



Changes in Health Care Financing & Organization (HCFO)

# findings brief

## Geographic Variation in Alcohol, Drug Abuse, and Mental Health Services Utilization: What is the Role of Physician Practice Patterns?

### key findings

- The researchers found that psychiatrists, in comparison with non-psychiatrist physicians, had a lower assessment of their overall ability to provide patients with the quality of care they believe necessary.
- The findings also indicate that patients' personal characteristics may explain greater variation in treatment and assessment of ADM conditions than geographic variation.

Throughout the course of a single year, 58 million people, or about one out of every four adults, experience a diagnosable mental illness or condition.<sup>1</sup> Yet according to survey results, only one in three adults actually receive adequate treatment for their condition.<sup>2</sup> These results come almost 10 years after the passage of the Mental Health Parity Act of 1996 which sought to create parity between physical health and mental health services. Despite the creation of new public policies, survey results show that assessment and treatment of alcohol, drug, and mental health (ADM) disorders has not kept up with technological advances and growing need for utilization among adults.

The Dartmouth Atlas of Health Care has been instrumental in understanding geographic variation in the use of health services. In the face of the growing need for ADM services, questions about geographic variation in the use and quality of ADM care are arising. The Dartmouth Atlas of Health

Care attributes a great deal of geographic variation to “provider quality defects.”<sup>3</sup> While the Dartmouth Atlas findings for geographic variation have been groundbreaking, the research on which it is based has been scarce and not specifically focused on quality of care for ADM assessment and treatment or how geography, providers, and personal characteristics can each affect quality.

### Background

In order to examine geographic variation and its relationship to quality, HCFO funded research in 2003 to address provider assessment of quality and geographic variations. The research team included co-principal investigators Mark Edlund, M.D., Ph.D. assistant professor at the University of Arkansas for Medical Sciences, Thomas R. Belin, Ph.D, professor at the University of California, Los Angeles, Lingqi Tang, Ph.D. principal statistician at the UCLA/NPI Health Services Research Center, and Bruce E. Landon, M.D., M.B.A., associate professor



Robert Wood Johnson Foundation

Changes in Healthcare Financing and Organization is a national program of the Robert Wood Johnson Foundation administered by AcademyHealth.



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of medicine and health care policy at the Harvard Medical School. The team worked over a 12-month period analyzing two large community surveys, previously funded by the Robert Wood Johnson Foundation.

The researchers focused on understanding if physician practice patterns, such as physician autonomy or ability to make referrals, two factors which ultimately affect physician self-assessment of quality of care they are able to deliver,<sup>4</sup> had any link to geographic variation in diagnosis and treatment of ADM disorders. “The primary objective of our study is to better understand the relationship between physician practice patterns and the likelihood of evaluation, treatment, and guideline-concordant care for alcohol, drug, and mental disorders,” Mark Edlund said. “With enhanced understanding of this relationship, we will be in a better position to implement policies that meet the treatment needs of adults with alcohol, drug, or mental health disorders.”

### Project/Research

The study focused on two main research questions addressing how community factors might influence the quality of care and provider assessment of quality of care. To assess how community factors affected the quality of specialty psychiatric care, as evaluated by psychiatrists, the researchers utilized the Community Tracking Study (CTS). The CTS is a national survey of physicians, that enabled the researchers to compare assessments by psychiatrists and non-psychiatrist physicians of their ability to deliver quality care to their patients. The researchers focused on whether the physician assessments were influenced by community factors, such as the ease obtaining inpatient services for patients, inpatient length of stay, and the percentage of patients in managed care plans.

The second research question focused on the source of geographic variation in the assessment and treatment of ADM conditions, particularly the extent to which variation in personal characteristics and health status of patients affects assessment and treatment.

In order to study these variations, the researchers analyzed data from the 1997/1998 Health-care for Communities (HCC) survey, which

is the mental health supplement to the CTS household survey. The HCC data were crucial for the researchers because it tracked information about people’s different ADM disorders, the status of their physical health, and socio-demographic characteristics.<sup>5</sup> This portion of the study looked at 60 different geographic areas and adjusted for ADM disorders, physical health, and socioeconomic characteristics. From this information, the researchers were able to estimate the amount of geographic and person-level variation in assessment and treatment for ADM conditions.

### Findings

In general, the findings show that psychiatrists had a lower assessment of their ability to provide quality care to their patients than general physicians. The researchers report that although managed care involvement was associated with lower quality of care assessments for all physicians, the effects were even stronger for psychiatrists. These findings suggest that while psychiatrists do have lower assessments of their ability to provide quality care, this may stem from the involvement of managed care, which can make obtaining some services, such as inpatient care, more difficult.

The researchers found geographic variation in assessment and treatment to be statistically significant but small. Further, less geographic variation was seen when the analysis controlled for physical health, different ADM disorders, and socioeconomic status. These results suggest that variation in assessment and treatment may have less to do with geography and more to do with personal characteristics and behaviors of patients.

### Policy Implications

Currently both the House and the Senate have taken a renewed interest in mental health parity legislation that seeks to expand parity beyond the Mental Health Parity Act of 1996. The findings from this study provide timely insight for policymakers in addressing ADM assessment and treatment options. Overall, psychiatrists tend to have a lower self-assessment of their ability to provide their patients with quality care. Much of this assessment centers on the psychiatrists

ability to provide or access inpatient treatment options for their patients. With the emergence of managed care, psychiatrists’ assessment of quality care has dropped even further. These measures of quality by psychiatrists suggest that if policies aim to create a large reduction in inpatient services, this could have important, negative, implications on quality for people receiving all types of ADM services.

The study also examined the extent to which differences in assessment and treatment could be explained by community factors, versus individual factors. Much of the past work in the field of geographic variation has shown that variations in assessment and treatment can indicate differences in quality, while this work suggests that quality cannot simply be improved by reducing these variations. Edlund states that, “there may be only modest to moderate potential for improving quality by reducing geographic variation.”<sup>6</sup> This study points to the interconnectedness of geography and personal traits as a precursor to quality. The findings show that in addition to having much more to learn about the assessment and treatment of ADM conditions, policies for parity between mental and physical health services cannot simply focus on overcoming geographic variation without understanding how personal factors affect quality.

### About the Author

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### Endnotes

1. The Commonwealth Fund. “Mental Health Care: Adequacy Treatment for Adults.” December 2006. [http://www.commonwealthfund.org/snapshotscharts/snapshotscharts\\_show.htm?doc\\_id=376500](http://www.commonwealthfund.org/snapshotscharts/snapshotscharts_show.htm?doc_id=376500). Accessed October 29, 2007.
2. Ibid.
3. The Dartmouth Atlas of Health Care. “Research Agenda and Findings.” <http://www.dartmouthatlas.org/agenda.shtm>. Accessed July 13, 2007.
4. Edlund, M. et al. “Comparison of Psychiatrists’ and Other Physicians’ Assessments of Their Ability to Deliver High-Quality Care.” *Psychiatric Services*, Vol. 56, No. 3, March 2005, pp. 308-14.
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6. Ibid.