

Identifying Community-Level Predictors of Depression Hospitalizations

Executive Summary

The goal of this research was to identify rural areas that should be targeted for early adoption of evidence-based depression treatments based on elevated rates of depression related hospitalizations. Using county-level data from the Statewide Inpatient Database, Census, Department of Agriculture, and Area Resource File, predictors of elevated hospitalizations rates were identified using spatial regression models. This investigation demonstrated that: (1) rural counties have lower rates of depression-related hospitalization than urban counties, (2) rurality fails to predict depression-related hospitalization in models that control for community-level demographic, economic and health system risk factors, (3) community-level risk factors explain a respectable ~30% of the variance in depression-related hospitalization rates, and (4) while these risk factors identify high risk areas in the 10 states we studied, they cannot be used to identify high risk areas in other states.

This is the first investigation of potentially preventable mental health hospitalizations in a high quality database that provides systematically coded information on all public and private hospitalizations in 10 states across the country. Merging this database with other national databases allowed us to identify community-level risk factors of unmet need for mental health care that are otherwise subsumed under the umbrella of 'rurality'. We identified counties from 10 states with extremely elevated rates of depression related hospitalizations. These counties should be prioritized for dissemination/implementation of evidence-based treatments for depression using designs that evaluate whether improved depression treatment produces a cost offset for health plans because it reduces expensive hospitalizations.