

## **Preventing Hospitalization in Depressed Rural Patients**

### *Executive Summary*

The purpose of this research was to investigate the substitution of higher cost hospitalization for lower cost outpatient specialty care for depression and the extent to which insurance barriers impact service substitution patterns of outpatient specialty care for depression in rural and urban areas. Specifically, this study explored: (1) whether depressed rural patients were more likely than their urban counterparts to be hospitalized, (2) whether any rural-urban hospitalization differences are reduced in models that control for previous outpatient specialty care, and (3) differences in the prevalence and consequences of insurance barriers for outpatient specialty care in rural and urban patients. We conducted a secondary analysis of the Partners in Care (PIC) and Quality Enhancement by Strategic Teaming (QuEST) project databases to examine the frequency and duration of hospitalizations over two years. A secondary analysis of the QuEST database queried insured depressed patients in specialty care at 12 months about the insurance barriers they faced in continuing specialty care. Our study found that depressed rural patients were hospitalized more than their urban counterparts over two years, with statistically greater hospitalization rates at 6 months and statistically greater length of stays at 12 months. These differential hospitalization rates/lengths were not explained by previous outpatient specialty care treatment, which was comparable for rural and urban patients. Insurance barriers predict reduced use of specialty care in depressed urban patients, but not in depressed rural patients.

Since this is one of the few studies that examines service substitution in rural populations, future studies are needed to determine the generalizability of our findings across geographic areas and time. These studies should seek to clarify the factors that lead to higher frequency and duration of hospitalization for rural patients, such as patient characteristics, provider characteristics, and insurance barriers. Future research should consider developing general medical and/or specialty care interventions that provide evidence-based care to depressed rural patients to determine whether ‘excess’ hospitalizations we observe in rural populations can be sufficiently reduced to pay for the costs of the intervention.