutes. Total points earned out of 100[2]	17.7% 12.0%*
Uninsured Rate (<65 years)	Percentage of people under 65 years old without health insurance coverage: 2017[3]	17.7% 12.0%*
Telehealth Policy	Scoring based on score card grade (A=3, B=2, C=1)[4]	17.7% 12.0%*
State Grant Opportunities	Posted and active state grants in mental health and behavioral health integration	17.7% 12.0%*
Medication-Assisted Treatment Facilities*	Number of facilities offering at least one form of MAT per capita: 2017[5]	0.0% 8.0%*
Buprenorphine Providers* *Secondary Analysis	Buprenorphine prescribers per capita: 2017[5]	0.0% 12.0%*

Table 2. State Mental Health Outcome Score Variables

Variable	Details	Weight
Prevalence of Individuals with Thoughts of Suicide	Prevalence of individuals who had thoughts of suicide: 2016-2017[6]	17.7% 12.0%*
Prevalence of Suicide	Prevalence of completed suicides: 2017[7]	29.4% 20.0%*
Change in Suicide Rate	Percent change in suicide: 1999–2001 to 2014–2016[8]	17.7% 12.0%*
Adults with Any Mental Illness Reporting Unmet Need	Adults (18 years or older) with any mental illness reporting unmet need: 2015[9]	17.7% 12.0%*
Children with any Mental Illness Reporting Unmet Need	Children (Under 18 years) with any mental illness reporting unmet need: 2016[10]	17.7% 12.0%*
Needed but Did Not Receive SUD Treatment*	Individuals that needed but did not receive treatment for substance use disorder in the past year: 2016-2017[11]	0.0% 8.0%*
Prevalence of Drug Overdose Deaths*	Prevalence of drug overdose deaths: 2017[12]	0.0% 12.0%*
Increase in Drug Overdose Deaths*	Percent increase in the overdose death rate between 2016-2017[12]	0.0% 12.0%*

*Secondary Analysis

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