

## Policy Brief

### The Association Between Rural Residence and the Use, Type, and Quality of Depression Care .....

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**Overview** – Despite the potential for rural disparities in the use, type and quality of care, there are no studies which have examined these issues among a nationally representative population of individuals with depression. The purpose of the project was to assess the association between rurality and the use, type (pharmacotherapy versus psychotherapy), and quality of care among individuals in the Medical Expenditure Panel Survey with self-reported depression. Because psychotherapists are less available in rural areas, we expected that individuals with depression in rural areas would be less likely to receive psychotherapy compared to their urban counterparts. To compensate for the lack of psychotherapists in rural areas, we also expected that individuals with depression in rural areas would be more likely to receive pharmacotherapy than individuals with depression in urban areas. We also expected that rural individuals receiving pharmacotherapy or psychotherapy would have lower quality of care than urban individuals due to the lack of mental health specialists in rural areas.

**About the Study** – This study uses data from the 2000 to 2004 Medical Expenditure Panel Survey (MEPS), a nationally representative survey sponsored by the Agency for Healthcare Research and Quality (AHRQ) that is conducted annually. Rurality is defined dichotomously and continuously. The dichotomous definition is based on the Office of Management and Budget’s definition of a Metropolitan

Statistical Area (MSA). Rurality is measured continuously and categorically using the Rural Urban Continuum Codes (RUCCs). In the RUCC classification system, urbanized counties (i.e., population >50,000) are categorized into four groups, based on size of the county’s population. Nonmetropolitan counties (i.e., population <50,000) are categorized into six groups, based on total urban population of the county and whether it is adjacent or nonadjacent to a metropolitan county.

#### Key Findings .....

- There were no significant rural-urban differences in receipt of any formal depression treatment.
- Rural residence was associated with significantly higher odds of receiving pharmacotherapy (MSA: OR= 1.16, p=0.04 and RUCC: OR=1.04, p=0.05),
- There were no significant rural-urban differences in the adequacy of pharmacotherapy.
- Rural residence was associated with significantly lower odds of receiving psychotherapy (MSA: OR=0.6, p<0.01 and RUCC: OR=0.91, p<0.001).
- Rural residence was associated with significantly lower odds of receiving minimally adequate psychotherapy (MSA: OR=0.5, p<0.01 and RUCC: OR=0.92, p=0.02).

## Implications

Despite the limitations, the study was conducted in a high quality database and produced the first nationally representative data about rural disparities in the use, type and quality of depression care. Results indicated that rural individuals are more reliant on pharmacotherapy than psychotherapy. If receipt of pharmacotherapy is primarily due to a lack of psychotherapists in rural areas rather than a preference for antidepressants, it may be that depression outcomes are suboptimal in rural areas.

## Limitations

We cite several limitations to the study: First, the identification of individuals with depression was based on patient self-report. It is possible that some patients with depression were not identified as having depression and that some patients identified as having depression did not meet diagnostic criteria for depression. With respect to adequacy of treatment, another limitation is that the type of psychotherapy was not known and because only treatments that were provided during the calendar year were included in the dataset, some individuals may have initiated a treatment regimen before the beginning of the calendar year and some may have continued treatment after the end of the calendar year.

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