Creating A State Minority Health Policy Report Card

An evaluation of states' capacity to address racial and ethnic health disparities.

by Amal N. Trivedi, Brian Gibbs, Laurie Nsiah-Jefferson, John Z. Ayanian, and Deborah Prothrow-Stith

ABSTRACT: A state minority health policy report card may provide an important tool for evaluating and promoting state policies to reduce health disparities. This study develops criteria that can form the basis of such a state report card and assesses the performance of all fifty states on these measures. The results indicate wide variation among states, with geographic region being a significant predictor of performance on all four measures. Future research should be conducted on other predictors of state variation in minority health policy and connections between state policy and health outcomes for minorities.

Despite substantial advances in the overall health of Americans, health disparities persist among U.S. racial and ethnic groups.[1] Healthy People 2010, which sets the comprehensive health policy agenda of the United States, has placed the elimination of these disparities at the forefront of the country's health priorities.[2] Federal and state governments have a vital role to play in achieving this goal.

The past several decades have seen an increasing transfer of social programs from federal to state governments. Examples of this devolution of authority, also known as "the New Federalism," include the modification of Temporary Assistance for Needy Families (TANF) and the 1996 Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA).[3] Although the emergence of health disparities as a major health policy issue has been driven by federal initiatives, continued devolution may create opportunities for states to take leading roles in eliminating disparities. Indeed, many national health interventions, including drug coverage for seniors and expansions of health insurance for low-income children, have been informed by state innovation and experimentation.[4] In such a po-

Amal Trivedi (trivedi@hcp.med.harvard.edu) is a fellow in the Division of General Internal Medicine, Brigham and Women's Hospital, and the Department of Health Care Policy, Harvard Medical School, in Boston, Massachusetts; John Ayanian is an associate professor in those departments. Brian Gibbs is an instructor in public health practice at the Harvard School of Public Health, where Deborah Prothrow-Stith is a professor. Laurie Nsiah-Jefferson is a W.K. Kellogg Fellow in Health Policy Research at the Heller School, Brandeis University, in Waltham, Massachusetts.

DOI 10.1377/hlthaff.24.2.388 ©2005 Project HOPE–The People-to-People Health Foundation, Inc.

litical environment, it is critical to analyze state variations in minority health policy and provide feedback to stakeholders as a way of improving minority health.

Several researchers have evaluated the use of public reporting to improve accountability and performance in health.[5] Although prior experience with public reporting in health care has been mixed, the rationale for its ongoing use is compelling: that report cards provide transparent public information and a clear incentive for improved performance. Previous comparative state reports on health policy issues have been released.[6] However, few studies have reported and analyzed the minority health policy efforts and performance of all fifty states.

In this study we propose criteria for a state report card in minority health policy. We then use these criteria to analyze capacity, infrastructure, and activity in addressing health disparities for all fifty states. Finally, we assess whether region of the country, per capita government spending, or the percentage of minorities within the state are correlated with improved performance on the report card measures.

Study Data And Methods

We conducted a structured review of the evidence on state minority health policy efforts using the Ovid and Lexis-Nexis databases and key-informant interviews with a range of leaders in health policy. Informants were selected based on their experience in minority health policy within government, universities, or community-based organizations. To determine measures for the report card, we asked key informants to propose criteria that would evaluate state policy in addressing health disparities. The goal was to evaluate states based not on disparities in health outcomes, but rather on more proximate measures of effort, leadership, capacity, and infrastructure that would be sensitive to direct policy intervention. We included measures that were mentioned by multiple informants and supported by previous literature.

For the first measure, which assessed insurance coverage disparities, we used data from the 2001 and 2002 Current Population Surveys to examine states' nonelderly, low-income populations. The elderly were excluded since they usually receive health insurance via the federal Medicare program. We focused exclusively on people with incomes below 200 percent of the federal poverty level, since insurance coverage within this group is highly correlated with state Medicaid policy; we also used this income level as a means of controlling for socioeconomic status.[7] Within this group, the following "Insurance Ratio" was used to compare rates of uninsurance for minorities relative to whites: the percentage of the state's low-income nonelderly minorities who are uninsured, divided by the percentage of the state's low-income nonelderly whites who are uninsured. We defined minorities as African American, Hispanic, Asian American/Pacific Islander, and American Indian/Alaska Native.

For the second measure, we used data from the 2000 U.S. census and the AMA Physician Masterfile, a widely used data source on physician diversity, to analyze the racial and ethnic composition of the physician workforce in all fifty states.[8] We created a "Diversity Ratio" to measure the degree to which a state's physician composition reflects it demographic composition. Underrepresented minority (URM) physicians were defined as African American, Native American, and Latino, which is consistent with prior literature and the current definition of such physicians as stated by the Association of American Medical Colleges.[9] The "Diversity Ratio" was defined as follows: total state URM population/number of state URM physicians, divided by the total state white population/number of state white physicians. This ratio provides an estimate for the degree to which underrepresented minority physicians in the state must be raised to reach proportional representation equal to that of white physicians in that state.

For the third measure, we developed a ten-item instrument and used it to conduct a telephone survey of all thirty-four state offices of minority health recognized by the federal Office of Minority Health as of December 2002.[10] The survey covered funding, staffing, scope of activities, and history of the office.

For the fourth measure, we obtained the most recently published state vital statistics reports from all fifty states and analyzed how each state reported its mortality data by race and ethnicity. The publication dates for the reports ranged from 1998 to 2001.

Finally, we conducted secondary analyses of the data to explore three potential predictors of state performance in minority health—region of the country, per capita government spending, and proportion of minorities within the state. Data on these predictors were obtained from the 2000 U.S. census.

Study Results

We selected four key variables with which to analyze state performance and activity in minority health (Exhibit 1). The variables relate to insurance coverage for low-income minorities, the racial and ethnic composition of the physician workforce, the state governmental offices that promote minority health, and the race/ethnicity categories used to report state vital statistics data.

■ **Insurance gap.** Although eleven states had minimal differences between minorities and whites in the proportion of low-income nonelderly people who are uninsured, thirteen states had a 50–100 percent difference in that proportion. The data also reveal a geographic clustering; with the exception of Maryland and Virginia, the states with the largest disparities were concentrated in the West and Mountain regions. Other than New Hampshire, states with minimal differences in the rates of uninsurance for minorities compared with whites were clustered in the South and Midwest.

■ **Physician workforce diversity.** Comparisons of physician diversity demonstrate substantial state variations in the composition of the physician workforce. Al-

EXHIBIT 1
Four Elements Of A State Minority Health Policy Report Card, And Assessment Of States' Compliance With Them, 2000–2002

State	Insurance gap[a]	Diversity ratio[b]	Has minority health office	Number of race/ethnicity vital statistics categories
Alabama	0.97	4.27	Yes	1
Alaska	1.14	6.93	No	4
Arizona	1.52	5.70	No	5
Arkansas	1.05	4.29	Yes	2
California	1.53	5.60	Yes	5
Colorado	1.54	6.49	No	5
Connecticut	1.15	3.47	No	3
Delaware	0.74	2.47	Yes	5
Florida	1.33	1.34	Yes	5
Georgia	1.19	2.96	Yes	2
Hawaii	1.39	6.51	No	3
Idaho	2.13	6.38	No	5
Illinois	1.47	11.53	No	3
Indiana	1.02	2.25	Yes	3
Iowa	1.15	1.61	No	5
Kansas	1.27	2.34	No	2
Kentucky	1.33	2.30	No	2
Louisiana	1.01	3.69	No	2
Maine	–[c]	0.94	No	4
Maryland	1.64	2.64	Yes	4
Massachusetts	1.37	2.34	Yes	4
Michigan	1.08	2.04	Yes	2
Minnesota	1.60	1.91	Yes	5
Mississippi	0.98	6.71	Yes	1
Missouri	0.97	2.36	Yes	2
Montana	1.52	4.00	No	2
Nebraska	1.33	2.80	Yes	5
Nevada	1.48	3.93	No	5
New Hampshire	0.85	1.09	Yes	5
New Jersey	1.48	5.63	Yes	4
New Mexico	1.11	4.66	Yes	4
New York	1.35	3.28	Yes	3
North Carolina	1.29	4.56	Yes	5
North Dakota	1.91	1.44	No	5
Ohio	0.96	2.01	Yes	5
Oklahoma	1.12	4.49	Yes	3
Oregon	1.84	4.69	Yes	5
Pennsylvania	1.25	2.54	No	4
Rhode Island	1.15	2.70	Yes	5
South Carolina	1.19	6.87	Yes	1
South Dakota	2.00	6.43	No	2
Tennessee	1.23	2.73	Yes	2
Texas	1.48	3.15	Yes	3
Utah	1.66	6.47	No	5
Vermont	–[c]	1.35	Yes	4

EXHIBIT 1
Four Elements Of A State Minority Health Policy Report Card, And Assessment Of States' Compliance With Them, 2000–2002 (cont.)

State	Insurance gap[a]	Diversity ratio[b]	Has minority health office	Number of race/ ethnicity vital statistics categories
Virginia	1.52	3.21	Yes	5
Washington	1.39	3.94	No	5
West Virginia	0.75	0.91	Yes	2
Wisconsin	1.28	3.09	Yes	3
Wyoming	1.57	6.14	No	4

SOURCES: 2001 and 2002 Current Population Surveys; 2000 U.S. census; American Medical Association (AMA) Physician Masterfile; Office of Minority Health; and state vital statistics reports.
[a] Relative risk of uninsurance for minorities compared to whites among nonelderly poor. For example, a ratio of 1.5 would indicate that the minority population is 50 percent more likely than the white population to be uninsured.
[b] Factor by which underrepresented minority physicians must be increased to reach population parity with whites.
[c] Not available.

though a few states had a proportion of underrepresented minority physicians that reflected their demographic composition, eighteen states would need to raise their number of such physicians by a factor of 4.5–11.5 to reach proportional representation comparable to white physicians. There was clustering of low-diversity states in the West region. New Jersey, Illinois, Mississippi, North Carolina, and South Carolina also had low proportional representation of minority physicians.

■ **Offices of minority health.** Thirty-four states were identified by the federal government as having a dedicated Office of Minority Health. Of these states, Arizona, Utah, Connecticut, and Hawaii recently discontinued the office. Twenty-eight of the remaining thirty (90.3 percent) participated in the survey. Twenty-two of the surveyed offices were established more than five years ago. Indeed, the total number of offices has decreased during the past two years, as two have been created and four have been discontinued.

State minority health offices have tremendous variations in the financial and human resources allocated to them. For example, California, which has a minority population of more than seventeen million, has an Office of Minority Health budget of $275,000, or 1.5 cents per minority California resident. In contrast, Minnesota, a state with a minority population of approximately 500,000, allocates $9.5 million to its Office of Minority Health. This per capita funding ratio is 1,200 times greater than California's. Also, although eleven state offices have six or more full-time-equivalent (FTE) employees, ten have only one or two FTE staffers. Two-thirds have no legislative mandate.

There was little variation, however, in the stated scope of activities for the minority health offices. Twenty-five respondents (89 percent) indicated that their offices conducted four or more of the following activities: providing information to the public about minority health issues, building community partnerships to

identify and solve problems, developing policies and programs to advance minority health, collecting or reporting data on the health status of minority populations, building a diverse and culturally competent health professions workforce, and evaluating the effectiveness of existing health programs for minorities.

■ **Detailed race and ethnicity vital statistics collection.** Federal health statistics data are reported using one ethnicity and five race categories stipulated by Directive 15 of the Office of Management and Budget (OMB).[11] However, nearly half of the states report mortality data using three or fewer race or ethnicity categories. Nearly 30 percent report mortality data using a "white-other," "black-white," or "black-white-other" racial breakdown. For example, Mississippi's vital statistics report from 2001 describes the reporting of its race/ethnicity data as follows:

> The two categories for race…are white and non-white. White includes such groups as Caucasian, Anglo-American, Canadian, Cuban, French, Greek, Hispanic, Latin-American, Mexican, Puerto-Rican, Swedish, etc. Non-white includes such groups as Black, Afro-American, American Indian, Chinese, Japanese, Hawaiian, Filipino, and all other groups not considered as white.[12]

Of note, none of the fifty states reports data using the six specific categories outlined by the OMB.

As depicted in Exhibit 1, many of the states with the most detailed vital statistics reporting were clustered in the West region, a finding that is unexpected given the previous three measures. States with the least detailed data collection were concentrated in the South.

■ **Predictors of performance.** Region of the country was a significant predictor of performance on all four report card measures, a striking finding given the small sample size of fifty (Exhibit 2). Western states had larger insurance disparities and less diverse physician workforces and were less likely to have an Office of Minority Health than the national average; states in the West region did report more race/ethnicity categories in their vital statistics reports than the national average. States in the South had significantly fewer insurance disparities and collected data in fewer vital statistics categories than the other states.

We did not find evidence of an association between performance and state fiscal capacity. Demographic composition was not associated with three of the four minority health measures. We did find, however, a statistically significant inverse relationship between the percentage of minorities within a state and the diversity of the physician workforce. In other words, states with the highest proportion of minorities had physician workforces that were the least reflective of their demographic composition.

Discussion

Achieving equity in health is a major challenge facing the United States, and states will play a vital role in meeting this challenge. Since the causes of health disparities are multifactorial, the interventions designed to eliminate these disparities are likely to require diverse strategies and approaches. This paper analyzes

EXHIBIT 2
Predictors Of State Performance In Reducing Racial/Ethnic Disparities In Health Care, 2000–2002

Predictor	Uninsurance gap	Diversity ratio	Percent of states with a minority health office	Number of race/ ethnicity vital statistics categories
Region				
Northeast	1.22	2.59	73	4.09
South	1.17	3.68	86	2.57
Midwest	1.33	3.32	58	3.50
West	1.52	5.50	23	4.38
	$p = .02$[a]	$p < .001$[a]	$p = .008$[a]	$p = .008$[a]
Per capita state government spending				
Less than $3,550	1.31	3.58	67	3.50
$3,550–$4,100	1.31	4.60	61	3.23
$4,100–$4,800	1.36	3.16	46	3.62
More than $4,800	1.28	3.95	67	4.08
P value for trend	$p = .85$[b]	$p = .85$[b]	$p = .35$[c]	$p = .80$[d]
Percent minority population within state				
<11%	1.45	2.89	43	3.79
11–19%	1.26	3.03	67	3.67
20–33%	1.25	5.11	58	3.75
>33%	1.31	4.42	75	3.17
P value for trend	$p = .72$[b]	$p < .001$[b,e]	$p = .27$[c]	$p = .50$[d]

SOURCES: 2001 and 2002 Current Population Surveys; 2000 U.S. census; American Medical Association (AMA) Physician Masterfile; Office of Minority Health; and state vital statistics reports.
NOTE: For explanation of uninsurance gap and diversity ratio, see Exhibit 1.
[a] Kruskal-Wallis test.
[b] Spearman correlation.
[c] Logistic regression.
[d] Ordinal logistic regression.
[e] Spearman correlation equals –.50. No other Spearman correlation was significant at the .05 level.

state performance on four broad measures that may be associated with future reductions in health disparities: equity in insurance coverage between whites and minorities, establishment of a diverse health professions workforce, collection of health data with detailed race/ethnicity categories, and creation of specific governmental institutions dedicated to reducing disparities.

In selecting measures for the report card, we emphasized those measures that have been shown in previous literature to affect health status or that have been recommended by leading authorities in health policy. For example, having health insurance has been shown to be associated with increased use of health services and improved health outcomes.[13] The rationale for increasing physician diversity is also compelling. We know, for example, that minority physicians are more likely to work in underserved areas and that patients may have increased satisfaction when treated by physicians of their same race or ethnicity.[14]

The creation of the federal Office of Minority Health was a major policy recommendation by the 1985 Heckler Report on black and minority health.[15] Its stated goal was to "[improve] data collection[and]…outreach programs and [increase]

representation of blacks and other minorities in health professions."[16] The rationale for its creation was to provide an institutional framework within government to provide a continuing focus on minority health issues.

The federal government has established standards for the collection of health data using detailed race and ethnicity categories for more than two decades. Congress has passed several laws affirming the collection of race/ethnicity data within the context of health initiatives.[17] Data that are not collected using these categories are of limited use to policymakers who want to track the health of minorities.

We therefore believe that the four report card measures, while not comprehensive, do reflect important aspects of minority health policy. Indeed, recent health disparities legislation introduced in the U.S. Senate (S. 2091) included key provisions to target priority populations for enrollment in Medicaid and the State Children's Health Insurance Program (SCHIP), increase the diversity of health professions, make permanent the federal Office of Minority Health, and expand health data collection.

The data clearly demonstrate that there is widespread variation in state performance on all four measures of minority health. High- and low-performing states tended to cluster geographically, and region of the country was a significant predictor of performance on all four measures. Of note, states in the West scored below the national average on three of the four measures. In addition, we found no consistent association between performance on the four measures and state fiscal capacity or percentage of minorities in the state.

■ **Study limitations.** This study had several limitations. Although states are our unit of comparison, many states have highly decentralized governments that give major responsibilities for social programs and policy to counties and municipalities. Such decentralized states may not invest the same degree of resources in collection of state-level health statistics by race and ethnicity by minority health offices.

Another limitation is the exclusive focus on health programs and performance. This study did not analyze state policy on nutrition, public income assistance, and employment benefits, all of which may contribute to the overall health of the population. We employed a cross-sectional study design that precludes causal inferences between geography and performance.

Finally, although we selected measures for the report card that have been of interest to either previous researchers or our key informants, these measures have not yet been conclusively shown to have an impact on health outcomes.

■ **Questions for further study.** This study raises several important questions. First, it is still unclear what factors explain the wide regional variation we found in state minority health policy. Additionally, while this study provides descriptive data on minority health measures across states, the impact of these measures on actual health outcomes such as infant mortality and life expectancy is unknown. Although we aggregated all minority groups in the report card measures, different patterns may emerge from stratified analyses of African American, Hispanic, Asian, and Na-

tive American subpopulations. Establishing a framework for comparing state minority health performance and policies may provide a foundation for future exploration of these important topics.

This study was funded by the California Endowment; National Research Service Award no. 5 T32 HP11001-15; the Commonwealth Fund; the Agency for Healthcare Research and Quality; and the National Center for Minority Health and Health Disparities. The authors express deep gratitude to Joan Reede, Dean for Diversity and Community Partnership at Harvard Medical School, for thoughtful comments on this project.

NOTES

1. J.L. Murray-Garcia, "Health Disparities," in *Multicultural Health 2002: An Annotated Bibliography* (Woodland Hills, Calif.: California Endowment, 2003), 25–48.
2. U.S. Department of Health and Human Services, *Healthy People 2010: Understanding and Improving Health,* 2d ed. (Washington: U.S. Government Printing Office, 2000).
3. A. Kondratas, A. Weil, and N. Goldstein, "Assessing the New Federalism: An Introduction," *Health Affairs* 17, no. 3 (1998): 17–24.
4. J. McDonough et al., *A State Policy Agenda to Eliminate Racial and Ethnic Health Disparities* (New York: Commonwealth Fund, 2004).
5. M.N. Marshall et al., "The Public Release of Performance Data: What Do We Expect to Gain? A Review of the Evidence," *Journal of the American Medical Association* 283, no. 14 (2000): 1866–1874.
6. Henry J. Kaiser Family Foundation, State Health Facts, www.statehealthfacts.kff.org (22 October 2003); United Health Foundation, *America's Health: State Health Rankings* (Minnetonka, Minn.: UHF, 2003); and J. Rosenthal, N. Kaye, and L. Flowers, *State Purchasing and Regulation of Health Care Services: A Snapshot of Strategies to Reduce Racial and Ethnic Health Disparities* (Portland, Maine: National Academy for State Health Policy, 2002).
7. C. Treholm and S. Kung, *Disparities in State Health Coverage* (Princeton, N.J.: Mathematica Policy Research, 2000).
8. D.L. Libby, Z. Zhou, and D. Kindig, "Will Minority Physician Supply Meet U.S. Needs?" *Health Affairs* 16, no. 4 (1997): 205–214.
9. Ibid.; and Association of American Medical Colleges, "Underrepresented in Medicine Definition," www.aamc.org/meded/urm/start.htm (13 December 2003).
10. The federal Office of Minority Health provides a listing of states with an "official minority health entity (such as an office, commission, council, center, branch, project, or other unit)"; Office of Minority Health Resource Center, "Minority Health Liaison Map," www.omhrc.gov/OMH/sidebar/stateliaisons.htm (22 January 2003).
11. Office of Management and Budget, "Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity," *Federal Register* 62, no. 210 (1997): 58782.
12. Mississippi State Department of Health, "Vital Statistics, Mississippi 2001," www.msdh.state.ms.us/phs/2001/bulletin/intro.htm#Race (5 February 2004).
13. Institute of Medicine, *Insuring America's Health: Principles and Recommendations* (Washington: National Academies Press, 2004).
14. M. Komaromy et al., "The Role of Black and Hispanic Physicians in Providing Health Care for Underserved Populations," *New England Journal of Medicine* 334, no. 20 (1996): 1305–1310; and L. Cooper-Patrick et al., "Race, Gender, and Partnership in the Patient-Physician Relationship," *Journal of the American Medical Association* 282, no. 6 (1999): 583–589.
15. M.M. Heckler, *Report of the Secretary's Task Force on Black and Minority Health* (Washington: U.S. Department of Health and Human Services, 1985).
16. S.R. Gregg, "The Quest for Health Parity; Herbert Nickens, Taking Command at the Office of Minority Health," *Washington Post,* 14 October 1986.
17. R.T. Perot and M. Youdelman, *Racial, Ethnic, and Primary Language Data Collection in the Health Care System: An Assessment of Federal Policies and Practices* (New York: Commonwealth Fund, 2001).