

Altering the Course

BLACK MALES IN MEDICINE

Association of American Medical Colleges



Contents

Acknowledgments	2
Foreword	3
Executive Summary	2
Introduction	5
Background	5
Delving Deeper into the Numbers	7
Success Factors: How Black Males Navigate Pathways to Medicine	9
Build a Support Network	11
Cultivate Certain Personal Attributes	12
Gain Access to Information	13
Enroll in Premedical Programs	13
Some Defining Challenges for Black Males	14
Education and School Quality	15
Community Members' Roles	18
Public Perceptions and Images of Black Men	20
Financial Cost of Higher Education	24
Socialization to the Pre-Med Process	25
Career Attractiveness and Role Models	26
Role of Academic Medicine	28
Engage Leadership	29
Examine and Enhance Institutional Policies and Administrative Practices	30
Develop and Support Promising Programs and Initiatives	31
Beyond the Walls of the Academic Health Center: Engage the Community	32
Everyone Benefits	35
Afterword	37
References	38
Interviewee Ries	43



Acknowledgments

The AAMC extends gratitude to the following individuals, who shared their perspectives through interviews and reviewed the content of this publication:

Jonathan R. Batson, BS

Anne C. Beal, MD, MPH

Cedric Bright, MD, FACP

Isaac Freeborn, MD

Shermaine Hutchins

Alden M. Landry, MD, MPH

Forrester A. "Woody" Lee, MD

Brian Smedley, PhD

Louis W. Sullivan, MD

M. Roy Wilson, MD, MS

Malcolm H. Woodland, PhD

We also thank the members of the AAMC team that provided the vision, conducted the research, prepared the content, and made this publication a reality:

Norma Poll-Hunter, PhD, Senior Director Human Capital Initiatives, Project Lead

Marc Nivet, EdD, MBA, Chief Diversity Officer

Amanda Owens, MA, Senior Specialist, Strategic Partnerships and Outreach

Taniecea Arceneaux, PhD

Former Senior Research Analyst, Diversity Policy and Programs

Kehua Zhang, PhD, Senior Research Analyst, Diversity Policy and Programs

We appreciate the support of AAMC colleagues who contributed data and content development and review:

Michael Dill, Senior Data Analyst

Douglas Grbic, PhD, Senior Research Analyst

Geoffrey Young, PhD, Senior Director, Student Affairs and Programs

We also want to acknowledge the AAMC design team—Douglas Ortiz, Christina Scott, and Mark Mavilia; the AAMC production and editorial team—Joanna Ouellette, Cindy Allen, and Jennifer Keller; and administrative coordination from Patricia Pascoe.

This is a publication of the Association of American Medical Colleges.

The AAMC serves and leads the academic medicine community to improve the health of all. www.aamc.org

^{© 2015.} Association of American Medical Colleges. May not be reproduced or distributed without prior permission. To request permission, please visit: www.aamc.org/91514/reproductions.html.



Foreword



There is no doubt that academic medicine is facing many challenges, including the need to make the medical education model more interprofessionally focused, the reduction in clinical revenues due to the changing health care environment, and the hypercompetitive environment for research dollars. In the middle of these challenging times is an equally vexing problem, in my opinion, facing all of medicine: the lack of black males applying to and entering the field of medicine. While the demographics of the nation are rapidly changing and there is a growing appreciation for diversity and inclusion as drivers of excellence in medicine, one major demographic group—black males—has reversed its progress in entering medical school. In 1978, there were 1,410 black male applicants to medical school, and in 2014, there were just 1,337. The number of black male matriculants to medical school over more than 35 years has also not surpassed the 1978 numbers. In 1978, there were 542 black male matriculants, and in 2014, we had 515. No other minority group has experienced such declines. The inability to find, engage, and develop candidates for careers in medicine from all members of our society limits our ability to improve health care for all.

This report aims to be a clarion call to leaders across the education continuum, from kindergarten through professional school, to rise to the challenge of increasing the number of black males in medicine and to recognize the opportunity we have to alter the course for black males by collectively redoubling our efforts and partnering in new ways. Beyond the educational outcomes this report highlights are anecdotes asserting that more actors must be at the table to change both the expectations and outcomes for black male youth. This is why we are excited to partner with the National Medical Association, the largest black physician member organization, to explore solutions. We anticipate that this report will jump start connections in your institutions and communities and help you think anew about existing initiatives that may need renewed focus and greater investment.

There is no doubt in my mind that the challenges facing academic medicine will continue to inspire innovation and inventiveness, and I believe the same energy will be required as we aim to alter the course for young black males so that they can view a career in medicine as a truly viable option.

Onward and upward,

Marc Nivet, EdD, MBA
Chief Diversity Officer
Association of American Medical Colleges



Executive Summary

While many initiatives and programs supported by foundations, medical schools, and government have contributed to increasing diversity in the physician pipeline, the number of applicants from one major demographic group—black males—has not increased above the number from 1978. That year, 1,410 black males applied to medical school, and in 2014, just 1,337 applied. A similar trend is observed for first-time matriculants: in 1978, there were 542 black male matriculants to MD-granting institutions, and in 2014, there were 515. In addition, of all racial and ethnic groups, the proportion of applicants to medical school who were male compared with female is lowest for African-Americans—despite an overall increase in the number of black male college graduates.

The AAMC sought to understand the decline in black males applying and matriculating to medical school by gathering the perspectives of 11 black premedical students, physicians, researchers, and leaders. The interviews explored factors that may contribute to low application rates, experiences along the career pathway, and the role of academic medicine in altering the course of black males in medicine.

This report captures the major themes from the interviews and highlights research and data from various sources to build the narrative to understand these trends and find broad-based solutions to alter the trends for black men. Interviewees discussed:

- Personal and external factors that contribute to success in becoming a physician
- Factors in the early grades in the public education system that may adversely affect young black boys
- The role of community members in having either positive or negative influences on career exploration and decisions
- Public perceptions and images of black men, including negative media portrayals and lower expectations, that may adversely influence their educational and career progress
- Four major areas in which academic medicine may influence current trends for black males

With the predicted shortage of between 46,000 and 90,000 physicians by the year 2025 and the changing demographics of the patient population, it's even more critical to provide greater access to care for a more diverse patient population. Increased physician diversity is often associated with greater access to care for patients with low incomes, racial and ethnic minorities, non–English-speaking patients, and individuals with Medicaid.

The hope is that this report will prompt leaders in academic medicine to redouble their efforts to improve opportunities for minorities, with specific attention to African-American men. They could rethink and renew their existing initiatives, including reviewing and updating current admissions policies and practices, thinking creatively about formal and informal efforts to engage black men and their communities, and conducting community outreach.





Introduction

Background

The U.S. health care system is undergoing significant transformation. With the passage of the Affordable Care Act (ACA), more people have access to care, and new delivery and cost models are in play. There is greater attention to developing new technologies and to quality of care. However, these changes are occurring within the broader context of unmet health needs due to health-workforce shortages and issues with the delivery and quality of care, particularly for underserved communities.

Recent workforce projections estimate a shortage of 46,000 to 90,000 physicians by 2025, considering the increased engagement of other health professionals, widespread implementation of new payment and delivery models, and other health care innovations (IHS Inc. 2015). Along with physician shortages, health and health care disparities persist among racial and ethnic minorities, individuals living in poverty, and LGBT communities (AHRQ 2015). Landmark reports, including Missing Persons: Minorities in the Health Professions (Sullivan Commission on Diversity in the Healthcare Workforce 2004), In the Nation's Compelling Interest: Ensuring Diversity in the Health Care Workforce (IOM 2004), and Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care (IOM 2002), propose increasing diversity in the health professions as part of the strategy to address public health needs in the United States.

Diversity and inclusion yield multiple benefits starting with the education and training environment of the health care system. Higher education and medical education research shows that diversity affords learners an enriched environment that fosters greater

- Civic engagement
- Ease with managing diversity
- Recognition of racism
- Exposure to different pedagogical approaches
- Cognitive complexity (Bowman et al. 2011; Whitla et al. 2003)

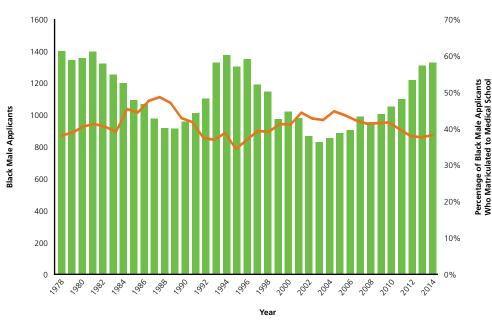


Increased physician diversity is often associated with greater access to care for patients with low incomes, racial and ethnic minorities, non–English-speaking patients, and individuals with Medicaid (Marrast et al. 2013).

For these reasons, understanding diversity trends in medical education remains important. This report focuses on a discouraging trend for black males in the application and matriculation to medical school. The numbers of black male applicants and matriculants to medical school have not exceeded the 1978 numbers, a trend that has persisted over the past 35 years (Figure 1). In 1978, there were 1,410 black male applicants to medical school, compared with 1,337 in 2014. For matriculants, there were 542 in 1978, compared with 515 in 2014. This report intends to explore reasons for this trend and potential solutions to alter this course.

Multiple initiatives and programs supported by foundations, medical schools, and government have contributed to increasing diversity in the physician pipeline (AAMC 2014; Cosentino et al. 2015; U.S. DHHS 2009). However, data show that the numbers of African-American/black, American Indians/Alaska Natives, and Latino/Hispanic applicants and matriculants have remained relatively stagnant over the past 10 years, with the exception of small increases for Latino/Hispanic matriculants from 2008 to 2013 (Figure 2). These data demonstrate the ongoing need for targeted efforts to support the development of a diverse and culturally competent physician workforce.

FIGURE 1. Number of black or African-American male medical school applicants (bars) versus percentage of black or African-American applicants who matriculated (line), 1978–2014.



Source: AAMC Data Warehouse: Applicant and Matriculant File, as of 5/11/2015



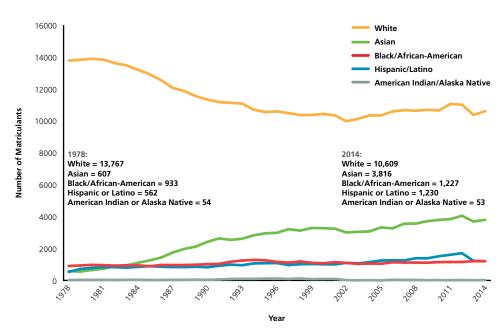


Delving Deeper into the Numbers

Educators and researchers are now paying more attention to the participation of racial and ethnic minority males in higher education than ever before. Although premedical students pursue a diverse range of majors, interest in science, technology, engineering, and math (STEM) fields serves as one important and commonly used indicator of the potential pool of applicants to medical school. A National Science Foundation study found that in 2006, 35.7% of incoming African-American male freshman reported intentions to study a STEM field compared with 31.9% of African-American females (NSB 2012). However, four years later, the outcomes for this same cohort of African-American students in degrees awarded in science and engineering were very different. In 2010, female African-American students received the majority of overall science and engineering degrees, totaling 100,435, while male African-American students received 51,969 science and engineering degrees (NSF 2013).

The trend of low participation rates and gender differences in STEM permeates into the applicant pool to medical school. Disaggregated data from 2014 show that the percentage of total medical school applicants who were male was lower for the black/African-American group than for any other race or ethnicity (Figure 3).

FIGURE 2. U.S. medical school matriculants by race and ethnicity, 1978–2014.



Note: The figure does not include non-U.S. matriculants, U.S. matriculants who designated "Other" race/ethnicity, U.S. matriculants who designated multiple race/ethnicity categories, or any matriculant for whom race data are not available.

Source: AAMC Data Warehouse: Applicant and Matriculant File, as of 5/11/2015.

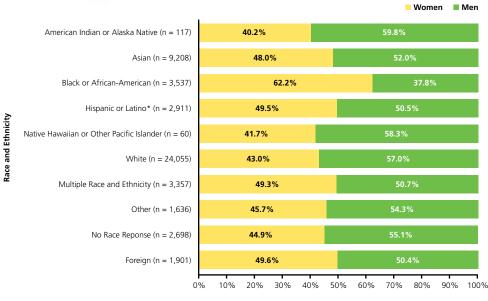




Despite overall increases in the number of black male college graduates over the past two decades, their annual number of applications to medical school has not exceeded 1,410 since 1978 (Figure 1). In a study of high school juniors, Rao and Flores (2007) found that perceived barriers to pursuing medicine as a career included limited knowledge about the career pathway, poor access to African-American role models, finances, and attractiveness of other careers that were less educationally intensive.

The AAMC sought to understand the decline in black males applying and matriculating to medical school by gathering the perspectives of 11 black premedical students, physicians, researchers, and leaders. The interviews explored factors that may contribute to low application and matriculation rates, experiences along the career pathway, and the role of academic medicine in altering the course. This report captures the major themes from the interviews and highlights research and data from various sources to build the narrative to understand these trends and find broad-based solutions to alter the trends for black men.

FIGURE 3. Percentage of U.S. medical school applicants by gender and race and ethnicity, 2014.



Percentage of Applicants

Note: Six students did not report their gender, so they were excluded here. Source: AAMC Data Warehouse: Applicant and Matriculant File, as of 3/26/2015. Get them early and convince them that they have power, and that they have the potential to do well.

—Forrester A. Lee, MD

Trying to give these men hope is so key. ... Everybody needs to be involved in creating ... change in terms of attitude[s toward] what these young men of color can bring to our society.

—Brian Smedley, PhD

Success Factors: How Black Males Navigate Pathways to Medicine





Success Factors: How Black Males Navigate Pathways to Medicine

Recent reports have identified key factors that contribute to black male educational success (see box). An earlier qualitative study of black male medical students and physicians found that success in admissions and graduation was related to rigorous curricular experiences such as magnet programs or advanced placement classes, social support from family and others in the community, exposure to the field of medicine, and personal attributes and beliefs (Thomas et al. 2011). Consistent with those findings, our interviewees highlighted several personal and external factors that contribute to success in becoming a physician and being part of academic medicine.

Key factors in black male educational success

Several recent reports, including *Black Lives Matter 2015*— The Schott 50 State Report on Public Education and Black Males (Schott Foundation for Public Education 2015), the Open Society Foundation's Building a Beloved Community (Shah and Sato 2014), and The Black Sonrise: Oakland Unified School District's Commitment to Address and Eliminate Institutional Racism (Watson 2014), give an in-depth view of the multidisciplinary approach needed to engage and empower young black males.

Published in 2008, Breaking Barriers: Plotting the Path to Academic Success for School-Age African American Males, by Ivory A. Toldson, adds to this critical conversation. It uniquely integrates high-achieving black male students into the statistical analysis of education surveys not to highlight educational insufficiencies, but to recognize solutions and success. Based on four national surveys with responses from almost 6,000 school-age black males, the study explored in depth the influence of several intersectional factors—personal and emotional, family, social and environmental, and school—on academic performance. Academic achievement was dependent on the positive and adverse influence of external factors on the students' lives (Toldson 2008).





Build a Support Network

"I certainly wouldn't be in the position that I'm in if it wasn't for mentors at every step of the way, and we as black male doctors need to do more to provide mentorship. ... We can't forget about those who are coming behind us and ... then pull up the ladder so no one else can follow behind us. We need to make sure that that ladder is there and we're helping people up the ladder." —Alden M. Landry, MD, MPH

Interviewees viewed the significance to young black men of having access to supportive others as critical to success. These others were described in multiple ways, as champions, peer support, mentors, and members of study groups.

Interviewees noted the challenges of medical school and that success is often influenced by the social capital individuals are able to draw upon. They viewed it as essential for young black men to reach out and build their networks and not to perceive such behaviors as a weakness.

"I think it's critical that they reach out and ask for help—seek assistance from classmates, mentors, and role models ... instead of thinking that they can struggle through on their own. Because medical school is different. It's much more strenuous than undergraduate school, and certainly than high school. ... Casting a wide net and getting assistance is not something to be ashamed of, but something that should be encouraged." —M. Roy Wilson, MD, MS





Cultivate Certain Personal Attributes

"Sometimes a dream may be a dream deferred but it's not a dream denied. It becomes a dream denied when you quit. As long as you continue to get up and fight every day, no matter how many times you get knocked down, that's not the issue. The issue is what you're going to do when you get up. And that's [what] I try to encourage my students about." —Cedric Bright, MD, FACP

When reflecting on success, interviewees identified specific personal attributes as significant to navigating the pathway to becoming and being a physician. Resilience was a key attribute that interviewees consistently cited as critical for success as a black man. Interviewees noted that being a medical student was already strenuous, but that black men also have the potential to encounter bias or stereotyping that calls for the need to develop greater resilience.

"The underlying lesson is always persistence and maybe having a chip on your shoulder—you're going to face a number of people who just don't believe in you, for a number of reasons. It may be because of your skin color. It may be because of the community that you're from or the school that you came from or your economic background. ... Seeing [that] and not letting them deter you—use that as fuel to make you want to try even harder to achieve your goals." —Malcolm H. Woodland, PhD

Themes of sacrifice, hard work, self-awareness, and self-knowledge were also emphasized as important to becoming a physician. Knowing yourself was viewed as critical to persistence. Younger interviewees noted that being extroverted was also a valuable characteristic, especially for engaging others and obtaining support.



National support networks can be helpful.

The National Medical Association (NMA), established in 1895, is the oldest and largest physician organization to represent African-American health professionals. Founded in a period of heightened racial discrimination that subverted access to basic rights, including education, transportation, and medical care, it has been pivotal in the development of black American medical professionals. While the NMA is open to all physicians, the organization remains true to its original mission: improving the health of African-Americans and the underserved through education, advocacy, and health policy. www.nmanet.org

Recognizing the need to incorporate and support medical students, the Student National Medical Association was founded in 1964 by members of the NMA. By the 1970s, the SNMA had grown into an independent organization, establishing chapters throughout the United States. Not only does the SNMA focus on providing academic support, but it has a long history of community service, "serving as a pipeline" to youth interested in the health professions. www.snma.org

Gain Access to Information

"I've found that over the years, many young people who come to me for information really don't have a clue. They really have not had much in the way of information, but may have some television image or some image they've gotten from elsewhere, but [they] really have no idea. So I would want to see that such an individual gets as broad a picture as possible of what medicine is like and the other health professions."

—Louis W. Sullivan, MD

Access to information about the various requirements to be successful along the medical education continuum—from applying to medical school to understanding careers in academic medicine—was noted as critical (see box). Interviewees said that lack of information can often derail talented young black men interested in pursuing medicine and even faculty careers. Interviewees noted that it was critical to understand the multiple pathways to medical school and have knowledge of financial resources at the point of application.

"A lot of advisors try to be the gatekeepers, when they themselves, especially those that have never been to medical school, are [not] able to understand that medicine is not just one-size-fits-all. Everybody has a different path. And, I think, we as young men of color ... think that if we don't fit in those specific markers that they tell us that we have to go through, then we lose our hope." —Jonathan R. Batson, BS

Enroll in Premedical Programs

Engagement in premedical and research pipeline programs was noted as a significant factor in the success of all students of color, including black males. Examples such as the federally funded Health Careers Opportunity Programs (HCOP), state-based initiatives such as the Texas JAMP program, and foundation-supported programs such as the Summer Medical and Dental Education Program (SMDEP) were highlighted as necessary to increasing diversity in the health professions, especially for black men.

I would argue ... the challenges that we're seeing in black male entry into the field is a function of a number of underlying issues that affect low-income students, that affect men, that affect ... people who have different types of talents, people who are scientifically gifted and might have a lot of options. And so we see it first among African-American males, but there is likely a confluence of factors that are affecting other people as well.

—Anne C. Beal, MD, MPH

Some Defining Challenges for Black Males



Some Defining Challenges for Black Males

Education and School Quality

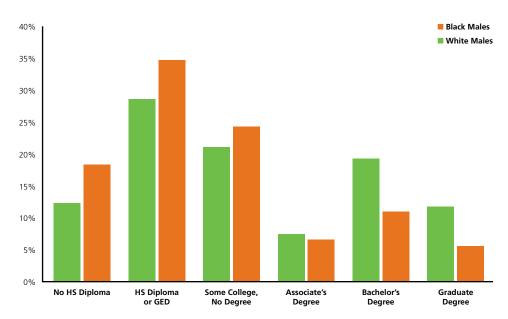
Consistently across interviews, the disproportionate number of young black men in underperforming K-12 public schools was identified as a key influence on the pipeline to medical school.

"We're moving toward separate and unequal educational opportunities, which Brown v. Board of Education attempted to address. And so, again ... kids of color are more likely to be in low-performing schools that are underresourced—you have issues of physical infrastructure crumbling, outdated textbooks, teachers not credentialed to teach in the subjects that they're teaching. All of these problems compound, and I suspect that they have a disproportionate impact on males of color, particularly black boys of color."
—Brian Smedley, PhD

Data show that despite increases in graduation rates over the past decade, educational attainment at the baccalaureate and graduate levels is still lower for black males than for white males (Figure 4).

Interviewees noted that a confluence of factors in the early grades in the public education system may adversely affect the educational and career trajectories for young black boys.

FIGURE 4. Educational attainment of males ages 25 and over by race, 2012.



Source: 2012 American Community Survey, one-year estimates.





18%

18% of black high school sophomores in 2002 aspired to become a doctor



7% of medical school applicants in 2012 identified as black/ African-American

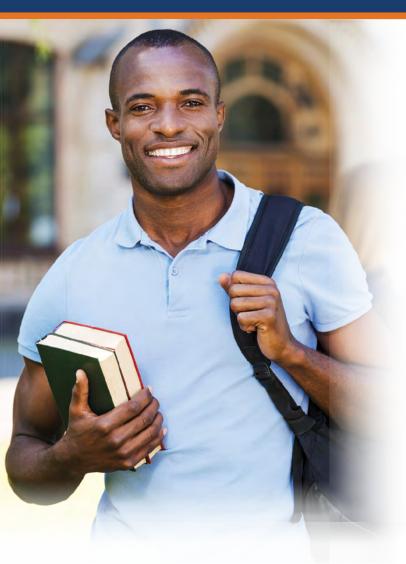
Source: Morrison and Cort 2014.

"The aspirations of African-American boys and girls and youth of color are just as high, if not higher, than [those of] kids from other racial and ethnic groups. ... African-American boys are just as likely to say ... they want to do well, they want to graduate from high school, they want to have a wonderful career. I would guess that if you looked early on, you could probably find as many African-American boys ... who would say they want to go on to be doctors or physicians. I think there's just so much that impedes that process prior to them getting there." —Malcolm Woodland, PhD

Recognizing that black males may be disproportionately educated in school districts with fewer resources, the interviewees noted how having limited resources to manage normative behaviors and teacher perceptions may result in negative school experiences.

"I think black males especially have a problem because as soon as they act like little boys act and get out of line, they're going to be labeled and stereotyped and placed outside of the mainstream pipeline—that is ... diverted into pathways that are not productive in terms of their educational advancement." —Forrester A. Lee, MD





Thomas et al. (2011) found that success in medical school admissions and completion for black males was often attributed to participation in gifted or magnet programs, advanced placement courses, and experiencing actively engaged and supportive teachers. Toldson's research documented in *Breaking Barriers 2: Plotting the Path Away from Juvenile Detention and Toward Academic Success for School-Age African-American Males* finds that early school interventions are important for black males (2011). Toldson noted in that report that higher instances of suspension and disciplinary action may be attributed to factors that include "cultural mismatches and lack of cultural awareness among teachers."

Bright Spots in Higher Education

Since 1990, groups such as the Student African American Brotherhood (SAAB), located in Ohio, have been leading the charge to ensure that African-American males have the support, guidance, mentoring, and tutoring they need to be successful graduates (Reynolds 2012). It is not enough to provide enrichment programs—administrators also have to be acutely aware of the specific cultural needs of young men of color. While not solely focused on bringing more African-American males to STEM, these programs have been credited with helping students stay in school and graduate.

For example, after establishing SAAB at the University of Louisville, the graduation rate for undergraduate African-American males went from 27.4% in 2005 to 36.6% in 2009. Since the arrival of the program in 2005, every student who joined has stayed in school or completed his education and graduated (Reynolds 2012).

Another example of promising initiatives is the University System of Georgia (USG) African American Male Initiative: Laser Focused on Black Males' College Graduation (USG 2012). The initiative involves workshops and programs focused on enhancing self-image, developing interpersonal and social skills, and creating a balance between athletics and academics. As a result of this strategic intervention, the number of degrees awarded annually to African-American males at USG went from 1,294 in 2003 to 2,046 in 2011, an increase of 752 degrees over eight years, or 58%.



Community Members' Roles

"None of us, none of us, none of us get to where we are by going it alone. ... I think men more than women try to do that lone-wolf thing, and that may be part of why men fall by the wayside more than women." —Anne C. Beal, MD, MPH

The role of others—parents, peers, role models, mentors, and sponsors—was noted as critical for the career development process. Interviewees explained that relationships can have both positive and negative influences on career exploration and decisions. In some cases, young black men may be more likely to come from communities living in poverty, and their parents may expect them to work while they're in school. Family members and friends may be supportive of aspirations but often don't have the knowledge to impart about the pathway to medicine.

"I've got to the point where I've stopped telling people what my career goal is and what my major is, because when I say, 'Yeah ... I'm pre-med. I'm thinking about being a physician,' the first thing they say is, 'Oh, you must be really smart. Oh, man, that's hard. You're crazy. Why in the world would you do that?" —Shermaine Hutchins







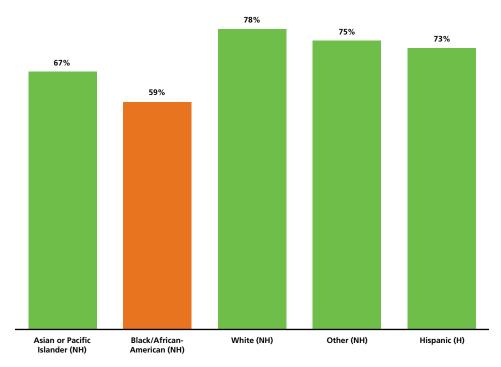
The absence of black male physician role models was consistently noted as problematic, whether in the local community or in academic medicine.

"One [important factor for success] is having role models, instructors, and teachers who are African-American, people the student can identify with and model their behavior after. ... I think having mentors is very important ... [as] is having a critical mass of other African-Americans, males particularly, but other African-Americans in the class so that you're not the only one." —M. Roy Wilson, MD, MS

Data show that compared with the proportions of practicing physicians who are male in other racial and ethnic groups in the United States, the proportion for black males is the lowest (Figure 5). Interviewees noted a similar deficit in black males among faculty and leaders in academic medicine.

"It's one thing to see it on TV, and it's one thing to read about it, and it's a whole other level, in my opinion, to actually physically see somebody and actually physically be in contact with someone and see them in person working as a physician that's just like you, that's African-American." —Shermaine Hutchins

FIGURE 5. Percentage of active physicians within each race and ethnicity who are male, 2006.



NH = non-Hispanic; H = Hispanic; Other Includes American Indian, Alaska Native, Multiple Races, and Other. Source: AAMC-AMA Surveys of Physicians Over and Under 50, 2006.





Public Perceptions and Images of Black Men

"I had a student ... shadowing me ... [and] when we walked into the room ... the patients thought we were there for their transport, to take them down to get their X-rays. They didn't realize that I was the attending physician ... supervising the white male residents that were taking care of them, and then they didn't realize that this was a premedical student who was interested in becoming a doctor. So that goes to the whole other side of medicine where, again, black men aren't perceived to be doctors; we're perceived to be sort of lower on the totem pole and doing other roles in the health care field."—Alden M. Landry, MD, MPH

The most commonly noted challenge is the bias and stereotyping related to the black male experience in the United States. Interviewees noted that public perceptions and images of black men may adversely influence their educational and career progress and outcomes. They frequently cited the problematic claim that is often perpetuated in the media that there are more black males in prison than in college. Rao and Flores (2007) found that high school students perceived these biases and stereotyping as a barrier to pursuing medicine as a career.

Interviewees explained that the combination of frequent negative media portrayals and lower expectations for males, specifically black young boys and men, directly and indirectly perpetuate stereotypes and systemic biases. Experiencing and internalizing these stereotypes and biases affect education and career pursuits (Ben-Zeev et al. 2014).

"From the perspective of black boys, when they first come into school, [they] have very similar aptitudes and aspirations as all other students, but somewhere between ... third grade and the fifth grade, there is something that occurs to them [and] they become consciously aware of how they're being treated or how they're not being treated, which then starts to change some of their expectations and even their aspirations for what they feel that they can achieve. I think a lot of that has to do with primary teaching and some of the biases, both implicit and explicit, that they [experience] when they enter the classroom setting." —Cedric Bright, MD, FACP





The challenge of managing and working through the bias and stereotypes is crucial throughout the process from career exploration to becoming and being a physician. Nunez-Smith et al. (2007) framed the stress and psychological impact of encountering race-related issues in the workplace as "racial fatigue," particularly when these issues are not dealt with. In this study of black physicians, racial fatigue was associated with decisions to change training and work environments.

Some of the interviewees noted that there are often generational differences within the black community in understanding the black experience in America. Some leaders observed that the younger generation of black men appear somewhat oblivious to the dynamics of race within the workplace and often experience difficulties navigating the environment when first confronted with racism or discrimination.

"That's one thing that we had growing up, because my parents and my grandparents growing up in Jim Crow always helped explain to me that we had to be two times as better to be considered equal. Nowadays, because this world is all integrated, they don't know about Jim Crow, so when all of a sudden they don't have that resiliency and the knowledge that they [need] to be resilient, they think that they're just like everybody else. And when all of a sudden they get hit with bias or feel that some bias is going on ... they're like shattered, because they thought the world was fair." —Cedric Bright, MD, FACP





While educational attainment is on the rise for black males, opportunities for them appear to diminish as stereotypes and sensational headlines permeate the public's attention.

"But I don't think it's solved by putting out positive images, because they're already out there. It's not like we don't have plenty of examples ... starting with the President of the United States. It's not that we don't have positive images of black men. The problem is that we continue to have, in our minds, the bias—unconscious, subconscious—about black men in general, specifically as it relates to crime and threatening behaviors."

—Forrester A. Lee, MD

Recent losses, such as in Ferguson, Missouri, have sparked national dialogue about the experience of black men in the United States.

"When you see, just in the span of a month, four or five African-American kids being killed, probably wrongly in some cases, it's just the tip of the iceberg. It's something that's going on in communities throughout our country, and not all of it is being televised and captured on cellphones and other such devices. So there are some real societal issues that need to be looked at also." —M. Roy Wilson, MD, MS

Interviewees expressed that these societal issues seep into educational environments and our health care systems. Acknowledging these issues and creating climates that are supportive of all, including black men, were identified as crucial to advancing diversity and inclusion.

"I think it's not just an issue of the attitudes and views of young people of color; it's our national views and expectations. We have four generations that communicated as a country that we have low expectations particularly for young minority males. We as a society view them as a problem rather than as a vital asset, a source of talent that is necessary for the nation to harness to be able to create a more equitable and pluralistic society. And so this is, again, a national problem. It's one of deep belief systems often not stated overtly, but there [are] subtle ways of communicating as a society that we don't value these children." —Brian Smedley, PhD



Another theme of the interviews was the diversity of the African-American/black community in the United States, which represents different cultures, countries of origin, languages, and migration histories and how those histories translate to current opportunity or perceptions of progress.

"The reality is blacks that are not African-Americans in the traditional sense look at African-Americans almost how everyone else looks at African-Americans—in a negative light. ... The big difference is ... the environment ... that nontraditional African-Americans are brought up in ... [with] a lot of support from the parents with regards to pushing them to go to college and pushing them to get good grades from the get-go. ... I don't want to generalize and say that every black person that comes from Africa has got to come over here and be a 4.0 student and be a doctor. But I am saying that there is definitely a divide with regards to how each side perceives [the] other."—Shermaine Hutchins

The multiplicity of these factors creates a complex picture of the black male experience in the United States. The consistent message across interviews was the need to:

- Recognize how these public perceptions and images may influence how black men are perceived at various points along the medical education continuum
- Emphasize the importance of understanding the unique experiences that may influence their lives



Total education debt of more than \$200,000 reported by medical school graduates, 2014:



31.5% of all 2014 medical school graduates



41.9% of 2014 black male medical school graduates

Source: AAMC Medical School Graduation Questionnaire (GQ) database.

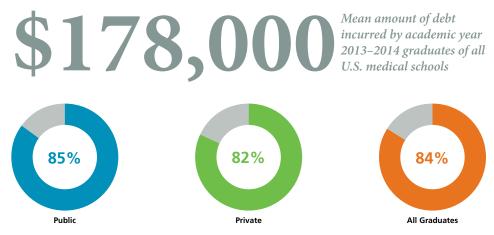
Financial Cost of Higher Education

"The high cost of higher education ... means not only [for] medical school or dental school or other health profession schools, but for college preceding that. And that's important because such a high percentage of minority students come from ... low-income families, so the financial barriers that are experienced by students of color are, on average, much more severe than those faced by white students. And coupled with that are inadequate financial aid programs for students, in college and in the health professions. I'm referring to the reality that there are relatively few scholarships as compared to the situation prior to the mid-'70s." —Louis Sullivan, MD

Interviewees noted that the costs of medical school and debt may often be a deterrent to African-Americans pursuing medicine as a career, as it is for many other prospective medical students. The general perception is that many talented young black men may not have the financial resources to attend medical school or be able to access information about scholarships and other funding support.

"When I applied to college, I didn't have the financial means. ... I didn't know much about the scholarship process." —Jonathan R. Batson, BS

Interviewees noted that within medicine, there is a limited pool of scholarships for aspiring physicians and a huge need for improved financing for medical education. This could include expanding programs that offer free tuition in exchange for service and that enhance programs like the National Health Service Corps.



Graduates of all U.S. medical schools incur significant amounts of debt, with a larger percentage of those from public medical schools facing this financial strain.

Source: AAMC Medical School Graduation Questionnaire (GQ) database. Education debt figures include premedical education debt.







African-American and Latino medical school applicants are more likely to report lower socioeconomic status.

Source: Grbic et al. 2015.

Socialization to the Pre-Med Process

"I think the programs that are available are awesome. ... But it's one of those things ... [like] the phrase, 'You can lead a horse to water, but you can't make him drink,' ... [though] in this situation, there's water, but the horses don't know that the water is there."

—Shermaine Hutchins

Interviewees shared that the process for preparing for medical school and admission is often unknown to black men. They discussed perceptions that may prevent young black men from considering medicine, starting with the reliance on standardized test scores for admission to medical school, and the schools' lack of openness to nontraditional students. With a greater likelihood that black students attend underperforming schools, test preparation and high-quality advising are often missing from their school experiences.

"We need to develop and put in place strong career counseling programs. So often students will graduate from high school and enter college, and will say that they are interested in becoming a doctor or a dentist or other health professional, but have no idea what it takes or how to plan their educational experience so that they will be prepared not only academically, but be aware of when to apply, how to get information." —Louis Sullivan, MD



Career Attractiveness and Role Models

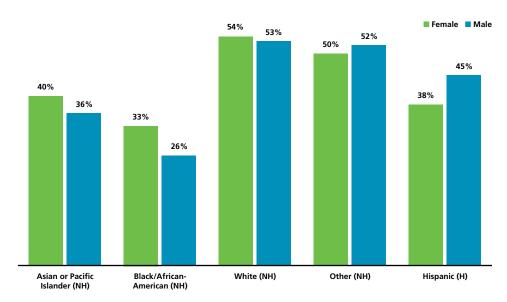
"I think that there are both the challenges of push and the challenges of pull. The push is really around the pipeline, and the pull is really around how attractive are careers in medicine to talented young people who have skills in math and science. The pull component says, okay, if you have a pool, even if it is a limited pool of young people who have real skills in terms of math and science, and you are interested in different career options, what is it about medicine that would attract someone to, say, choose a career in medicine, take on the debt associated with that as compared to ... the PhD or going into finance or engineering or doing something else? And so the pull component is, I think, particularly in medical education, there are more opportunities to try to institute changes that can have a positive impact." —Anne C. Beal, MD, MPH

Interviewees noted broader trends that may influence pursuit of medicine as a career. Many mentioned the pressure for STEM majors to consider careers that require fewer years in school and may offer higher earning potential.

"The Baton Rouge to Houston region refines 85% of the crude oil used in the U.S. So you can go to college for two years and come out making \$90,000 a year, and that's very, I mean, it's extremely common. So they're like, 'Well, I just want to go and get my plant technology degree and work at the plant." —Isaac Freeborn, MD

Perceptions of financial well-being are often considered when evaluating the pursuit of medicine as a career. Data show that among all active physicians, African-American males are the least likely to report having excellent or very good financial status (Figure 6).

FIGURE 6. Percentage of active U.S. physicians reporting excellent or very good financial status by race and sex, 2006.



NH = non-Hispanic; H = Hispanic; Other Includes American Indian, Alaska Native, Multiple Races, and Other. Source: AAMC-AMA Surveys of Physicians Over and Under 50, 2006.



African-American men represent 2% of male full-time faculty at MD-granting institutions.

Source: AAMC Faculty Roster, as of 12/31/2014.



The dearth of visible black males in medicine was noted as another challenge. Becoming a physician or pursuing a particular specialty may be less attractive to young black men when they don't see people similar to them in academic medicine.

"It can be an incredibly isolating experience. There are some schools that do really, really well in having people not only get in but get out, and then there are some schools less so. There are so many people who really talk about their medical school experience as being so incredibly isolated—not seeing themselves reflected among faculty, not seeing other students around them who look like them."—Anne C. Beal, MD, MPH

The presence of other black men will likely influence decisions to attend a particular school or apply for a residency or faculty position.

"Historically, if a program does not select African-American males, [it's] very easy to see that; we go look at the program, we go view the pictures of the previous residents that they've brought in. It's easy to spot whether we're in there or not, and if we're not in there, then, obviously, there's some other issue going on beyond the fact of whether we're qualified or not."—Cedric Bright, MD, FACP

First, the schools have to make a decision that diversity is crucial and that diversity leads to excellence, that diversity is not an and/or proposition but is an inclusive proposition. ... Most universities, I feel, when we talk about diversity, they immediately think of losing positions for other deserving students. In actuality, you increase the educational satisfaction by having a more diverse student body. Research has shown that.

—Cedric Bright, MD, FACP

Role of Academic Medicine



The Liaison Committee on Medical Education has new diversity standards.

The Liaison Committee on Medical Education (LCME) is the accrediting agency for MD-granting institutions in the United States and Canada. It leads the voluntary, peer-reviewed process of quality assurance to determine accreditation for medical education programs. Once accredited by the LCME, the programs are eligible for designated federal grants and programs.

For medical education programs to maintain accreditation, they must meet the detailed standards listed in the Functions and Structure of a Medical School (LCME 2014). The recently revised edition of the LCME standards, for the 2015–2016 academic year, lists effective policies and practices as those that recognize the role and importance of diversity in medical education:

3.3 Diversity/Pipeline Programs and Partnerships

A medical school has effective policies and practices in place, and engages in ongoing, systematic, and focused recruitment and retention activities, to achieve mission-appropriate diversity outcomes among its students, faculty, senior administrative staff, and other relevant members of its academic community. These activities include the use of programs and/or partnerships aimed at achieving diversity among qualified applicants for medical school admission and the evaluation of program and partnership outcomes.

7.6 Cultural Competence/Health Care Disparities/Personal Bias

The faculty of a medical school ensure that the medical curriculum provides opportunities for medical students to learn to recognize and appropriately address gender and cultural biases in themselves, in others, and in the health care delivery process.

Role of Academic Medicine

Leaders acknowledged success in medical school efforts while recognizing that there is opportunity for academic medicine to become more diverse and inclusive. Interviewees' perspectives on how academic medicine may influence current trends for black males aligned along four major areas:

- Active and responsive leadership
- Institutional policy and related administrative practices
- Increased support for programs across the medical education continuum
- Community engagement

Engage Leadership

There was a strong viewpoint that leadership commitment—from the top—that is active and responsive is essential if any change is to occur and remain sustainable.

"Unless somebody comes to that [admissions] committee at the level of the institutional leader and says, 'You know what? I want to see a good, diverse group that you bring into this class. I want it to be diverse across all levels: ethnically, socioeconomic[ally]. I want it to be diverse.' And unless that committee gets that charge from above, they're not going to do it. They're not going to do it." —Forrester A. Lee, MD

Interviewees noted that leaders should leverage broader societal trends and regulatory requirements, such as the LCME diversity standards, to advance diversity and inclusion (see box).

"[There's a] basic and easy-to-determine correlation between the needs of the American people ... and how medical education should respond. And frankly, I think we have failed in that response. Look at the example of preparing people for careers in primary care versus specialty care; do we train enough primary care physicians to meet the needs of the U.S. population? But ... if you say, 'And we need a ... physician workforce that looks like the patients who we're serving,' that's taking it to another level."

—Anne C. Beal, MD, MPH



75%

75% of dental, medical, public health, pharmacy, and nursing schools in the study reported using holistic review.

Schools using holistic review experienced increased diversity, no change to student success metrics, and an improved teaching and learning environment.

Source: Urban Universities for Health 2014.



Examine and Enhance Institutional Policies and Administrative Practices

Interviewees viewed it as critical to examine existing policies and how they influence administrative practices. They shared strategies focused on improving institutional climate for diversity, including incentives for leaders to make diversity and inclusion a priority.

"[It] is important to measure, actively monitor, and take steps to improve the institutional climate for diversity among all students, faculty, [and] administrators so that diversity is seen as a value, [and] it is seen as being synonymous with quality education. Too often ... attitudes [are] expressed subtly, not just in medical schools but in all kinds of higher education settings, that diversity is not ... important for quality of education and educational experiences. We need to communicate the opposite, that diversity is critical, particularly, again, in a much more diverse society for training and for success post medical school."—Brian Smedley, PhD

Nunez-Smith et al. (2007) found that black physicians perceived challenges in health care organizations' capacity to promote dialogue on race. They noted the importance of leadership "proactively raising awareness" and promoting climates and cultures that welcome and nurture productive conversations about diversity.

Reviewing and updating current admissions policies and practices was considered an important avenue for change.

"[One] study confirmed that those students who were admitted through a holistic review process did well, and, in fact, the schools that used holistic review in general did at least as well if not better than those who did not. ... I think that speaks again to the notion that it's not lowering the standards, it's actually, in some cases, getting a better group of students who are prepared to succeed in this increasingly complex world, students prepared to provide outstanding health care to different populations. So it's unfortunate that many programs feel like their rankings are based on how selective they are—and this extends well beyond medical school to residency positions, also."

—M. Roy Wilson, MD, MS, referring to the Urban Universities for Health 2014 study



Promising programs: Young Doctors DC and Minority Men in Medicine

In the summer of 2013, six young black men, students of Anacostia and Ballou High Schools in Washington, D.C., spent six weeks on the campus of Howard University School of Medicine. They were part of the inaugural class for a mentoring program called Young Doctors DC, a peer-mentoring group working to change the predicted outcomes for young black males from Southeast Washington, D.C., by exposing them to educational opportunities and career options they believed to be out of their reach. That summer, those young men were exposed to surgeries, clinical rotations, dorm life, and even college students participating in the Summer Medical and Dental Education Program. They created the foundations of lasting relationships with mentors, many of whom had faced the same challenges as the Young Docs have. www.youngdoctorsdc.org

The University of North Carolina (UNC) School of Medicine has developed a mentoring program for minority males interested in health professions. Minority Men in Medicine (MMM) is a grassroots, nonprofit organization that, over time, has developed organically into a national network for aspiring young men of color interested in medical or dental school. Program Director Claudis Polk planted the seeds for MMM at the medical school in early 2009. The program's aim was to create an environment of camaraderie and collaboration among UNC's minority male medical and dental students. In the succeeding years, it has morphed into a program that not only promotes peer-to-peer mentoring, but has engaged faculty and staff. Medical and dental students also reach back and mentor undergraduates, and the program engages the community and works with a local high school and middle school. http://uncmmm.blogspot.com/

Develop and Support Promising Programs and Initiatives

Continued support and development of premedical programs were noted as critical to developing the next generation of physicians, including black males in particular. Institutionalizing programs and focusing on sustainability were noted as critical tasks for academic medicine leadership. One such program is the AAMC's Aspiring Docs program, which provides resources so anyone can aspire to be a physician (aspiringdocs.org).

Interviewees encouraged thinking creatively about formal and informal efforts to engage black men and their communities.

"In general, while they can be ambivalent about their neighborhoods, they have a certain pride in their communities, and they know the problems that are endemic and often feel like they want to help. I think this gives them a unique way to really go back and work in their communities. ... Programs that are able to introduce health in that way, and even schools that are able to introduce health- and science-based work in that way ... really engender personal investment from the kids. ... Not only is this about health education, this is about your own families, your own neighborhoods, and what you can do to make sure that your own family and your own neighborhood are healthier. ... I think programs that come from that angle can be particularly effective, because ... you get a different kind of investment from the kids and you get a different kind of investment from their families." —Malcolm Woodland, PhD

One leader noted that programming may not require significant funding compared with the value of the outcomes.

"You can arrange and develop programs that really don't cost a lot of money. There are three things you can give: you can give your time, you can give your treasure, or you can give of your talent. I think these types of programs allow people to give of their time and their talent, and don't always cost a large treasure." —Cedric Bright, MD, FACP

Another interviewee shared how the clinical encounter with a patient can also become an opportunity to engage young people and their families.

"Part of your assessment in pediatrics is to ask ... where they are and where they're going. And so if they showed any interest, then I would say, 'If that's okay with you, I could help you out and be a resource,' ... so I can have the opportunity to help them out. I mean, my pediatrician did that for me even when I was growing up back at Cincinnati. He was kind of like a role model. But he did it the same way. It was through the office. He knew our business as I came throughout those visits while growing up. He was a good resource for me." —Isaac Freeborn, MD





Beyond the Walls of the Academic Health Center: Engage the Community

"We need leadership across many different sectors—not just government, but also faith communities, business leaders, [and] grassroots and community-based organizations. We need white people, frankly, to step up to the plate ... to express high regard for the talents and contributions of young men of color. So everybody needs to be involved in creating a sea change in terms of attitude regarding what these young men of color bring to our society."—Brian Smedley, PhD

Academic medicine's engagement with the broader community was noted as a key strategy for improving the numbers of black men in medicine (see box on page 31). Interviewees noted these tactics for finding solutions and partners for implementing interventions:

- Bringing in physicians from the community to serve as faculty to help increase the presence of black males
- Strategic recruitment of future doctors from underserved communities
- Working with Minority Serving Institutions
- Improving advising in high school and college

"Too many of our institutions are saying, 'We can't find the students,' but they are not doing anything, really, to try and help address the activities that would expand the pipeline of students. In other words, they wait for students to show up on their threshold. That clearly is inadequate if we're going to solve the problem. So, I certainly think that stronger programs reaching out to community leaders and community organizations are necessary." —Louis Sullivan, MD

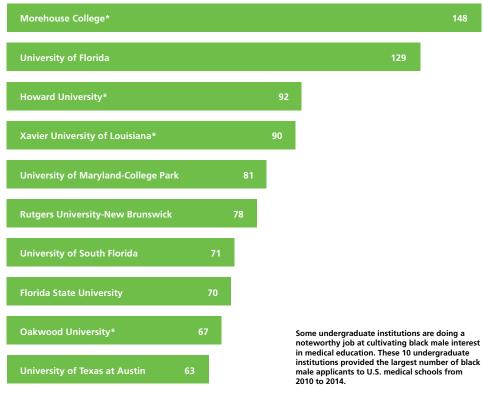


Academic medical centers should commit to increasing black male applicants by conducting community outreach, interviewees noted.

"Work with black organizations and organizations of color to network with them ... [and] show them other opportunities ... in their local neighborhoods, like [doing] research with a local institution ... working with local churches to do community service. ... Medicine is not just about ... shadowing at the hospital. ... You need to know what it is to be a doctor by looking at doctors. So [providing] opportunities [to partner with] ... local black organizations would help ... increase black males in medicine." —Jonathan R. Batson, BS

Building stronger partnerships with Historically Black Colleges and Universities (HBCUs) was noted as pivotal to any strategy, since HBCUs are among the most active feeder institutions to medical schools (Figure 7).

FIGURE 7. Undergraduate institutions providing the largest number of black male applicants to U.S. medical schools from 2010 to 2014.



*Historically Black College or University (HBCU). Source: AAMC Data Warehouse: Applicant and Matriculant File, as of 2/11/2015.



Leaders suggested learning from the institutions that demonstrate a record of success with black males.

"They've been successful for many years. And the question is, what is the reason for their success? Clearly, that is something that I think should be highlighted, should be examined, and should be, hopefully, a model that could be replicated, and we should urge that other colleges develop or adopt [that model]." —Louis Sullivan, MD

Existing efforts to engage males of color in education

There is a national movement under way to further engage young minority males. Initiatives highlight educational deficiencies in underserved communities and work in conjunction with current policies to augment national efforts to address issues detrimental to young black males. The White House initiative My Brother's Keeper offers a national platform from which a wide variety of organizations and foundations can expand on opportunities for boys and young men of color. My Brother's Keeper seeks to address many of the issues interviewees listed as hindering the full development and integration of young black males into their communities. Its unique partnerships with private- and public-sector organizations promise an impactful outcome. https://www.whitehouse.gov/blog/2014/02/27/my-brother-s-keeper-new-white-house-initiative-empower-boys-and-young-men-color

The Minority Male Community College Collaborative (M2C3) is another national initiative, established by San Diego University's Interwork Institute. This initiative furthers institutional support and partnerships within the community college educational system to ensure access to academic and financial resources, achievement, and success of enrolled minority male students. Using research and promising practices to develop agendas, curriculum, and national projects, M2C3 prioritizes the educational, social, and emotional needs of underserved minority males in the classroom. http://interwork.sdsu.edu/sp/m2c3/

In 2004, the City University of New York (CUNY) established the Black Male Initiative with the groundbreaking document "Chancellor's Initiative on the Black Male in Education." Since that time, CUNY has been instrumental in bringing to the forefront programs, speakers, and leaders dedicated to remedying the persistent gaps in educational attainment for black males in the university system. The CUNY Black Male Initiative's continuous involvement in research and programmatic design has made it a powerful partner in efforts to overcome prevailing issues in the black community. http://www.cuny.edu/academics/initiatives/bmi.html

Other strategies for promoting success for black males, particularly in math and science, include the African American Male Mentoring Initiative, funded by the Heinz Foundation. The initiative provides individual, needs-based mentoring for more than 100 young African-American males in the Pittsburgh Public School System. The mentee graduation rate is nearly 100%, and nearly 100% of the mentees matriculate to postsecondary education. http://www.needld.org/programs-services/aammi

We [really need to] resolve as a nation to integrate our schools for the greater good of the country. I mean, it's not just about expanding opportunity for kids of color, but it's also about making sure that our young white children are better prepared to deal with a much more diverse world and to ... be culturally excellent and competent to navigate [their] way through an increasingly diverse America. We have to make sure that all of our children are prepared to live in a pluralistic society.

Everyone Benefits

—Brian Smedley, PhD

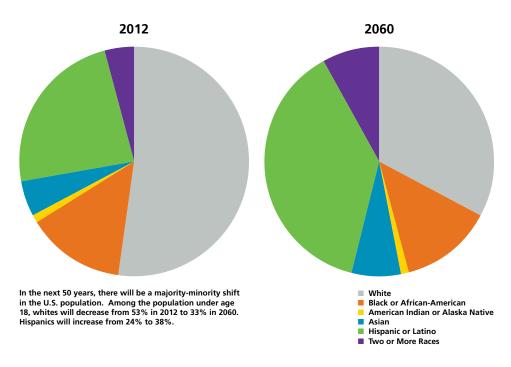


Everyone Benefits

As a nation, the United States is becoming more diverse (Figure 8). To advance innovation and meet public health demands, there is a need to engage talent from all segments of our society.

A common thread throughout the interviews was a general sense that many of the issues and strategies around supporting black men in pursuing medical careers were not unique or different from what most aspiring physicians encounter or need, particularly individuals from underserved communities. As is the case with other diversity efforts, focusing on black males yields benefits for everyone in higher education and in the health care system. Along with other health professions and higher education partners, academic medicine plays a vital role in ensuring that black males feel welcomed and that they can thrive professionally.

FIGURE 8. U.S. Census Bureau projections for U.S. population under age 18 years, 2012 versus 2060.



Source: William H. Frey, Brookings Institution Analysis of U.S. Census Bureau Population Projections, released 12/12/2012.



Afterword



The Affordable Care Act promises to move our nation closer to better health care at lower costs with better health outcomes for all Americans. To achieve this promise, the next generation of physicians must be equipped to meet the complex health care needs of patients and families. Clearly, the physician workforce must keep pace with the increasing diversity of the American population. The decrease in the number of African-American men enrolled in medical school creates a significant challenge to the diversity of the future physician workforce. Medical schools and academic medical centers must lead efforts to reverse this decrease. Together, the American Association of Medical Colleges (AAMC) and the National Medical Association (NMA) will lead efforts aimed at increasing the numbers of African-American men who not only enroll but also complete medical school. Sustaining a diverse and inclusive physician workforce will move us closer to the goal of health equity for all Americans.

Because of tremendous progress, most children born in America today can expect to live 25 to 30 years longer than children born in the 1900s. Unfortunately, not all Americans share the benefits of such progress. African-American and Hispanic boys and girls born today cannot expect to live as long as white boys and girls because life-expectancy disparities by race persist even until today. In neighborhoods all across America, African-Americans and other minority people bear disproportionate burdens of illness and disease that lead to poorer health outcomes. In many cases, African-American and other minority physicians care for people every day who bear the consequences of longstanding health disparities. As a nation, our capacity to improve health for all Americans depends on our commitment to ensuring access to high-quality services in every neighborhood. The downward trend in the number of African-American men entering medical school threatens our ability to achieve equitable access across all American neighborhoods.

Efforts to reverse the downward trend in the numbers of African-American men enrolled in medical school must start with early in childhood. Together, the AAMC and the NMA will advocate for programs that build and sustain a pipeline of talented young men and women interested in medicine. We will work to ensure that there is sufficient political support to sustain funding for programs that reinforce high academic standards and stimulate interest in science, technology, engineering, and math. Programs that provide mentoring and tutoring are essential to sustaining a strong pipeline. Together, we will push neighborhoods to invest in high-quality education. We will work to make sure that a college education remains within the reach of all Americans. The AAMC and the NMA plan to align efforts with programs such the White House's My Brother's Keeper initiative to help young men and women stay on track.

We will advocate for initiatives that help people recognize and address forces that foster exclusion and for opportunities for all Americans to explore, recognize, and overcome historical stereotypes and bias. Medical schools and academic medical centers must show leadership, too, and provide diversity and cultural competence training for all faculty and staff. Diversity and inclusion must be among the core values of our transformed health system.

The AAMC and the NMA intend to work in partnership with medical schools and academic health centers to lead the way to a diverse and inclusive future physician workforce. As partners in this effort, the AAMC and the NMA will monitor and report progress to key stakeholders. Good health is necessary for people to take advantage of opportunities to improve the quality of life for themselves and their children. A healthy, diverse, and inclusive workforce benefits all of us because it leads to a stronger and more productive nation.

Lawrence Sanders Jr., MD 115th President National Medical Association



References

- Agency for Healthcare Research and Quality (AHRQ). 2015. 2014 National Healthcare Quality and Disparities Report. Rockville, MD: Agency for Healthcare Research and Quality.
- Association of American Medical Colleges. 2014. Reflections on Diversity and Inclusion in Academic Medicine: Commemorating Dr. Herbert W. Nickens' Legacy. Washington, DC: Association of American Medical Colleges. Accessed June 11, 2015.
 - https://www.aamc.org/download/427368/data/nickensinteractivecommemorativebook.pdf
- Ben-Zeev, A., Dennehy, T.C., Goodrich, R.I., Kolarik, B.S., and Geisler, M.W. 2014. When an "educated" black man becomes lighter in the mind's eye: Evidence for a skin tone memory bias. *SAGE Open*, 4(1).
- Bowman, N., Brandenberger, J., Hill, P., and Lapsley, D. 2011. The long-term effects of college diversity experiences: Well-being and social concerns 13 years after graduation. *Journal of College Student Development*, 52(6):729–739.
- Cosentino, C., Speroni, C., Sullivan, M., and Torres, R. 2015. *Impact Evaluation of the RWJF Summer Medical and Dental Education Program (SMDEP)*. Washington, DC: Mathematica Policy Research. Accessed June 11, 2015. http://www.mathematica-mpr.com/~/media/publications/pdfs/education/smdep_impacteval.pdf
- Frey, W.H. 2012. Census projects new "majority minority" tipping points. Brookings Institution Analysis of U.S. Census Bureau Population Projections. Accessed June 11, 2015.
 - http://www.brookings.edu/research/opinions/2012/12/13-census-race-projections-frey
- Grbic, D., Jones, D.J., and Case, S.T. 2015. The role of socioeconomic status in medical school admissions: Validation of a socioeconomic indicator for use in medical school admissions. *Academic Medicine*, 90(7):953–960. Accessed June 11, 2015.
 - http://journals.lww.com/academicmedicine/Abstract/publishahead/The Role of Socioeconomic Status in Medical School.98867.aspx
- IHS Inc. 2015. *The Complexities of Physician Supply and Demand: Projections from 2013 to 2025*. Prepared for the Association of American Medical Colleges. Washington, DC: Association of American Medical Colleges.



- Institute of Medicine (IOM) Committee on Institutional and Policy-Level Strategies for Increasing the Diversity of the U.S. Healthcare Workforce. 2004. *In the Nation's Compelling Interest: Ensuring Diversity in the Health Care Workforce.* Washington, DC: The National Academies Press.
- Institute of Medicine (IOM) Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care. 2002. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care.* Washington, DC: The National Academies Press.
- Liaison Committee on Medical Education (LCME). 2014. Functions and Structure of a Medical School: Standards for Accreditation of Medical Education Programs Leading to the M.D. Degree. Accessed June 11, 2015.
 - http://www.lcme.org/publications.htm#standards-section
- Marrast, L.M., Zallman, L., Woolhandler, S., Bor, D.H., and McCormick, D. 2013. Minority physicians' role in the care of underserved patients: Diversifying the physician workforce may be key in addressing health disparities. *JAMA Internal Medicine*, 174(2):289–291.
- Morrison, E., and Cort, D.A. 2014. An Analysis of the Medical School Pipeline: A High School Aspirant to Applicant and Enrollment View. Washington, DC: Association of American Medical Colleges. Accessed June 2, 2015.
 - https://www.aamc.org/download/372712/data/march2014aibananalysisofthemedicalschoolpipeline.pdf
- National Science Board (NSB). 2012. Appendix Table 2-12. Freshmen intending S&E major, by field, sex, and race/ethnicity: 1995–2010. *Science and Engineering Indicators 2012*. Arlington, VA: National Science Foundation (NSB 12-01). Accessed June 8, 2015.
 - http://nsf.gov/statistics/seind12/pdf/seind12.pdf
- National Science Foundation (NSF). 2013. Table 5-6. Racial/ethnic distribution of bachelor's degrees awarded to U.S. citizens and permanent residents, by field: 2002–2012 (updated). Women, Minorities, and Persons with Disabilities in Science and Engineering. Accessed June 11, 2015.
 - http://www.nsf.gov/statistics/wmpd/2013/race.cfm
- Nunez-Smith, M., Curry, L.A., Bigby, J., Berg, D., Krumholz, H.M., and Bradley, E.H. 2007. Impact of race on the professional lives of physicians of African descent. *Annals of Internal Medicine*, 146:45–51.
- 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*, 99:986–993.

Altering the Course: Black Males in Medicine

- Reynolds, C.V. 2012. No man left behind. In: *Convergence: Diversity and Inclusion,* an advertising supplement to the *Chronicle of Higher Education,* pp. 20–27. Accessed June 8, 2015.
 - http://saabnational.org/sites/all/themes/corporateclean/pdf/convergence2012.pdf
- Schott Foundation for Public Education. 2015. *Black Lives Matter 2015: The Schott 50 State Report on Public Education and Black Males.* Accessed June 8, 2015. http://blackboysreport.org/
- Shah, S., and Sato, G. 2014. *Building a Beloved Community: Strengthening the Field of Black Male Achievement*. Washington, DC: The Foundation Center. Accessed June 11, 2015.
 - http://www.opensocietyfoundations.org/sites/default/files/Building-Community-Black-Male-Achievement-20140512.pdf
- Sullivan Commission on Diversity in the Healthcare Workforce. 2004. *Missing Persons: Minorities in the Health Professions*. Washington, DC: The Sullivan Commission. Accessed June 10, 2015.
 - http://depts.washington.edu/ccph/pdf_files/Sullivan_Report_ES.pdf
- Thomas, B., Manusov, E.G., Wang, A., and Livingston, H. 2011. Contributors of black men's success in admission to and graduation from medical school. *Academic Medicine*, 86(7):892–900.
- Toldson, I.A. 2008. Breaking Barriers: Plotting the Path to Academic Success for School-Age African-American Males. Washington, DC: Congressional Black Caucus Foundation, Inc.
- Toldson, I.A. 2011. Breaking Barriers 2: Plotting the Path Away from Juvenile Detention and Toward Academic Success for School-Age African-American Males. Washington, DC: Congressional Black Caucus Foundation, Inc.
- University System of Georgia (USG). 2012. The University System of Georgia's African-American Male Initiative: Creating a More Educated Georgia. Accessed June 8, 2015.
 - http://www.usg.edu/aami/files/AAMI Booklet UPDATED.pdf
- Urban Universities for Health. 2014. *Holistic Admissions in the Health Professions:* Findings from a National Survey. Washington, DC: Urban Universities for Health. Accessed June 11, 2015.
 - http://urbanuniversitiesforhealth.org/media/documents/Holistic Admissions in the Health Professions.pdf



Altering the Course: Black Males in Medicine

- U.S. Department of Health and Human Services (DHHS). 2009. *Pipeline Programs to Improve Racial and Ethnic Diversity in the Health Professions: An Inventory of Federal Programs, Assessment of Evaluation Approaches, and Critical Review of the Research Literature*. Washington, DC: U.S. Department of Health and Human Services. Accessed June 8, 2015.
 - http://bhpr.hrsa.gov/healthworkforce/reports/pipelineprogdiversity.pdf
- Watson, V. 2014. *The Black Sonrise: Oakland Unified School District's Commitment to Address and Eliminate Institutionalized Racism.* Oakland, CA: Oakland Unified School District.
- Whitla, D.K., Orfield, G., Silen, W., Teperow, C., Howard, C., and Reede, J. 2003. Recruitment of underrepresented minority students to medical school: Minority medical student organizations, an untapped resource. *Journal of the National Medical Association*, 99(9):1000–1004, 1008–1009.



Interviewee Bios



JONATHAN R. BATSON, BS

Mr. Batson was born in Brooklyn, New York, and raised on the island of Grenada. After going to high school at the Grenada Boys Secondary School, his family moved back to the United States so that he and his brother could pursue higher education. In south Florida, Jonathan attended Blanche Ely High School. After obtaining his BS in biology with minors in public health and sociology/anthropology from Florida International University, Jonathan decided to pursue an MS in biomedical sciences at Barry University in hopes of improving his academic record so he can matriculate into medical school. In college, he served as the president of the Minority Association of Premedical Students (MAPS) chapter, which was awarded the distinction of 2011–2012 Student National Medical Association (SNMA) Region IV MAPS Chapter of the Year, was recognized by the Florida International University's Council for Student Organizations as the 2011–2012 Outstanding Leader of the Year, and received the 2012 Dr. Gina Morgan-Smith Promising Premedical Student Award from the James Wilson Bridges, MD, Medical Society (JWBMS) chapter of the National Medical Association. While working on his MS, he is also serving as national vice-chair of the SNMA Publications Committee and senior editor of the Journal of the SNMA (JSNMA) and using his diverse academic background to create articles that focus on the intersection of race, culture, and poverty in relation to medicine.



ANNE C. BEAL, MD, MPH

Dr. Beal is dedicated to improving health care in the United States, particularly for vulnerable patient groups. Her career has been devoted to providing access to high-quality health care and has included delivering health care services, teaching, research, public health, and philanthropy. She is the chief patient officer for Sanofi, an integrated, global health care company focused on patients' needs and engaged in the research, development, manufacturing, and marketing of health care products. She supports a patient-centered culture at Sanofi to ensure that patients' needs and priorities come first.

Before joining Sanofi, Dr. Beal was the deputy executive director and chief engagement officer for the Patient-Centered Outcomes Research Institute (PCORI), created by the Affordable Care Act. She was charged with ensuring that the voices of patients and other stakeholders are reflected in the PCORI research portfolio, and she helped ensure that PCORI worked efficiently and effectively to carry out its mission as the nation's largest research institute focused on patient-centered outcomes research.

Earlier in her career, Dr. Beal was president of the Aetna Foundation, the independent charitable and philanthropic arm of Aetna Inc. Her career in philanthropy started at the Commonwealth Fund, where she was assistant vice president for the Program on Health Care Disparities.

A board-certified pediatrician, Dr. Beal has also worked with a mobile medical unit project delivering health care services to children living in homeless shelters



throughout New York City. She was a health services researcher at Harvard Medical School within the Center for Child and Adolescent Health Policy at Massachusetts General Hospital and associate director of the Multicultural Affairs Office of Massachusetts General Hospital, an attending pediatrician within the Division of General Pediatrics, and a faculty member at Harvard Medical School and the Harvard School of Public Health.

Dr. Beal's research interests include social influences on preventive health behaviors for minorities, racial disparities in health care, and quality of care for child health. In addition to publishing in the peer-reviewed medical literature, Dr. Beal is the author of *The Black Parenting Book: Caring for Our Children in the First Five Years.* She has been a pediatric commentator and medical correspondent for *Essence Magazine*, The American Baby Show, ABC News, and NBC News. Dr. Beal holds a BA from Brown University, an MD from Cornell University Medical College, and an MPH from Columbia University. She completed her internship, residency, and NRSA fellowship at Albert Einstein College of Medicine/Montefiore Medical Center in the Bronx.



CEDRIC BRIGHT, MD, FACP

A physician and patient advocate, Dr. Bright is assistant dean for admissions, director of special programs, and associate professor of medicine in the Department of Medical Education at the UNC School of Medicine, and he served as the 112th president of the National Medical Association, from 2011 to 2012. He was previously associate clinical professor of internal medicine and community and family medicine at Duke University and a staff physician at the VA Medical Center in Durham. Dr. Bright also served on the North Carolina Medical Society Patient Safety Taskforce; chaired the board of directors at the Lincoln Community Health Center; has spoken about health disparities before the Congressional Black Caucus; served as a medical ambassador to Ghana; and has served as a mentor for the Student National Medical Association. He is a dedicated leader in delivering patient equity through broader access and is a staunch proponent of health care reform.



ISAAC FREEBORN, MD

Dr. Freeborn is from Cincinnati, Ohio. He attended The Ohio State University as an undergraduate and attended medical school at the Medical College of Ohio. He attended University of Texas Medical Branch at Galveston for a dual residency in internal medicine and pediatrics, and that is where he found his true passion: treating patients in the emergency room (ER). After residency, Dr. Freeborn practiced primary care in a small community in Louisiana while fulfilling a National Health Service Corps commitment that led to experiences with correctional, hospice, and addiction medicine. During this time, he worked part time in a variety of hospital ERs. In 2011, he began working exclusively as an ER physician.

In 1998, Dr. Freeborn participated in the SMDEP (formerly MMEP) program at Case Western Reserve University and returned to work as a student advisor while in medical school in 2000. He is currently serving as an SMDEP alumni board member. He is board certified in internal medicine and is practicing emergency medicine with Neighbors Emergency Center as the medical director of the Lakeline facility in Austin, Texas.





SHERMAINE HUTCHINS

Mr. Hutchins is a nontraditional student attending Bowling Green State University. He is majoring in biochemistry, and he aspires to become a physician scientist. At 39, he is married and is the father of two children, and he has proudly served as an Army Combat Medic/Healthcare Specialist. His military tours include Nicaragua, where he was awarded the Army Distinguished Service Medal for exceptionally meritorious service. After his honorable discharge, Hutchins began a 10-year career in radio broadcasting spanning stations in Florida, Georgia, and Ohio while being heard nationally via the Core DJs Shade 45 on SiriusXM satellite radio. While completing his bachelor's, Mr. Hutchins works as a cardiac step-down nurse technician at St. Luke's Hospital in Maumee, Ohio. In an effort to assist other students seeking advanced-degree careers in health care, he founded the Midwest Pre-Health Conference. Now in its second year, this conference has quickly become one of the largest pre-med/pre-health conferences in the Midwest. He has conducted research at the National Institutes of Health and has presented his research at several research symposia, including the New England Science Symposium presented by Harvard Medical School. Additionally, he is a proud alumnus of the Yale Summer Medical and Dental Education Program (SMDEP), and he hopes to enter medical school in the fall of 2016.



ALDEN M. LANDRY, MD, MPH

Dr. Landry is an emergency medicine physician at Beth Israel Deaconess Medical Center, founder of Motivating Pathways, and co-director of the Tour for Diversity in Medicine. His other academic positions include senior faculty at the Disparities Solutions Center at Massachusetts General Hospital and faculty assistant director of the Office of Diversity, Inclusion, and Community Partnership at Harvard Medical School. He received his BS from Prairie View A&M University in 2002 and his MD from the University of Alabama in 2006, and he completed his residency in emergency medicine at Beth Israel Deaconess Medical Center in 2009. In 2010, he earned an MPH from the Harvard School of Public Health, completed the Commonwealth Fund/Harvard University Fellowship in Minority Health Policy, and was awarded the Disparities Solutions Center/Aetna Fellow in Health Disparities award. In addition to his clinical interests, Dr. Landry is involved in research on emergency department utilization trends, disparities in care, and quality of care. He also co-instructs two courses at the Harvard School of Public Health and teaches cultural competency to residents.





FORRESTER A. LEE, MD

Dr. Lee, a native of Plainfield, New Jersey, attended Dartmouth College before graduating with honors from the Yale School of Medicine in 1979. He remained at Yale for residency training in internal medicine. After a year as chief resident, he completed fellowship training in cardiovascular medicine. He joined the Yale School of Medicine full-time academic faculty in 1987, where he pursued a clinical and research career in heart failure and heart transplantation. He has served as program director of the Cardiovascular Medicine Fellowship, medical director of cardiac transplantation, interim chief of cardiology, and, since 1995, associate dean for multicultural affairs. He was promoted to professor of medicine with tenure in 2003. He has published articles on heart failure and transplantation, mathematical and computer applications in nuclear cardiology and cardiac physiology, and health care disparities. He has developed programs to increase diversity among medical students and faculty and to improve career opportunities for high school and college students underrepresented in medicine and biomedical science. He has been the principal investigator on major grants from the National Institutes of Health, the Howard Hughes Medical Institute, and The Robert Wood Johnson Foundation's Summer Medical and Dental Education Program (SMDEP). He is married and has three children, including a daughter who is a family medicine physician.



BRIAN SMEDLEY, PhD

Dr. Smedley is co-founder and executive director of the National Collaborative for Health Equity, a project that connects research, policy analysis, and communications with on-the-ground activism to advance health equity. In this role, Dr. Smedley oversees several initiatives designed to improve opportunities for good health for people of color and to undo the health consequences of racism. From 2008 to 2014, Dr. Smedley was vice president and director of the Health Policy Institute of the Joint Center for Political and Economic Studies in Washington, D.C., a research and policy organization focused on addressing the needs of communities of color. Formerly, Dr. Smedley was research director and co-founder of a communications, research, and policy organization, The Opportunity Agenda, which seeks to build the national will to expand opportunity for all. Before that, Dr. Smedley was a senior program officer in the Division of Health Sciences Policy of the Institute of Medicine (IOM), where he served as study director for the IOM reports In the Nation's Compelling Interest: Ensuring Diversity in the Health Care Workforce and Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care, among other reports on diversity in the health professions and minority health research policy. Dr. Smedley came to the IOM from the American Psychological Association, where he worked on a wide range of social, health, and education policy topics in his capacity as director for public interest policy. Before that, Dr. Smedley served as a congressional science fellow in the office of Rep. Robert C. Scott (D-Va.), sponsored by the American Association for the Advancement of Science. Among his awards and distinctions, in 2013, Dr. Smedley received the American Public Health Association's Cornely Award for social activism; in 2009, Dr. Smedley received the Congressional Black Caucus Congressional Leadership in Advocacy Award; in 2004, he was honored by the Rainbow/PUSH coalition as a "Health Trailblazer" award winner; and in 2002, he was awarded the Congressional Black Caucus "Healthcare Hero" award.





THE HONORABLE LOUIS W. SULLIVAN, MD

Dr. Sullivan is chair of the board of the National Health Museum in Atlanta, Georgia, and chair of the Washington, D.C.-based Sullivan Alliance to Transform America's Health Professions. He served as chair of the President's Commission on Historically Black Colleges and Universities from 2002 to 2009 and was co-chair of the President's Commission on HIV and AIDS from 2001 to 2006.

A native of Atlanta, Dr. Sullivan graduated magna cum laude from Morehouse College and earned his MD, cum laude, from Boston University School of Medicine. His postgraduate training included an internship and residency in internal medicine at New York Hospital—Cornell Medical Center (1958—1960), a clinical fellowship in pathology at Massachusetts General Hospital (1960—1961), and a research fellowship in hematology at the Thorndike Memorial Laboratory of Harvard Medical School, Boston City Hospital (1961—1963). He is certified in internal medicine and hematology.

In 1975, Dr. Sullivan was the founding dean and president of Morehouse School of Medicine, serving for more than two decades. He is now president emeritus. As secretary of the Department of Health and Human Services from 1989 to 1993, he released *Healthy People 2000* (a blueprint for health promotion/disease prevention), waged a vigorous campaign against tobacco use, urged increased seat belt use in vehicles, and improved FDA food labels.

Dr. Sullivan has served on the faculties of Harvard Medical School, the University of Medicine and Dentistry of New Jersey, and Boston University School of Medicine. He is the author (with Marybeth Gasman) of *The Morehouse Mystique: Becoming a Doctor at the Nation's Newest African American Medical School,* published in 2012 by the Johns Hopkins University Press, and his autobiography, *Breaking Ground: My Life in Medicine* (with David Chanoff), published in 2014 by the University of Georgia Press.



M. ROY WILSON, MD, MS

Dr. Wilson became the 12th president of Wayne State University on August 1, 2013. Before joining Wayne State, Dr. Wilson served as deputy director for strategic scientific planning and program coordination at the National Institute on Minority Health and Health Disparities of the National Institutes of Health. He has also served as dean of the School of Medicine and vice president for health sciences at Creighton University, president of the Texas Tech University Health Sciences Center, chancellor of the University of Colorado Denver, and chair of the board of directors of University of Colorado Hospital. He also chaired the board of directors of the Charles R. Drew University of Medicine and Science and was acting president during part of his chairmanship.

Dr. Wilson's research has focused on glaucoma and blindness in populations from the Caribbean to West Africa. He was selected for the list of Best Doctors in America for 14 consecutive years by Best Doctors Inc. In 2003, he was elected as a lifetime member of the Institute of Medicine of the National Academies, one of the highest honors in the field of medicine. He received his undergraduate degree from Allegheny College, his MS in epidemiology from the University of California, Los Angeles, and his MD from Harvard Medical School.





MALCOLM H. WOODLAND, PhD

Dr. Woodland is the director and co-founder of Young Doctors DC, a health care and pipeline-to-health-careers program for boys and young men of color in Washington, D.C. He is also the chief psychologist in the D.C. Superior Court. Dr. Woodland has worked on issues related to the experiences of African-American males in several areas, including juvenile justice, education, and careers in medicine. His research interests examine out-of-school programs for African-American males, African-American identity, and psychological measurement issues in forensic populations. Before coming to D.C., Dr. Woodland served as an American Educational Research Association fellow at the University of California, Berkeley. His work on African-American males, youth development, and forensic assessment can be found in several peer-reviewed periodicals, including the *Journal of Forensic Psychiatry and Psychology, Journal of Forensic Psychology Practice, Journal of Negro Education*, and *Urban Education*. He received his doctorate in clinical psychology from Howard University and completed his undergraduate studies at Tougaloo College in Mississispipi.

