

**AHEC Diversity Regional Conference
Dallas, Texas**

***Demographics and Diversity in
Selected Health Care Professions***

Health Professions Resource Center

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- 2) Texas Center for Nursing Workforce Studies**
- 3) Hospital Survey Unit**

<http://www.dshs.state.tx.us/CHS/hprc/>

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1 in 10 Americans Works in Health Care or Is a Health Professional

- Health professionals:
 - Working in health service settings: 8.7 million
 - Working in other settings: 2.1 million
- Non-health professionals in health service settings: 4.1 million
- Total Health Care Workforce: 14.9 million
- U.S. civilian labor force: 141.6 million

Source: Bureau of Labor Statistics, 2001 – figures shown are the average of 12 months' data (Oct 2000-Sep 2001)

Source: Center for Health Workforce Studies, School of Public Health, University of Albany, SUNY, May 2004; modified by the Texas Health Professions Resource Center, Center for Health Statistics, January 2007

Projection -5 of the 25 Occupations to Add the Most Jobs in 2002 thru 2012 will be in Health Care

Texas Workforce Commission (TWC)

Occupational Titles (Rank out of 25 Occupations)	TX Numerical Change, 2002- 2012	Average Annual Openings in TX
(3) Registered Nurses	<i>47,500</i>	7,625
(5) Personal and Home Care Aides	<i>42,700</i>	5,905
(14) Medical Assistants	<i>26,300</i>	3,410
(15) Nursing Aides, Orderlies, and Attendants	<i>24,000</i>	3,525
(19) Home Health Aides	<i>21,100</i>	2,710

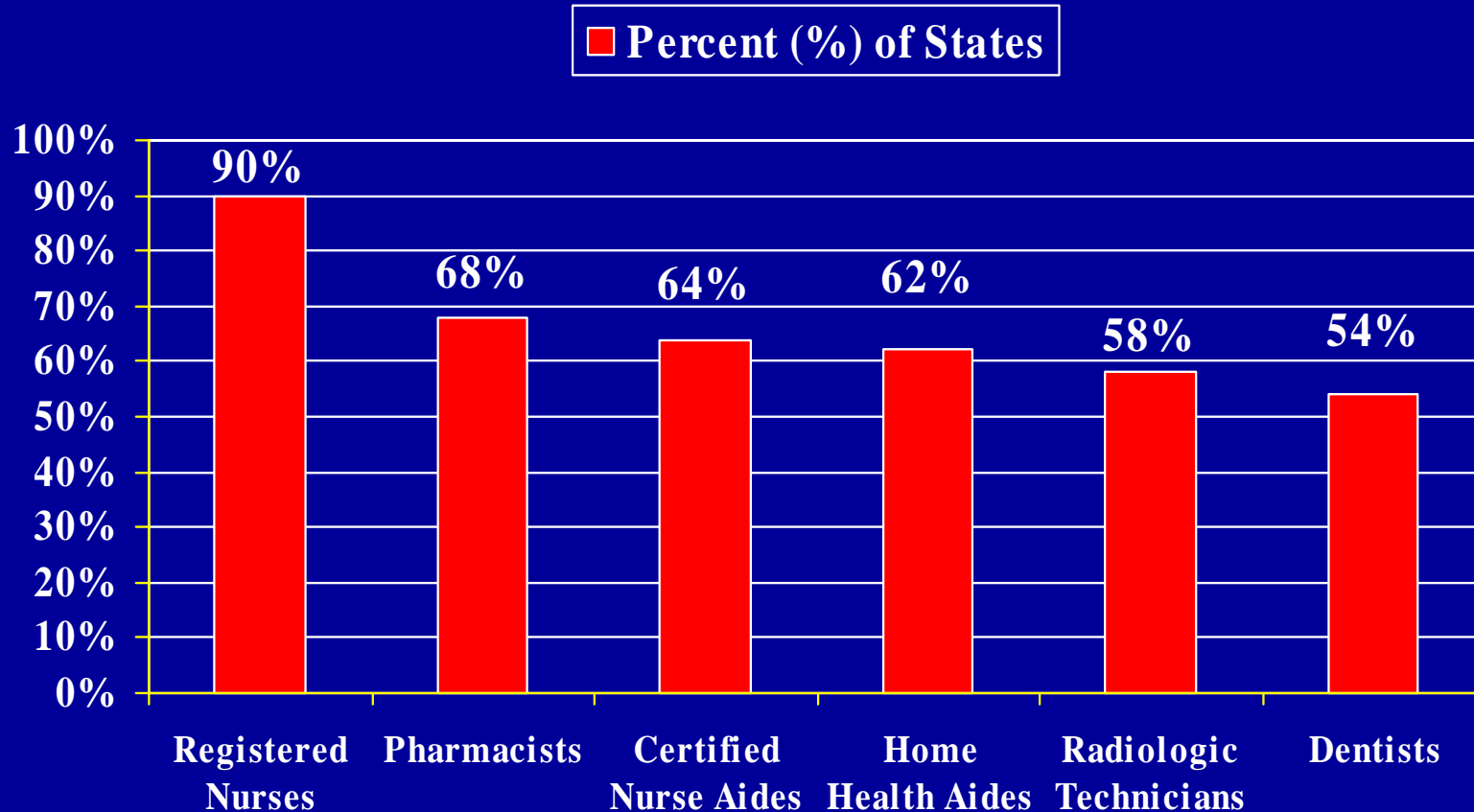
Source: Texas Workforce Commission, "Tracer" Website - Accessed 1/16/2007; modified by the Texas Health Professions Resource Center, Center for Health Statistics, January 2007

Projection - 13 of the 25 Fastest Growing Occupations in 2002 thru 2012 will be in Health Care - TWC

Occupational Titles (Rank out of 25 Occupations)	TX Growth Rate (%) - 2002 thru 2012
(1) Medical Assistants	62.3
(2) Medical Records & Health Info Technicians	55.3
(3) Physician Assistants	52.8
(4) Physical Therapist Aides	50.0
(7) Physical Therapist Assistants	48.5
(9) Home Health Aides	46.1
(10) Respiratory Therapists	46.1
(11) Environmental Health/Science Technicians	44.8
(13) Dental Hygienists	43.1
(15) Dental Assistants	42.0
(16) Physical Trainers & Aerobic Instructors	42.0
(17) Personal & Home Care Aides	41.8
(19) Occupational Therapists	41.1

Source: Texas Workforce Commission, "Tracer" Website, Accessed 1/16/2007; modified by the Health Professions Resource Center, Center for Health Statistics, 2007

Percent of States Experiencing Shortages in Selected Health Professions, 2002

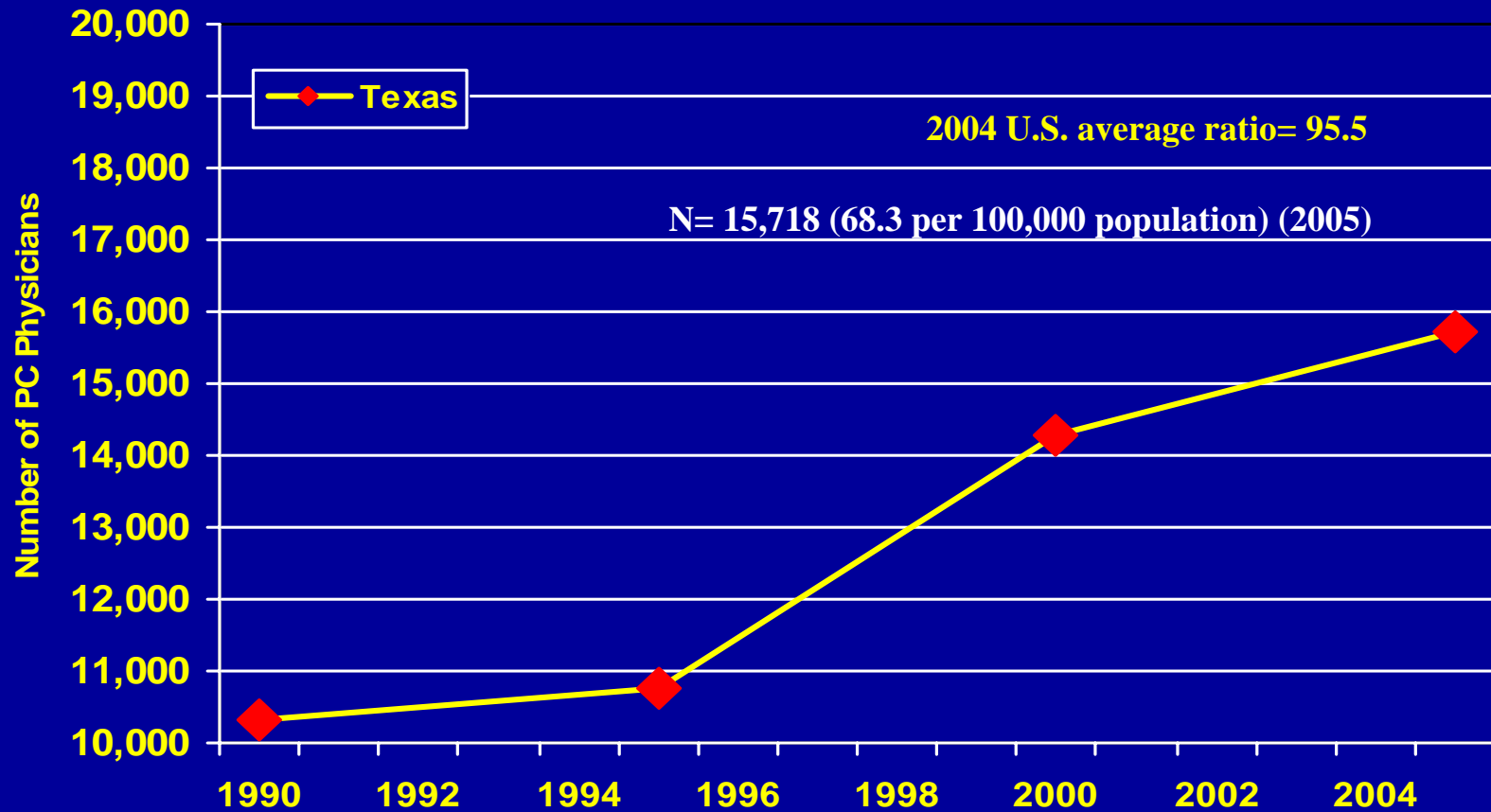


Source: Center for Health Workforce Studies, School of Public Health, University of Albany, SUNY, "State Responses to Health Worker Shortages: Results of 2002 Survey of States," Published November 2002. Slide prepared by the Texas Health Professions Resource Center, Center for Health Statistics, January 2007.

SUPPLY TRENDS - TEXAS

Supply Trends: 1990 - 2005

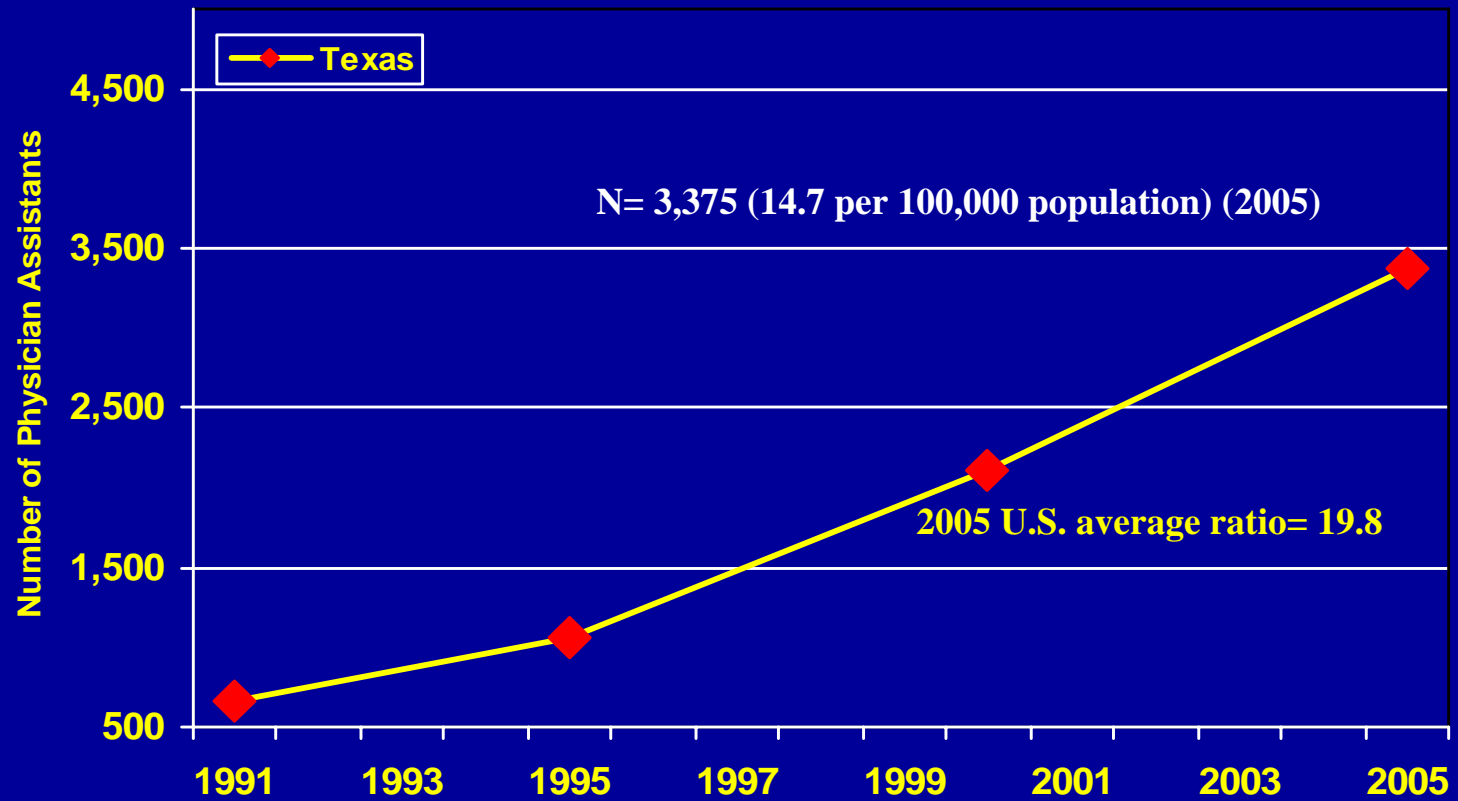
Primary Care (PC) Physicians



Data source: Texas Medical Board's physician licensing database; Health Resources and Services Administration, Washington, DC; Prepared by: Texas Health Professions Resource Center, Center for Health Statistics, January 2007

Supply Trends: 1991 - 2005

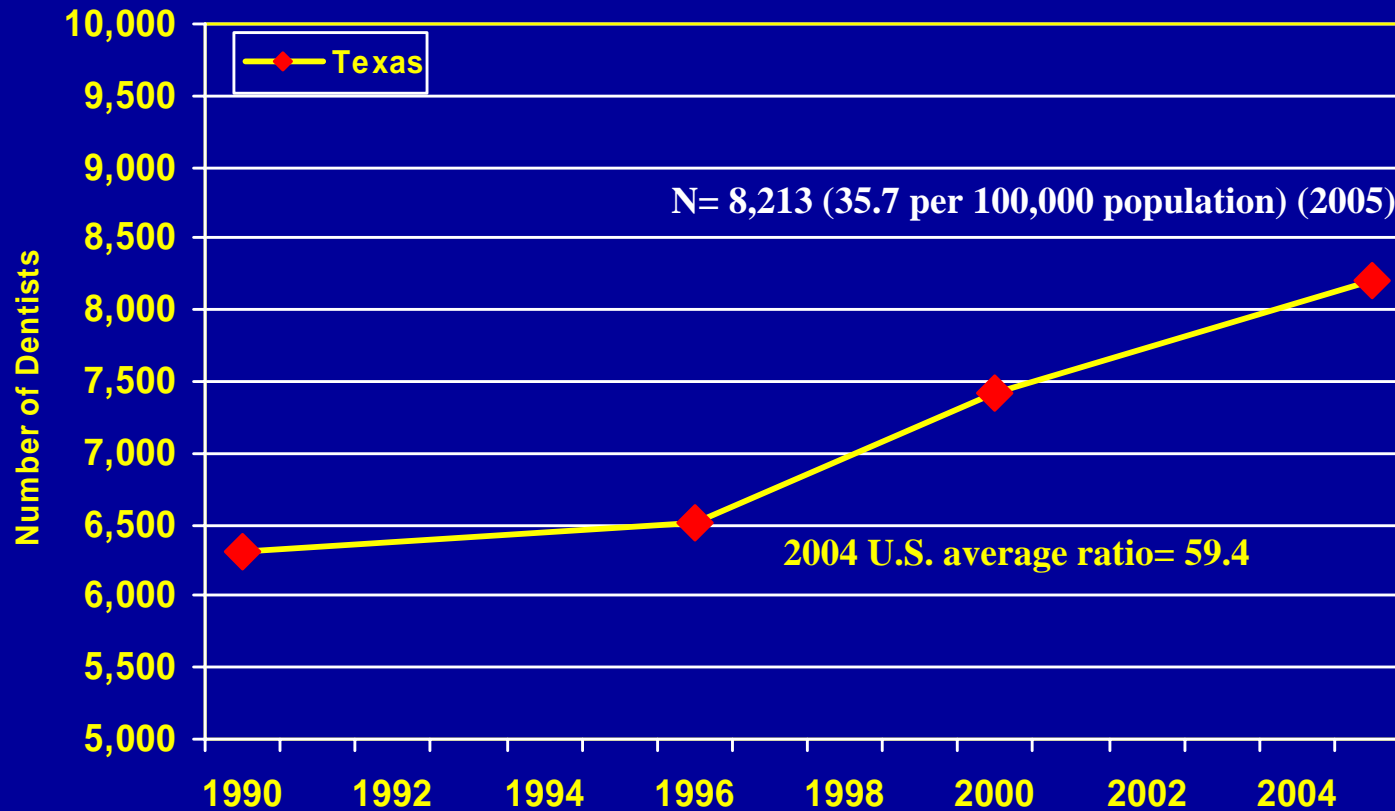
Physician Assistants



Data source: Texas Medical Board's physician licensing database, includes all active physician assistants practicing in Texas.
Prepared by: Texas Health Professions Resource Center, Center for Health Statistics, January 2007

Supply Trends: 1990 - 2005

Dentists

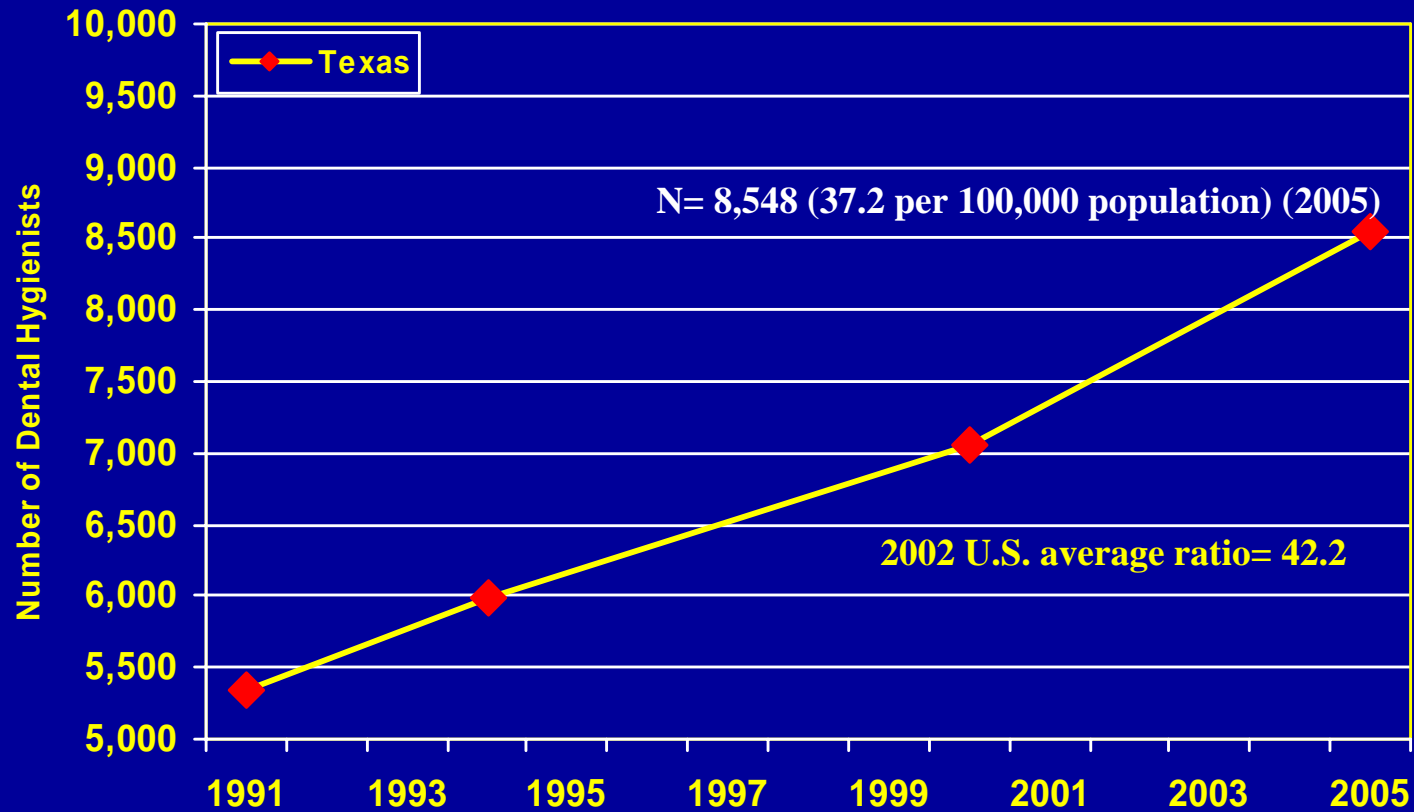


Data source: Texas State Board of Dental Examiners' licensing database.

Prepared by: Texas Health Professions Resource Center, Center for Health Statistics, January 2007

Supply Trends: 1991 - 2005

Dental Hygienists

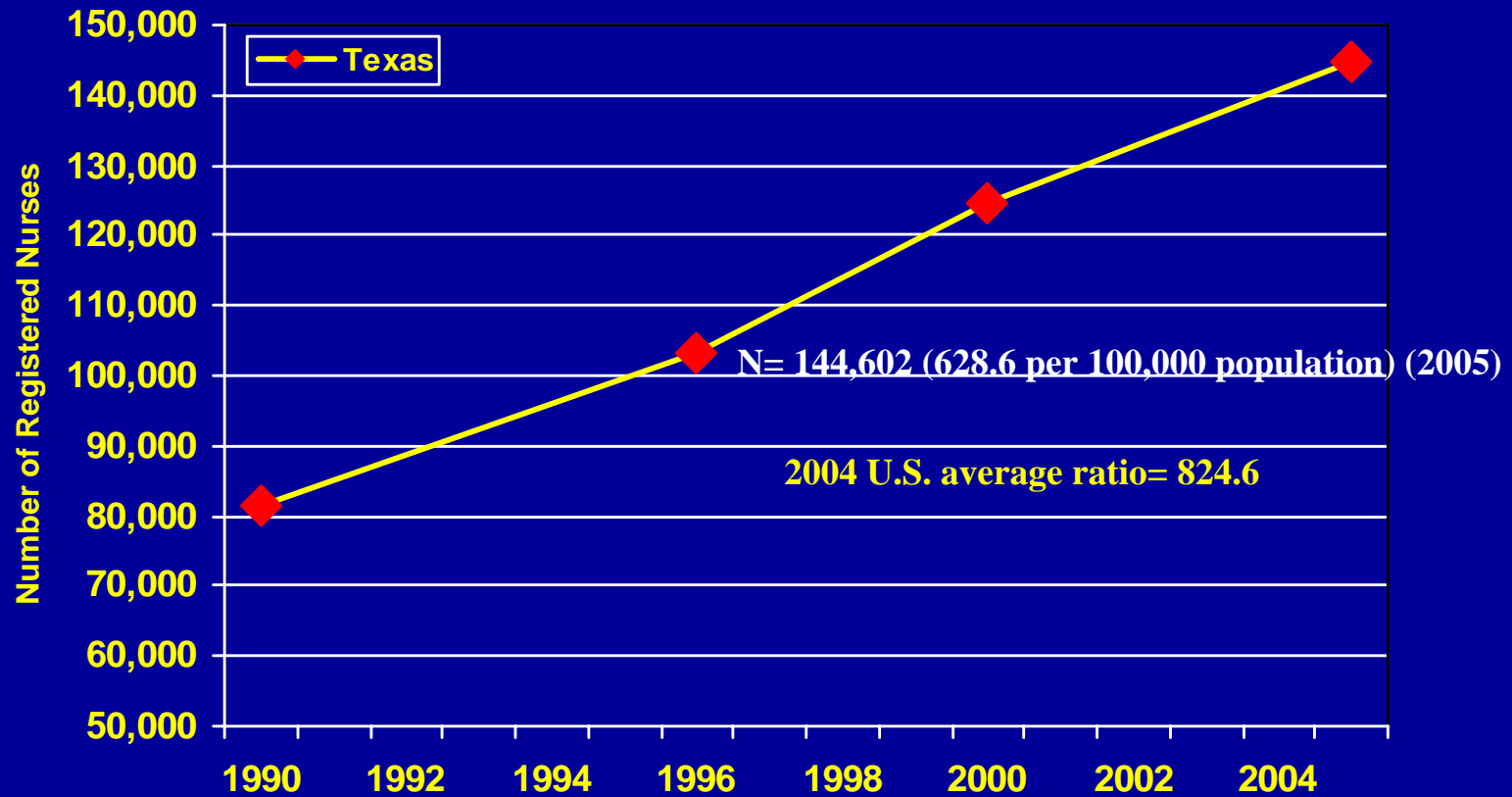


Data source: Texas State Board of Dental Examiners' dental hygienist licensing database.

Prepared by: Texas Health Professions Resource Center, Center for Health Statistics, January 2007

Supply Trends: 1990 - 2005

Registered Nurses

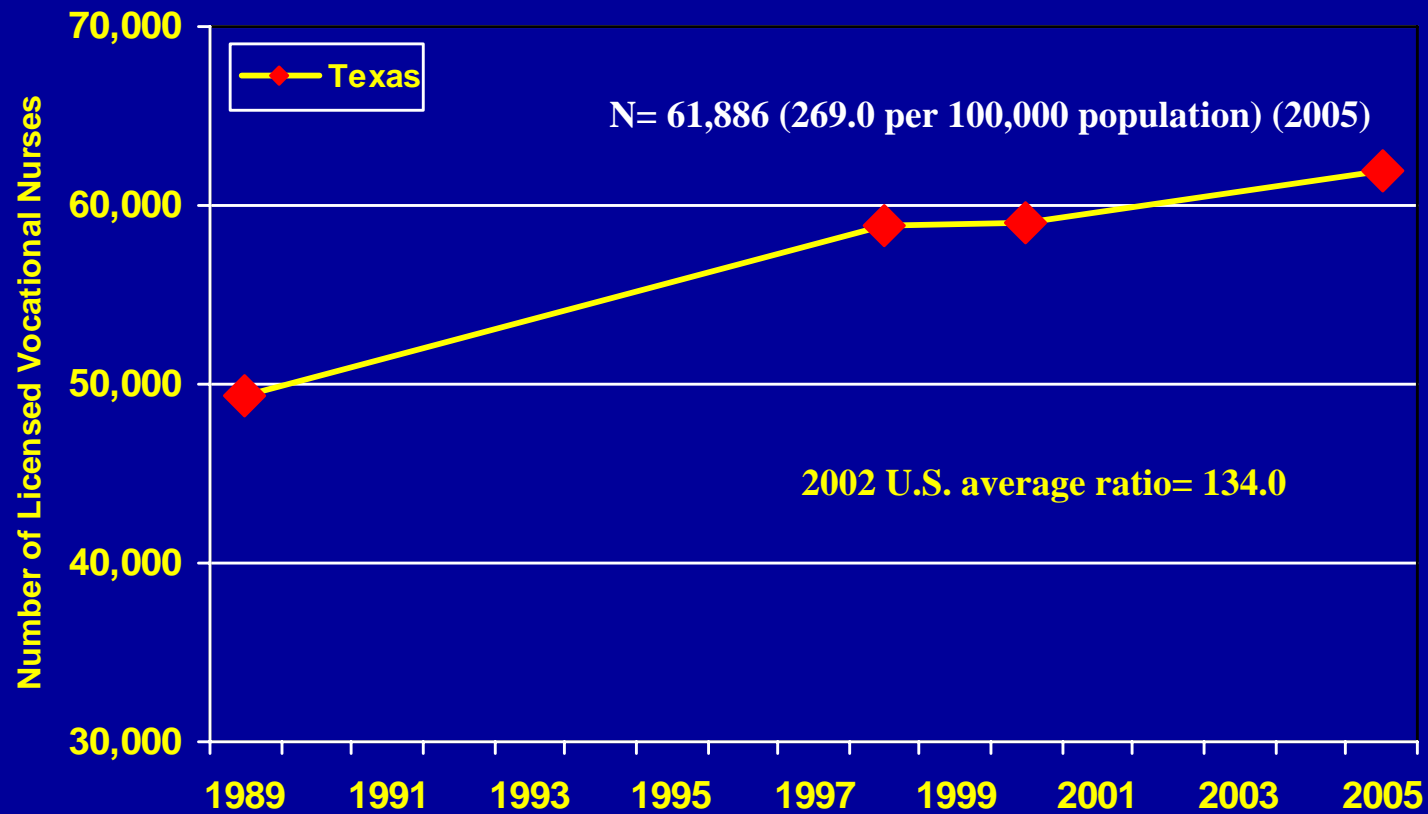


Data source: Board of Nurse Examiners' RN licensing database.

Prepared by: Texas Health Professions Resource Center, Center for Health Statistics, January 2007

Supply Trends: 1989 - 2005

Licensed Vocational Nurses

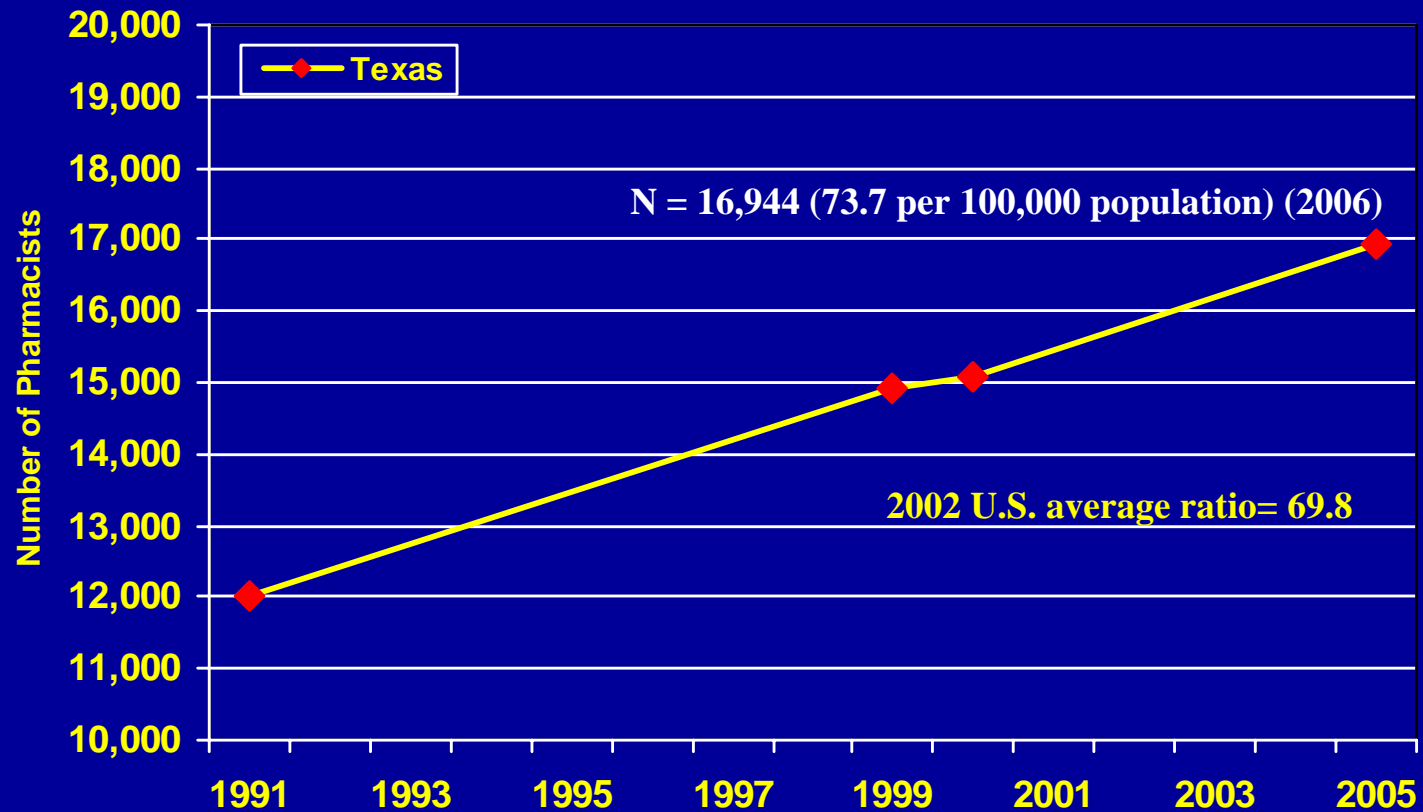


Data source: Board of Nurse Examiners' LVN licensing database.

Prepared by: Texas Health Professions Resource Center, Center for Health Statistics, January 2007

Supply Trends: 1991 - 2005

Pharmacists

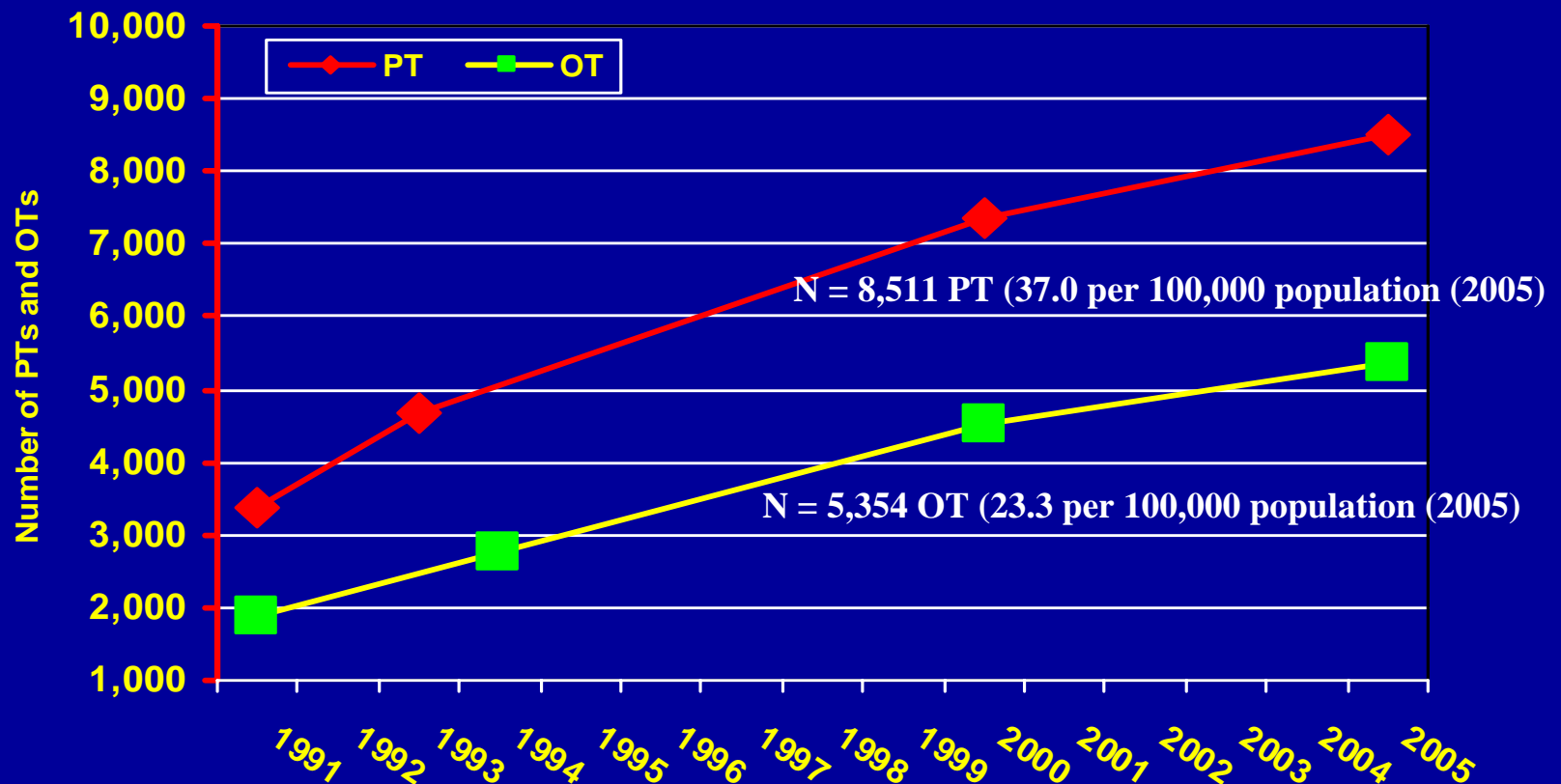


% of U.S. graduates with PharmD increased from 20.8% to 59.3% between 1995 and 2000

Data source: Texas State Board of Pharmacy's licensing database; Prepared by: Prepared by: Texas Health Professions Resource Center, Center for Health Statistics, January 2007

Supply Trends: 1991 - 2005

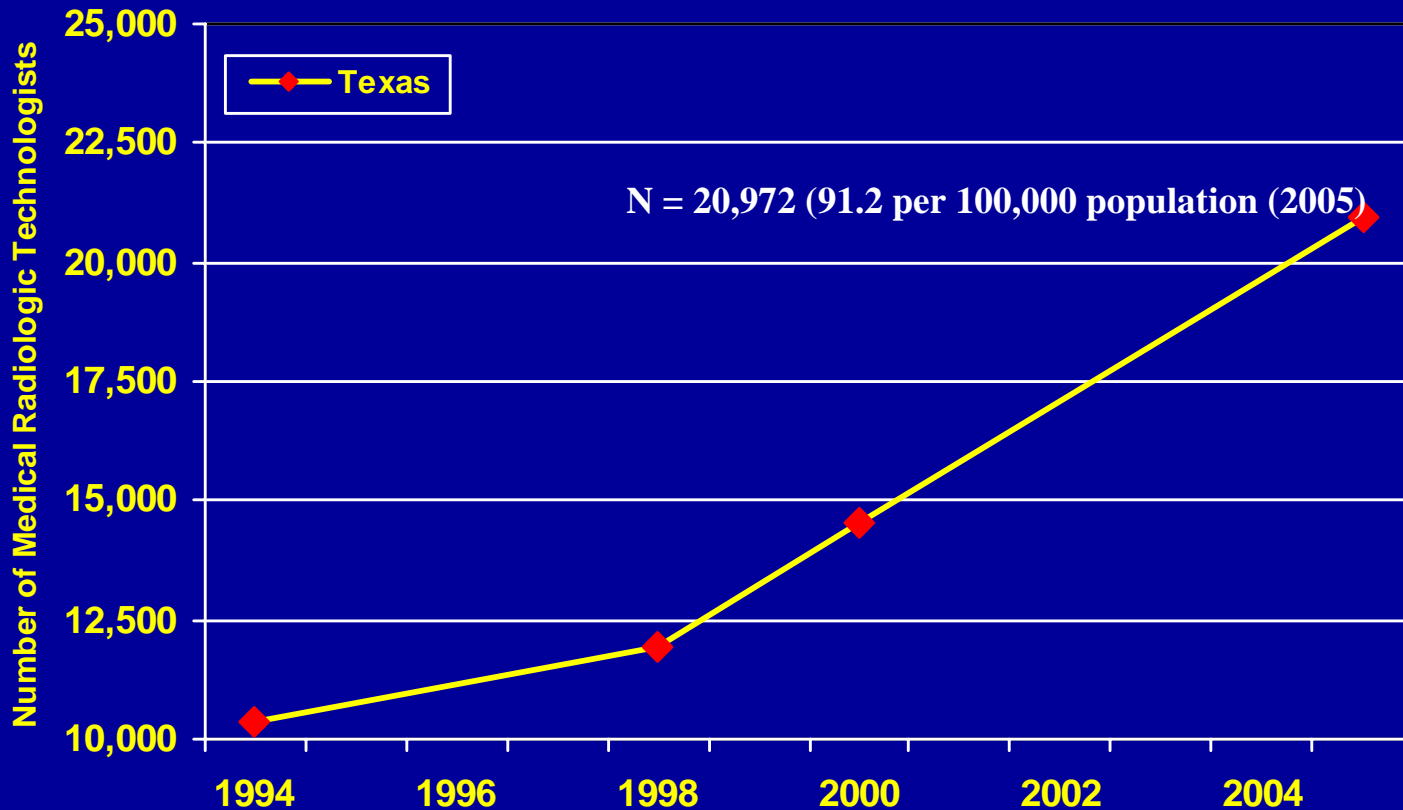
Physical and Occupational Therapists



Data source: Executive Council of Physical Therapy & Occupational Therapy Examiners' physical and occupational therapist licensing databases; Prepared by: Texas Health Professions Resource Center, Center for Health Statistics, January 2007

Supply Trends: 1994 - 2005

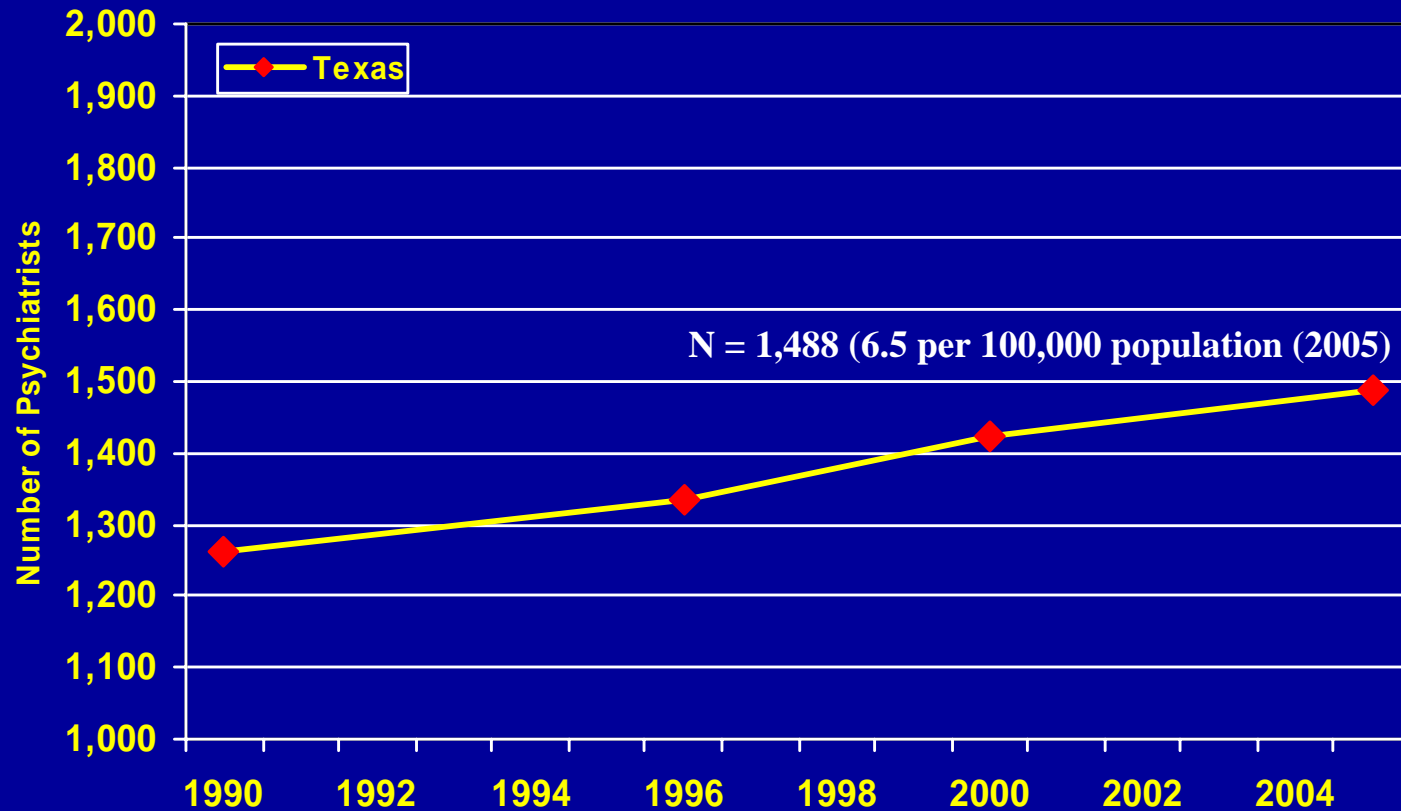
Medical Radiologic Technologists



Data source: Professional Licensing and Certification Unit's Medical Radiologic Technologist licensing database
Prepared by: Texas Health Professions Resource Center, Center for Health Statistics, January 2007

Supply Trends: 1990 - 2005

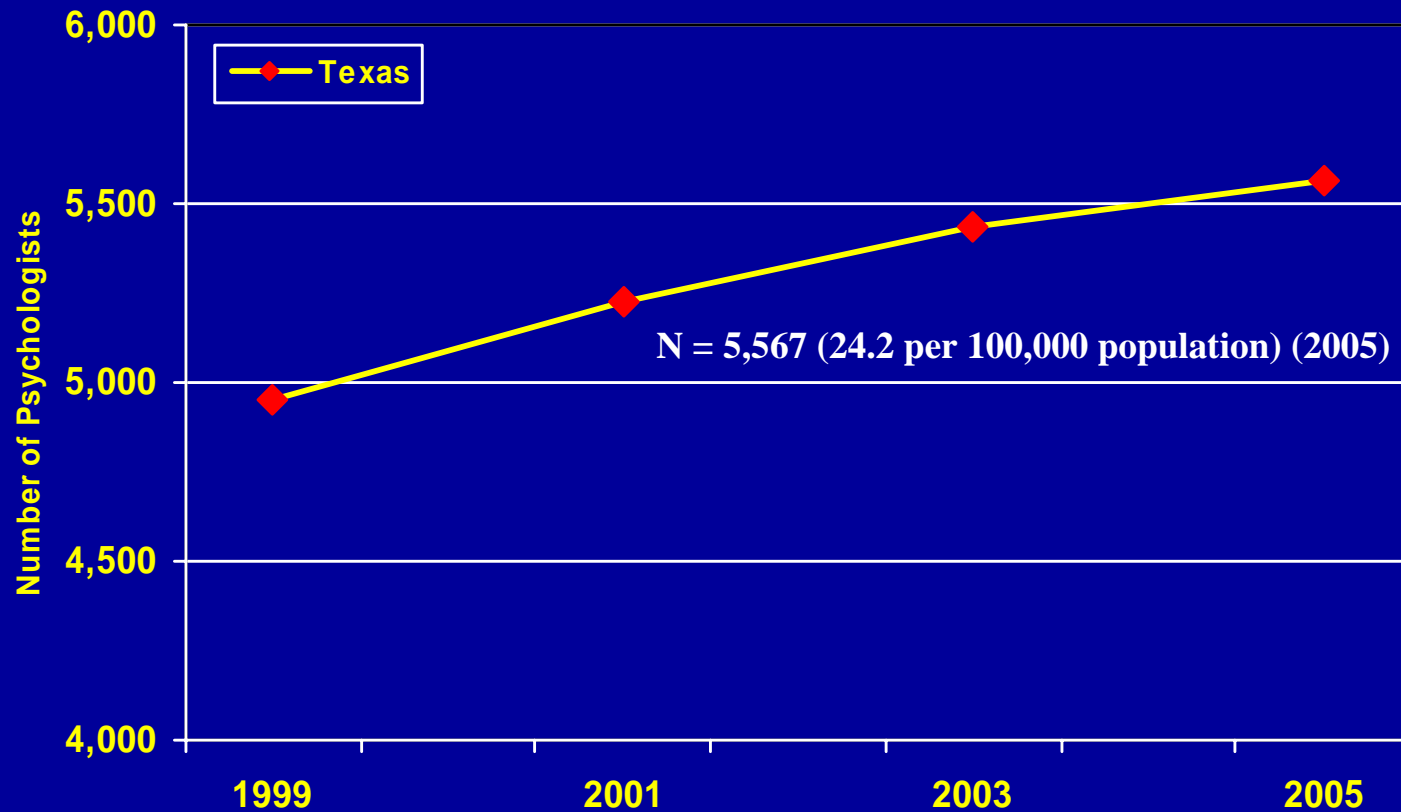
Psychiatrists



Data source: Texas Medical Board's physician licensing database; Prepared by: Texas Health Professions Resource Center, Center for Health Statistics, January 2007

Supply Trends: 1999 - 2005

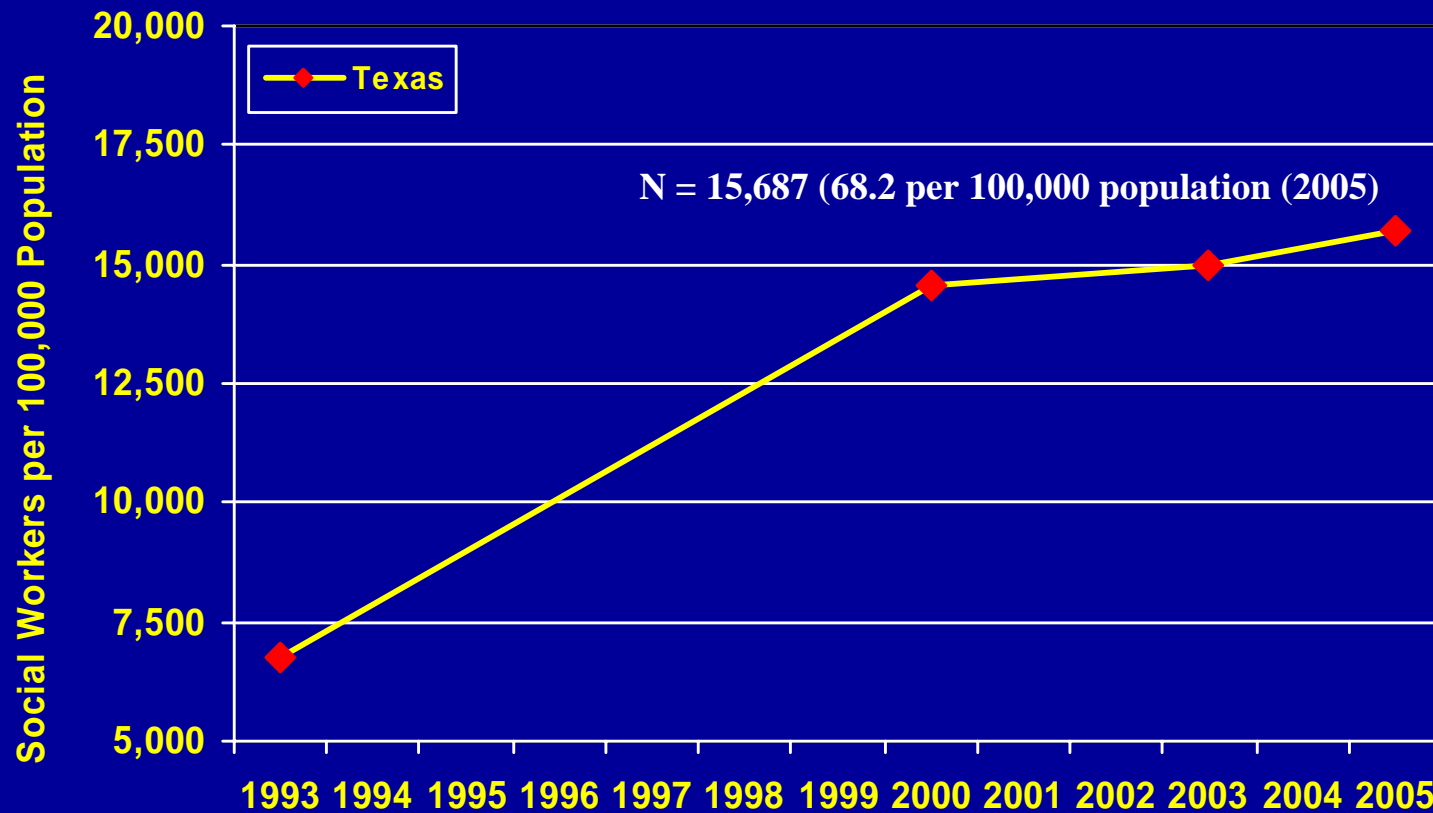
Psychologists



Data source: Texas State Board of Examiners of Psychologists' licensing database; Prepared by: Texas Health Professions Resource Center, Center for Health Statistics, January 2007

Supply Trends: 1993 - 2005

Social Workers



Data source: Professional Licensing and Certification Unit's social worker licensing database; Prepared by: Texas Health Professions Resource Center, Center for Health Statistics, January 2007

Diversity Within the Health Professions In Texas

The Health Professions are not Entirely Representative of the Population

- Demographics
 - Race/Ethnicity
 - Gender
 - National origin
 - Socio-economic status
 - Age
- Geographic Distribution
 - Urban vs Rural
 - Border vs Non-Border

Race/Ethnicity - 2005

Occupation	Race/Ethnicity (%)*			
	White	Black	Other	Hispanic
<i>Texas General Population</i>	49.4	11.4	3.8	35.4
Primary Care Physicians	61.4	<u>5.8</u>	<u>19.1</u>	13.7
Physician Assistants	76.0	<u>5.3</u>	6.0	12.7
Registered Nurses	<u>74.6</u>	7.6	9.3	8.5
Licensed Vocational Nurses	59.8	<u>18.9</u>	2.7	<u>18.6</u>
Pharmacists	63.4	<u>12.7</u>	15.2	8.7
Physical Therapists	78.7	<u>2.6</u>	12.9	5.8
Occupational Therapists	75.0	<u>4.3</u>	8.5	12.2
Psychiatrists	68.4	<u>3.8</u>	15.0	12.8
Dentists, Dental Hygienists, Med Radiologic Techs, Psychologists, and Social Workers	NA**	NA	NA	NA

* Percent of population or occupation. Population data from the Texas State Data Center, Migration Scenario 2, 2/23/05, <http://txsdc.utsa.edu/>; Prepared by: Texas Health Professions Resource Center, Center for Health Statistics, January 2007. ** Race/Ethnicity data are not collected.

Gender - 2005

Occupation	Male (%)*	Female (%)
<i>Texas General Population</i>	50.1	49.9
Primary Care Physicians	<u>66.9</u>	33.1
Physician Assistants	45.4	<u>54.6</u>
Dentists	<u>76.9</u>	23.1
Dental Hygienists	1.5	<u>98.5</u>
Registered Nurses	9.5	<u>90.5</u>
Licensed Vocational Nurses	9.1	<u>90.9</u>
Pharmacists	<u>52.7</u>	47.3
Physical Therapists	28.8	<u>71.2</u>
Occupational Therapists	12.0	<u>88.0</u>
Psychiatrists	<u>67.0</u>	33.0
Medical Radiologic Technologists, Psychologists, and Social Workers	NA**	NA

* Percent of population or occupation. Population data from the Texas State Data Center, Migration Scenario 2, 2/23/05, <http://txsdc.utsa.edu/>; Prepared by: Texas Health Professions Resource Center, Center for Health Statistics, January 2007. ** Race/Ethnicity data are not collected on Psychologists, Social Workers, Dentists and Dental Hygienists.

Geographic Location

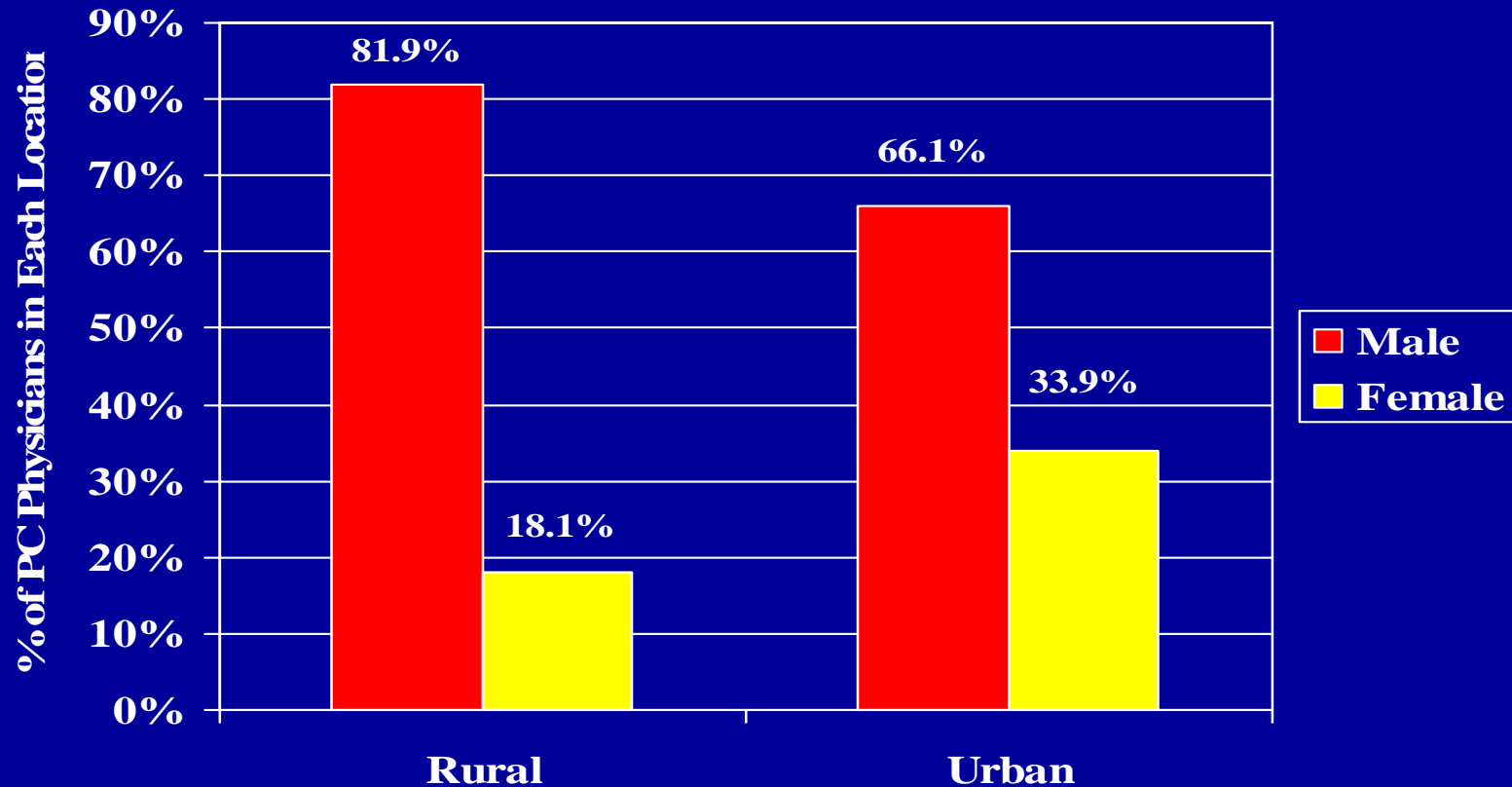
Ratio of Providers per 100,000 Population - 2005

Occupation	Texas	Urban		Rural	
		Border	Non-Border	Border	Non-Border
Primary Care Physicians	68.3	64.7	72.2	<u>45.0</u>	54.4
Physician Assistants	14.7	15.5	14.8	15.4	<u>12.7</u>
Dentists	35.7	27.6	40.0	<u>16.6</u>	25.3
Dental Hygienists	37.2	<u>29.1</u>	41.4	<u>15.3</u>	<u>28.1</u>
Registered Nurses	628.6	606.6	673.7	<u>308.6</u>	446.0
Licensed Vocational Nurses	269.0	<u>269.8</u>	<u>237.0</u>	<u>365.5</u>	<u>448.3</u>
Pharmacists	73.7	60.1	81.0	<u>41.5</u>	55.4
Physical Therapists	37.0	31.0	41.5	<u>18.8</u>	<u>22.0</u>
Occupational Therapists	23.3	21.5	26.2	<u>8.0</u>	<u>11.1</u>
Medical Radiologic Technologists	91.2	93.1	94.7	<u>50.5</u>	74.0
Psychologists	24.2	20.4	27.8	<u>9.0</u>	<u>10.6</u>
Social Workers	68.2	64.3	73.6	<u>34.8</u>	47.1
Psychiatrists	6.5	6.2	7.2	<u>4.1</u>	<u>2.5</u>

Prepared by: Texas Health Professions Resource Center, Center for Health Statistics; Licensing Board Data, January 2007

Gender and Rural-Urban Practice Location

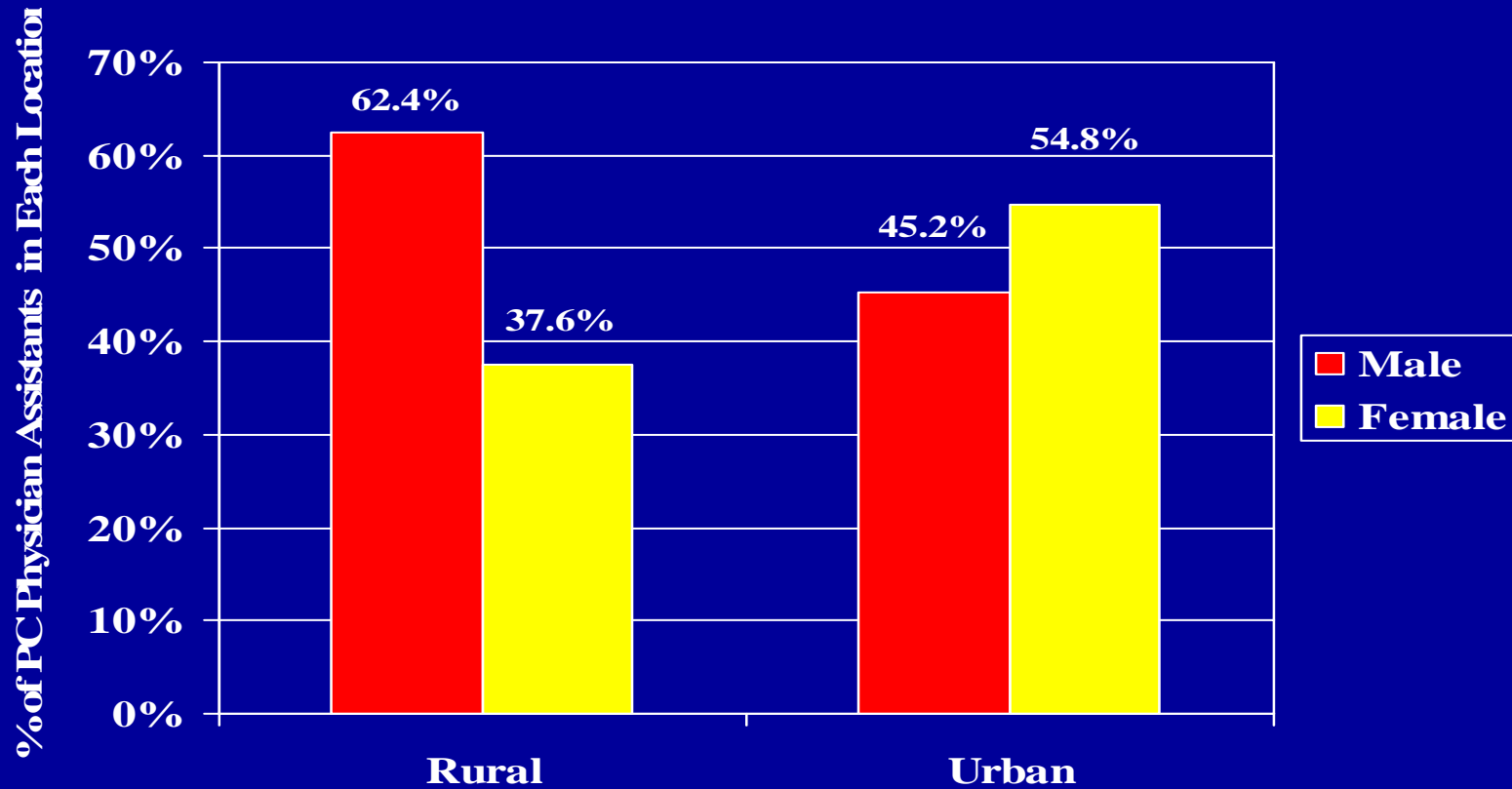
Primary Care Physicians - 2005



Data source: Texas Medical Board's physician 2005 licensing database.

Prepared by: Texas Health Professions Resource Center, Center for Health Statistics, January 2007

Gender and Rural-Urban Practice Location *Physician Assistants - 2005*



Data source: Texas Medical Board's physician assistant 2005 licensing database.

Prepared by: Texas Health Professions Resource Center, Center for Health Statistics, January 2007

Median Age

Urban/Rural Locations - 2005

Occupation	Texas	Urban- male	Urban- Female	Rural- Male	Rural- Female
Primary Care Physicians	46	49	<u>41</u>	50	<u>41</u>
Physician Assistants	40	44	<u>40</u>	50	<u>40</u>
Dentists	48	50	<u>39</u>	53	<u>37</u>
Dental Hygienists	41	<u>37</u>	41	<u>27</u>	41
Registered Nurses	46	<u>43</u>	46	47	48
Licensed Vocational Nurses	45	<u>42</u>	46	<u>42</u>	45
Pharmacists	46	51	<u>40</u>	58	<u>44</u>

Race/Ethnicity and MEDIAN AGE - 2005

Occupation	Texas	White	Black	Hispanic
Primary Care Physicians	46	48	<u>43</u>	<u>45</u>
Physician Assistants	40	41	42	<u>37</u>
Dentists	48	NA	NA	NA
Registered Nurses	47	48	46	<u>40</u>
Pharmacists	46	50	<u>42</u>	<u>45</u>

Prepared by: Texas Health Professions Resource Center, Center for Health Statistics; Licensing Board Data, January 2007;
NA = not available for this profession.

Gender and Median Age - 2005

Occupation	Male	Female
Primary Care Physicians	49	<u>41</u>
Physician Assistants	45	<u>36</u>
Dentists	50	<u>39</u>
Dental Hygienist	<u>37</u>	41
Registered Nurses	<u>43</u>	47
Licensed Vocational Nurses	<u>42</u>	46
Pharmacists	52	<u>40</u>
Physical Therapists	39	39
Occupational Therapists	38	39
Psychiatrists	54	<u>47</u>
Medical Radiologic Technologists, Psychologists, Social Workers	NA*	NA

Prepared by: Texas Health Professions Resource Center, Center for Health Statistics; Licensing Board Data, January 2007;

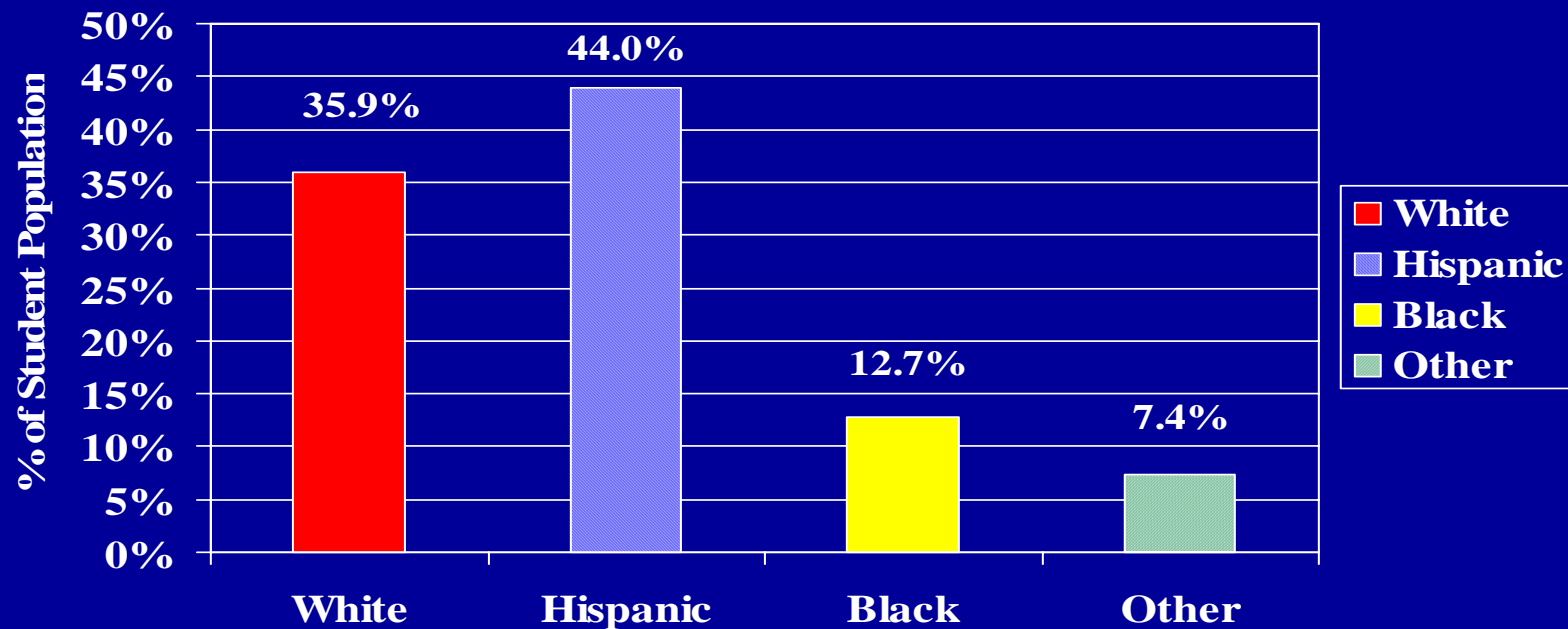
*NA = Gender and/or age data are not collected.

Diversity in the Health Professions Educational Pipeline

Lack of Diversity - Race/Ethnicity

Texas High Schools

Health Science Technology Education Programs: *Fall 2005*



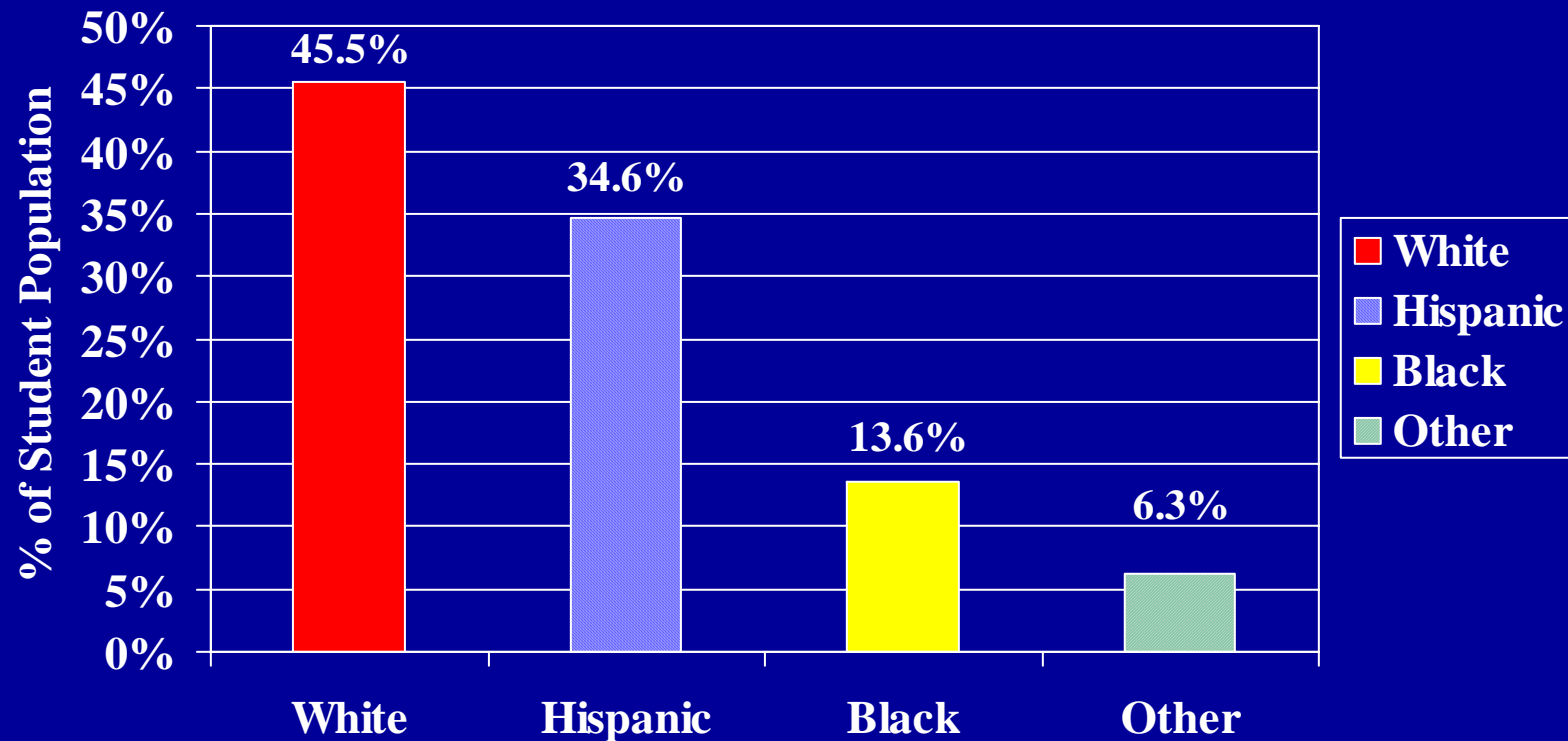
Note: 58.2% of HST students are economically disadvantaged, 5% or special education students, and 3.1% have limited English Proficiency – 73.4% are female students

Source of Data: Fall 2005 data from Texas Higher Education Coordinating Board. Prepared by: Texas Health Professions Resource Center, Center for Health Statistics; Licensing Board Data, January 2007

Lack of Diversity - Race/Ethnicity

74 Texas Community and Technical Colleges

Freshman Declared Majors in Health Professions & Related Clinical
Sciences: *Fall 2005*

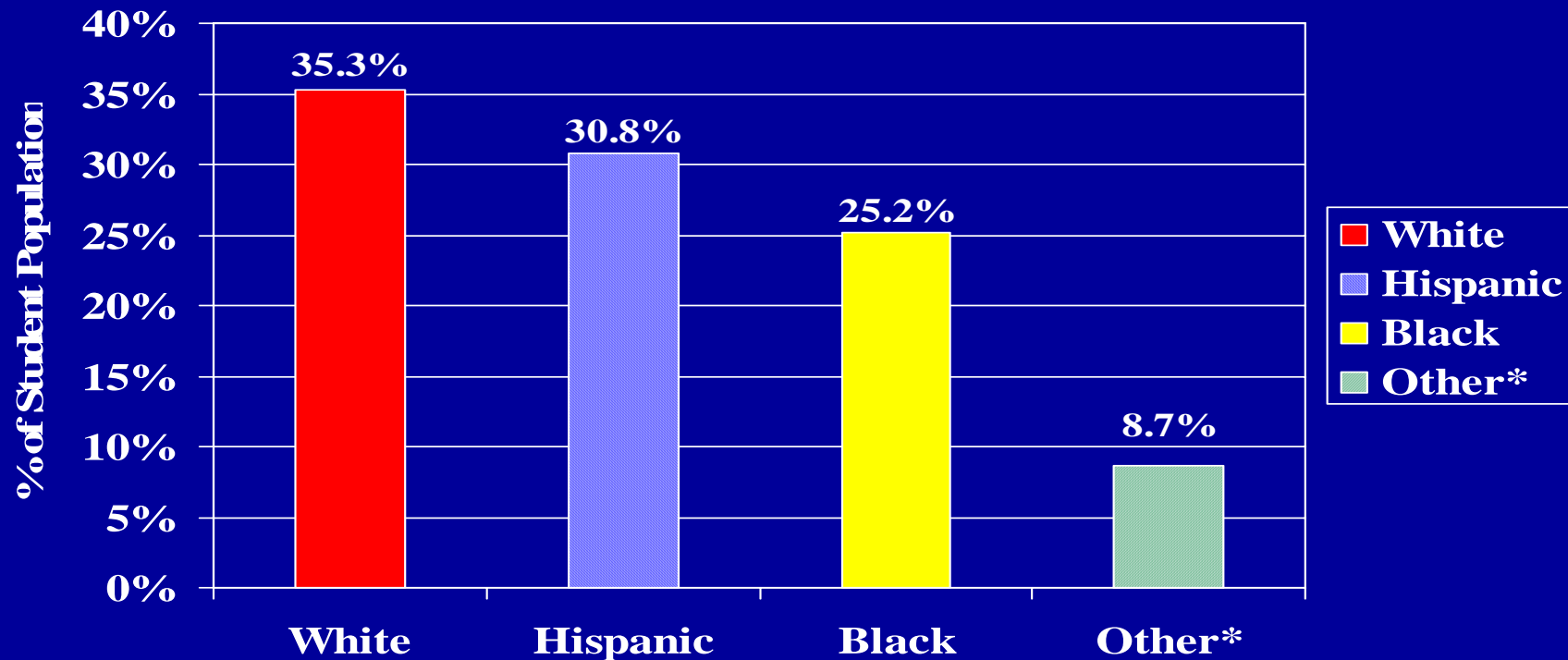


Source of Data: Fall 2005 data from Texas Higher Education Coordinating Board. Prepared by: Texas Health Professions Resource Center, Center for Health Statistics; Licensing Board Data, January 2007

Lack of Diversity - Race/Ethnicity

28 Texas Public Universities

Freshmen Declared Majors in Health Professions & Related Clinical Sciences: *Fall 2005*

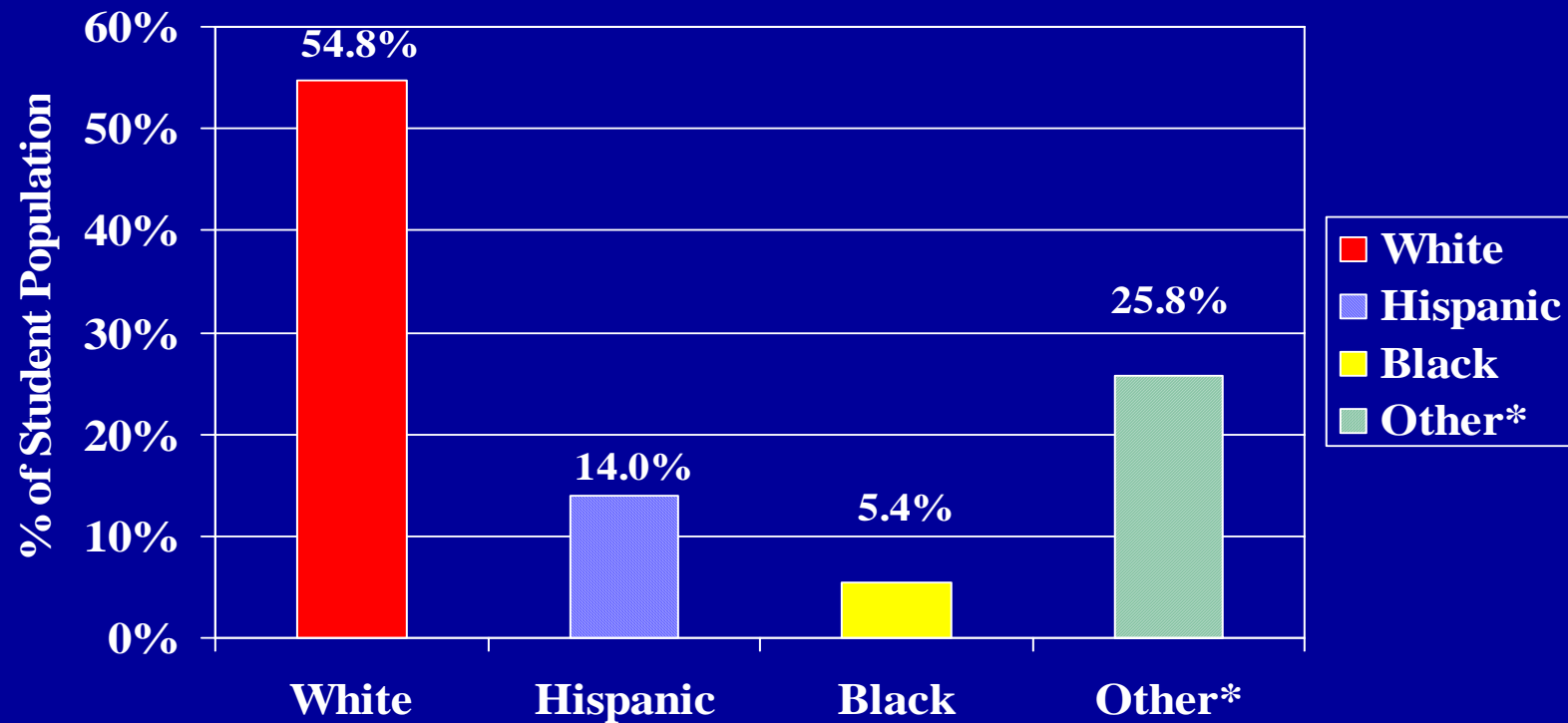


Source of Data: Fall 2005 data from Texas Higher Education Coordinating Board. Prepared by: Texas Health Professions Resource Center, Center for Health Statistics; Licensing Board Data, January 2007

Lack of Diversity

7 Texas Public Health Science Centers

First Year Medical and Dental Students *Fall 2005*



* 83.5% of the "Other" student category is comprised of students with an Asian ancestry. Source of Data: Fall 2005 data from Texas Higher Education Coordinating Board. Prepared by: Texas Health Professions Resource Center, Center for Health Statistics; Licensing Board Data, January 2007

The Basic Premise about the Health Workforce

- The Health Care System is only as good as is its workforce
- The workforce directly affects:
 - Quality of Care
 - Cost of Services
 - Access to Care
 - Public health

Short Term Factors Contributing to Health Workforce Shortages

- Competition for workers and the economy
- Growing demand
- Increased intensity and complexity of services
- Educational system cycles and response lags

Source: Center for Health Workforce Studies, School of Public Health, University of Albany, SUNY, May 2004; modified by the Texas Health Professions Resource Center, Center for Health Statistics, January 2007

Long Term Factors Contributing to Health Workforce Shortages

- Changing racial/ethnic mix in the U.S.
- Expanded career choices for women
- The economy and public expectations
- Increases in credential requirements
- The aging of America: Increase in Demand
- The aging of America: Decrease in Supply of workers

Supply Trends

The supply of mental health professionals in Texas has been increasing over the past decade.

- However, the ratios of MH professionals per 100,000 population have declined.
- Thus, the growth in supply is not keeping up with the population's growth.

The supply ratios for almost all of the other professions have been steadily increasing.

The ratios for most Texas licensed profession are still less than are the U.S. ratios for these professions.

Race/Ethnicity

Whites comprise the majority of licensed health professionals in all Texas professions – and, their proportionate representation in these professions exceeds their representation in the population.

The representation of **Blacks** in the LVN and Pharmacist professions exceeds their proportionate representation in the population - the only two professions where this occurs.

The representation of **Hispanics** in the health professions does not exceed their proportionate representation in the population for any profession analyzed in this report.

Median Age

White professionals have the highest median ages for most professions.

Of the professions examined here, Licensed Professional Counselors had the highest median age.

And, Physical and Occupational Therapists had the lowest median ages.

Gender

The median age of males are higher than the median age of females in the same profession for over one-half of the licensed health professions in Texas.

- This appears to be due in part to the late entry of females into the “traditionally male-dominated” professions – a process that has been labeled “feminization of the workforce.”
- The median age of male RNs is less than the median age of female RNs.

The entry of males into “traditionally female-dominated” professions (Dental Hygienists, Nurses, etc) is occurring at a much slower pace than the entry of females into the “traditionally male-dominated professions” (Physicians, Physician Assistants).

Geographic Representation

The **supply ratios** for almost every profession are **lower in Rural areas** than in Urban areas.

The **supply ratios** for every profession are **even lower in Border areas**.

The only **exception** is the greater supply of LVNs in Rural Areas than in Urban areas.