



Diversity in California’s Health Professions: Physical Therapy
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A report of the California Health Workforce Tracking Collaborative

Timothy Bates and Susan Chapman
UCSF Center for the Health Professions

Introduction

This issue brief is one in a series of briefs presenting a profile of California’s current and projected population, selected health professions, and data describing trends in selected health professions education programs in the state. In this brief we present data describing key demographic characteristics of the state’s physical therapist (PT) labor force including age, gender, race/ethnicity, and income; and data describing trends in gender and race/ethnicity for graduates of California’s physical therapy programs.

California’s Current & Projected Population

California has become one of the most racially and ethnically diverse states in the country, and is projected to become even more so in the coming decades. In 2000, roughly 53% of California’s population was non-White.¹ By 2006 this proportion had grown to approximately 57%.² Population projections suggest that by the year 2030, 66% of the state’s population will be non-White.³ Over the next 25 years the state’s population is projected to grow by roughly 12 million people. Over 90% of this population growth is projected to occur among California’s Latino (75%) and Asian (17%) populations.³ These dramatic changes underscore the need to address the lack of racial and ethnic diversity among key health professions in the state.

Active Physical Therapists in California

The following tables present estimates describing physical therapists⁴ (PTs) in California over the period 2005-2006.⁵

Table 1: Annual Wage[†] of Physical Therapists in California in 2006 Inflation-adjusted Dollars by Percentile Ranking

All Physical Therapists ⁶		
Annual Wage 10 th Percentile	Annual Wage 50 th Percentile (Median)	Annual Wage 90 th Percentile
\$35,547	\$66,019	\$94,536

Source: Combined 2005 & 2006 American Community Survey, Public Use Microdata Sample for California

The 2006 median annual wage for all California PTs was \$66,019, however, there is a considerable range in earnings. Wages at the 10th percentile are commonly used to proxy entry-level pay, while wages at the 90th percentile are commonly used to proxy wages earned by experienced workers. For physical therapists in California, the estimated distribution of 2006 wages suggests that experienced PTs earn as much as \$60,000 per year more than PTs just entering the labor force. It’s important to point out, though, that these wage estimates do not reflect other factors known to impact differences in earnings. These factors include years of experience, geographic location of the practice, whether the physical therapist specializes in a particular field, and the practice setting.

[†] The annual wage of physical therapists was obtained by first estimating an hourly wage, which was then multiplied by 2080 to obtain a full-time equivalent annual income.

Table 2: 2005/2006 Mean Age of Active Physical Therapists in California by Gender

	Gender	
	Male	Female
Mean Age of Physical Therapists	40	40

Source: Combined 2005 & 2006 American Community Survey, Public Use Microdata Sample for California

We found no difference in the average age of active PTs in California, based on gender. Over the period 2005-2006, the average age of both male and female PTs was 40 years old.

Table 3: Comparing the 2005/2006 Composition of Physical Therapists with the General Labor Force in California by Gender, Race/Ethnicity*

		Proportion of Physical Therapist Labor Force	Proportion of CA Labor Force ⁷
Gender	Male	34.0	50.1
	Female	66.0	49.9
Race / Ethnicity	White	65.0	44.5
	Asian	21.2	13.2
	Latino	8.5	33.8
	African American	2.7	5.8
	Other Race⁸	2.6	2.7

Source: Combined 2005 & 2006 American Community Survey, Public Use Microdata Sample for California

*Estimates in bold indicate the comparative estimates are statistically, significantly different from one another (alpha = .05).

Female PTs outnumber male PTs by nearly 2 to 1 in California. This ratio is comparable to that of the national physical therapist labor force.⁹ Females are also more highly represented among PTs in California than among the state's general labor force.

California's physical therapist labor force is predominantly White. Collectively, Whites (65%) and Asians (21%) represent over 85% of all PTs in the state, compared with just 57% of the general labor force. However, "Asian" is a very broad category entailing numerous subpopulations. It

may be that certain Asian groups are much better represented among physical therapists than others. Unfortunately, data limitations preclude more detailed analysis.

In contrast, Latino PTs are underrepresented at an estimated 8.5% of the state's physical therapist labor force, compared with nearly 34% of California's general labor force. While less dramatic by comparison, African Americans are also underrepresented among physical therapists in California, accounting for just 2.7% of all PTs but nearly 6% of the state's general labor force.

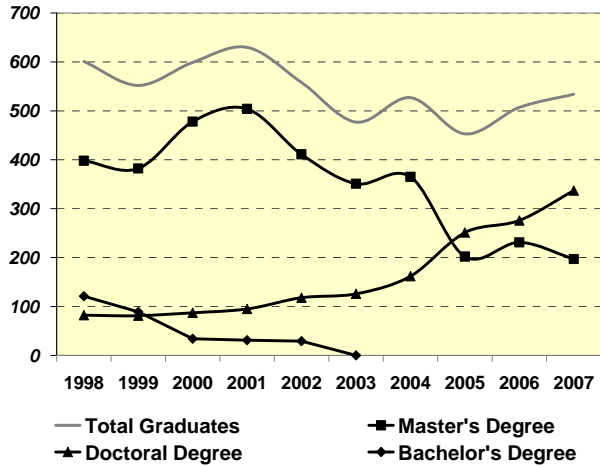
Collectively, Native Americans, Native Hawaiians & Pacific Islanders, and multiracial Californians are represented in roughly equal proportions among the state's physical therapist and general labor force. However, it may be that one or more of these population groups are underrepresented among physical therapists in California; these are comparatively small groups and the limitations of available data prevent us from conducting analysis at that level of detail.

Although there is clear underrepresentation of Latinos and African Americans in the state's physical therapist labor force, PTs in California exhibit substantially greater racial/ethnic diversity by comparison with the national physical therapist labor force. The 2007 American Physical Therapy Association's demographic profile indicates that 88% of its membership is White.¹⁰ Similarly, estimates from the 2007 Current Population Survey show that Asians, Latinos, and African Americans represent smaller proportions of the national PT labor force by comparison with California.⁹

Physical Therapy Education in California

The following section describes graduates of California's PT programs between 1998 and 2007. Although the number of programs offering physical therapy education during this period has remained constant (15 programs), there is an overall declining trend in the number of graduates each year.

Figure 1: Total Number of Graduates of California's Physical Therapy Programs by Degree Type: 1998-2007

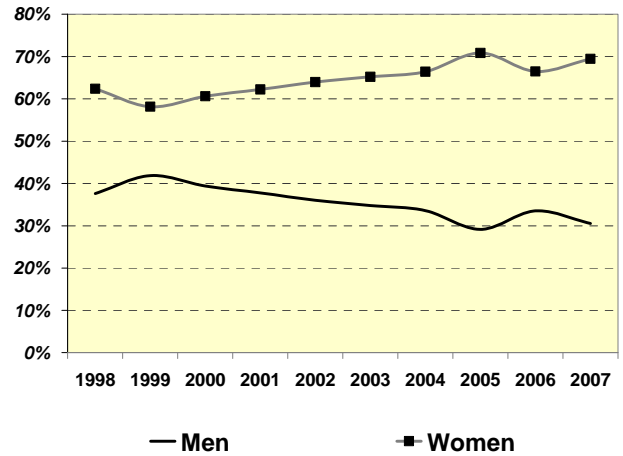


Source: Integrated Postsecondary Education Data System

The educational credential for entry into practice in physical therapy has shifted from a bachelor's degree to a master's degree over the past fifteen years. The transition began in the 1990s, and in 1996 the Commission on Accreditation in Physical Therapy Education established a requirement that physical therapy programs culminate in a post-baccalaureate degree.¹¹ By the year 2003, there were no longer any baccalaureate programs in physical therapy in California.

In recent years many master's level programs have transitioned to a 3-year doctor of physical therapy degree (DPT) program. There are still several physical therapy programs in California (in the California State University system) that offer the Master of Science degree. However, the number of master's level graduates has been steadily declining since 2001. In the year 2005 over 60% of all graduates from a California physical therapy education program held the DPT credential. At the same time, the total number of PT graduates has been declining as this transition from master's level to doctoral level degree program has taken place.

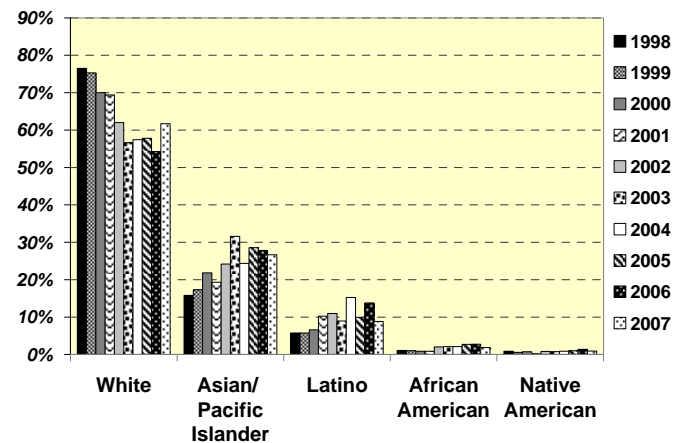
Figure 2: Graduates of California's Physical Therapy Programs by Gender (%): 1998-2007



Source: Integrated Postsecondary Education Data System

The gender composition of graduates of California's physical therapy education programs has increasingly favored females. Males represented more than 40% of the total number of PT graduates in 1999; in 2007 they accounted for just 30% of the total. Data not shown here suggest that as PT education programs transitioned away from the bachelor's degree, the proportion of male PT graduates has declined.

Figure 3: Latino, African American, and Native American Total Enrollment in California's Physical Therapy Programs: 2001-2007



Source: Integrated Postsecondary Education Data System

Figure 3 shows the shifting racial/ethnic composition¹² of graduates from California's physical therapy education programs. Although there is some fluctuation in proportional representation, overall, the level of racial/ethnic diversity is increasing over time. Asian students have made the biggest gains in representation as the annual number of Asian graduates has roughly doubled over the past 10 years. Although Latino students are still an underrepresented group among the state's physical therapy education programs, they have grown in number over time and the overall racial/ethnic composition of graduates reflects this growth.

Both Asians and Latinos are better represented in California's physical therapy education programs by comparison with the state's current PT labor force. In contrast, African Americans are underrepresented in California's PT education programs and the current PT labor force in roughly equal proportions (they represent 2%-3% of the total in both cases). While it is not clear to what extent Native Americans are represented in California's current PT labor force (due to data limitations), in recent years the number of graduates reported has been 5 or 6 per year. Proportionally, this is roughly equal to Native American representation in California's general labor force. Overall, the data indicate that in recent years student bodies in California's PT programs have become more racially/ethnically diverse compared with the PT labor force.

Discussion & Policy Implications

Estimates of the racial and ethnic composition of California's current physical therapy labor force illustrate the predominance of White and Asian practitioners. Collectively, White and Asian physical therapists represent roughly 85% of the California's physical therapy labor force.

This predominance of White and Asian practitioners means that Latinos and African Americans are underrepresented among physical therapists in California. The gap between presence in the state's PT labor force and the general labor force is, however, much more dramatic for Latinos by comparison. Data limitations preclude analysis of

how well Native Americans, Native Hawaiians & Pacific Islanders, and multiracial Californians are represented in the state's physical therapist labor force.

Achieving a racially/ethnically diverse PT labor force is a stated policy objective of the American Physical Therapy Association.¹³ Efforts to reach this goal include minority scholarship awards to students pursuing PT education as well as fellowship awards to minority faculty conducting research in the area of physical therapy practice and minority population health issues. At the state level, the California Physical Therapy Association does not appear to have a stated policy position on workforce diversity. Nor did our research uncover any initiatives sponsored by individual PT programs in California with a focus on recruiting minority students into physical therapy education.

Student data show that as PT education programs have transitioned away from the bachelor's degree to the master's degree and now to a 3-year doctoral degree, the number of graduates has steadily declined. This may be a temporary transition, the result of a longer time to attain a degree.

Student enrichment programs are key efforts that address the need to develop a more racially/ethnically diverse health professions labor force, including physical therapy. One example of such a program is the Health and Medical Professions Preparation Program at UC San Diego.¹⁴ It offers multiple opportunities that support students who are planning to enter health professions such as physical therapy. These opportunities include mentor programs, pre-professional seminars designed to stimulate exploration of a field, and volunteer opportunities. Other such enrichment programs are found throughout the UC and CSU systems,¹⁵ offering opportunities not only to become exposed to less "high profile" health professions such as physical therapy, but also offering academic preparation in science and mathematics. These enrichment programs play a vital part in encouraging and preparing students from economically and educationally disadvantaged backgrounds to enter health professional fields like physical therapy, and they rely on continuous public and private support.

References

¹ Census 2000 Summary File 1 (SF1) 100-Percent Data, Table P4. Hispanic or Latino, and Not Hispanic or Latino by Race (Total Population).

² 2006 American Community Survey, Public Use Microdata Sample for California.

³ State of California, Department of Finance, *Race/Ethnic Population with Age & Sex Detail 2000-2050*. Sacramento, CA, July 2007.

⁴ We restricted the sample to physical therapists holding a bachelor's degree or higher and that reported working in healthcare-related industries.

⁵ PUMS data for the 2005 & 2006 ACS surveys were combined in order to have enough observations to generate useful estimates.

⁶ In order to generate comparable earnings estimates we limited the sample to physical therapists who reported having worked at least 40 weeks in the last year and at least 20 hours per week.

⁷ We use the population between the ages of 18 and 65 (inclusive) as a proxy for the general labor force.

⁸ Other race combines sample observations of American Indian, Native Alaskan, Native Hawaiian, Pacific Islander, and multiracial physical therapists.

⁹ Bureau of Labor Statistics, Current Population Survey, *Employed Persons by Detailed Occupation, Sex, Race, and Hispanic/Latino Ethnicity*. 2007.

¹⁰ American Physical Therapy Association. *2007 PT Member Demographic Profile*.

¹¹ Nieland, V., Harris M.J. "History of Accreditation in Physical Therapy Education." *Journal of Physical Therapy Education*. Winter 2003.

¹² This calculation is based on total number of graduates for whom race/ethnicity is identified. During the period 1998-2007, graduates of California's PT programs whose race/ethnicity is unknown represent on average 10% of the total number of graduates.

¹³ The American Physical Therapy Association, Department of Minority Affairs is engaged in multiple efforts to develop a racially/ethnically diverse workforce and address issues of cultural competence. For full information see

<http://www.apta.org>.

¹⁴ Details of the program are available at:

<http://aep.ucsd.edu/default2.htm>

¹⁵ For example, the Health Careers Opportunity Program (HCOP) at UCSF/Cal State Fresno and at Cal State Los Angeles.

Acknowledgements



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