HEALTH POLICY
Health Care Workforce Issues

Bruce A. Gunn, Ph.D.

Manager

Health Professions Resource Center

Texas Center for Health Statistics

Hospital Survey Team

Center for Health Statistics

Texas Department of State Health Service

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

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Purpose of this Presentation

- Introduce the role of the Health Professions Resource Center and the Texas Center for Nursing Workforce Studies in providing data that helps shape health care policy in the state

- Introduce some current and upcoming challenges that will drive the need for a well trained and and adequate health professions workforce in Texas

- Review the demographics of selected health professions in terms of supply, distribution, location, gender, race-ethnicity, and age, to include information about the public health workforce

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

Total Workforce	
Health Care and Social Assistance	U.S. Civilian Workforce
15.8 million (10.5% of U.S. Civilian Workforce)	150.9 million

Source: Bureau of Labor Statistics, 2008, http://www.bls.gov/news.release/ecopro.t02.htm

Health Care Occupations with the Largest Employment Growth, 2008 to 2018

Occupational Titles	Employment 2008 (millions)	Employment 2018 (millions)	Change '08-'18	% Change
Registered Nurses	2.62	3.20	582	22.2
Home Health Aides	0.92	1.38	461	50.0
Personal-Home Care Aides	0.82	1.19	376	46.0
Nursing Aides, Orderlies, Attendants	1.47	1.75	276	18.8
Medical Assistants	0.48	0.65	164	33.9
Licensed practical and vocational nurses	0.75	0.91	156	20.7
Physicians and Surgeons	0.66	0.81	144	21.8

Source: Bur. of Labor Stat, U.S. Statistics, accessed 4/1/2010, http://www.bls.gov/news.release/ecopro.t06.htm

Overall Challenge:

Collect, Analyze, and Report on Complex and often Inadequate Health Workforce Data

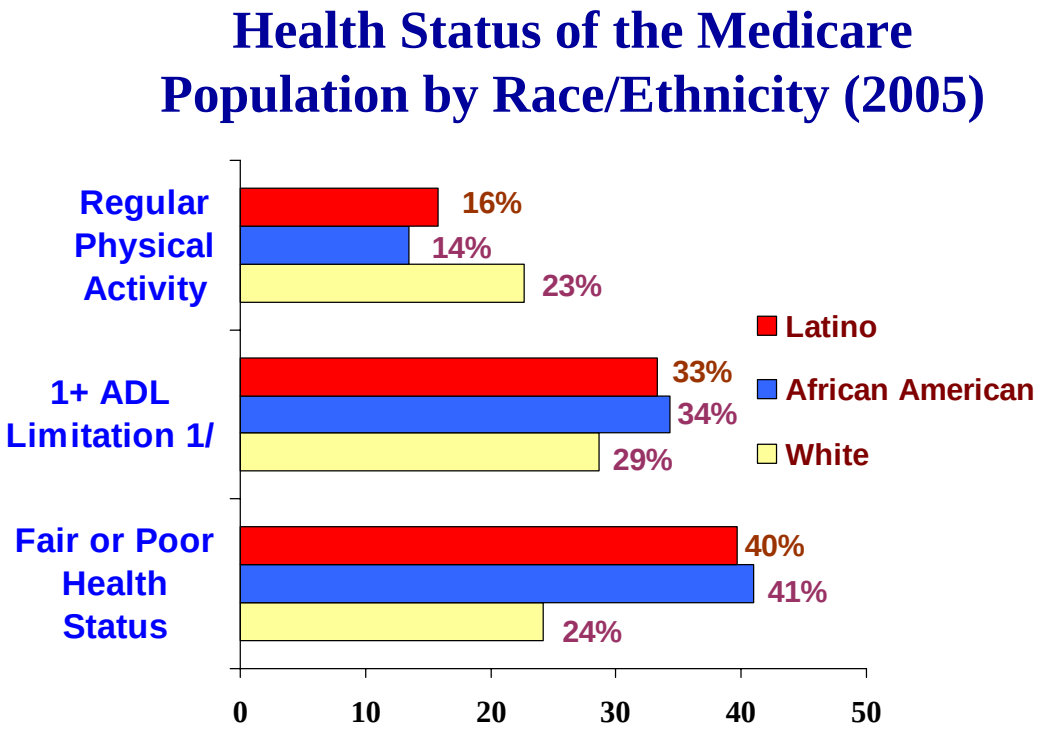
Inform policy makers on workforce issues that affect access to health care

Challenge: The Aging Population is Increasing Demand for Health Workers

- Over 65 population to increase from 10% to 16% ('00 to '40)
  - Increases in demand for health care services/workers
  - Decrease in supply of workers and educators due to retirement, and are not being replaced
  - Increased loss of older workers = increased loss of highly skilled workers
  - Chronic and preventable diseases are increasing the demand for workers (obesity, diabetes, asthma)
- Under 21 population is expected to decrease from 28% to 21% between '00 and '40

Health disparities of the elderly are likely to increase

- Elderly minorities report a poor health status almost twice as often as non-minorities.
- The population of elderly minorities will increase 4-fold over the next 50 years.



1/ ADL = Activity of Daily Living

HRSA National Center for Health Workforce Analysis Bureau of Health Professions, Source: MCBS, NHIS

High Over 65 Populations and Poverty Rates Contribute to Greater Healthcare Needs

Rural and Border Demographics

Demographics (2007)	Texas	32 Border Counties*	28 Rural-Border Counties	177 Rural Counties*
Poverty Rate	16%	30%	26%	17%
65 and over Population	10%	10%	12%	16%

* Rural (defined by US Office of Management and Budget); Border (counties within 100 kilometers of US/Mexico border); 4 Border counties are Urban

Poverty data from 2004 Census Bureau poverty estimates, Population data from the Texas State Data Center (2008).

Challenge: The Labor Pool is Shrinking

- Changing racial/ethnic mix affects size of the labor pool
- Minority students are not selecting health careers in proportion to their representation in the population
- Students are not selecting health careers as often as in the past, especially male students
- Current economic conditions increases retention of older workers leaving fewer jobs for recent college graduates
- High turnover and vacancy rates for public health and other health care workers creates problems within the public health delivery system

Challenge: Mal-distribution of Health Care Workers

- Adversely affects Access to Care in some areas of the state
- Rural and Border health care workers are aging and not being replaced by younger workers
- Male workers in rural counties are aging and not being replaced
- Women health care workers are entering the health care workforce in greater numbers but are less likely to practice in rural areas than urban areas

Demographics of Border and Rural-Border Counties

Profession	Texas 2009	32 Border Counties	28 Rural-Border Counties
Primary Care Physicians (per 100,000 population)	68	49	36
Hispanic Population (%)	38	87	82
Hispanic Primary Care Physicians (per 100,000 Population)	14	57	41
Average Age of Physicians (Years)	50	51	54

Selected Health Care Professions

Number per 100,000 Population –2009

Occupation	TEXAS	Urban		Rural	
		Border (4)	Non-Border (73)	Border (28)	Non-Border (149)
Primary Care Physician	68	51	72	36	55
Physician Assistant	18	15	19	16	13
Dentist	38	18	42	12	26
Dental Hygienist	40	19	44	10	31
Registered Nurse	681	**504**	**738**	239	478
Vocational Nurse	278	212	257	**313**	**477**
Pharmacist	79	45	87	34	60
Psychologist	25	9	30	5	12
Social Worker	67	46	73	20	47

Rounding of numbers may cause totals to be less or greater than 100.

Challenge: Educational System

- Cost for acquiring an education
- Lack of educational programs to meet need – Limited enrollment (small) programs, Lack of faculty, Lack of applicants, and High attrition rates
- Scarcity of clinical/training sites
- Increased credentialing requirements – from entry-level to higher degree
- Scope of practice issues – restricts the use of some professionals in the delivery of health services
- Technological training programs needed to satisfy the demand for higher skilled workers
- Lack of minority health care students and health care role models

Challenge: Minority Under-Representation in the Health Professions

By 2020, non-white Physicians will surpass white physicians in numbers

24 % non-white in 1991 (actual)
42 % non-white in 2009 (actual)
49 % non-white in 2015 (projected)
54 % non-white in 2020 (projected)

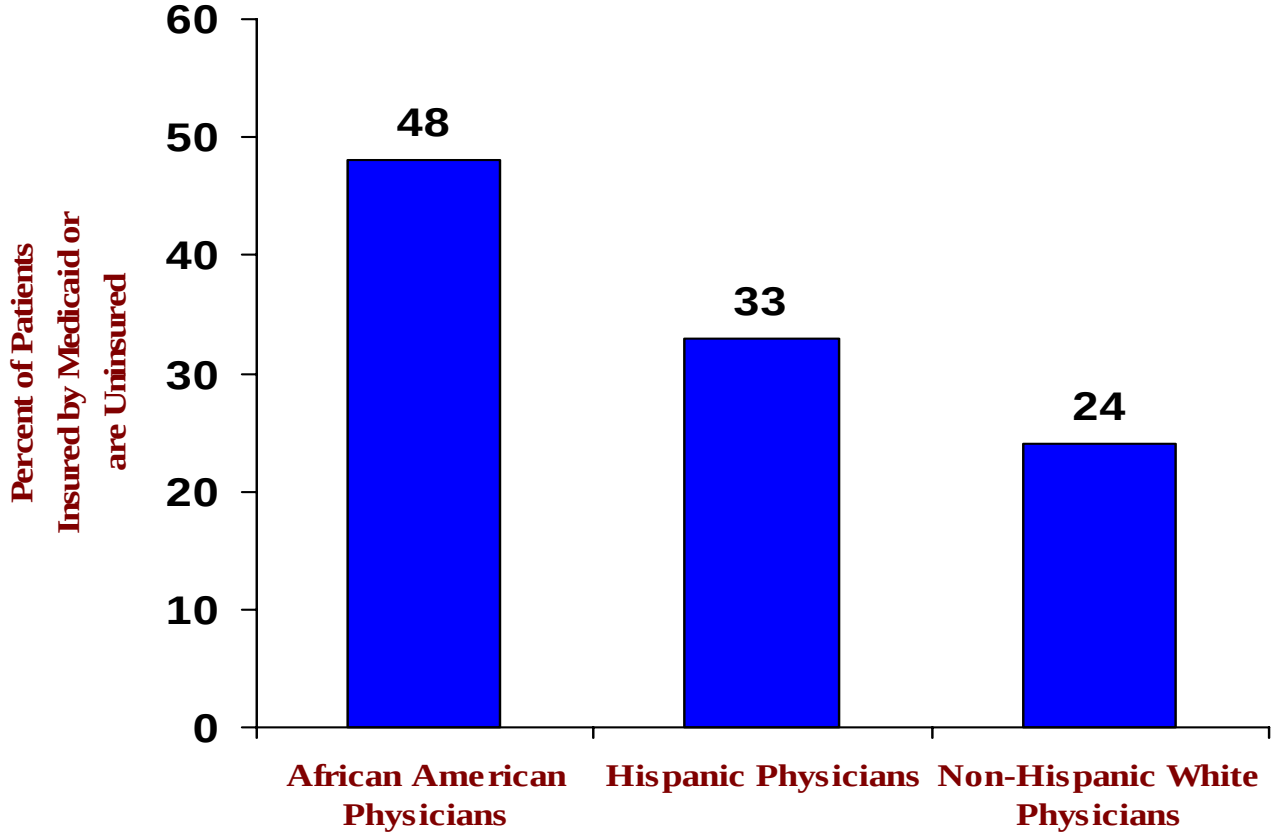
A net loss in physicians may occur because the entry of Non-White students into medicine will be less than the non-white representation in the population

Median age of physicians will increase and average hours worked will decline, just as population growth and aging, and technological advances, will help create a growing demand for physician services

Almost every profession will see similar changes.

Race/Ethnicity of Physicians

Acceptance of Medicaid/Uninsured Patients



African American and Hispanic physicians are far more likely to treat Medicaid or uninsured patients than white physicians from the same area.

Nearly half of patients seen by African American physicians and one-third of patients seen by Hispanic physicians are Medicaid and uninsured patients.

Data on Am. Indians/ Alaskan Natives are insufficient to calculate reliable estimates. Komaromy, et al., New England Journal of Medicine: May 16, 1996; HRSA National Center for Health Workforce Analysis, Bureau of Health Professions

Race- Ethnicity
Representation in the Workforce - 2009

Selected Occupations	Change in Race/Ethnicity (%)- 2009			
	White	Black	Other	Hispanic
Texas General Population	46	12	4**	38
Primary Care Physicians	58	6	3	14
Physician Assistants	71	6	4	15
Registered Nurses	68	10	11	11
Licensed Vocational Nurses	56	20	3*	21
Pharmacists	58	14	20	9
Physical Therapists	76	3	14	7
Occupational Therapists	71	5	11	13

Population data from the Texas State Data Center, http://txsdc.utsa.edu. Rounding of numbers may cause totals to be less or greater than 100.

Challenge: Economic Issues

- Compensation between Public Health, non-PH, and non-health careers
- Shortages of resources – health care delivery facilities, funding levels, costly training tools, educational resources
- Effect of economic conditions on the numbers of uninsured and underinsured patients/customers
- Downsizing of health care staff due to lower demand for health services by the recently unemployed
- Public expectations for health care services

Challenge: "Feminization" of the Workforce

- "Feminization" – Refers to the entry of females into "traditionally male-dominated" professions
- 76% of 364,000 workers in 12 major health professions are women, a significant increase from a decade ago
- Expanded career choices for women
- Males enter "traditionally female-dominated" professions (e.g., nursing) at a slower pace than females enter "traditionally male-dominated professions" (i.e., Physicians)
- Median age of males is higher than that of females in the same profession for over one-half of the licensed health professions in Texas.

"Feminization of the Workforce" 2005 vs 2009

Selected Professions	Male (%)*	Female (%)
Texas General Population	*50***	*50***
Primary Care Physicians	*67 to 64*	33 to 36
Physician Assistants	45 to 40	*55 to 60*
Dentists	*77 to 72*	23 to 28
Dental Hygienists	2**	*98*
Registered Nurses	10 to 11	*90 to 89*
Licensed Vocational Nurses	9 to 10	*91 to 90*
Pharmacists	*53 to 49*	47 to 51
Physical Therapists	29**	*71***
Occupational Therapists	12**	*88***

***Percent of population or occupation. Population data from the Texas State Data Center, http://txsdc.utsa.edu/; ** Less than 1% or no Change.**

Why is the Study of "Feminization" of the Workforce Important?

Research Studies Report:

- Female Physicians work fewer hours than Males, and are more likely to work part-time
- Female Physicians often take more leave, but often retire later in life
- Female Physicians tend to spend more time with patients, but then see fewer patients
- Female Physicians are less likely to practice in Rural areas
- May need more supply to counter fewer FTEs

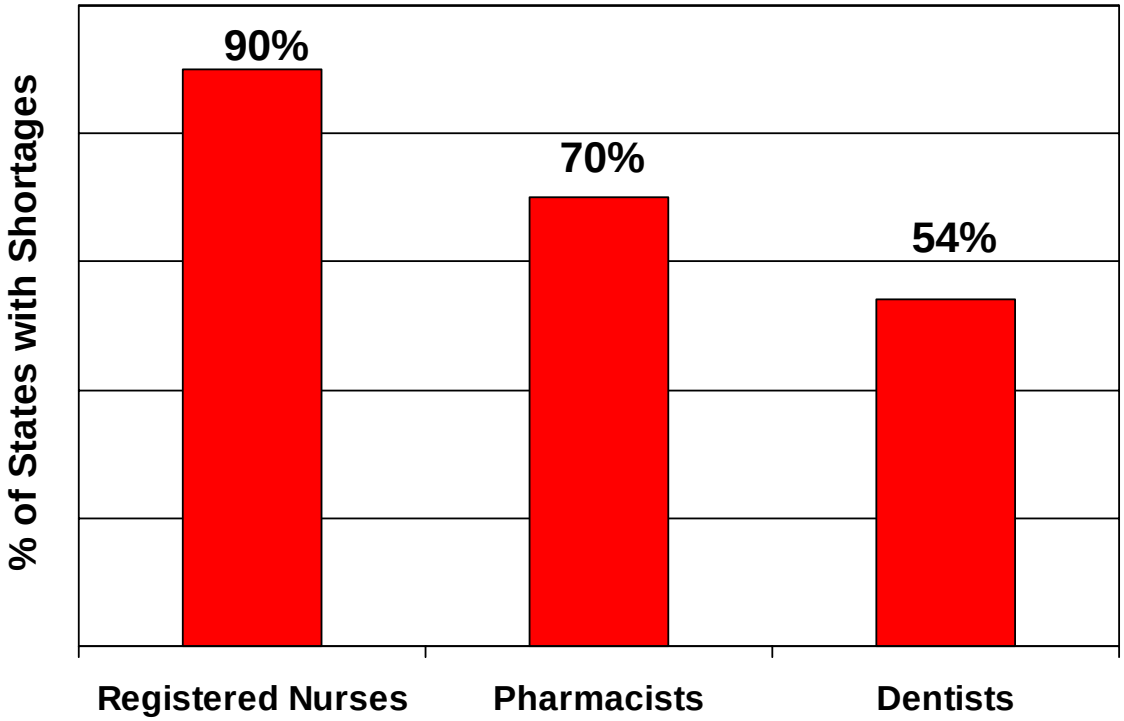
Physicians: by 2020, women will equal or surpass men in total number

- 13 % were women in 1987 (actual)
- 36 % were women in 2009 (actual)
- 42 % are projected to be women in 2015
- 48 % are projected to be women in 2020

http://www.dshs.state.tx.us/CHS/hprc/Publications

Workforce Shortages and Demographics

U.S. Shortages Affect State Shortages

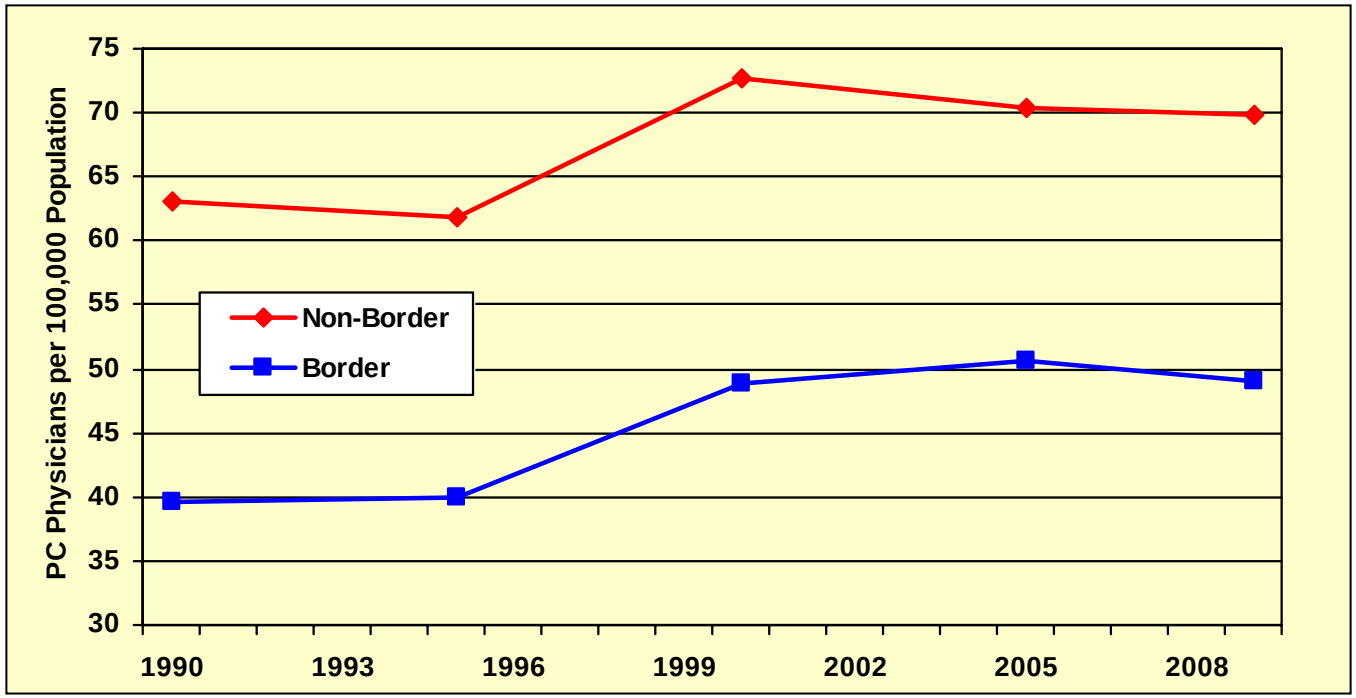


"**A**lmost 20 percent of Americans have inadequate or no access to primary care physicians because of a shortage of providers, according to a 2007 report issued by the National Association of Community Health Centers and the American Academy of Family Physicians. Florida, Texas, and California are the hardest hit, the data show."*

•Slide adapted presentation by Center for Health Workforce Studies, School of PH, Univ. of Albany, SUNY, "State Responses to Health Worker Shortages, 2002 Survey of States" published 11/ 2002.

•*MANAGED CARE June 2007, http://www.managedcaremag.com/archives/0706/0706.shortage.html

Primary Care Physicians



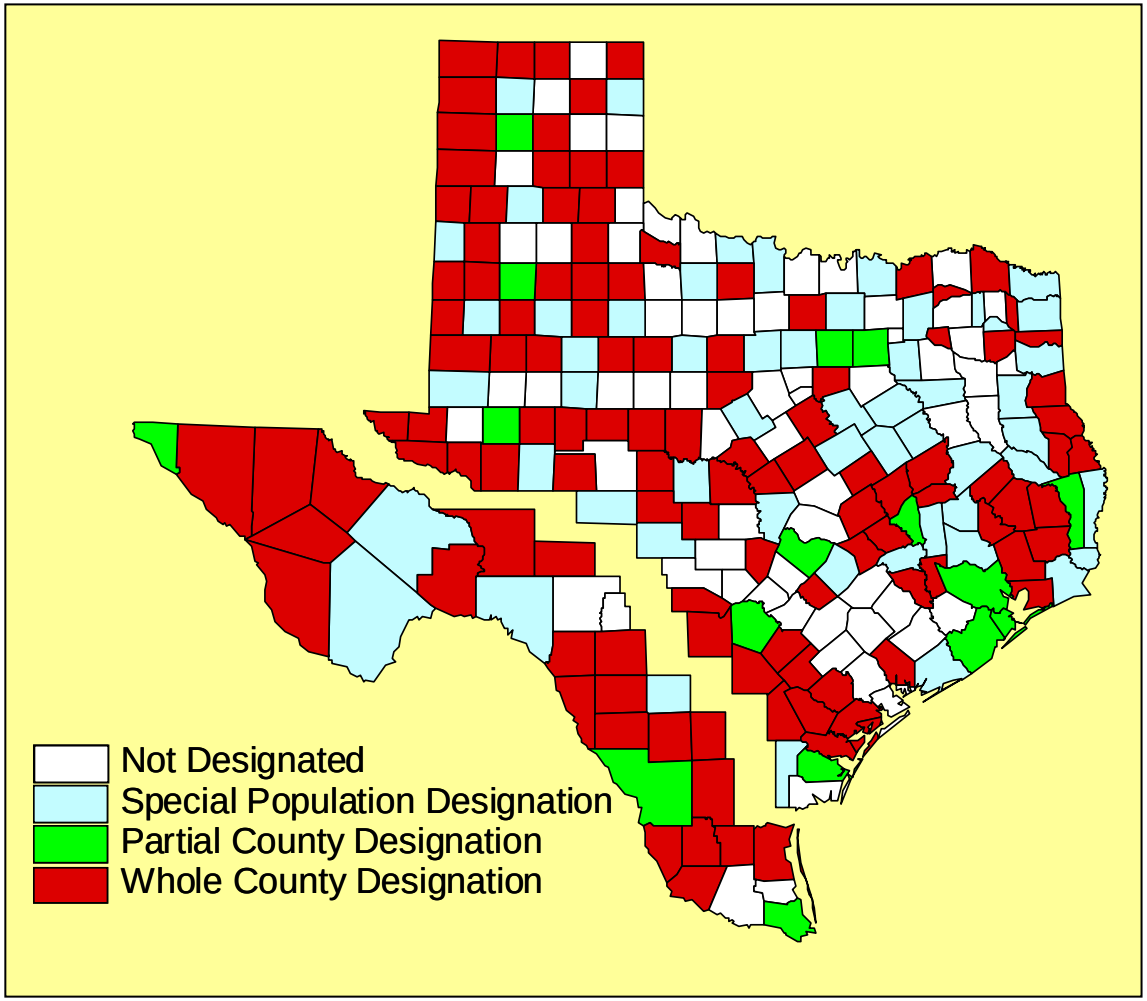
	% Border	% Non-Border
White	23.4	61.0
Black	3.7	6.3
Hispanic	57.2	10.9
Other	2.3	3.0
Unknown	13.4	18.8

	% Border	% Non-Border
Female	25.8	36.9
Male	74.2	63.1

Border Median Age = 49
Non-Border Median Age = 48

Data Source: Texas Medical Board

Primary Care Physician
Health Professional Shortage Areas (HPSAs)



Of 32 **Border** Counties, 28 (88%) have some type of HPSA Designation:

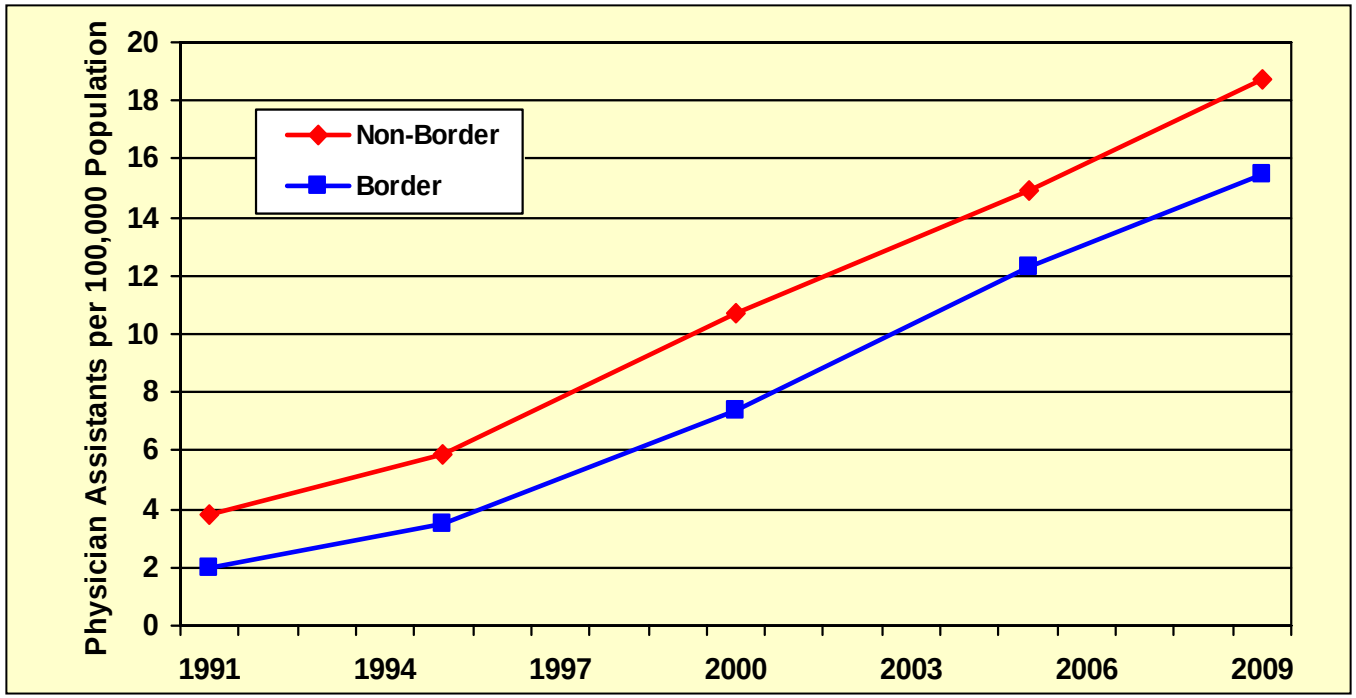
- 4 special population
- 3 partial county
- 21 whole county

Of 222 **Non-Border** Counties, 161 (73%) have some type of HPSA Designation:

- 51 special population
- 13 partial county
- 97 whole county

Data Source: Health Resources and Services Administration

Physician Assistants



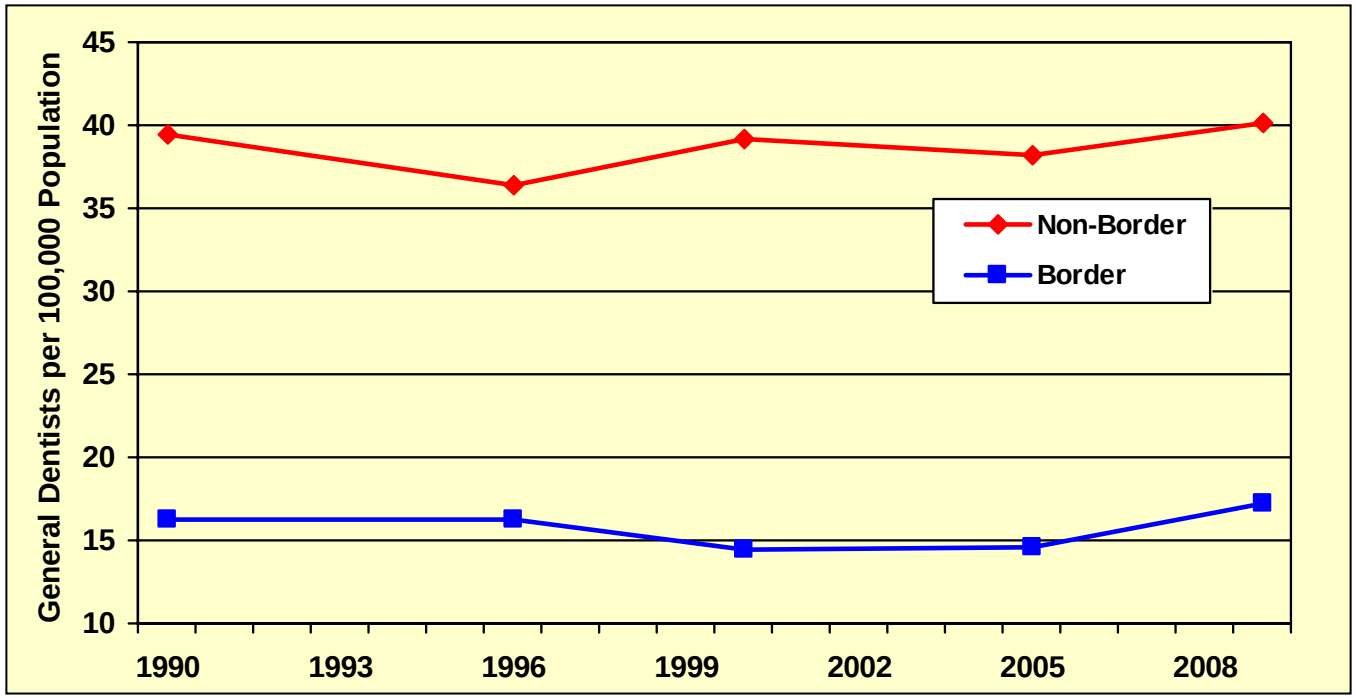
	% Border	% Non-Border
White	30.2	74.4
Black	3.8	6.3
Hispanic	61.8	10.4
Other	3.3	3.8
Unknown	1.0	5.1

	% Border	% Non-Border
Female	50.3	60.6
Male	49.7	39.4

Border Median Age = 38
Non-Border Median Age = 40

Data Source: Texas Medical Board

General Dentists



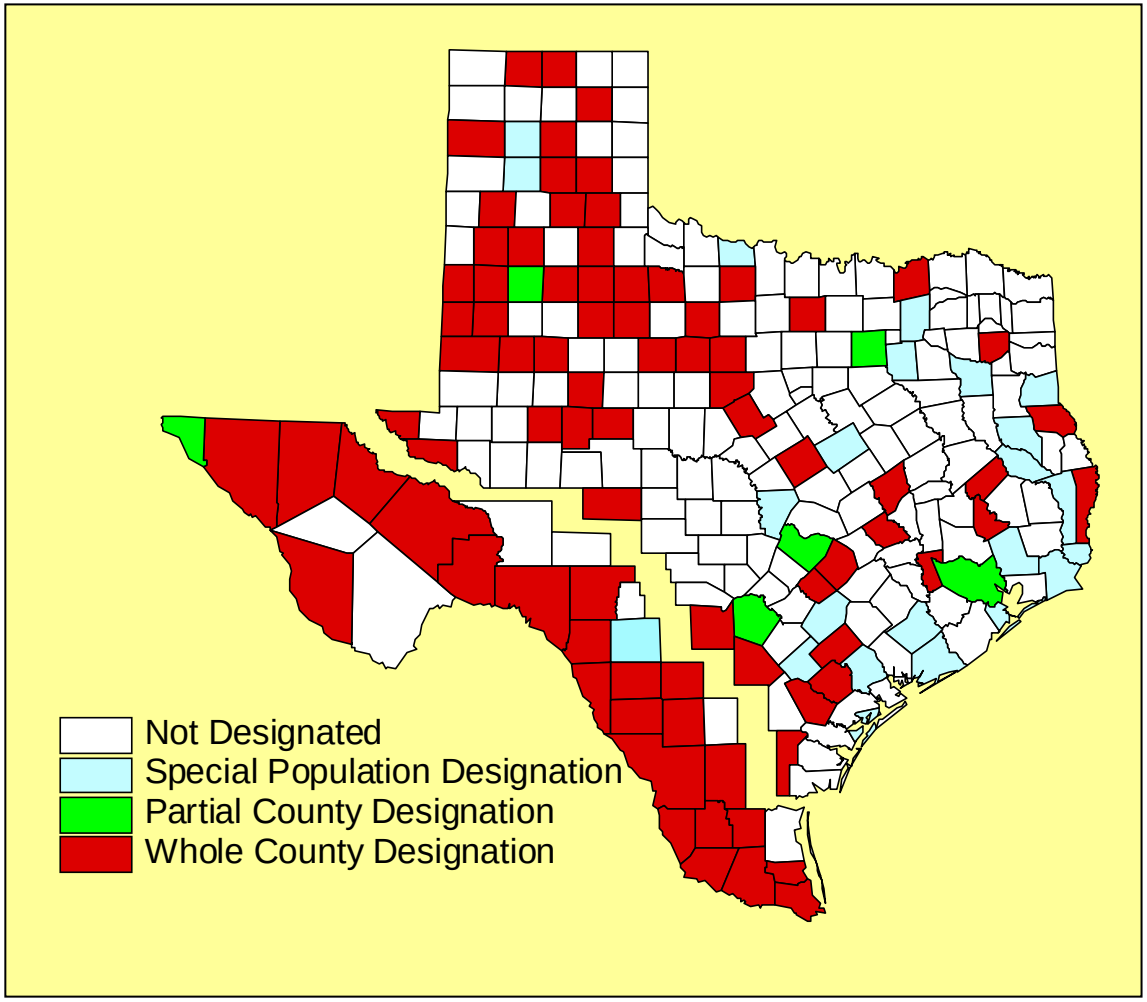
Data on Race/Ethnicity were not available

	% Border	% Non-Border
Female	23.5	27.9
Male	76.5	72.1

Border median age = 49
Non-Border median age = 48

Data Source: Texas State Board of Dental Examiners

Dental Health Professional Shortage Areas (HPSAs)



Of 32 **Border** Counties, 25 (76%) have some type of HPSA Designation:

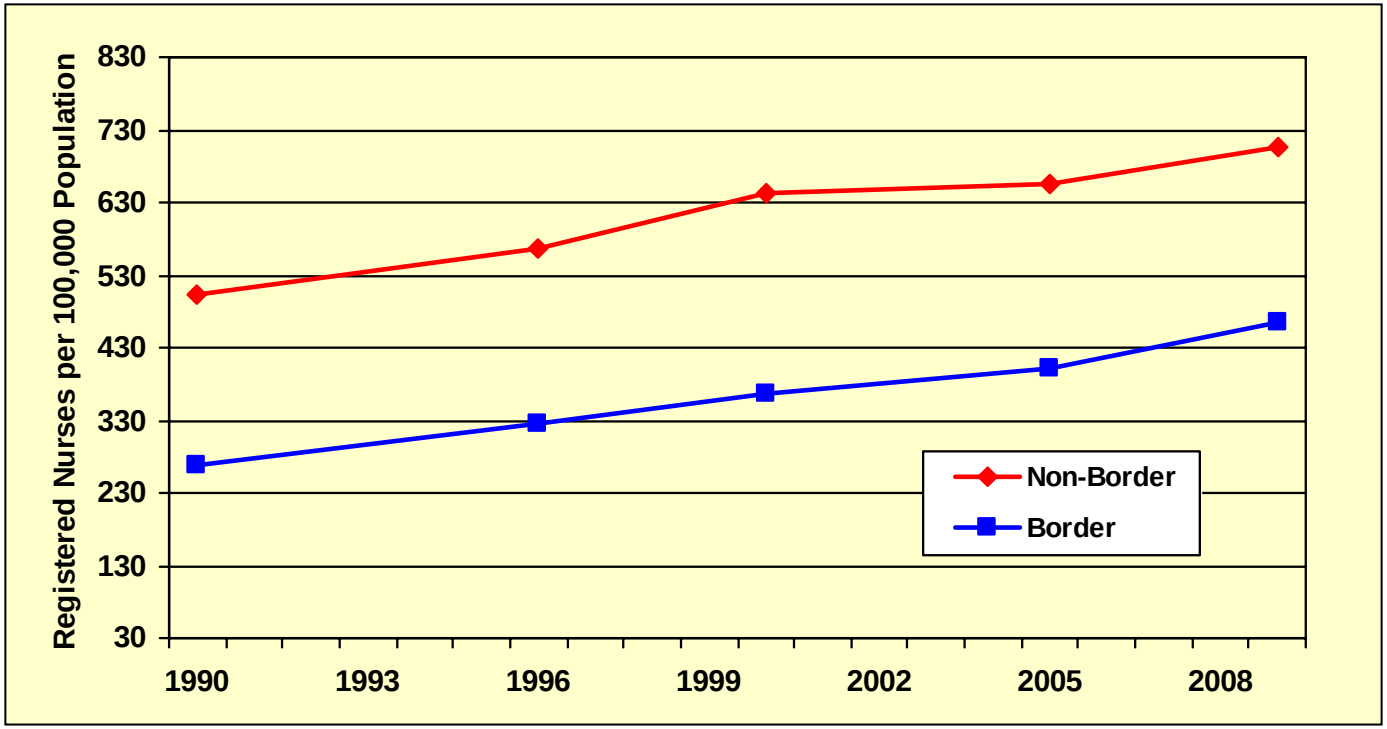
- 1 special population
- 1 partial county
- 23 whole county

Of 222 **Non-Border** Counties, 86 (39%) have some type of HPSA Designation:

- 22 special population
- 5 partial county
- 59 whole county

Data Source: Health Resources and Services Administration

Registered Nurses



	% Border	% Non-Border
White	29.7	70.5
Black	2.4	10.2
Hispanic	52.1	8.1
Other	15.3	10.6
Unknown	0.5	0.6

	% Border	% Non-Border
Female	81.1	89.9
Male	18.9	10.1

Border median age = 43
Non-Border median age = 47

Data Source: Texas Board of Nursing

Vacancy/Turnover Rates

Nursing School RN Faculty - 2008

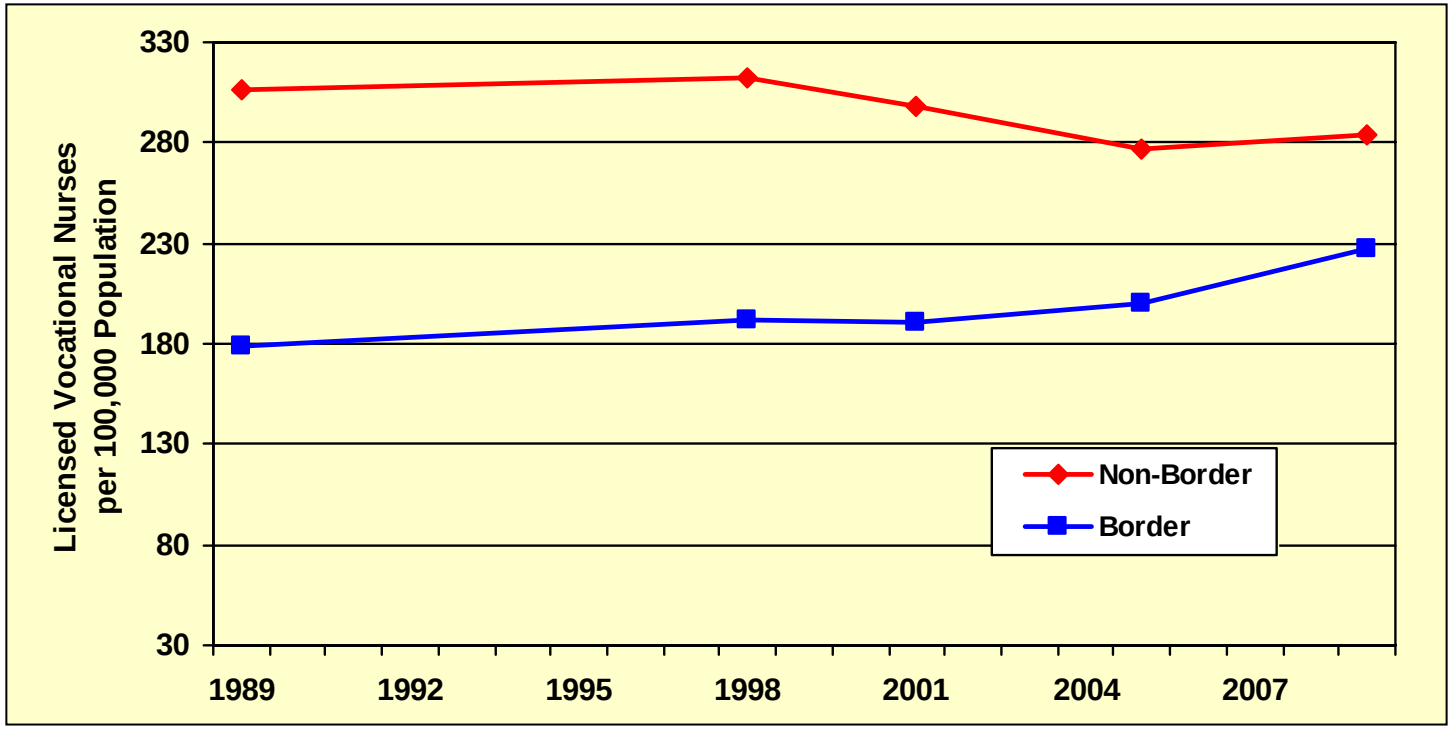
Employment Location	Profession	Vacancy Rate – State Average	Turnover Rate – State Average
Hospital	Registered Nurse	11%	16%
Hospital	Licensed Vocational Nurse	16%	18%
Long Term Care	Registered Nurse – Direct Care	13%	64%
Long Term Care	Licensed Vocational Nurse – Direct Care	13%	64%
Nursing School Faculty	Registered Nurse	6%	12%

Faculty positions remain vacant on an average of 29 weeks – some programs have vacancies lasting up to 2 academic years.

In 2009, RN faculty age ranged from 24-87 years; Median age was 52; mean age = 54; 65% of RN faculty are 50 or older and will be eligible for retirement now and during the next 12 years

Prepared by: Texas Center for Nursing Workforce Studies, CHS, Department of State Health Services. 2010.

Licensed Vocational Nurses



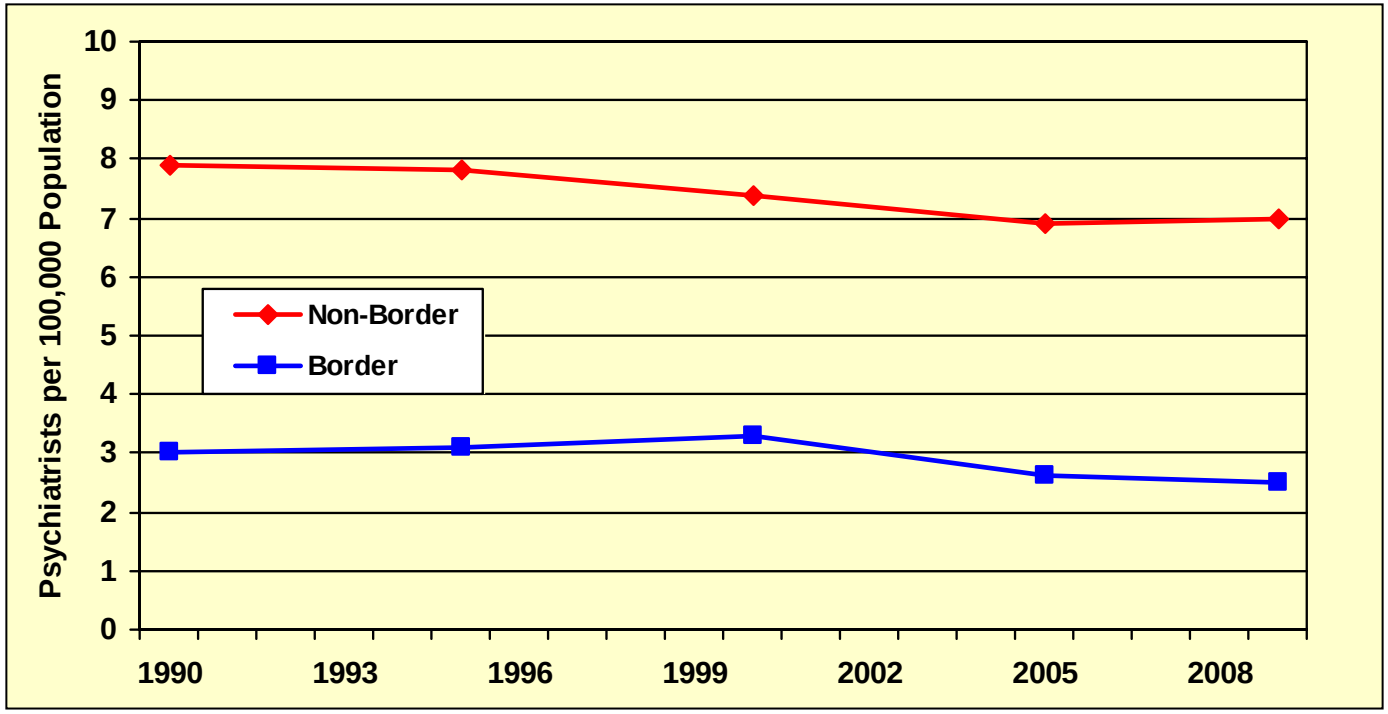
	% Border	% Non-Border
White	17.3	59.4
Black	2.4	21.7
Hispanic	77.7	15.5
Other	2.2	2.8
Unknown	0.4	0.5

	% Border	% Non-Border
Female	80.8	90.8
Male	19.2	9.2

Border median age = 40
Non-Border median age = 45

Data Source: Texas Board of Nursing

Psychiatrists



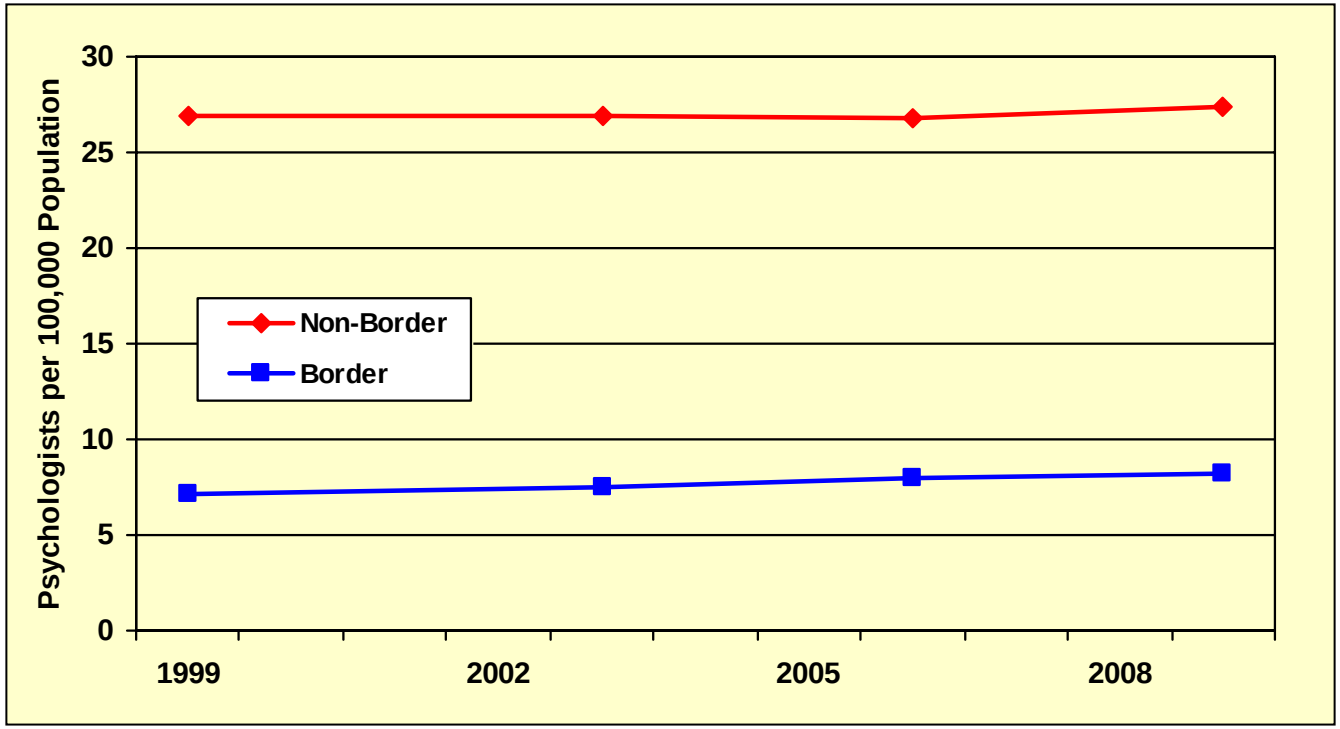
	% Border	% Non-Border
White	21.9	65.7
Black	4.7	3.5
Hispanic	67.2	10.1
Other	1.6	3.8
Unknown	4.7	16.8

	% Border	% Non-Border
Female	18.8	36.8
Male	81.3	63.2

Border median age = 56
Non-Border median age = 54

Data Source: Texas Medical Board

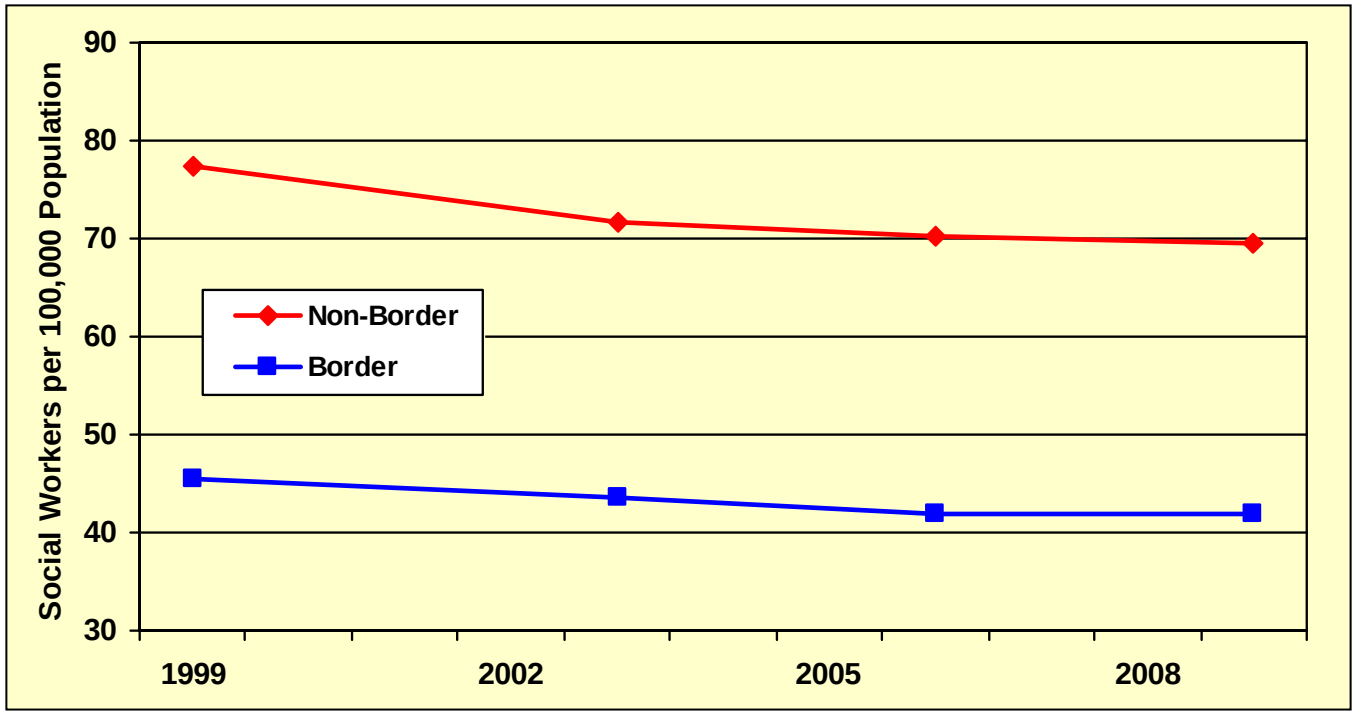
Psychologists



Data on Race/Ethnicity, Gender, and Age were not available

Data Source: Texas State Board of Examiners of Psychologists

Licensed Social Workers



Data on Race/Ethnicity were not available

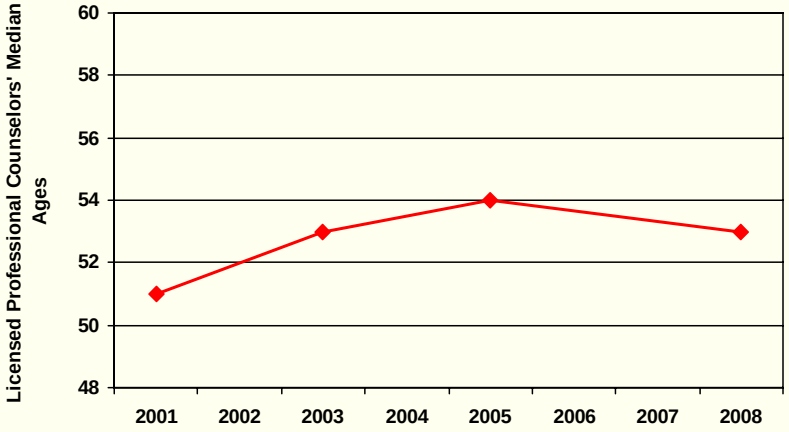
Border median age = 47
Non-Border median age = 48

	% Border	% Non-Border
Unknown	17.0	17.0
Female	64.3	69.9
Male	18.7	13.1

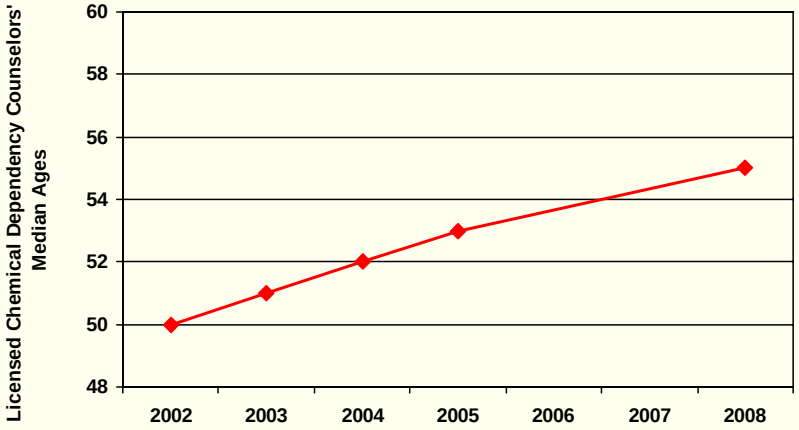
Data Source: Professional Licensing and Certification Unit, Department of State Health Services

Behavorial/Mental Health Professions – Median Age Trends

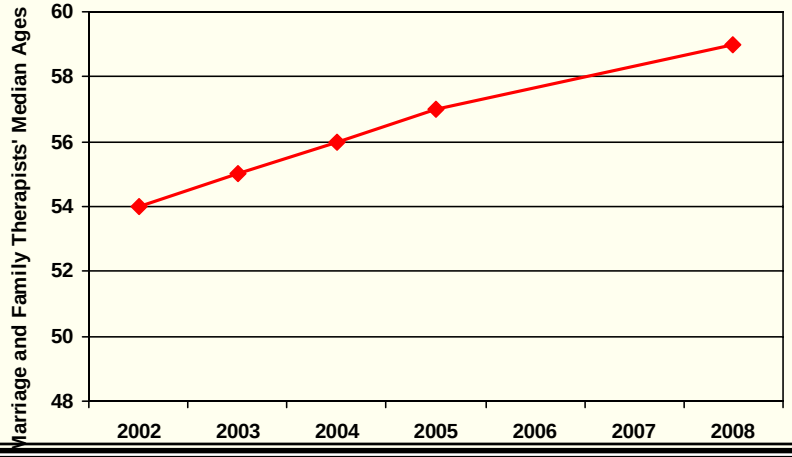
Licensed Professional Counselors



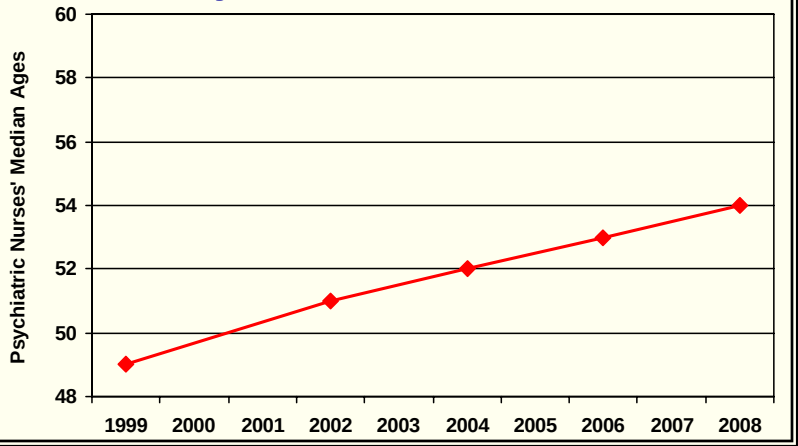
Licensed Chemical Dependency Counselors



Marriage and Family Therapists



Psychiatric Nurses



Public Health Workforce

Public health workers comprise about 5% of the Texas health workforce

Why are there Problems with Recruiting and Retaining PH Workers?

PH workers are often underpaid

Few career ladders for entry-level PH workers

Lack of standardized PH training for some PH professions

Competition with non-PH facilities for workers highly trained in analytical and epidemiological skills

The largest single group of PH professionals, nurses, tend to be women with families, therefore geographic mobility is often an issue.

* Reference: 1. "The Texas Public Health Workforce, Texas Health Workforce Planning Partnership, Texas Health Care Policy Council, June 20, 2006, Virginia C. Kennedy, Ph.D., Director, Texas Public Health Training Center. 2. Center for Health Workforce Studies, Public Health Workforce Panel Meeting, July 16, 2001.

Why is it so Difficult to Count the PH Workforce?

- Many are unlicensed non-government generalists who can have more than one job/role
- Roles/responsibilities for PH and non-PH workers may overlap
- Lack of uniform job titles/roles among state PH workers limits use of data for national comparisons

"Public Health Workforce Study, Bureau of Health Professions, HRSA, January 2005. Study accessed on 12/28/06 at http://bhpr.hrsa.gov/healthworkforce/reports/publichealth/default.htm. Prepared by: Texas Department of State Health Services, Center for Health Statistics, Health Professions Resource Center, February 2009.

Vacancy Rates

Selected Public Health Professions

Profession	Vacancy Rate
All 39 Professions that were analyzed	13%
Registered Nurses	23%
Public Health Technicians	22%
Medical Technologists	21%
Physicians	18%
Dentists	18%
Dental Hygienists	17%
Physician Assistants	16%
Microbiologists	11%
Licensed Vocational Nurses	10%
Licensed Social Workers	9%
Epidemiologists	8%
Environmental Health workers/engineers/ specialists	8%
Animal Control Officers	3%

Prepared by: Health Professions Resource Center, Center for Health Statistics, Department of State Health Services, April, 2010. Results from Participating and non-participating Local Health Departments, and HHSC Agency Vacancies.

Conclusions: Behavioral Health Professionals

Supply has been increasing over the past decade

- 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.

Ratios for almost all of the other professions have been steadily increasing

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

Conclusions: Race/Ethnicity

- *Whites* comprise the majority of licensed health professionals in all Texas professions

- *White* proportionate representation in almost all professions exceeds their representation in the population

- *Blacks* in the LVN and Pharmacist professions exceed their proportionate representation in the population - the only two professions where this occurs

- *Hispanics* in the health professions do not exceed their proportionate representation in the population for any profession

Conclusions: Border Areas

- Supply ratios for most professions are lower in Rural areas than in Urban areas
  - Only exception is the greater supply of LVNs in Rural than Urban areas
- 20% of the population lives in rural areas, only 9% of physicians practice there
- Non-Border supply ratios are higher than Border supply ratios.
- Border providers are predominately Hispanic, while Non-Border providers are predominately White.
- Females make up a higher percentage of the workforce in the Non-Border areas than they do in the Border areas.
- For professions where males comprise more than 50% of the workforce, the median ages are higher in the Border areas than the Non-Border areas.
- For professions where females comprise more than 50% of the workforce, the median ages are higher in the Non-Border areas than in the Border areas.

Conclusions

- We have conducted numerous workforce studies and data analyses over the years
- Our reports and presentations have been directed toward legislators, educators, consumers, college students, and others
- Many bills in the legislature have been drafted based on recommendations given in these reports.
- For more information about out extensive databases and reports, consult the following website

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

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Texas Department of State Health Services

CONTACT:

Bruce.gunn@dshs.state.tx.us

512-458-7261

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