Simulating the Impact of Psychologist Prescriptive Authority on Unmet Prescribing Need

Research Objective: There is a shortage of mental health providers in the US, especially those that can prescribe. Five states have attempted to increase access to psychotropic medications by allowing qualified psychologists to prescribe. We sought to simulate the change in unmet mental health prescribing need at the state and national level associated with widespread adoption of a policy granting prescriptive authority to psychologists.

Study Design: We created a Markov simulation model using state-level data on the mental health workforce from the George Washington University Mullan Institute for Health Workforce Equity and state-level psychotropic medication use among those identified as having any mental illness in the 2018-2019 National Survey on Drug Use and Health. First, we estimated need by calculating the current prescribing full-time equivalents (FTEs) available and divided those by the FTE needed to treat the total number of people who currently or might receive medication as part of their treatment. We then estimated the FTEs associated with 10% of psychologists becoming licensed to prescribe, based on evidence from prior states, and re-calculated unmet need. To accommodate uncertainty in our model parameters, we conducted a probabilistic uncertainty analysis using 10,000 Markov replications of the model in which all model parameters with the exception of the number of providers were allowed to vary. The 2.5th and 97.5th percentiles of the Markov replications served as the 95% confidence interval for our base-case estimates. Sensitivity to each parameter was examined using probabilistic one-way sensitivity analyses.

Population Studied: The state and US population with any mental illness.

Principal Findings: Granting prescriptive authority to psychologists may reduce national unmet mental health prescribing need by 4.0% (95% Confidence Interval: [0.7%, 15.0%]), though the impact varied widely by state. Washington, D.C. (21.9% [2.4%, 504.6%]) and Hawaii (10.7% [1.7%, 56.4%] had the highest simulated reductions in unmet need, while North Dakota (0.1% [0.0%, 0.5%] and Wisconsin (0.9% [0.2%, 3.5%) had the lowest. Having a larger percentage of psychologists become licensed to prescribe led to larger reductions in unmet need; however, the extent of this increase varied considerably by state. The variation in the relative reductions was explained primarily by the time per patient (62.7%), the percent of psychologists becoming licensed to prescribe (19.4%), and the direct service time per psychologist (17.6%) and psychiatrist (0.3%).

Conclusions: Prescriptive authority for psychologists appears to be a promising policy lever for reducing unmet need for mental health care. Future research is needed to assess the efficacy and practice patterns of prescribing psychologists to better understand the patient-level outcomes. Implementation research on increasing prescribing psychologist licensure rates may increase the effectiveness of this policy approach.

Implications for Policy or Practice: States seeking to improve access to mental health care should explore granting prescriptive authority to psychologists, especially if their state environment appears to be one in which a relatively large percentage of psychologists would seek licensure.