

Geographic Disparities in Access to Mental Health Services Among a National Sample of Children in the Child Welfare System

Ramesh Raghavan MD PhD^{1,2}, Gyanesh Lama MSW¹, Barton Hamilton PhD³

¹Brown School of Social Work; ²Department of Psychiatry, School of Medicine ³Olin School of Business and Department of Economics; Washington University in St. Louis

CNISS, September 30, 2008

Abstract

Purpose: Since the 1970s, it has become increasingly clear that geography plays a significant role in determining individuals' receipt of needed health services. However, this work has been conducted on populations served largely by the private sector. The extent to which geographic disparities exist among child welfare populations that present to public agencies with significant mental health needs, and the factors that contribute to such disparities are currently unknown in this population. We used data from a national sample of children in child welfare to quantify the magnitude and predictors of geographic disparities in use of mental health services among these children.

Methods: We used a merged data set containing information from 8 strata (states) of the National Survey of Child and Adolescent Well-Being (NSCAW), the nation's first national study of children coming into contact with child welfare agencies; the Caring for Children in Child Welfare Study, containing information on county-level policy variables; and the 1999 Area Resource File, containing information on county-level health resources. We aggregated children (sample N=3736) up to their state of residence, and used weights to obtain weighted mean unadjusted probabilities of ambulatory mental health service and psychotropic medication use separately for each stratum. We then estimated weighted logistic regression models using child (mental health need as measured by the Child Behavior Check List, sociodemographic characteristics, abuse history, placement, insurance status), caregiver (education), and caseworker (experience) variables. We then added health resources variables (child psychiatrist, pediatrician, and family physician ratios); and health system variables (Medicaid managed care penetration, and behavioral carve-outs). From each model we obtained the weighted mean adjusted probabilities of mental health service and medication use. We used these probabilities to construct a GIS map to graphically represent changes in, and the statistical significance of, probability of service use conditional upon child characteristics, availability of health resources, and effects of Medicaid policy.

Results: Controlling for need and other child, caregiver, and caseworker covariates, children in our sample displayed statistically significant variation in probabilities of use of ambulatory services, ranging between 0.15 (in IL and MI) and 0.35 (in PA); and in use of psychotropic medications, ranging between 0.11 (in CA and NY) to 0.25 (in TX). Controlling for health resources and Medicaid managed care policies exacerbated the range of differences between children residing in different states. Probabilities of use of

ambulatory services now varied between 0.09 (NY) and 0.35 (MI and OH); probabilities of use of psychotropic medications varied between 0.07 (NY) and 0.4 (FL and TX).

Implications: Children in the child welfare system display over 2-fold variations in probabilities of use of ambulatory mental health services, and nearly 6-fold variations in psychotropic medication use. Such use can be explained neither by need, nor by individual, provider supply, or health system variables. Attention to the intrinsic practice environments of children in child welfare agencies is necessary to determine if these variations are reflective of variations in quality of care available to these children.

Words: 489