



# In the Literature

## SEPARATE AND UNEQUAL: RACIAL SEGREGATION AND DISPARITIES IN QUALITY ACROSS U.S. NURSING HOMES

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In the last several years, studies have begun to acknowledge the effects of racial segregation on medical treatment. Researchers have shown that blacks are more likely than whites to seek care at hospitals with higher surgical mortality rates, receive maternity services at hospitals with higher risk-adjusted neonatal mortality rates, and receive primary care from physicians who are less well trained than those who mainly treat white patients.

Now, a new Commonwealth Fund-supported study shows that poorer quality of care in nursing homes is linked to racial segregation. Black residents, the authors say, are more likely than whites to live in poor-quality nursing homes marked by significant deficiencies on inspection reports, substantial staffing shortages, and financial vulnerability. The problem seems to be most acute in the Midwest.

In "[Separate and Unequal: Racial Segregation and Disparities in Quality Across U.S. Nursing Homes](#)," (*Health Affairs*, Sept./Oct. 2007), Temple University's David Barton Smith, Ph.D., and his colleagues rank metropolitan statistical areas (MSAs) on disparities between blacks and whites in access to quality nursing homes. Ten of the 20 nursing homes with the greatest disparities in quality of care, they found, were located in just four states: Wisconsin, Indiana, Ohio, and Michigan.

### How Disparities Were Measured

The authors used 2000 data from the Centers for Medicare and Medicaid Services and the nursing home Minimum

Data Set to measure the quality of nursing homes and determine the facilities' racial composition. To gauge levels of segregation and racial disparities in quality, they relied on a commonly used index that yields the combined percentage of nursing home residents of both races who would need to be relocated for there to be an equal proportion of blacks and whites. The so-called dissimilarity index can range from 0.00 to 1.00, with a score of 1.00 indicating total segregation. The researchers looked at inspection deficiencies, staffing issues, and financial viability at 7,196 freestanding (i.e., not hospital-based) nursing homes and their 837,810 residents, representing about 50 percent of homes and 57 percent of residents in the United States.

### Highest Segregation in Midwest

Nationally, the dissimilarity index in 2000 was 0.65, with not-for-profit homes more segregated than for-profit ones. Regionally, nursing homes were most segregated in the Midwest and least segregated in the South. Nursing homes in the Cleveland metropolitan area were the most segregated, followed closely by Gary, Ind.; Milwaukee; Detroit; Indianapolis; Chicago; St. Louis; Harrisburg, Pa.; Toledo, Ohio; and Cincinnati.

Blacks make up about 15 percent of all U.S. nursing home residents, yet around 60 percent of black residents were concentrated in less than 10 percent of those homes, the researchers found. These homes, they say, tend to be in the bottom quartile with respect to quality.

Black nursing home residents were 1.41 times as likely as whites to be in facilities cited with a deficiency causing actual harm or immediate jeopardy to residents, and 1.7 times as likely to be in a nursing home that was subsequently terminated from Medicare and Medicaid participation because of poor quality. In addition, blacks were 1.12 times as likely as whites to reside in a nursing home that was greatly understaffed, and 2.64 times as likely to be in a facility housing predominantly Medicaid residents.

“Blacks and whites aren’t getting different care in the same nursing homes. They’re getting different care because they live in different nursing homes,” said Vincent Mor, Ph.D., the study’s lead investigator who chairs the Department of Community Health at Brown University.

According to the researchers, there is a relatively high correlation between nursing home and residential segregation. Nursing homes may be merely reflecting the racial composition of their communities, they say.

## Policy Recommendations

To ensure access to high-quality health care for all nursing home residents, the researchers recommend the following policy changes:

- Improve payment structures for nursing homes with a high proportion of Medicaid residents;
- Close the gap between the amount paid to nursing homes by Medicaid and private payers;
- Ensure broader regional planning in response to concerns about racial disparities; and
- Monitor admissions practices to ensure they meet the requirements of the Civil Rights Act.

“[D]isparities in treatment will persist even in the absence of any disparities of treatment within nursing homes because of the differences in the homes providing care to blacks and whites,” the researchers conclude. “We contend that the same basic message holds, in part, for the health system as a whole.”

Top 10 MSAs Ranked by Overall Black-White Disparities

| Metropolitan Statistical Area   | Disparities <sup>1</sup> | Segregation <sup>2</sup> |
|---------------------------------|--------------------------|--------------------------|
| Milwaukee-Waukesha, WI          | 78                       | 0.74                     |
| St. Louis, MO-IL                | 76                       | 0.70                     |
| Baltimore, MD                   | 71                       | 0.58                     |
| Detroit, MI                     | 71                       | 0.74                     |
| Indianapolis, IN                | 70                       | 0.72                     |
| South Bend, IN                  | 67                       | 0.53                     |
| Harrisburg-Lebanon-Carlisle, PA | 65                       | 0.70                     |
| Hartford, CT                    | 64                       | 0.64                     |
| Houston, TX                     | 64                       | 0.56                     |
| West Palm Beach-Boca Raton, FL  | 64                       | 0.62                     |

<sup>1</sup> A higher overall Disparity Rank Score indicates greater disparity between blacks and whites in access to high-quality nursing homes in the MSA.

<sup>2</sup> Degree of segregation (Dissimilarity Index) among black and white U.S. nursing home residents, 2000.

Adapted from D. B. Smith, Z. Feng, M. L. Fennell et al, “Separate and Unequal: Racial Segregation and Disparities in Quality Across U.S. Nursing Homes,” *Health Affairs*, Sept./Oct. 2007 26(5): 1448–58.