

Brown, Sarah K., Psychiatric Emergency Services Utilization in Tarrant County, Texas, 2000 to 2007. Doctor of Public Health (Clinical Research), August 2009, 136 pp., 21 tables, bibliography, 71 titles.

OBJECTIVE: This study explores the utilization of psychiatric emergency services in Tarrant County Texas, which has a dedicated Psychiatric Emergency Center (PEC).

There were three specific research questions: 1) Who uses the PEC and how do they use it? 2) How are clinical and socio-demographic characteristics related to single and repeat visits? 3) Is admission status useful in defining distinct PEC user groups? This research is a novel approach to analyzing process characteristics of the PEC using available data and statistical techniques that maximize the potential of these data.

METHODS: This study used existing patient data from the PEC information system. Data included eight years of consecutive admissions, with over 42,000 patient records and 79,000 admission events. This study employed statistical methods suitable for this type of data, and approaches unique to each of the three research questions, including univariate analysis of group differences, and binary and multinomial logistic regressions to examine relationships between PEC utilization groups and multiple independent variables.

RESULTS: Increased PEC use is not a direct function of county population growth, and admission rates are not uniform across patients. Generally, repeat users were younger, admitted voluntarily, and had diagnoses of schizophrenia or bipolar disorder rather than depression. Examining repeat PEC users as two distinct groups, occasional users and

frequent users, detected significant differences between them. The findings also supported the dual role of the PEC in serving both voluntary and involuntary patients. Patients admitted involuntarily were more likely to present with suicidality and aggression.

CONCLUSIONS: A small proportion of patients utilize a disproportionate amount of resources and the PEC serves patients with fundamentally different treatment needs. This analysis of existing data has elucidated factors critical in planning and sustaining coordinated and accessible psychiatric services for Tarrant County residents.