

Latino Research Program Project

Project 4: Disparities

J.J. Escarce and T.G. McGuire, "Methods for Using Medicare Data to Compare Procedure Rates Among Asians, Blacks, Hispanics, Native Americans, and Whites," Health Services Research 38:5 (October, 2003), 1303-1317.

1. Objective(s)

Compare rates for all above-mentioned groups and assess how small sample size and misreporting affect the validity of comparisons. Compare with a correction for misreporting.

2. Methods

Medicare data from 1997 are used to calculate age and sex-adjusted rates. We develop a method to derive estimates of actual rates from reported rates when rates of misreporting are known.

3. Main Findings

Sample sizes are sufficient to find significant ethnic and racial differences for most procedures studied. Blacks' rates tend to be lower than whites. Asian and Hispanic rates also tend to be lower than whites', and about the same as blacks'. Sample sizes for Native Americans are very small (about .1 percent of the data); nonetheless, some significant differences from whites can still be identified. Biases in rates due to misreporting are small (less than 10 percent) for blacks, Hispanics, and whites. Biases in rates for Asians and Native Americans are greater, and exceed 20 percent for some procedures.

4. Significance for Policymakers, Communities, Advocacy Groups or Health Service Providers

Sample sizes for Asians, blacks, and Hispanics are generally adequate to permit meaningful comparisons with whites. Implementing a correction for misreporting makes Medicare data useful for all ethnic groups. Misreporting race/ethnicity and small sample

sizes do not materially limit the usefulness of Medicare data for comparing rates among racial and ethnic groups.

M. Alegria and T. McGuire, "Rethinking a Universal Framework in the Psychiatric Symptom-Disorder Relationship," Journal of Health and Social Behavior v 44 (September, 2003), 257-274.

1. Objective(s)

Test for whether the symptom-disease relationship is the same for various population subgroups for several psychiatric disorders.

2. Methods

Data from the National Comorbidity Survey are used. Conditional probabilities of disorders and symptoms, the elements feeding into clinical decision-making, are tested for equivalence across various racial/ethnic, educational, income, and gender groups.

3. Main Findings

Numerous significant differences among the groups are found.

4. Significance for Policymakers, Communities, Advocacy Groups or Health Service Providers

These findings should encourage testing relativistic (as opposed to universalistic) frameworks in diagnostic nosology as a step to improve clinical decision-making and reduce disparities in mental health services.

A. Balsa, T. McGuire and L. Meredith, "Testing for Statistical Discrimination in Health Care," Health Services Research 40:1 (February, 2005), 227-252.

1. Objective(s)

Test for the presence of statistical discrimination in data on hypertension, depression and diabetes treatment.

2. Methods

Data from the RAND Medical Outcome are used to implement models. A conventional disparities regression is estimated and compared with models that incorporate information about population values for underlying prevalence rates and proxies for miscommunication.

3. Main Findings

We find evidence consistent with statistical discrimination for diagnoses of hypertension, diabetes, and depression. In particular, we find that if clinicians act like Bayesians, plausible priors held by the physician about the prevalence of the disease across racial groups could account for racial differences in the diagnosis of hypertension and diabetes. In the case of depression, we find evidence that race affects decisions through differences in communication patterns between doctors and white and minority patients.

4. Significance for Policymakers, Communities, Advocacy Groups or Health Service Providers

To contend effectively with inequities in health care, it is necessary to understand the mechanisms behind the problem. Discrimination stemming from prejudice is of a very different character than discrimination stemming from the application of rules of conditional probability as a response to clinical uncertainty. While in the former case, doctors are not acting in the best interest of their patients, in the latter, they are doing the best they can, given the information available. If miscommunication is the culprit, then efforts should be aimed at reducing disparities in the ways in which doctors communicate with patients.