



PHYSICIANS MEDICAL FORUM

Dedicated to Encouraging Recruitment & Retention of African American Physicians

A WHITE PAPER

A Discussion on African American Physicians: A Vital and Endangered Resource

AUTHORS:

Phillip Gardiner, Dr. P.H.

Robynn Battle, ED.D.

Gayle Cummings, M.P.H,

Stalfana Bello, M.P.A.

Michelle Shute-David, M.D., F.A.C.P.

Thurman Hunt, M.D.

CONTRIBUTORS:

Kathryn E. Malone, M.D., Glenda F. Newell, M.D, Albert L. Brooks, M.D.,
John H. Norton, III, M.D., Warren J. Strudwick, M.D., M.B.A, Sandra Weatherby, M.D.,
Zealous D. Wiley, M.D., Michael F. Charles, M.D., C. Ralph Melton, M.D.

The Physicians Medical Forum is a 501(c)(3) non-profit organization and is supported by grants from Alta Bates Summit Medical Center, Wells Fargo and California Healthcare Foundation. The authors' views and recommendations do not necessarily represent those of the funders.

The authors would also like to thank Uchenna Okoye for her proofing assistance and GraDeEnt Design for the design and graphics.

Copyright © 2011
by Physicians Medical Forum
All rights reserved.

Physicians Medical Forum
2201 Broadway, Suite 212
Oakland, CA 94612

Phone (510) 874-7700

Fax (510) 874-7701

www.pmfmd.com

INTRODUCTION

Recruitment and retention of African American physicians remains an essential requirement and at the same time a daunting task, especially in the San Francisco/Oakland Bay Area. Research has shown that African Americans report greater satisfaction working with African American physicians and that African American physicians can play an important role in reducing cultural barriers often encountered by African Americans seeking healthcare services (Smedley, Stith and Nelson, 2003; Saha, 1999). Despite the important role that Black physicians can play, attracting and keeping these professionals in the Bay Area remains a challenge. This paper discusses the

disparity confronted by African American physicians and addresses some of the numerous obstacles they confront, including not being proportionate to the Black population; falling attendance in US medical schools; greater concentration in less lucrative HMO jobs; the high cost of living in the Bay Area; and the larger and disproportionate medical school debt they carry. Furthermore, the dispersal of the northern California Black population is discussed in relationship to the shortage and additional demands on African American physicians. Lastly, previous PMF recommendations for recruitment and retention are reiterated and further detailed.

THE LANDSCAPE

It is unfortunate but true that African Americans have some of the worst health outcomes. African Americans disproportionately have the highest incidences and/or mortality rates of Cardiovascular Disease, Cerebrovascular Disease, Lung Cancer, Prostate Cancer, Breast Cancer, and HIV/AIDS, among other maladies (Smedley, Stith and Nelson, 2003). This health profile is further compromised by African Americans having less access to affordable quality health care (Smedley, Stith and Nelson, 2003). Often times, Blacks avoid the medical system for fear of abuse and neglect, many fully conscious of the health and medical experimentation (the Tuskegee effect) potential that lurks within the

system (IOM, 2001). This factor alone has made significant numbers of African Americans prefer the services of African American physicians and medical professionals. But, herein lies the dilemma: African American physicians are not proportionate to the Black population. In San Francisco/Oakland Bay Area, where the Black population is relatively low, still the number of Black physicians is even lower. Equally important, African Americans often fear discrimination and are faced with with economic challenges, such as unemployment and lack of health insurance, further complicating their ability to access adequate healthcare.

THE DISPARITY

Even though California has the most practicing African American physicians compared to any other state in the United States (3,422), still African American physicians are not proportional to the Black population, particularly in the Bay Area (AAMC, 2006). In a report published in 2008, “Physician Diversity in California: New Findings from the California Medical Board Survey” provided data to detail this disparity. This was the first analysis of data since the enactment of Assembly Bill 1586 in 2001, which required the collection and analysis of information about physician work hours, specialties, ethnicity, languages spoken and practice location (Business Times, 2008).

Drawing on a sample of 91,060, Dr. Kevin Grumbach, Chair of UCSF’s Department of Family and Community Medicine and lead author on the report, was able to determine that 61,861 physicians were actively practicing medicine in California (Grumbach et al, 2008). From responses to the survey, it was determined that African Americans represent 6.7 % of the adult California population; however, Blacks make up only 3% of California physicians (Grumbach, et al, 2008). As the chart below makes abundantly clear, the situation is even worse for the Latino population, who represent nearly one-third of California’s population, but only 5% of the physicians (Grumbach et al, 2008).

TABLE 1.
CALIFORNIA: PHYSICIAN ETHNICITY
BY ETHNIC POPULATION DEMOGRAPHICS

	California Physicians (%)	California Population (%)
White	61.7	46.7
African American	3.2	6.7
Latino	5.2	32.4
Asian/Pacific Islander	26.4	11.2
Native American	0.6	1.0

In the San Francisco/Oakland Bay Area, African Americans are at a greater percentage than they are in the state as a whole, 7.3%, but even fewer (2.9%) of the practicing physicians are Black (Grumbach et al, 2008). These numbers reflect the obvious disparity. It must be recognized, however, that many doctors,

African Americans included, may maintain an active California physician’s license while at the same time practicing medicine in another state, leading to the possibility that even fewer are practicing full time in the state (Grumbach et al, 2008).

TABLE 2.
AFRICAN AMERICANS, AFRICAN AMERICAN PHYSICIANS, CALIFORNIA AND THE BAY AREA COMPARISONS

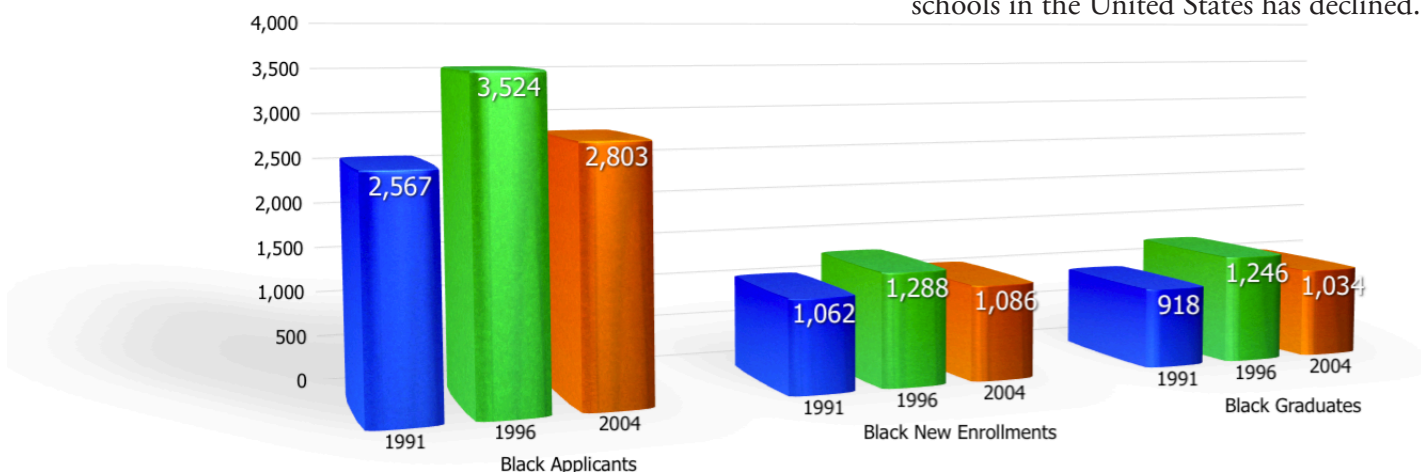
California		Bay Area	
% of Population	% of Physicians	% of Population	% of Physicians
6.7	3.0	7.3	2.9

THE PIPELINE (OR LACK THEREOF)

African Americans attending and graduating from medical school has fallen sharply over the past 20 years. The Journal on Blacks in Higher Education (JBHE) documents this decline graphically.

GRAPH 1.
DECREMENTS IN THE NUMBER OF AFRICAN AMERICANS IN MEDICAL SCHOOL

From 1970 to the mid-1990s black enrollments in medical school education steadily progressed. But since 1991 the number of blacks in medical schools in the United States has declined.



Sources: Association of American Medical Colleges

Chart © Copyright The Journal of Blacks in Higher Education

Their report states: “In 1996 black applications to medical school peaked at 3,524. By 2004, black applications to medical school had dropped to 2,803; a decrease of 20.5 percent . . . Black graduates from medical school reached an all-time high of 1,246 in 1998. In 2004, there were 1,034 black graduates at U.S. medical schools. This is a decline of 17 percent from the 1998 high” (JBHE, 2005).

Another problem with the pipeline is the low number of African American faculty teaching at medical schools. In a survey conducted by the Journal on Blacks in Higher Education, it was found that African American faculty represented only 3% or less of all medical school faculty and only 2% of them were tenured faculty (JBHE, 2005). The pipeline is even further compromised by an apparent lack of enthusiasm for the medical profession by African American high school and under-graduate students. Rao and Flores, in a recent study found that African American high school teens identified a number of barriers to them becoming physicians. These students pointed out that they had little knowledge of the medical field and medicine; found little encouragement at home and at school to become a doctor; saw few African American role models in the community and on television; and other work seemed more appealing for making money (Rao and Flores, 2007).

Moreover, future prospects are just as bleak. The Association of American Medical Colleges projects by the year 2025, if the current practices continue, there will be a need for 859,000 Black doctors and surgeons; however, there will be only be approximately 735,000, a decrement of 124,000 (AAMC, 2008).

From Private Practice to HMOs

The movement of physicians generally, and Black physicians particularly, away from private practice to health management organizations (HMO) creates fewer options for both the Black physicians and Black patients. In the past, even if a patient seeking care did not have private insurance nor was part of a government-run health program like Medicaid or Medical, this patient still could go to a local community-based Black physician, pay costs out-of-pocket, and receive services. Black physicians, however, along with most other physicians are moving toward the HMO trend, resulting in fewer African American physicians in solo and or small group practices. Furthermore, minimal reimbursement for primary care providers limits sustainability, especially in California due to the increasing high costs of insurance and general high costs of living. This issue is further exacerbated by the high cost of maintaining a solo or small group practice at today’s costs, thus African Americans increasingly have fewer opportunities to be seen by Black physicians in a private practice setting. Furthermore, African American physicians often are not included in medical groups. Research has shown that most Black patients prefer Black doctors, feeling a greater cultural and historical identity with these providers (Saha, 1999). Additionally, without insurance, any patient, regardless of race, faces difficulty in receiving care through HMOs and medical groups, and are often forced to seek treatment through overextended clinics and emergency rooms.

HMOs are attracting a large numbers of African American physicians. Analyzing the data from the Young Physicians Survey, Briscoe and Konrad found that African Americans were 2.48 times more likely to practice in HMOs compared to young White physicians (Briscoe and Konrad, 2006). This same study found that five years later these young African

American physicians were 7.5 times more likely to leave their current employer, highlighting the high turnover amongst this population. Moreover, these physicians were 2.17 more likely to express serious doubts about their careers compared to non-African American physicians (Briscoe and Konrad, 2006). It is also imperative to note that in other large commercial organizations, African Americans have better higher paying jobs; however, Blacks working at large HMOs and/or medical groups, such as Kaiser, may have lower compensation and less job security. Hence, even with African American physicians disproportionately working in HMOs, their lower remuneration, greater turn over and lower job satisfaction, all conspire to place these physicians in a precarious situation (Briscoe and Konrad, 2006).

The recent national expansion of health care services is an important step toward ensuring that everyone is covered in the United States; however, this expansion in and of itself does not address the needed growth and maintenance of Black private physicians. In the new legislation, attention is given to community clinics, HMOs and emergency room physicians, but little if any attention is paid to private physicians generally and Black private physicians in particular.

Additionally, the efforts for the national expansion of the health care reform has not completely accounted for three other critical issues:

- 1) The shortage of physicians;
- 2) The shortage of African American physicians, who are the ones who are more likely to serve in an underserved African American community; and
- 3) The existing infrastructure for low payments and slow reimbursements of physicians, which impinges on the success of private practices and or small group practices.

Addressing these challenges is vital to addressing the disparities faced by Black physicians and the disparities faced by the African American community as a whole.

RETENTION OBSTACLES

Cost Of Living

Clearly one of the main impediments to African American physicians locating to and staying in the Bay Area is the cost of living. Each of the major cities in the immediate Bay Area, specifically, Oakland, San Francisco, Berkeley, Richmond, and San Jose, etc all have a higher cost of living than most places in the United States. This is an impediment to all people seeking to relocate to the Bay area; however, it is especially problematic for young African Americans

physicians, given that more often than not, they leave medical school with a higher financial burden and debt compared to their White classmates (Rosenblatt and Andrilla, 2005; Jolly, 2005). The table below shows that the cost of food, utilities and the overall cost of living in the Bay Area is quite high compared to the national average (with the US overall at 100, all scores above 100 denote that it is more expensive to live there compared to the national average).

TABLE 3.
COST OF LIVING IN THE US COMPARED TO FOUR MAJOR BAY AREA CITIES

Cost of Living	United States	San Francisco	Oakland	San Jose	Berkeley
Overall	100	187	141	162	171
Food	100	122	119	119	120
Utilities	100	144	128	128	127
Misc	100	110	107	109	107

(Sperlings, *BestPlaces*, 2010).

Probably the key asset for most families is home ownership. However, home prices in the Bay Area are some of the highest in the country, making locating to the Bay Area even that much more prohibitive, especially for young Black physicians.

TABLE 4.
MEDIAN HOME COST IN THE US
COMPARED TO FOUR MAJOR BAY AREA CITIES

Median Home Cost	United States	San Francisco	Oakland	San Jose	Berkeley
	\$202,300	\$673,610	\$341,430	\$544,640	\$660,500

(Sperlings, *BestPlaces*, 2010).

The Grumbach, et al., report was also able to establish that African Americans, unfortunately, were concentrated in medically underserved areas of the state. The majority of the African American population in California lives in segregated communities and prior research shows that living in segregated areas means less access to health services and African American doctors (Williams and Collins, 2002).

Medical School Debt

African Americans leaving medical school have disproportionately higher debt than their White counterparts do, which is another obstacle confronting these physicians.

In 2003, median tuition and fees for state residents in public schools was \$16,322; for private schools, the median was \$34,550. In the two decades since 1984, median tuition and fees increased 165 percent in private medical schools and by 312 percent in public medical schools, growing far more rapidly than the Consumer Price Index in constant-dollar terms; the increases were 50 percent more for public medical schools and 133 percent greater for private medical schools. A medical education is far less affordable to students and their families today than it was two decades ago (Jolly, 2005).

In 2003, the median amounts for those who have debt had risen to \$100,000 for public medical schools and \$135,000 for private medical schools (Jolly, 2004). This rise in debt is especially true for African Americans and other underrepresented minorities (URMs). Rosenblatt and Andrilla reported in 2005 that the average debt for African American medical students was \$102,909, compared to the total average debt of \$86,870 for all US medical students. These figures were by far “the highest of any of the available racial categories as compared to US \$76,049 for Asian students, with other racial groups falling between these two extremes” (Rosenblatt and Andrilla, 2005). The predicament of African American and URM medical students is portrayed in the chart below, showing they are less likely not to have any debt, and more likely to have disproportionately high debt.

TABLE 5.
DEBT LOADS OF 14,097 MEDICAL STUDENTS, BY STUDENT CHARACTERISTICS,
FROM RESPONSES TO THE ASSOCIATION OF AMERICAN MEDICAL COLLEGES’
MEDICAL SCHOOL GRADUATION QUESTIONNAIRE, 2002

Medical Students Total Debt	Percent of all Respondents (%)	African Americans (%)	Under Represented Minorities (%)
0	16.5	3.0	5.0
\$200,000 to \$249,000	3.8	9.0	12.0
≥ \$250,000	1.0	11.0	15.0

(Abbreviated from Rosenblatt and Andrilla, 2005) (African Americans are included in the URM calculations)

The greater debt of African American physicians also serves as a barrier toward going into private practice. The initial capital outlay required to establish one’s own practice or the buy in fee for joining a small group practice is often prohibitive, thus forcing Black physicians to join HMOs which may, in some instances, pay less, as discussed above (Briscoe and Konrad, 2006).

Complication:

African American Out-Migration

California has a declining African American population. For example, during the period of 1995 to 2000, 63,180 Black people left the state of California, many relocating to the South (Frey, 2004). As it concerns the Bay Area, African Americans are now moving away from traditional centers of concentration in Oakland, San Francisco, Richmond, Berkeley and East Palo Alto and relocating to Antioch, Pittsburg, Vallejo, Fairfield, Hercules, Pinole and Stockton (Ginwright and Akom, 2008). Twenty-five years ago, Oakland was 47% African American; today it is only 37% African American.

Even more alarming is San Francisco where the Black population dropped from approximately 79,000 in 1990 to 47,000 in 1995; and this exodus continues. In many respects, Northern California has become a mini Black Diaspora. This dispersal of the Black population puts additional demands on African American physicians about where to locate and what communities they wish to serve. While the need remains great in Oakland and San Francisco, the cost of living can be prohibitive for many African Americans, physicians included.

RECOMMENDATIONS

Addressing the recruitment and retention of African American physicians will require a multi-pronged intervention. First, the debt burden facing Black physicians needs to be eased, so that they will at least contemplate coming to and staying in the Bay Area. In their initial study, *Physicians Retention and Recruitment Study*, Battle and Cummings assert that loan modification for practicing in underserved locations be initiated, along with other financial incentives, as detailed in the following recommendations (Battle and Cummings, 2005).

Repayment /Forgivable Loans. Currently, the majority of federal funding for forgivable loan programs primarily target rural areas as mentioned by many focus group participants. However, the state of California has the *California Physicians Corps Loan* program that encourages recently licensed physicians to practice in underserved locations in California by authorizing a plan for repayment of their educational loans in exchange for their service in a designated underserved area for a minimum of three years (Battle and Cummings, 2005)

Black Medical Student Support. In a similar vein, PMF should make Black medical students aware of the *National Health Service Corps Scholarship Program*. This program provides tuition and a monthly stipend to medical students in exchange for a commitment to train in a primary care specialty and then practice for a minimum of two years in a federally designated Health Professional Shortage Area (Battle and Cummings, 2005).

Start-up funds for private practice. There are numerous low interest loan programs available, specifically geared toward physician needs intended for private practice start-up funds. Several focus

group participants commented on the need to develop some type of mechanism in the Bay Area that can help direct physicians to low interest loans or funding assistance to establish private practices (Battle and Cummings, 2005).

Increase Opportunities for Increased Federal Government Support. The federal government should devote more funding to the Scholarships for Disadvantaged Students program. Authorized under Title VII of the Public Health Service Act, this program provides grants to health professional schools, which then award scholarships to financially needy students. Data collected by the Department of Health and Human Services indicates that this program has been effective in recruiting minority students (Battle and Cummings, 2005).

In addition to financial incentives, recruitment and retention necessitate exposure to the field of medicine at different educational levels and strong mentorship and support programs, post initiation of a medical career. The following recommendations detail examples of initiatives and efforts designed to increase exposure and opportunities for African Americans to successfully navigate the process of medical education.

Medical Resident Training. PMF should continue to be a resource to African American residents by providing guidance and mentorship to them while completing medical residencies in the Bay Area. Mentorship and guidance can create visibility and attraction to different specialties and can provide realistic insights into the various aspects of medical practice. Additionally, these relationships provide encouragement and support to new-to-practice or new-to area physicians in the Bay Area by listening,

sharing experience, coaching and linking with other resources.

Work to increase the pipeline by targeting undergraduate and high school students to pursue biomedical fields. This will be an important part of an overall strategy. As noted in the text, African American high school teens identified a number of barriers to them becoming physicians. These students pointed out that they had little knowledge of the medical field and medicine; found little encouragement at home and at school to become a doctor; saw few African American role models in the community and on television; and other work seemed more appealing for making money (Rao and Flores, 2007). These findings call out for mentoring and role models to be extensively used at the high school and undergraduate level. Efforts along these lines are ongoing as exemplified by the NIH/NIDDK Short-Term Education Program for Underrepresented Persons (STEPUP) program that provides research opportunities to high school and undergraduate students at seven institutions (Merchant and Omary, 2010). Furthermore, due to the overall disparities in healthcare, university institutions, private institutions, and HMO's should be held accountable for increasing the numbers of African American providers.

PMF recently launch an innovative and inter-active model program called "Doctors On Board Program" (DOB) for African-American and other minority students who are pre-meds, college students and high school seniors who know they want to become physicians. Students attended workshops and heard panelists discuss pre-medical school preparation, admission requirements, and scholarships & financial aide information. Each student received

a "medical bag" and a DOB Binder filled with information to assist them in their journey of becoming doctors.

Students also participated in "mock medical clinics" and were provided white doctors coats, stethoscopes and clip boards & paper and then went on "mock doctor rounds" to examine "real patients" with various illnesses and conditions. This exercise provided a wonderful opportunity for students to network with physicians, residents & medical students and review patients history, labs, x-rays and ending with a diagnosis, just as if they were "real" physicians. PMF is encouraged to further develop, expand and seek funding for this exemplary program.

Increase the pool of interested non-URM mentors. To increase the pool of interested physicians to mentor URM's, given that the pool of URM mentors is simply insufficient. Such "URM equivalents" can, with time, increase the pipeline of academic URM's but they need to be encouraged and incited to do so (Merchant and Omary, 2010).

Establish an NIH-wide initiative to address URM underrepresentation in the biomedical and clinical arenas. Such an initiative is likely to help scale up institutional, state, and local government support and effort, and to play a cornerstone role in reversing the current stagnation. Clearly, a multi-dimensional approach is needed but a big push by the NIH will likely help to ignite the momentum (Merchant and Omary, 2010). A nationwide recruitment effort for minority children to enter health sciences as a viable career choice is an initiative example that could be undertaken by the NIH.

REFERENCES

- Association of American Medical Colleges. Diversity in the Physician Workforce: Facts & Figures 2006. Table B. 2004.
https://services.aamc.org/publications/index.cfm?fuseaction=Product.displayForm&prd_id=161
- Association of American Medical Colleges (2008). The Complexities of Physician Supply and Demand: Projections Through 2025. Baseline Physicians FTE Supply and Demand Projections, 2006-2025;
https://services.aamc.org/publications/showfile.cfm?file=version122.pdf&prd_id=244&prv_id=299&pdf_id=122/
- Battle R and Cummings G. (2005). Physicians Retention and Recruitment Study; Alameda, Contra Costa and San Francisco Counties. Report prepared for the Physicians Medical Foundation, Oakland California;
www.pmfmd.com
- Briscoe F and Konrad T R. (2006). HMO Employment and African American Physicians. *Journal of the National Medical Association*; vol. 98, NO 8, August: 1318 – 1325;
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2569578/pdf/jnma00195-0080.pdf>
- Business Times. (2008). Report shows racial disparity between California physicians and population. *East Bay Business Times*, April 2, 2008;
<http://www.bizjournals.com/eastbay/stories/2008/03/31/daily45.html>
- Frey W. (2004). The New Great Migration: Black Americans' Return to the South, 1965 – 2000. *The Brookings Institution: The living cities Census Series*, May: 1 – 17.
- Ginwright S A and Akom A. (2008). African American Out-Migration Trends Initial Scan of National and Local Trends in Migration and research on African Americans. Prepared for the San Francisco's Mayors Office on Community Development; Task Force on African American Out-migration, by the Public Research Institute at San Francisco State University;
<http://www.sfport.com/site/uploadedfiles/mocd/Product%20I%2007-18-07.pdf>
- Grumbach K, Odom K, Moreno G, Chen E, Vercammen-Grandjean C, Mertz E. (2008). Physicians Diversity in California: New Findings from the California Medical Board Survey. Center for California Health Workforce Studies, University of California San Francisco;
<http://www.futurehealth.ucsf.edu/cchws.html>
- Institute of Medicine (IOM). (2001). Preserving Public Trust: Accreditation and Human Research Participant Protection Programs. Washington, DC: National Academy;
<http://www.nap.edu/openbook.php?recordid=10085&page=1>
- Jolly P. (2005). Medical School Tuition and Young Physicians' Indebtedness. *Health Affairs*, Vol. 24, NO 2, March/April: 527 – 535;
<http://content.healthaffairs.org/cgi/reprint/24/2/527>
- Merchant J L and Omary M B. (2010). Underrepresentation of Underrepresented Minorities in Academic Medicine: The Need to Enhance the Pipeline and the Pipe. *Gastroenterology*, Vol. 138, No. 1: 19 – 26;
http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6WFX-4XSTRGX-1&_user=29241&_coverDate=01%2F31%2F2010&_rdoc=1&_fmt=high&_orig=search&_sort=d&_docanchor=&view=c&_acct=C000059609&_version=1&_urlVersion=0&_userid=29241&md5=a9842f7da3674fc71a30884dfdd655a6

Rao V and Flores G. (2007).
Why aren't there more African-American physicians? A qualitative study and exploratory inquiry of African-American students' perspectives on careers in medicine. *Journal of the National Medical Association*, September; 99(9): 986–993;
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2575862/>

Rosenblatt R A and Andrilla C H A. (2005).
The Impact of U.S. Medical Students' Debt on Their Choice of Primary Care Careers: an Analysis of Data from the 2002 Medical School Graduation Questionnaire. *Academic Medicine*, Vol. 80, No. 9, September: 815 – 819;
http://journals.lww.com/academicmedicine/Abstract/2005/09000/The_Impact_of_U_S_Medical_Students__Debt_on_Their.6.aspx

Saha S, Komaromy M, Koepsell T D, Bindman A B. (1999).
Patient-Physician Racial Concordance and the Perceived Quality and Use of Health Care; *Archives of Internal Medicine*; 159:997-1004;
<http://archinte.ama-assn.org/cgi/reprint/159/9/997>

Smedley B D, Stith A Y, Nelson A R, eds. (2002).
Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care, a Report of the Institute of Medicine, Washington, DC: National Academy Press.

Sperling's Best Places. (2010).
Find Your Own Best Place;
<http://www.bestplaces.net/>

The Journal of Blacks in Higher Education, eds. (2005).
A JBHE Check-Up on Blacks in U.S. Medical Schools;
http://www.jbhe.com/features/47_medicalschoools.html

Williams D R and Collins C. (2002).
Racial Residential Segregation: A fundamental Cause of Racial Disparities in Health. Chapter 21, Race, Ethnicity and Health A Public Health Reader, LaVeist Editor; Jossey-Bass.



PHYSICIANS MEDICAL FORUM
2201 Broadway, Suite 212 • Oakland, CA 94612
Phone: (510) 874-7700 • Fax: (510) 874-7701
www.pmfmd.com