

Men of Color in California's Health Professions Education Programs

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ABSTRACT

It has long been known that certain ethnic and racial groups are underrepresented in the health professions. We looked specifically at participation rates of men of color in health professions education programs in California and found that the representation of African American and Latino men is significantly below what would be expected based on population rates. Representation in some professions has declined over time. We identify research and programmatic implications for policy, education and community leaders seeking to improve the situation.

Introduction

The subject of racial and ethnic underrepresentation in California's health professions training programs and workforce has come to occupy a central role in the effort to develop better models of health care practice and better systems for health care delivery. The reasons for this are many. The practice of linguistically and culturally competent health care and a diverse health professions workforce are critical to addressing health disparities.¹⁻³ In addition, student experiences in health professions training programs are enriched by the presence of fellow students with diverse social and cultural experiences.⁴⁻⁵

Economic development in communities is another reason to promote greater diversity in the health professions. The health care industry is one of the few economic sectors in California that continues to create jobs.⁶ Most of the jobs are well paid, and many of them offer opportunities for professional development.

Analyses and policy discussions on the subject of gender, racial and ethnic group representation have often focused on physicians and dentists, as these professions are principle health care practitioners. Yet, underrepresentation in the health

professions is widespread, affecting most of the occupations that span both diagnosing and treating practitioners and health technologists and technicians.

Key Findings

- African American men are significantly underrepresented in most of the education programs analyzed, while Latino men are significantly underrepresented in every program analyzed.
- Latino male representation in CA health professions education programs has generally declined over time.
- The number of Latino men trained in CA dentistry and pharmacy schools did not change in the past 15 years; the number of African American men increased slightly.
- Fewer African American and Latino men matriculated in CA medical schools (MD & DO) in 2007 compared to 1995.
- African American men are best represented in programs that train radiologic technologists, respiratory therapists, psychiatric technicians, and physician assistants and are overrepresented in programs that train substance abuse counselors.

From the report *Reparable Harm: Assessing and Addressing Disparities Faced by Boys and Men of Color in California* by the RAND Health Promotion and Disease Prevention Program (2010)

- African American & Latino children are more than three times as likely as White children to live in poverty.
- African American & Latino boys are more than twice as likely as White boys to score below proficient on both the *Grade 4* and *Grade 8* National Assessment of Educational Progress Reading Test.
- African American & Latino boys are more than three times as likely as White boys to score below proficient on both the *Grade 4* National Assessment of Educational Progress Math Test, and more than twice as likely to score below proficient on the *Grade 8* National Assessment of Educational Progress Math Test.
- The proportion of African American children in California's foster care system is four times the proportion of African American children in California's general child population.
- African American men are 5 times more likely, and Latino men nearly 3 times more likely than White men to go to prison during their lifetime.

It is only among the entry-level health care support occupations that training programs and the active workforce resemble the diversity of California's population, and even there it is women of color who are most represented.

Previous reports on diversity in the health professions have generally lacked detailed analysis describing the experience of underrepresented men in particular. The purpose of this brief is to contribute to the wider discussion of health professions underrepresentation by focusing on men of color, specifically on African American and Latino men. This narrow focus is because the conditions facing young African Americans and Latinos are profound. Recent work supported by The California Endowment describes the dramatic differences in life outcomes for African American and Latino men in California, in comparison to White men.⁷ By almost every broad measure of social, physical and economic disparity, African American and Latino men suffer disproportionately.

Overview

This brief examines student data describing graduates of health professions training programs in California across a range of health care occupations that require

different levels of educational preparation and vary in the type and scope of structural barriers that limit access (e.g., cost, location, number of programs, and competition for admission). We present a descriptive analysis that focuses on the underrepresentation of African American and Latino men; we include Asian men for comparison.

Throughout this brief, all measures of racial and ethnic composition exclude individuals or populations whose race and ethnicity are not identified. In the population data, this means that we have excluded the category, 'more than 1 race'. In the education data, we have excluded 'unknown race/ethnicity' as well as 'non-U.S. citizen'. In addition, all references to 'Asian' include 'Native Hawaiian and Pacific Islander'.

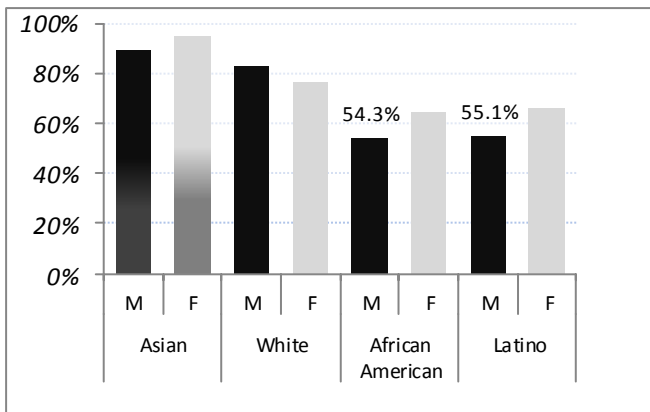
Limits of the Data

It is important to acknowledge that in these data the category, Asian, is overly broad. Not only is the experience of Native Hawaiian and Pacific Islander students obscured, but that of many more specific Asian nationalities whose experiences of health professions education in California are most certainly different. Unfortunately, data that would allow us to disaggregate these groups are not available.

Educational Attainment

Figure 1 describes recent graduation rates for California's public high schools. These data indicate that for young African American and Latino men, there is a lack of basic preparation to enter health professions education programs. Almost half of African American and Latino young men enrolled in California public high schools fail to graduate in four years.⁸

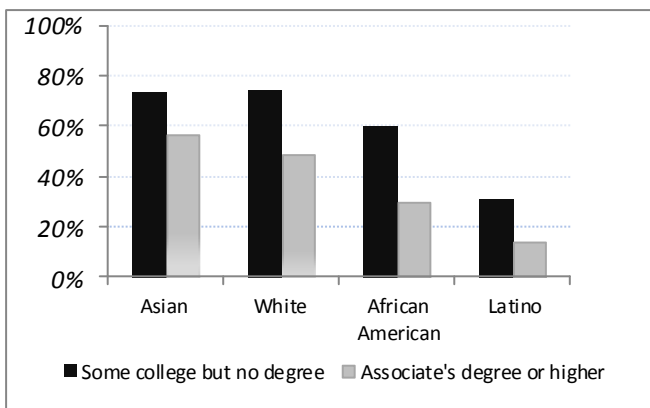
Figure 1. Public High School Graduation Rates by Race/Ethnicity, California, 2006-2007



Source: California Dropout Research Project (2009)

Figure 2 describes postsecondary educational attainment in the general male population age 25 and older. Although there are many health care occupations that require only a high school degree as preparation, many others require a college degree, either at the associate or baccalaureate level.

Figure 2. Educational Attainment of Men Age 25 or Older by Race/Ethnicity, California, 2009



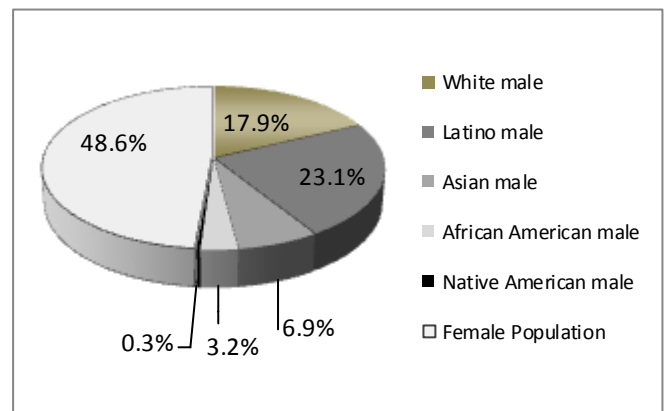
Source: American Community Survey (2009)

Postsecondary educational attainment for African American and Latino men is very low in comparison with both Asian and White men. Roughly 60% of African American men in California age 25 or older have some postsecondary experience, but only 30% have obtained a college degree. For Latino men, the pattern is similar. Approximately 30% of men age 25 or older have some postsecondary experience but only 14% have obtained a college degree. This non-degree and degree difference is also evident for Asian and White men, but the magnitude is smaller than for African American and Latino men.

California's Population of Young Men

Figure 3 describes the composition of California's population between the ages of 18 and 34 in 2008. Men are identified by specific racial and ethnic groups. Women are represented as a single group. We selected this subset of the population because it is commonly the age at which individuals are pursuing opportunities in postsecondary education.

Figure 3. Population Age 18-34 by Race/Ethnicity, California 2008



Source: California Department of Finance (2008)

Men of Color in Health Professions Education Programs

In the tables that follow, the data are presented as a *proportionality index*. The index compares the proportion of degrees awarded to a specific group of men to its proportion of the general population between the ages of 18 and 34. A value of 1 indicates proportional representation. A value of less than 1 indicates underrepresentation and a value of greater than 1 indicates overrepresentation.

This index has the benefit of being easy to interpret. In Table 1 below, the 1995 index for Latino male first-year enrollments in MD programs has a value of .44, indicating that in 1995, the number of Latino men enrolled in one of California's MD programs was 44% of the total one would expect based on the size of the Latino male population ages 18 to 34.

Medicine Dentistry and Pharmacy

Tables 1 and 2 focus on medicine (both MD and DO), dentistry (DDS) and pharmacy (PharmD) programs in California. The unit of measurement for allopathic medicine (MD) and dentistry programs is first-year enrollments. The unit of measurement for osteopathic medicine (DO) and pharmacy programs is graduates.

Table 1. Proportionality Index for African American, Latino, and Asian Men in Medical Education (MD & DO) Programs, California, 1995 vs. 2008*

Race/ethnicity	MD Programs		DO Programs	
	1995	2007	1995	2008
African American	.75	.55	.65	0.0
Latino	.44	.27	.17	.17
Asian	2.8	2.1	2.4	2.9

Sources: Association of American Medical Colleges (1995, 2007); IPEDS (1995, 2008); California Department of Finance (1995, 2008)

*We used the most recent publicly available data. For MD programs this was 2007.

Table 2. Proportionality Index for African American, Latino, and Asian Men in Dentistry and Pharmacy Education Programs, California, 1995 vs. 2008

Race/ethnicity	Dentistry		Pharmacy	
	1995	2008	1995	2008
African American	.30	.53	.12	.49
Latino	.18	.17	.06	.09
Asian	4.4	2.8	3.6	2.9

Sources: American Dental Education Association (1995, 2008); IPEDS (1995, 2008) California Department of Finance (1995, 2008)

The indices illustrate that the underrepresentation of African American and Latino men in California's medicine, dentistry, and pharmacy programs has persisted over time. There has been a small positive change in the index measuring African American representation in both dentistry and pharmacy. In dentistry, the change is likely driven by the shrinking size of the African American male population between the ages of 18 and 34 since 1995. The actual number of African American male first-year enrollments in California dental programs increased from six in 1995, to nine in 2008.

In pharmacy programs there were two reported African American male graduates in 1995, and ten in 2008, which is an important positive change. However they are still represented at only 50% the rate one would expect given their population size. In medicine, the number of African American men matriculating in California's medical doctor (MD) programs fell from 27 in 1995 to 18 in 2007. The state's osteopathic medical (DO) programs did not report a single African American male graduate in 2008.

The data describing Latino men present an even bleaker picture of diversity among California's elite health professions education programs, particularly in medical doctor (MD) programs. Part of the negative change in

the index is the result of a rapidly growing Latino population. However, there were fewer Latino men who matriculated in a California MD program in 2007 compared with 1995.

Physical Therapy and Physician Assistant

Table 3 presents indices describing the representation of men of color, over time, in two of what are often referred to as mid-level health professions training programs: physical therapy (PT) and physician assistant (PA). Physical therapists are increasingly independent in their delivery of care, and employment demand for PTs is expected to be strong as economic conditions improve and the demand for PT services increases with an aging population. The standard for physical therapy education has shifted in the past fifteen years due to changes driven by the profession. In 1995 there were still several baccalaureate programs in the state. Soon all programs will offer a post-baccalaureate, three-year doctor of physical therapy (DPT) degree.

Physician assistants play an important role in delivering primary care. PA training programs are offered at the associate degree level for students who already have training in a patient care related profession⁹ and at the master's level for qualified students with a baccalaureate degree in any field.

Table 3. Proportionality Index for African American, Latino, and Asian Men in Physical Therapy and Physician Assistant Education Programs, California, 1995 vs. 2008

Race/ethnicity	Physical Therapy		Physician Assistant	
	1995	2008	1995	2008
African American	.19	.25	1.01	1.12
Latino	.12	.18	.67	.49
Asian	.78	.94	.87	1.0

Sources: IPEDS (1995, 2008); California Department of Finance (1995, 2008)

In physical therapy programs, the indices illustrate that there are very few African American and Latino men training to become PTs, and that this did not change much between 1995 and 2008. One of the factors is that physical therapy is a field predominantly occupied by women; roughly 70% of graduates in 2008 were women and this also has not changed since 1995. However, there is opportunity in the field. The number of Asian men trained as physical therapists has grown substantially.

There are several highlights in the indices describing African American and Latino male representation in California's physician assistant programs. First, they compare well with the indices describing dentistry, medicine, and pharmacy. For African American men the index indicates they are proportionately represented in PA programs. There were more African American male PA graduates in 2008 versus 1995. For Latino men, the negative change in the index is the result of Latino population growth. Although there were more Latino men trained as PAs in 2008 versus 1995, Latino population growth was even greater. In general, PA programs expanded and the number of total graduates grew rapidly between 1995 and 2008. Most of this growth in the number of trained PAs was the result of increasing numbers of White and Asian women (more than ten times as many Asian women graduated from a PA program in 2008 compared to 1995).

Registered Nursing

Table 4 focuses on men of color in California's registered nurse (RN) training programs at the associate's and baccalaureate degree level. Registered nursing is the single largest health care profession. In recent years, the capacity of training programs around the state greatly expanded, and concerted efforts were made to broaden student diversity.¹⁰ Although current economic conditions have affected the employment outlook for recent graduates, nursing historically has been a very significant source of health care employment.

Table 4. Proportionality Index for African American, Latino, and Asian Men in Registered Nursing Education Programs (ADN & BSN), California, 1995 vs. 2008

Race/ethnicity	Registered Nursing	
	1995	2008
African American	.21	.32
Latino	.08	.13
Asian	.44	.95

Sources: IPEDS (1995, 2008); California Department of Finance (1995, 2008)

Registered nursing is a field predominantly occupied by women (roughly 85% of the current workforce), but the number of men entering field is increasing. Twice as many African American men and three times as many Latino men graduated from an associate's or baccalaureate degree RN program in 2008 versus 1995. However, they still represent a very small share of the total.

Radiologic Technology & Respiratory Therapy

Table 5 presents indices for men of color in radiologic technology and respiratory therapy programs, 1995 versus 2008. Radiologic technology is one of the primary fields of medical diagnostic imaging and one of the largest, in terms of workforce size, within the broad group of occupations considered health technologists and technicians. Once licensed, there are good opportunities for professional development. Radiologic technologists can obtain additional training to become certified in specialized fields of imaging such as computed tomography (CT), magnetic resonance imaging (MRI), or positron emission technology (PET), allowing greater variety of experience and increased employment opportunities. Radiologic technology programs operate at the associate's degree level and are

primarily located in the California Community College system.

Respiratory therapy is also a comparatively large occupation in terms of workforce size, with opportunities for professional development. Licensed respiratory therapists may become certified in specialty care areas, such as polysomnography, pulmonary function technology, and neonatal/pediatric respiratory care. In recent years, hospitals in California have expressed growing concern over the supply of respiratory therapists, indicating that employment demand is expected to be strong for this occupation.¹¹

Table 5. Proportionality Index for African American, Latino, and Asian Men in Radiologic Technology and Respiratory Therapy Education Programs, California, 1995 vs. 2008

Race/ethnicity	Radiologic Technology		Respiratory Therapy	
	1995	2008	1995	2008
African American	1.1	1.1	1.4	1.4
Latino	.80	.70	.40	.40
Asian	1.2	2.0	1.3	2.1

Sources: IPEDS (1995, 2008); California Department of Finance (1995, 2008)

Radiologic technology and respiratory therapy are two of the few fields in health care not predominantly occupied by women; the gender composition is roughly equal. It is not surprising to see that African American and Latino men are better represented here compared to many other health care training programs. In radiologic technology programs, African American male representation has remained proportional, whereas Latino male representation has declined very slightly. However, Latino men are better represented here than in any other program selected for this analysis. In respiratory therapy programs, the index indicates that

African American men remain well represented. The share of Latino men in respiratory therapy training is much lower, but has remained at the same level over time.

Medical Assistant and Dental Assistant

Overall, African American and Latino men are best represented in postsecondary education certificate programs, many of which take less than one year to complete, but this is not always the case within health care occupations. Training programs for these entry-level occupations are the most racially and ethnically diverse in health care, but are overwhelmingly populated by women. Two of the largest health care support occupations are medical assistant and dental assistant. Table 6 presents proportionality indices for both of these education programs, for 2008.

Table 6. Proportionality Index for African American, Latino, and Asian Men in Medical Assistant and Dental Assistant Education Programs, California, 2008

Race/ethnicity	Medical Asst.	Dental Asst.
African American	.31	.50
Latino	.26	.29
Asian	.29	.34

Sources: IPEDS (2008); California Department of Finance (2008)

Because women represent roughly 90% of the workforce for both of these occupations, it is not surprising to see so few men of color among graduates of training programs. The large size of the medical assistant workforce and the expected growth in this field offer significant employment opportunities for many workers. While this workforce often experiences low pay, wide variation in quality of educational programs, and limited career growth, it may be poised to be of greater appeal and value in the future.

Substance Abuse Counselor and Psychiatric Technician

Substance Abuse Counselors and Psychiatric Technicians both have more of a social health and welfare orientation in comparison with the other selected fields. Table 7 includes proportionality indices for both of these education programs, for 2008.

Table 7. Proportionality Index for African American, Latino, and Asian Men in Substance Abuse Counselor and Psychiatric Technician Education Programs, California, 2008

Race/ethnicity	Substance Abuse Counselor	Psychiatric Technician
African American	3.3	1.1
Latino	.56	.28
Asian	.25	1.3

Sources: IPEDS (2008); California Department of Finance (2008)

The indices for African American men show that in 2008 the number of psychiatric technician graduates was roughly proportional to their population size. However, there were more than three times as many African American male graduates of substance abuse counseling training programs as one would expect, based on the measure of proportionality. To date, research has not explored the reasons behind the differences between these and other professions.

Summary of Data

Our analysis shows that Latino men are profoundly underrepresented in California's health professions education programs. Educational attainment for both African American and Latino men is low, at the high school and postsecondary levels. This is a critical issue because a high school degree is the minimum educational requirement for all health professions education programs, and for many others a college degree is required (medicine, dentistry, and pharmacy). Among the programs selected for analysis, Latino men are best represented in radiologic technology, physician assistant, and respiratory therapy programs. While the absolute number of Latino male graduates has increased in certain programs, their share of the total number of graduates trained seems to be generally declining.

African American men are better represented in several of the selected fields of health professions training, including radiologic technology, physician assistant, and respiratory therapy programs, and psychiatric technician programs. They are overrepresented in substance abuse counseling programs. It is of special concern that there are so few African American men enrolling in California's medical, pharmacy and dental schools because efforts to increase enrollments have long been in place. We acknowledge that more recent data on enrollments may show results of these efforts.

Implications for Workforce Policy and Health Professions Education

There have been many studies of diversity in the health professions, covering a broad range of professions or focused on a single profession such as medicine or dentistry.¹²⁻¹⁷ There have been targeted efforts to improve the participation of young men of color in education programs and in the labor market. Career academies in high schools focused on young men of color have shown some success in increasing high school graduation rates.¹⁸ Mentoring young men of color in community colleges have also shown success in increasing graduation and retention rates.¹⁹ Some of

these efforts have focused specifically on health professions. A program operating in San Diego high school health and sciences career academies identified several key challenges and critical resources required for success, including the need for parental involvement, for industry and education partnerships, the need to be more inclusive of ESL students, and to recognize the additional burden placed on teachers in terms of time and resources.²⁰

It is important to continue to evaluate the range of efforts to improve the outcomes for young men of color in education and in health careers and to scale up successful efforts. We suggest that further research and specific types of targeted programs be considered to target young men of color in California. These efforts focus on communities and collaboration with the educational institutions in those communities.

- Develop targeted initiatives to maximize high school completions for men of color, including reliance on health care high school pipeline programs, to provide the foundation for health care careers.
- Adapt basic skills preparation programs to the needs of men of color to increase success in post-secondary education and professional work.
- Explore and assess enrollment and completion rates in community colleges by health professions degree type.
- Develop programs in specific geographic communities to establish and strengthen community colleges and educational support systems.
- Develop pilot programs in targeted communities including collaborations between workforce investment boards, high schools and community colleges aimed at young men of color in health professions education programs.

Notes

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