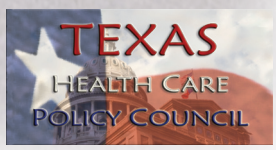
Commitment to Health Workforce Planning: A Strategy for Addressing Texas' Health Workforce Needs

Texas Health Care Policy Council

Strategic Plan
2006-2011



Commitment to Health Workforce Planning: A Strategy for Addressing Texas' Health Workforce Needs

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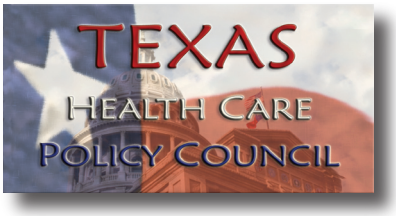


Texas Health Care Policy Council

-Executive Summary-

Commitment to Health Workforce Planning

A Strategy for Addressing Texas' Health Workforce Needs

RICK PERRY
GOVERNOR

Health Care Policy Council
Nancy W. Dickey, M.D., Chair
Texas A&M University System
Ann S. Fuelberg, Vice Chair
Employee Retirement System of Texas
Maureen Milligan, Ph.D., M.P. Aff.
Health and Human Services Commission
Rick Danko, Dr. P.H.
Department of State Health Services
Jon Weizenbaum
Department of Aging & Disability Services
Larry Jones
Workforce Commission
Stacey Silverman
Higher Education Coordinating Board
Jennifer Ahrens
Department of Insurance
Ronnie Jung
Teacher Retirement System
John Monk
Health Professions Council
Michelle Massey
Texas State University System
Alexia Green, R.N., Ph.D
Texas Tech University System
Seth Chandler, A.B., J.D.
University of Houston System
Vacant
University of North Texas System
Ken Shine, M.D.
University of Texas System

Health Workforce Planning Partnership Subcommittee
Stacy Silverman, Chair
Higher Education Coordinating Board
Alexia Green, R.N., Ph.D, Vice Chair
Texas Tech University System
Maureen Milligan, Ph.D., M.P. Aff.
Health and Human Services Commission
Rick Danko, Dr. P.H.
Department of State Health Services
Larry Jones
Workforce Commission
John Monk
Health Professions Council
Ken Shine, M.D.
University of Texas System
Theresa Cruz
Office of Rural Health Affairs
Larry Phillips, Ed.D.
Angelina College

Staff
Tony Gilman, *Executive Officer*
Stephen Palmer, *Policy Analyst*

A. Summary

"Commitment to Health Workforce Planning: A Strategy for Addressing Texas' Health Workforce Needs," is a health workforce strategic plan developed by the Texas Health Care Policy Council (THCPC) in response to the current and future health workforce challenges facing Texas. The strategic plan is designed to focus and synchronize all health workforce planning activities across the state over the next five years.

The strategic plan identifies key objectives and priority actions that should be taken to achieve the following three goals:

1. Regularly assess the status of health workforce in Texas – monitor, evaluate, and report.
2. Demonstrate commitment to health workforce planning, collaboration and implementation.
3. Ensure efficient and effective use of health workforce funding resources.

B. Background

House Bill 916, 79th Regular Legislative Session, created the Texas Health Care Policy Council (Council) to research, analyze and provide recommendations on ways to improve the quality, safety, efficiency, and effectiveness of the Texas health care system.

One of the primary objectives of the Council is to ensure the health workforce in Texas is adequate to serve the health care needs of the state. To address this important issue, House Bill 916 specified that the Texas Health Workforce Planning Partnership (Workforce Partnership Subcommittee) is a standing subcommittee of the Council and charged it with accomplishing the following:

- Monitoring the health care workforce needs of the state;
- Undertaking and implementing appropriate health care workforce planning activities; and
- Researching and identifying ways to increase funding for health workforce, including obtaining money from federal, state, private, and/or other public sources.

The Workforce Subcommittee held four public meetings in 2006 – April 20th, June 20th, August 24th, and October 3rd – to receive expert testimony, discuss health workforce issues, and develop a health workforce strategic plan for Texas. The full Council reviewed and approved the strategic plan, on November 7th.

C. Coordination and Implementation

The strategic plan is designed to provide guidance to state and local workforce planners, over the next five years and communicate the necessary steps to address the health workforce challenges facing the state. The plan is a living dynamic document that will be updated over time as the health workforce environment changes, new needs are identified, and as the priority actions are addressed and implemented.

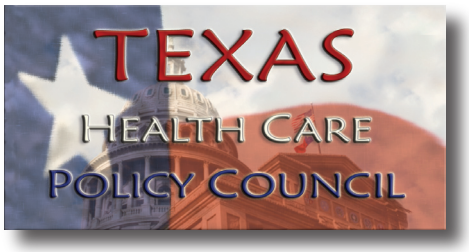
Under this plan, state agencies and higher education institutions represented on the Workforce Partnership Subcommittee are responsible for strengthening coordination and collaboration among the health workforce partners – governmental agencies, community colleges, universities, health science centers and their area health education centers (AHECS), local and regional workforce entities, and health professional associations – to implement the priority actions and achieve the goals set forth in the plan. The Workforce Partnership Subcommittee will also serve as the forum for discussion and as the decision making body for changes to the strategic plan.

Under the plan, all health workforce planning and development activities will be tracked and performance measured to guarantee progress is achieved. Health workforce funding streams – federal, state, local, and private – will be identified, coordinated, and linked to the strategic plan to ensure a maximum return on investment.

D. Key Findings and Recommendations

- An adequate supply of qualified workers is a major concern for health care providers and is essential for health care quality and the economic viability of the Texas health care system. This is particularly important in rural and under served urban areas of Texas, where recruitment and retention of health professionals continues to be a challenge.
- A unified state strategic plan is necessary to coordinate health workforce planning and development in Texas.
- Texas workforce planners need to have access to reliable, accurate, and complete health workforce data.
- Although there is not a consensus regarding the optimal number of health professionals necessary to meet the needs of Texans, the THCPC believes that currently available data on health workforce supply and demand indicates that there are shortages across the majority of the health professions.
- Supply and demand models for health professions should be developed so health workforce planners and policy makers have the necessary information to project future health workforce demand.
- Coordination and collaboration among all state education institutions will be critical as Texas incorporates additional technology training into the curriculum at our clinical training institutions, establishes standards for continuing education, and continues efforts to address faculty shortages and other areas impacting the education of health professionals.
- In order to properly plan for the future and to ensure additional focus and synchronization of all health workforce planning activities in Texas, the state needs to catalogue all health workforce funding sources. Collection of this information could enhance the state's ability to leverage existing federal and foundation funding opportunities.

Commitment to Health Workforce Planning: A Strategy for Addressing Texas' Health Workforce Needs



Strategic Plan
2006-2011

SECTION TWO:
VISION, PURPOSE, FOCUS AND COORDINATION

A. Vision

To ensure all Texas residents have access to quality health care, Texas must have an adequate supply of diverse and culturally competent health care professionals and a coordinated health workforce planning and development system that identifies priority areas and ensures efficient and effective use of our resources.

B. Purpose

"Commitment to Health Workforce Planning: A Strategy for Addressing Texas' Health Workforce Needs," is a framework for health workforce planning and development in Texas. It is designed to focus and synchronize all health workforce planning activities in Texas. Primary workforce partners in the state include: state and federal agencies; colleges, universities, health science centers and their area health education centers (AHECs); local and regional workforce entities; and professional associations.

C. Focus

A Strategy for Addressing Texas' Health Workforce Needs, identifies the high-level goals, strategic objectives, and priority actions that will guide workforce planning activities in Texas over the next five years. The strategic plan includes:

- ✪ Goals – Goals are general but will serve to focus the state's long-term health workforce planning efforts.
- ✪ Objectives – Objectives are specific and will serve to focus efforts in support of a particular goal. Objectives will be completed within the five-year time frame of the strategic plan.
- ✪ Priority Actions – Priority actions are specific initiatives that will be undertaken by stakeholder groups to address key health workforce challenges in Texas.

The plan complements the work of the Statewide Health Coordinating Council (SHCC) and the Texas State Health Plan.

D. Coordination and Implementation

The strategic plan is designed to provide guidance over the next five years and communicates the steps that must be taken to address the health workforce challenges facing the state. This will be a dynamic document that will be updated and continually evolve over time as the health workforce environment changes, new needs are identified, and as the priority actions are addressed and fully implemented.

Under this plan, state agencies and institutions of higher education represented on the Texas Health Workforce Planning Partnership are responsible for ensuring coordination with other health workforce partners to implement the priority actions and achieve the goals set forth in this plan. The Partnership serves as the forum for discussion and as the decision making body for changes to the strategic plan.

All health workforce planning and development activities will be tracked and performance measured to ensure progress is being achieved. All health workforce funding streams – federal, state, local, and private – will be identified, coordinated, and linked to the strategic plan to ensure a maximum return on investment.

TEXAS HEALTH CARE POLICY COUNCIL

SECTION THREE:

ASSESSMENT OF HEALTH WORKFORCE ACTIVITIES IN TEXAS

"Commitment to Health Workforce Planning: A Strategy for Addressing Texas' Health Workforce Needs" is designed to provide focus on workforce planning activities in Texas and prepared in response to the current and future health workforce challenges facing Texas.

Workforce planning serves as a mechanism to inform policy makers as they work to address the issues impacting health care in Texas, including:

- Future supply, demand, and the need for health professionals, including the health profession education and training system and its ability to meet those needs;
- Complex challenges facing the state's health care system, including disparities in quality and levels of care, problems for uninsured individuals, cost of health care, access to health care, the quality of health care, and other issues related to health care;
- Changes in the state's demographics and economy.

A. Health and the Texas Economy

The status of the state's health workforce and the types of health care delivery models used have a direct affect on the ability of Texans to access quality health care. It also impacts the overall economic health of Texas as access to quality health care is important to the business community as well. Quality of health care is one factor companies and individuals consider when making decisions about whether to move into or out of a community.

B. Impact of Population Change

Texas is the second largest state in the United States and, with a population change of 9.6% between 2000 and 2005, continues to be the second fastest growing state in numerical terms. At the same time, the population of Texas is projected to continue to grow and change according to age and race/ethnic composition. According to the Texas State Data Center at the University of Texas at San Antonio, the state's non-Anglo population is expected to grow at a faster rate than the Anglo population, and the number of persons age 65 or older is projected to account for a larger share of

the state's population. In addition, the number of and costs associated with visits to a physician, days in a hospital, and nursing home residents is expected to grow in both the short- and long-term. All of these demographic changes present challenges for the future, and could affect the delivery of health care in Texas.

C. Health Workforce Planning Challenges

There are many factors affecting health workforce supply and demand that could lead to shortages. Some causes include an aging workforce and working conditions on the supply side to an aging population and medical advances on the demand side. Increases in health care costs are one consequence of health workforce shortages, because providers spend additional time and money in attracting and retaining workers. More importantly, there is an adverse affect on the quality of care provided to patients.

Factors Affecting Workforce Supply and Resulting in Shortages	Factors Affecting Workforce Demand and Resulting in Shortages
✪ Aging Workforce	✪ Aging population/longevity
✪ Declining enrollments in some professional schools due to faculty shortages	✪ Expanded scope of practice (genomics)
✪ Challenges relating to keeping health care work as a career of choice for women	✪ Medical advances
✪ Workforce participation/lack of interest	✪ Insurance coverage
✪ Poor minority representation in health careers and professions schools	✪ Insurance reimbursement
✪ Distribution of providers	✪ Advances in technology
✪ Salary and benefits of providers	✪ Population growth
✪ Working conditions of providers	✪ Impact of chronic illness
✪ Lack of a unified state plan for workforce development	

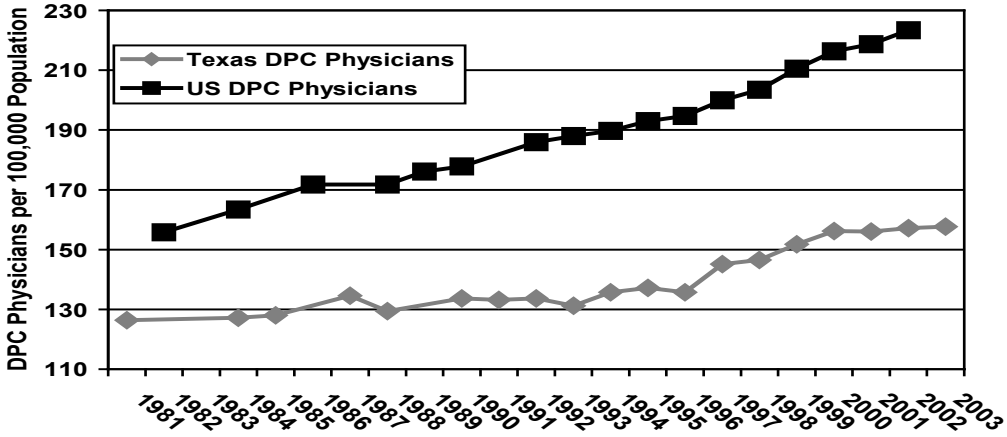
Source: Presentation to the Texas Health Workforce Planning Partnership on April 20, 2006 by Dr. Ben Raimer, Chairman of the Statewide Health Coordinating Council

D. Health Professions Challenges in Texas

The Health Professions Resource Center (HPRC), Center for Health Statistics, Texas Department of State Health Services, prepared the information in the following pages examining the challenges facing various health professions in Texas and the nation. Furthermore, it provides information on the current trends and demographics. Additional information on health professionals prepared by the HPRC can be found online at: www.dshs.state.tx.us/chs/hprc/.publications.

1. Direct Patient Care (DPC) Physicians

DPC Physicians per 100,000 Population: U.S. and Texas, 1981 to 2005



Source: Texas State Board of Medical Examiners (M.D. and D.O.); American Medical Association (U.S. M.D.)
Figures include all licensed, active, in-state, non-federal, non-resident in training DPC and PC physicians
Produced By: Health Professions Resource Center, Center for Health Statistics, Texas Department of State Health Services

A. Overview

According to an analysis of annual supply data conducted by the Health Professions Resource Center (HPRC), Texas appears to have a shortage of Direct Patient Care (DPC) physicians.

B. Key Challenges

The supply of DPC physicians increased between 1996 and 2005 by an average of 1,094 per year. In October 2005, there were 35,811 DPC physicians actively practicing in Texas. Texas has consistently lagged behind the U.S. average in the ratio of DPC physician supply per 100,000 in population, however, and the gap between the two appears to be increasing. DPC ratios decreased in 80 counties between 1996 and 2005.

One in three Texans live in a federal Health Professional Shortage Area (HPSA), and many of these areas have been short of DPC physicians for decades, particularly in the rural, border, and inner-city areas. One factor affecting the shortage in these areas is the perception of some physicians that small counties or communities have a disproportionate number of low-income and under insured patients and it could be difficult for them to maintain a viable practice in those areas. Others are frustrated by what they consider excessive insurance company paperwork; the inadequate level of reimbursements for treating Medicare, Medicaid, and uninsured or under insured patients; and, the cost of malpractice insurance (even in light of recent tort reform in Texas). The lack of social and other personal amenities in small rural areas also contribute to the

unwillingness of some physicians to locate in rural and border shortage areas. According to the 2006 East Texas Area Health Education Center (AHEC)/HPRC survey, the choice of practice area is partially influenced by whether or not the physicians were raised in a rural or border area. Additionally the capacity of medical schools and teaching hospitals in Texas is also a challenge.

c. Characteristics

Several characteristics of the state's DPC Physicians are highlighted below.

- In 2005:
  - The supply ratio for border rural areas (74.1) was the lowest in the state (155.7), and the ratio in non-border urban areas (171.6) was the highest.
  - There were 22,711 DPC physicians in Texas but 23 counties had none.
  - The median age of male DPC physicians was 7 years more than the female physicians median age of 42.

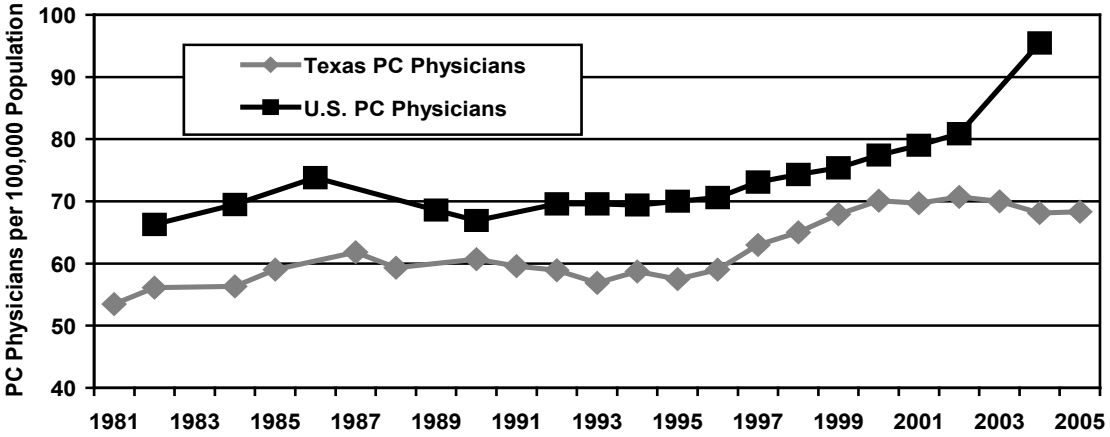
- Between 1995 and 2005:
  - Hispanic DPC physicians increased from 9.2% to 11.2% of the physician workforce but were still well below the percentage of Hispanics in the general population (35.4).
  - The representation of females in the DPC physician workforce increased from 15.4% to 23.8%.

Area	Providers/100,000 Population	Race/Ethnicity	% of Total
Border Urban	64.7	White	61.4
Non-Border Urban	72.2	Black	5.8
Border Rural	45.0	Hispanic	13.7
Non-Border Rural	54.4	Other	19.1
Texas	68.3		

Note: Border counties are the 43 county border area; Source of physician supply data: Texas Medical Board; Source for urban–rural definition: Office of Management and Budget; Figures include all licensed, active, non-federal, non-resident in training physicians; More detailed information can be found in the Highlights: The Supply of Primary Care Physicians in Texas – 2005 report on the Health Professions Resource Center's website at: www.dshs.state.tx.us/CHS/hprc/publicat.shtm.

2. Primary Care (PC) Physicians

PC Physicians per 100,000 Population: U.S. and Texas, 1981 to 2005



Source: Texas State Board of Medical Examiners (M.D. and D.O.); American Medical Association (U.S. M.D.)
Figures include all licensed, active, in-state, non-federal, non-resident in training DPC and PC physicians
Produced By: Health Professions Resource Center, Center for Health Statistics, Texas Department of State Health Services

A. Overview

In 2006, the East Texas Area Health Education Center (AHEC), in collaboration with the Health Professions Resource Center (HPRC), conducted a survey of PC physicians in certain rural areas of Texas. This, along with other documentation and studies, has revealed some of the challenges facing physicians today, and some of the challenges the state faces in training, recruiting, and retaining physicians. This information is especially important because of the predicted shortage of physicians over the next 15 years.

According to the Texas Medical Association, the number of physician graduates in Texas has been static for years because of the lack of suitable capacity and funding of medical schools. It is not surprising that 53% of the practicing physicians in Texas graduated from medical schools from other states or countries. Similar trends are occurring throughout the nation.

B. Key Challenges

There are challenges in obtaining enough physicians to meet need and demand. One in three Texans live in a federal HPSA, and many of these areas have been chronically short of PC physicians for decades, particularly in the rural, border, and inner-city areas. One factor affecting the shortage in these areas is the perception of some physicians that small counties or communities have a disproportionate number of low-income and under insured patients and it could be difficult for them to maintain a viable practice in those areas. Others are frustrated by what they consider excessive insurance company paperwork; the inadequate level of reimbursements for treating Medicare,

Medicaid, and uninsured or under insured patients; and, the cost of malpractice insurance (even in light of recent tort reform in Texas). The lack of social and other personal amenities in small rural areas also contribute to the unwillingness of some physicians to locate in rural and border shortage areas. And, according to the 2006 East Texas AHEC/HPRC survey, the choice of practice area is partially influenced by whether or not the physicians were raised in a rural or border area. Selecting strategies and policies that recognize these practice issues could go a long way toward addressing the apparent PC physician shortage in Texas.

c. Characteristics

Several characteristics of the state's PC physicians are highlighted below.

- In 2005:
  - The supply ratio for border rural areas (45.0) was the lowest in the state (68.3), and the ratio in non-border urban areas (72.2) was the highest.
  - There were 15,718 PC physicians in Texas but 27 counties had none.
  - The median age of male PC physicians was 8 years more than the female physicians median age of 41.
  - Female physicians were choosing family medicine and pediatrics at a higher rate than their male counterparts.
  - Almost one-half of the enrolled students in medical schools were female.

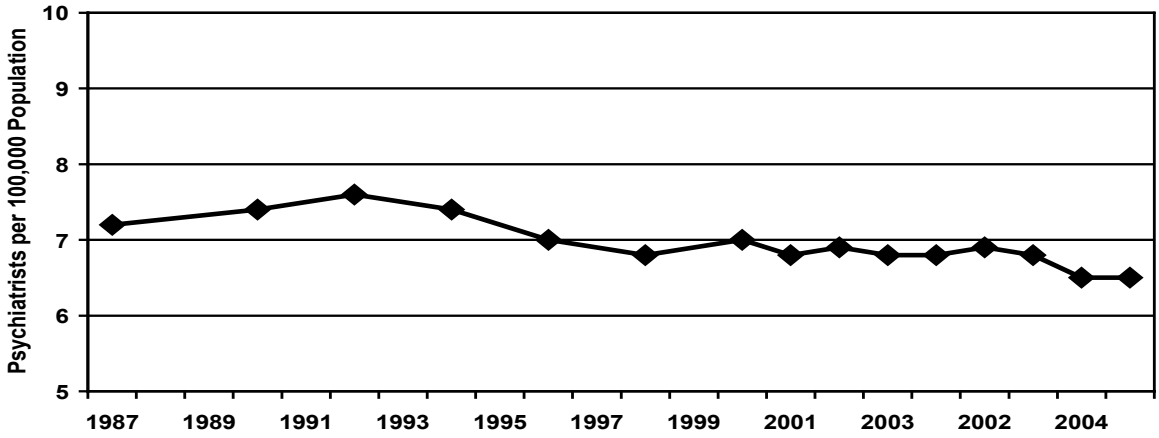
- Between 1995 and 2005:
  - Hispanic PC physicians increased from 11.4% to 13.7% of the physician workforce but were still well below the percentage of Hispanics in the general population (35.4).
  - The representation of females in the PC physician workforce increased from 19.2% to 33.1%.

Area	Providers/100,000 Population	Race/Ethnicity	% of Total
Border Urban	146.3	White	67.8
Non-Border Urban	171.6	Black	4.3
Border Rural	74.1	Hispanic	11.2
Non-Border Rural	87.6	Other	16.7
Texas	155.7		

Note: Border counties are the 43 county border area; Source of physician supply data: Texas Medical Board; Source for urban–rural definition: Office of Management and Budget; Figures include all licensed, active, non-federal, non-resident in training physicians; More detailed information can be found in the Highlights: The Supply of Primary Care Physicians in Texas – 2005 report on the Health Professions Resource Center's website at: www.dshs.state.tx.us/CHS/hprc/publicat.shtm.

3. Psychiatrists

Psychiatrists per 100,000 Population, Texas, 1987–2005



Source/Notes: Texas Medical Board; Information on the national supply of Psychiatrists is not available

A. Overview

There appears to be a shortage of psychiatrists across the state. The supply ratios in Texas decreased from 7.4 psychiatrists per 100,000 people in 1990 to 6.5 in 2005. And, according to the federal HPSA program, Texas continues to experience a chronic shortage and maldistribution of psychiatrists. For example, in April 2006 there were 184 counties designated as mental health HPSAs, and, most of the psychiatrists in Texas were concentrated along the I-35 corridor from Bexar County to Dallas County, and in the Harris and Cherokee County areas. There were 179 counties with no psychiatrists in 2005, and 150 of these were rural counties. There were also very few psychiatrists in the West Texas or Panhandle areas. In some areas of the state, a person would have to drive over 100 miles to see a psychiatrist.

There appears to be a shortage of child psychiatrists as well. It is estimated that in 2020 the nation will have only two-thirds of the number of child psychiatrists required for the size of the U.S. population. In 2005, Texas had only 190 child psychiatrists.

B. Key Challenges

Psychiatry is one of 70+ direct patient care physician specialties. Some of the challenges psychiatrists encounter are the same as those for PC physicians: the medical schools in Texas are at capacity, which limits the number of psychiatrists that can be trained each year; issues with excessive paperwork when dealing with insurance claims; the level of reimbursements for treating Medicare, Medicaid, and uninsured or under insured patients; the levels of private insurance benefits for psychiatric illnesses; funding levels for public mental health; and

the cost of malpractice insurance. There are also challenges related to recruiting and retaining psychiatrists. Small counties or communities with small patient populations are perceived to contain a disproportionate number of low-income people that could make it difficult for a psychiatrist to maintain a viable practice. The lack of social and other amenities in smaller rural areas could also contribute to unwillingness on the part of some psychiatrists to locate there. In addition, according to the U.S. Department of Health and Human Services, a psychiatrist must have a much larger patient base than many other physician specialties in order to have a viable practice.

c. Characteristics

Several characteristics of the state's psychiatrists are highlighted below.

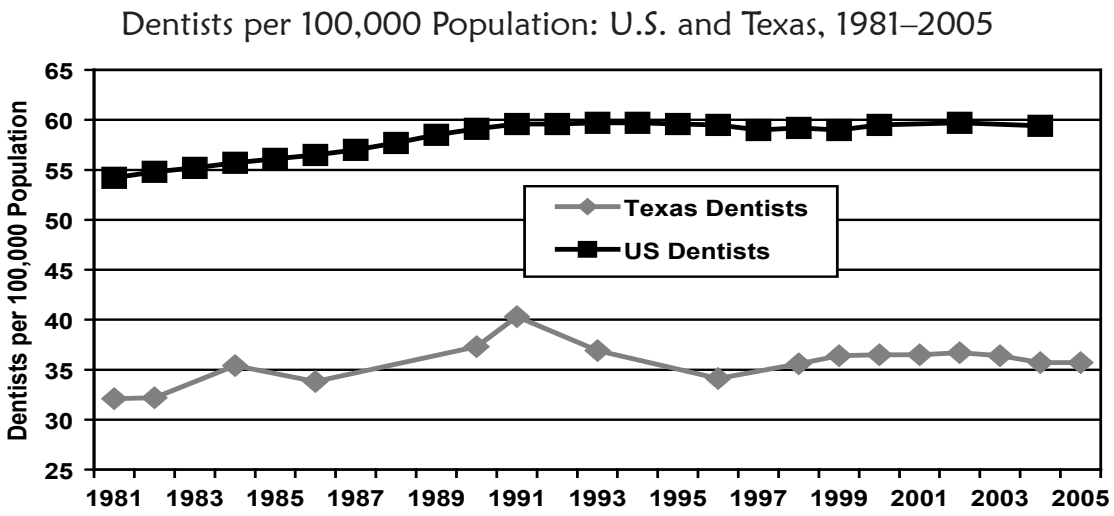
- In 2005:
  - The supply ratio for the non-border rural area (2.5) was the lowest in the state (6.5), and the ratio in the non-border urban area (7.2) was the highest.
  - There were 1,488 general and child psychiatrists.
  - The median age of male psychiatrists was 7 years more than the female psychiatrists median age of 47.

- Between 1995 and 2005:
  - Hispanic psychiatrists increased from 10.4% to 12.8% of the psychiatrist workforce but were still well below the percentage of Hispanics in the general population (35.4).
  - The representation of females in the psychiatrist workforce increased from 24.9% to 33.0%.

Area	Providers/100,000 Population	Race/Ethnicity	% of Total
Border Urban	6.2	White	68.4
Non-Border Urban	7.2	Black	3.8
Border Rural	4.1	Hispanic	12.8
Non-Border Rural	2.5	Other	15.0
Texas	6.5		

Note: Border counties are the 43 county border area; More detailed information can be found in the Highlights: The Supply of Mental Health Professionals in Texas report on the Health Professions Resource Center's website at: www.dshs.state.tx.us/CHS/hprc/publicat.shtm; Source: Texas Medical Board; Source for urban–rural definition: Office of Management and Budget. Figures include all licensed, active, non-federal, non-resident in training psychiatrists and child psychiatrists.

4. Dentists



Sources: Texas State Board of Dental Examiners 1981–2005; HRSA, Bureau of Health Professions; American Dental Association

A. Overview

There appears to be a nationwide shortage of dentists. As of May 2006, there were 82 counties designated as dental HPSA in Texas, indicating that many areas in Texas are not adequately served by dentists. The supply ratios in Texas have decreased from 37.2 dentists per 100,000 people in 1990 to 35.7 in 2005; and, the median age of dentists has increased from 46 in 2000 to 48 in 2005. Thus, the dental workforce is aging and is not being replenished with new workers at a rate that is necessary to match the population's growth rate. Between 1996 and 2005, 121 counties experienced a decline in their ratios and 81 of these were rural counties.

B. Key Challenges

According to the Bureau of Labor Statistics (BLS), demand for dental care should grow substantially through 2014. However, employment of dentists is not expected to grow as rapidly as the demand for dental services. As members of the baby-boom generation advance into middle age, a larger number will need more dentists for complicated dental work. In addition, the baby boomers are more likely to have retained their teeth than did their predecessors, so they could require much more dental care than in the past.

The overall age of dentists is also a concern because it affects retirement rates. Nationwide, there are about 152,000 active dentists, with more than one-third of them over age 55, according to the American Dental Association. Experts estimate that dentists' ranks will begin to decline in about 10 years as the number of dental school graduates -- now about 4,000 annually -- falls below the number of dentists leaving the work force due to retirement or other reasons. A large number of dentists, nationwide, are expected to retire in the near future.

Another challenge dentist's face is in encouraging some of their patients to seek the dental care that they need. Many people do not visit a dentist on a regular basis. The most often cited reason for not going to the dentist is that dental care costs too much (34%), even when a patient has dental insurance. Two other reasons cited by almost one-fourth of the consumers is that they have had a previous bad experience with a dentist and do not feel that it is necessary to go to a dentist until a problem occurs.

c. Characteristics

Several characteristics of the state's dentists are highlighted below.

- In 2005:
  - The supply ratio for border rural areas (16.6) was the lowest in the state (35.7), and the ratio in non-border urban areas (40.0) was the highest.
  - There were 8,213 dentists and 49 counties had none.

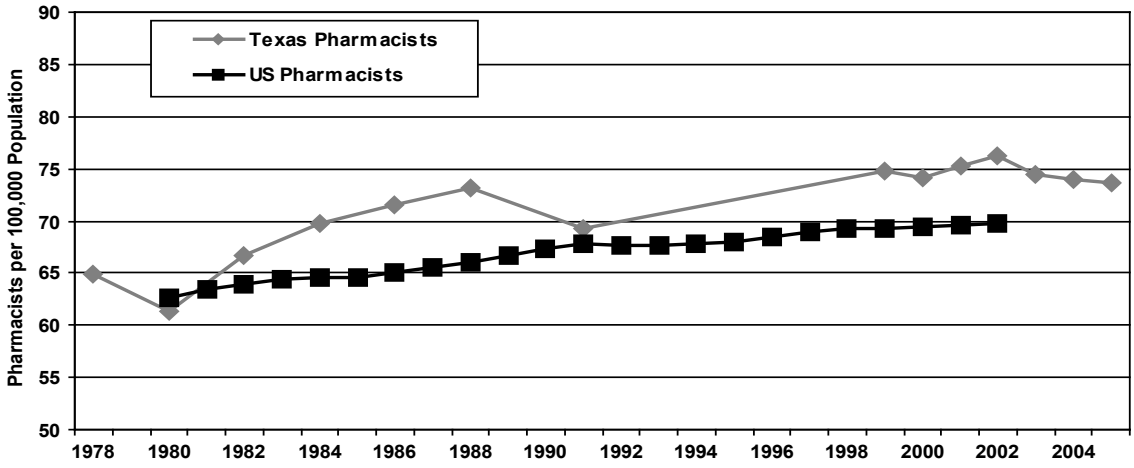
- Between 1996 and 2005:
  - 121 counties experienced a decrease in their supply ratios.
  - The representation of females in the dentist workforce increased from 12.0% to 23.1%.
  - The median age of male dentists increased to 50 years and was 11 years more than the female dentist median age of 39.
  - Race-ethnicity data were not available for dentists.

Area	Providers/100,000 Population
Border Urban	27.6
Non-Border Urban	40.0
Border Rural	16.6
Non-Border Rural	25.3
Texas	35.7

Note: Border counties are the 43 county border area; Source: Texas State Board of Dental Examiners; Source for urban–rural definition: Office of Management and Budget; Figures include all licensed, active, in-state, non-federal dentists

5. Pharmacists

Pharmacists per 100,000 Population, U.S. and Texas, 1978–2005



Sources: Texas State Board of Pharmacy; HRSA, Bureau of Health Professions

A. Overview

The supply of pharmacists in Texas may not be adequate to meet the demand, according to a recent analysis of annual pharmacist supply data conducted by HPRC. The supply ratios in Texas have increased from 69.2 pharmacists per 100,000 people in 1991 to 73.7 in 2005. However, the 2005 ratio is lower than the peak ratio of 76.2 in 2002. And, the median age of pharmacists has increased from 44 in 2000 to 46 in 2005. Thus, the pharmacist workforce is aging and is not being replenished with new workers at a rate that is necessary to match the population's growth rate. This disparity has been most pronounced in border and rural areas. Since 1999, 95 counties in Texas have experienced a decline in supply ratios; and 71 of these counties were rural. There is some evidence of a widespread and growing national shortage of pharmacists in the U.S. as well. The supply ratio for Texas ranks 39th among the 50 states; it is also below the average ratio of the 10 most-populous states. The two new pharmacy schools opening in 2006, Texas A & M Health Science Center College of Pharmacy and The University of the Incarnate Word in San Antonio, may help alleviate some of the shortages across the state.

B. Key Challenges

The percentage of Hispanics in the pharmacist workforce (8.7) has not increased since 1999, and is still well below the percentage of Hispanics in the general population (35.4). As with other professions, this problem of under-representation of Hispanics in the professional schools and the workforce could present an access problem for Texas' growing Hispanic population

since many health professionals prefer to work in locations where they were raised. Between 1999 and 2005, the representation of females in the pharmacist workforce has increased only slightly, from 43.1% to 47.3%. However, as females approach parity with males in the pharmacist workforce, there is the possibility that this would affect the overall supply ratios. The growing senior population also increases the need for prescriptions and pharmacists, especially in border and rural areas. The senior population in Texas increased by 30.5% between 1990 and 2005, and seniors comprise 15.4% of the overall rural population - but only 9.1% of the overall urban population. The demand for prescriptions and pharmacists should also increase as the Medicare prescription drug benefit program is fully implemented.

c. Characteristics

Several characteristics of the state's pharmacists are highlighted below.

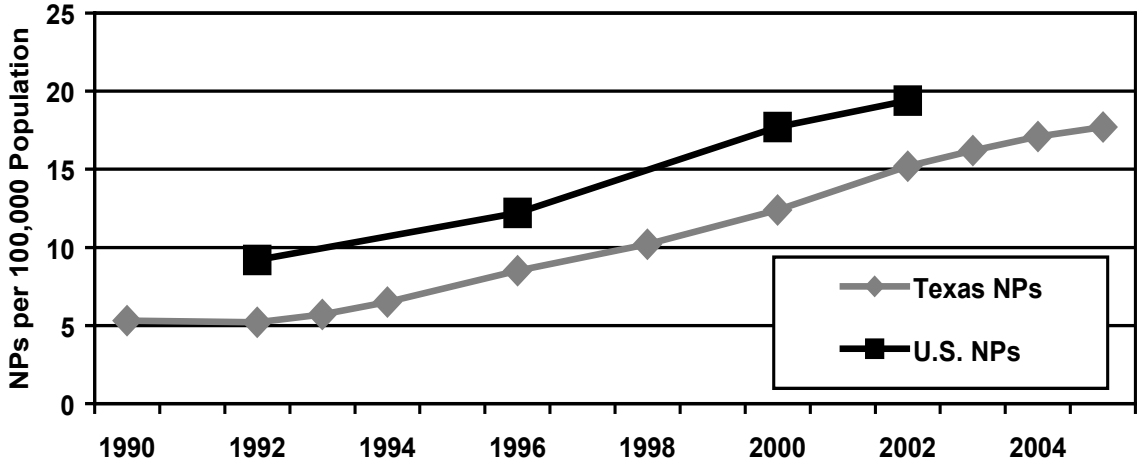
- In 2005:
  - The supply ratio for border rural areas (41.5) was the lowest in the state (73.7), and the ratio in non-border urban areas (81.0) was the highest.
  - There were 16,944 pharmacists in Texas, but 23 counties had none.
  - The median age of male pharmacists was 12 years more than the female pharmacists median age of 40.
  - Females comprised 47.3% of the pharmacist workforce.
  - Hispanics comprised only 8.7% of the workforce.
  - Pharmacy is one of the few professions where the representation of Black pharmacists (12.7%) in the workforce exceeded the Hispanic representation (8.7%).

Area	Providers/100,000 Population	Race/Ethnicity	% of Total
Border Urban	60.1	White	63.4
Non-Border Urban	81.0	Black	12.7
Border Rural	41.5	Hispanic	8.7
Non-Border Rural	55.4	Other	15.2
Texas	73.7		

Note: Border counties are the 43 county border area; Source: Texas State Board of Pharmacy; Source for urban–rural definition: Office of Management and Budget. Figures include all licensed, active, in-state pharmacists; More detailed information can be found in the Highlights: The Supply of Pharmacists in Texas – 2005 report on the Health Professions Resource Center's website at: www.dshs.state.tx.us/CHS/hprc/publicat.shtm.

6. Nurse Practitioners (NPs)

Nurse Practitioners per 100,000 Population, U.S. and Texas, 1990–2005



Sources: Texas Board of Nurse Examiners; HRSA, Bureau of Health Professions

A. Overview

Over the past decade, Nurse Practitioners (NPs) and other Advanced Practice Nurses (APNs) have gained wide acceptance by physicians, patients, and the general public as key members of the health care delivery team.

B. Key Challenges

As more NPs and APNs enter the workforce, they are facing many of the challenges that PC physicians are encountering in having to deal with excessive insurance paperwork and inadequate reimbursement issues. In addition, they face challenges that are unique to these professions because of state laws that govern their scope of practice and the degree of public awareness of these professions.

The size of the NP workforce in Texas was 26% of the size of the PC physician workforce in 2005, but was only 14% in 1996. Thus, the NP supply appears to be growing at a faster rate than is the PC physician workforce and could signal a greater acceptance of the role of NPs by both patients and PC physicians. The NP supply ratios in Texas doubled over the last decade, from 8.5 NPs per 100,000 people in 1996 to 17.7 in 2005. An indication there could be a shortage or an impending shortage of NPs in Texas is that the supply ratios in Texas have been lower than the U.S. average ratios for over a decade. In 2002, Texas had a ratio of 15.2 NPs per 100,000 people while the U.S. had an average ratio of 19.4.

c. Characteristics

Several characteristics of the state's NPs are highlighted below.

- In 2005:
  - The NP supply ratios in border rural areas (9.4) were the lowest in the state (17.7) and the ratios in non-border urban areas (19.6) were the highest.
  - The actively practicing nursing, female NPs median age of 48 was 5 years more than the male NPs median age of 43; In 2000, the median age for all NPs was 46 years, in 2005 it was 48 years – 2 years higher than for all RNs.
  - 91.9% of the NPs were female; 8.1% were male.
  - There were 4,066 NPs and 66 counties had none.
- Between 1996 and 2005:
  - Hispanic NPs increased from 6.8% to 7.4% of the NP workforce, but the 2005 ratio was still well below the percentage of Hispanics in the general population (35.4), and was lower than the ratio for all RNs.
  - The representation of females in the NP workforce decreased from 96.1% to 91.9%, but is still higher than their representation in the overall RN workforce.

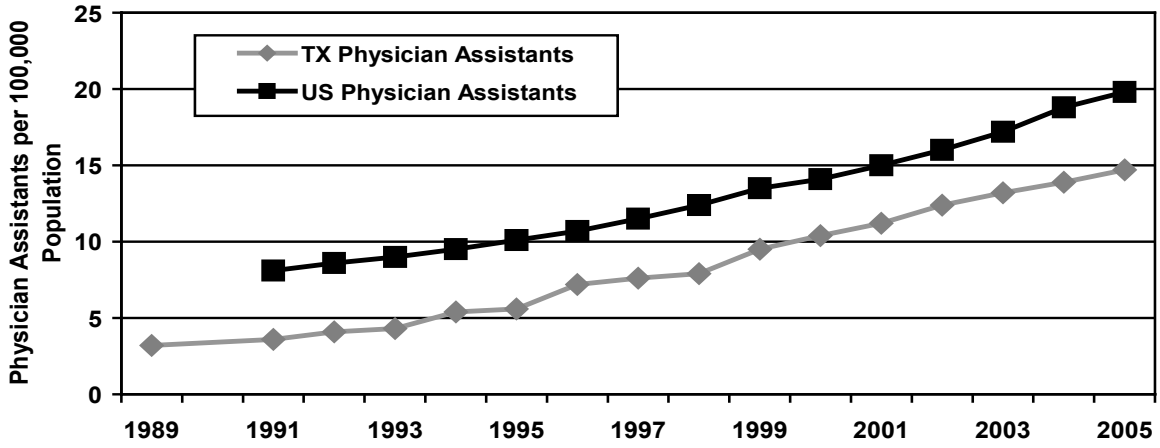
- In 67 counties with fewer than 14,000 people, NPs were often used to provide primary care and health care services in medically underserved areas:
  - 27 counties had no PC Physicians but had a total of 7 Nurse Practitioners.
  - 16 counties had 1 PC Physicians and a total of 8 Nurse Practitioners (ratio of 2.0 PC physicians to 1 NP).
  - 24 counties had 2 PC Physicians and a total of 15 Nurse Practitioners (ratio of 3.2 PC physicians to 1 NP).
  - By comparison, the state ratio of PC Physicians to NPs was 3.9 to 1; and the ratio for Travis County was 3.7 to 1.
  - Many of these counties also had Physician Assistants in practice.

Area	Providers/100,000 Population	Race/Ethnicity	% of Total
Border Urban	14.5	White	83.3
Non-Border Urban	19.6	Black	4.8
Border Rural	9.4	Hispanic	7.4
Non-Border Rural	12.6	Other	4.5
Texas	17.7		

Note: Border counties are the 43 county border area; Source for supply data: Texas Board of Nurse Examiners; Source for urban–rural definition: Office of Management and Budget; Figures include all licensed, active, in-state nurse practitioners

7. Physician Assistants (PAs)

Physician Assistants per 100,000 Population, U.S. and Texas, 1989–2005



Sources: Texas Medical Board, American Academy of Physician Assistants

A. Overview

Over the past decade, PAs have gained wide acceptance by physicians, patients, and the general public as key members of the health care delivery team. Between 1992 and 2000, the national supply of PAs increased by 160% while the Texas supply increased by 188%. The size of the PA workforce in Texas was 21% of the size of the Primary Care (PC) physician workforce in 2005, but was only 7% in 1992. Thus, the profession appears to be growing at a faster rate than is the PC physician workforce. Managed care penetration and health care delivery strategies affect the working environment of PAs and correlate with the significant increases in the numbers of graduates from professional education programs, and the continued success of new graduates in finding employment.

B. Key Challenges

As more PAs enter the workforce, they are facing many of the challenges that PC physicians and NPs are encountering in having to deal with excessive insurance paperwork and inadequate reimbursement issues. In addition, they face challenges that are unique to this profession because of state laws that govern their scope of practice and the degree of public awareness of the profession.

The demand for health care services provided by PAs appears to be expanding and could signal a greater acceptance of the role of PAs by both patients and PC physicians. The supply ratios in Texas increased from 3.6 PAs per 100,000 people in 1991 to 14.7 in 2005. An indication that there could be a shortage or an impending shortage of PAs in Texas is that the supply ratios in Texas have been lower than the U.S. average ratios for over a decade. In 2005, Texas had a ratio of 14.7 PAs per 100,000 people while the U.S. had a ratio 19.8. PA's now

rank as the fourth fastest growing profession in the U.S., and the fifth fastest in Texas. While HPRC has not found any reports of a national shortage of PAs, the rapid growth rate of this profession indicates that the demand is great and that the supply of new graduates from PA professional schools will likely be adequate if the capacity of these schools are staffed and funded appropriately.

c. Characteristics

Several characteristics of the state's PAs are highlighted below.

- In 2005:
  - Unlike most professions, there was little difference in the supply ratios between areas having the lowest ratio (12.7) and the highest ratio (15.5), as the table below shows.
  - There were 3,375 PAs and 58 counties had none.
  - In 67 counties with fewer than 14,000 people, PAs were often used to provide primary care and health care services in medically underserved areas.
  - 27 counties had no PC physicians but had a total of 11 PAs.
  - 16 counties had 1 PC physician and a total of 12 PAs (ratio of 1.3 PC Physicians to 1 PA).
  - 24 counties had 2 PC physicians and a total of 22 PAs (ratio of 2.2 PCs to 1 PA).
  - By comparison, the state ratio of PC physicians to PAs was 4.7 to 1 while the ratio for Travis County was 5.7 to 1.
  - Many of these counties also had nurse practitioners in practice.
  - The median age of male PAs was 45 years and 9 years more than the female PAs median age of 36.

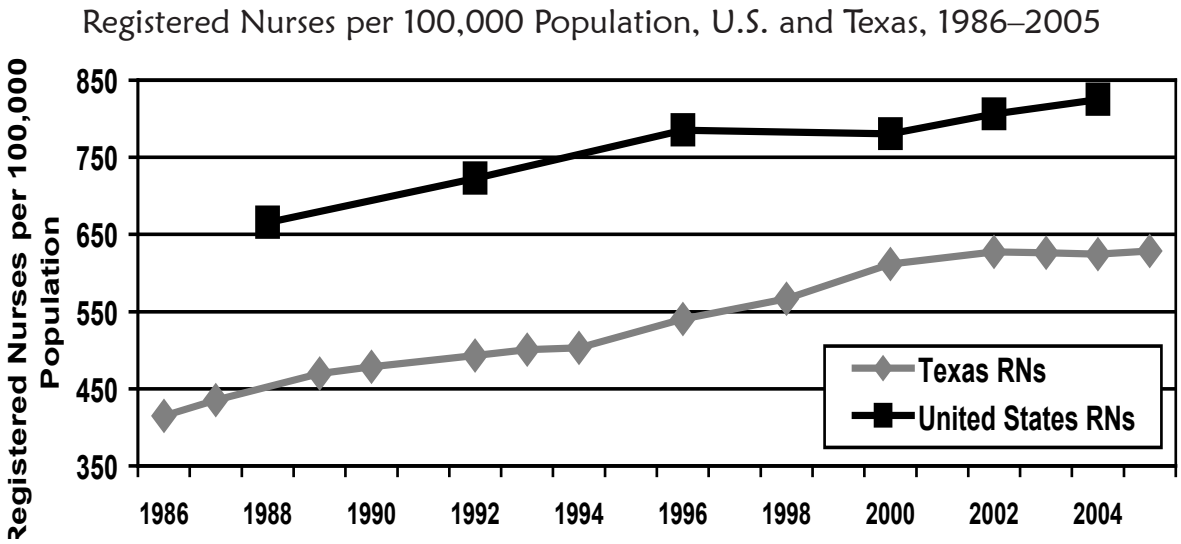
- Between 1995 and 2005:
  - 49 counties experienced a decrease in their supply ratios.

- Between 1998 and 2005:
  - Hispanic PAs increased from 9.7% to 12.7% of the PA workforce, but the 2005 ratio was still well below the percentage of Hispanics in the general population (35.4).
  - The representation of females in the PA workforce increased from 47.0% to 54.6%.

Area	Providers/100,000 Population	Race/Ethnicity	% of Total
Border Urban	15.5	White	76.0
Non-Border Urban	14.8	Black	5.3
Border Rural	15.4	Hispanic	12.7
Non-Border Rural	12.7	Other	6.0
Texas	14.7		

Note: Border counties are the 43 county border area; Source of supply data: Texas Medical Board; Source for urban–rural definition: Office of Management and Budget; Figures include all licensed, active, in-state physician assistants.

8. Registered Nurses (RNs)



Sources: Texas Board of Nurse Examiners; HRSA, Bureau of Health Professions

A. Overview

The United States is in the midst of a nursing shortage that is expected to intensify as baby boomers age and the need for health care grows. A 2002 report by the U.S. Department of Health and Human Services identified Texas as one of 30 states with shortages of RNs. The Texas Center for Nursing Workforce Studies (TCNWS) has developed, in cooperation with the U.S. Health Resources and Services Administration (HRSA), a supply and demand model to forecast the number of nurses that Texas will need in the future. According to the TCNWS supply and demand model, Texas will have 27,000 fewer nurses than it needs in 2010, and 71,000 in 2020. In order for the supply of nurses to meet the demand, Texas will need to increase the number of new nurses from 6,300 in 2005, to 9,700 in 2010, to 25,000 in 2020.

B. Key Challenges

One of the challenges Texas faces in increasing the supply of RNs is the nursing schools are operating at capacity, and have done so for years. The Texas Higher Education Coordinating Board reported that from September 1, 2002 to August 31, 2003, approximately 4,220 qualified applicants were denied admission to the state's initial RN-licensure programs, representing 34% of total applicants. Lack of admission of qualified applicants can be partially attributed to funding, a lack of the necessary faculty, and limited clinical sites.

Reports indicate that RNs are currently facing daunting challenges such as long hours, low salaries (Texas ranks 22nd among the states in median salaries for RNs, and below the national average), burnout, and physical challenges from violent patients and back injuries associated with lifting or moving patients. Only 34% of RNs who replied to a survey conducted by The Regional Center for Health Workforce Studies at the Center for Health Economics and Policy (CHEP) in 2004 indicated that they had adequate help with physical demands associated with the workplace. In addition, 69% of the RNs reported exhaustion; 54% reported frustration on the job; and, almost 43% reported that on most days they often have more work than they can safely handle. These workforce issues affect the retention of currently practicing RNs within the profession.

c. Characteristics

Several characteristics of the state's RNs are highlighted below.

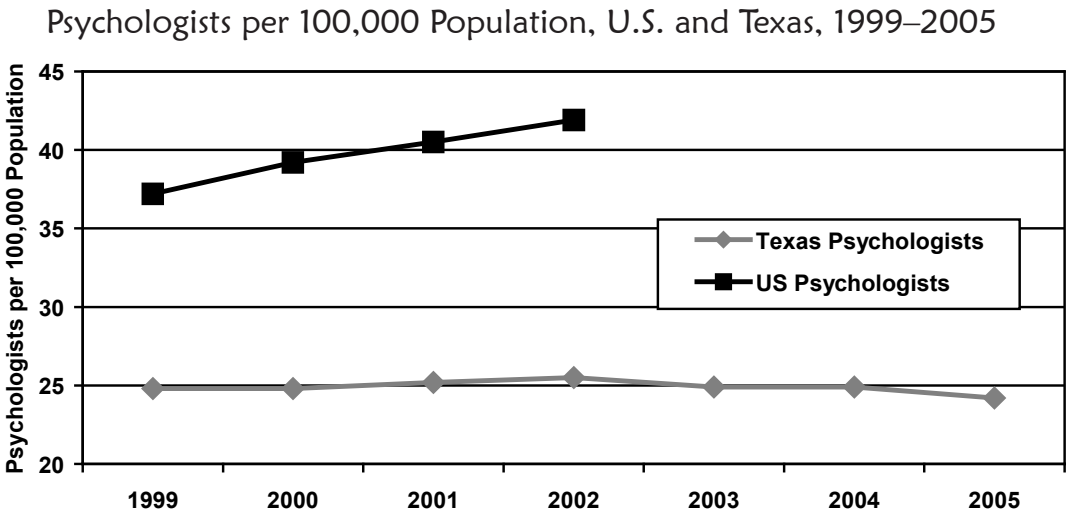
- In 2005:
  - The RN supply ratios in border rural areas (446.0) were the lowest in the state (628.6) and the ratios in non-border urban areas (673.7) were the highest.
  - The female RNs actively practicing in nursing median age of 47 was 4 years more than the male RNs median age of 43; In 2000, the median age for all RNs was 44 years, in 2005 it was 46 years.
  - 90.5% of the RNs were female; 9.5% were male.
  - There were 144,602 RNs and 4 counties had none.

- Between 1996 and 2005:
  - Hispanic RNs increased from 6.1% to 8.5% of the RN workforce, but the 2005 ratio was still well below the percentage of Hispanics in the general population (35.4).
  - The representation of females in the RN workforce decreased from 93.3% to 90.5%.

Area	Providers/100,000 Population	Race/Ethnicity	% of Total
Border Urban	606.6	White	74.6
Non-Border Urban	673.7	Black	7.6
Border Rural	308.6	Hispanic	8.5
Non-Border Rural	446.0	Other	9.3
Texas	628.6		

Note: Border counties are the 43 county border area; Source for supply data: Texas Board of Nurse Examiners; Source for urban–rural definition: Office of Management and Budget; Figures include all licensed, active, in-state registered nurses

9. Psychologists



Sources: Texas State Board of Examiners of Psychologists, 1999–2005; U.S. Bureau of the Census

A. Overview

The Texas State Board of Examiners of Psychologists (TSBEP) issues four types of licenses for psychologists: Licensed Psychologist (LP), Provisionally Licensed Psychologist (PLP), Licensed Psychological Associate (LPA), and Licensed Specialist in School Psychology (LSSP). Some reports suggest that reimbursement and scope of practice issues affect where psychologists choose to practice, and part of the shortages seen in border and rural areas could be a result of these issues. The supply ratios in these areas are one-half of the ratios in non-border and urban areas. Any state shortage of psychologists would contribute to the overall scarcity of mental health care across the state, especially in rural and border areas.

B. Key Challenges

In 2005, Texas only had a 3.5% increase in the number of active LSSPs over the prior year - from 2,021 in 2004 to 2,091 in 2005; and, over the past 7 years the annual increase has ranged between 3.5% to 5.3%.

The overall psychologist supply ratios for Texas have shown little change over the past six years, 24.8 psychologists per 100,000 people in 1999 and 24.2 in 2005; but, many areas - such as the non-metropolitan, West Texas, South Texas, and Panhandle areas – appear to have greater shortages than most areas based on annual supply ratios. Between 1999 and 2005, the supply ratios for 81 counties declined and 15 of them lost all of their psychologists. Of the 112 counties that did not have a psychologist in 2005, 105 of them were rural counties. Since rural areas have such low ratios for psychologists, the challenge facing Texas is how to provide mental health care to rural and other shortage areas, including the border and South Texas – the latter includes 33 counties that are under served for mental health services.

c. Characteristics

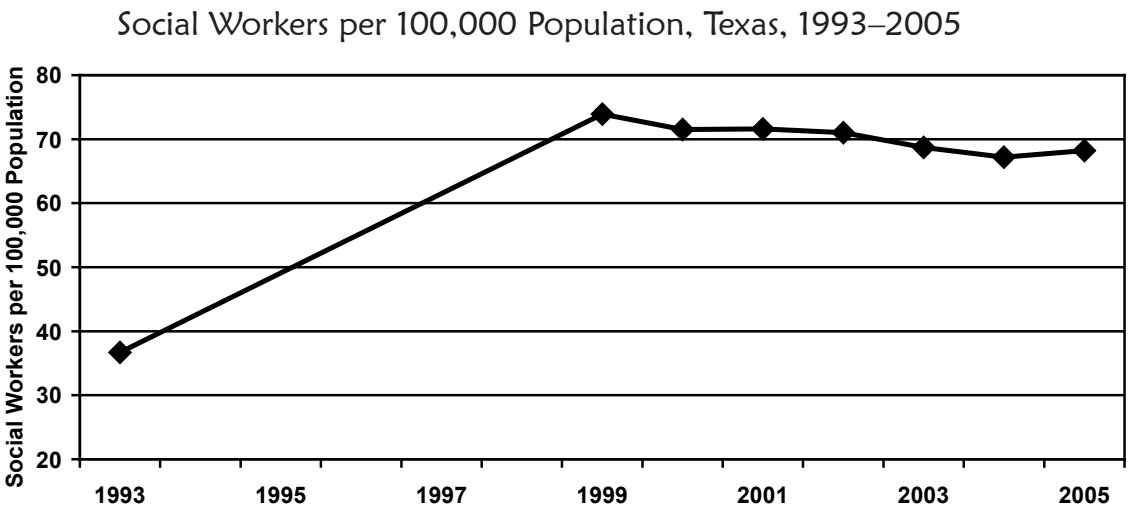
Several characteristics of the state's psychologists are highlighted below for 2005. Race-ethnicity, gender, and age data were unavailable from the licensing board.

- The supply ratio for the border rural area (9.0) was the lowest in the state (24.2), and the ratio in the non-border urban area (27.8) was the highest.
- There were 5,567 psychologists and 112 counties had none.

Area	Providers/100,000 Population
Border Urban	20.4
Non-Border Urban	27.8
Border Rural	9.0
Non-Border Rural	10.6
Texas	24.2

Note: Border counties are the 43 county border area; Source: Texas State Board of Examiners of Psychologists; Source for urban–rural definition: Office of Management and Budget; Figures include all licensed, active, in-state psychologists; Note: There are four types of Psychologists in Texas: Licensed Psychologists (LP), Provisionally Licensed Psychologists (PLP), Licensed Psychological Associates (LPA), and Licensed Specialists in School Psychology (LSSP). An LP, PLP, or LPA may also be an LSSP. The data above were derived from an unduplicated count of the sum of all four professions.

10. Social Workers



Source/Notes: Texas Department of State Health Services, Professional Licensing and Certification Unit; Information on the national supply of Social Workers is not available

A. Overview

Between 2004 and 2014, the U.S. Bureau of Labor Statistics (BLS) expects a strong demand for substance abuse social workers because substance abusers are increasingly being placed into treatment programs as a condition added to their sentencing or probation, instead of being sentenced to prison.

B. Key Challenges

Although the BLS expects increasing opportunities for employment of social workers in private social service agencies, many of these agencies are likely to hire additional lower paid social and human service assistants instead of social workers. Employment in state and local government agencies may grow somewhat in response to increasing needs for public welfare, family services, and child protection services; however, many of these services may be contracted out to private agencies. Employment levels in public and private social services agencies may fluctuate, depending on need and government funding levels. One challenge facing social workers nationwide is the profession is greatly affected by national funding and the focus of social welfare policies and programs. And, in Texas, the increasing cultural diversity of the State's populations requires social workers be trained in and knowledgeable of the cultural issues affecting the treatment of mental health conditions in different ethnic groups.

In addition, the supply ratios in Texas have decreased from 71.5 social workers per 100,000 people in 2000 to 68.2 in 2005. The median age of social workers has increased from 45 years in 2001 to 47 years in 2005. Consequently, as with some other health professions, the social worker workforce is aging and is not being replenished with new workers at a rate that is necessary in order to match the population's growth rate. This profession, as with many others, is also expected to experience a much greater demand for their services as a result of the mental health needs of the rapidly growing elderly population of aging baby boomers. This need could be especially evident for social workers with training in gerontology.

Many rural areas often find it difficult to attract and retain qualified mental health staff. Thus, an overall shortage of social workers in the state could adversely affect border and rural areas more than it does urban areas.

c. Characteristics

Several characteristics of the state's social workers are highlighted below for 2005. Race-ethnicity and gender data were unavailable from the licensing board.

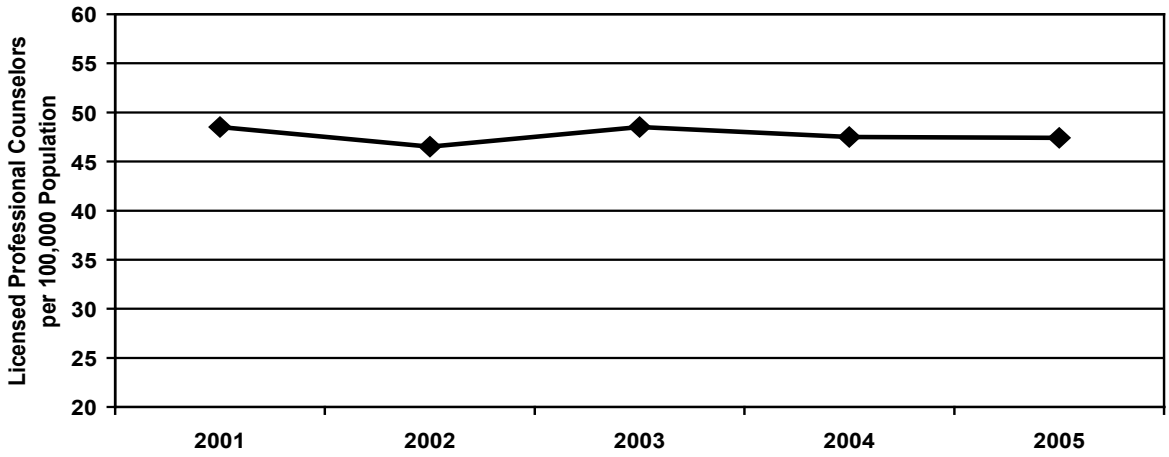
- The supply ratio for the border rural area (34.8) was the lowest in the state (68.2), and the ratio in the non-border urban area (73.6) was the highest.
- There were 15,687 social workers and 46 counties had none.
- The median age for social workers was 47.

Area	Providers/100,000 Population
Border Urban	64.3
Non-Border Urban	73.6
Border Rural	34.8
Non-Border Rural	47.1
Texas	68.2

Note: Border counties are the 43 county border area; Source: Professional Licensing and Certification Unit, DSHS; Source for urban–rural definition: Office of Management and Budget. Figures include all licensed, active, in-state social workers.

11. Licensed Professional Counselors (LPCs)

Licensed Professional Counselors per 100,000 Population, Texas, 2001–2005



Source/Notes: Texas Department of State Health Services, Professional Licensing and Certification Unit; Information on the national supply of Licensed Professional Counselors is not available

A. Overview

LPCs must be able to handle a large array of mental health problems, problems that are often stressful to the LPC and could affect job satisfaction. However, with the increase in the number of students in Texas and the need for rehabilitation counseling the U.S. Bureau of Labor Statistics (BLS) expects the profession to grow "faster than average" in the U.S. And, as with many of the mental health professions, counselors face the challenge of how to promote their services and to encourage persons who have a need to seek them out. Some non-licensed counselors, such as church pastors, augment and informally compete with LPCs as providers of mental health care.

B. Key Challenges

The supply ratios in Texas decreased from 48.5 LPCs per 100,000 people in 2001 to 47.4 in 2005; and, the median age of licensed professional counselors increased from 51 years in 2001 to 54 in 2005. Thus, as with some other health professions, the LPC workforce is aging and is not being replenished with new workers at a rate that is necessary in order to match the population's growth rate. Between 2001 and 2005, the supply ratios for 121 counties declined and 13 of them lost all of their LPCs. This profession and many others are also expected to experience a much greater demand for their services as a result of the mental health needs

of the rapidly growing elderly population of aging baby boomers. This need could especially be evident for LPCs with training in gerontology.

Many rural areas often find it difficult to attract and retain qualified mental health staff. Thus, an overall shortage of LPCs in the state could adversely affect border and rural areas more than it does urban areas.

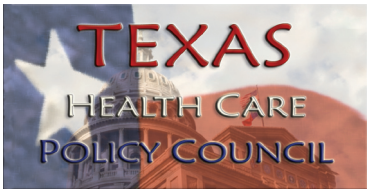
c. Characteristics

Several characteristics of the state's LPCs are highlighted below for 2005. Race-ethnicity and gender data were unavailable from the licensing board.

- The supply ratio for the border rural area (32.4) was the lowest in the state (47.4), and the ratio in the non-border urban area (51.7) was the highest.
- There were 10,896 LPCs and 54 counties with none.
- The median age for LPCs was 54.

Area	Providers/100,000 Population
Border Urban	42.8
Non-Border Urban	51.7
Border Rural	24.2
Non-Border Rural	32.4
Texas	47.4

Note: Border counties are the 43 county border area; Source: Professional Licensing and Certification Unit, DSHS; Source for metropolitan–non-metropolitan definition: Office of Management and Budget; Figures include all licensed, active, in-state licensed professional counselors



SECTION FOUR:
GOALS, OBJECTIVES AND PRIORITY ACTIONS

A. Introduction

The strategic plan communicates the high-level goals, strategic objectives and priority actions for health workforce planning and development in Texas.

Three goals serve as the foundation for the strategic plan:

- Regularly Assess the Status of Health Workforce in Texas-Monitor, Evaluate and Report.
- Demonstrate Commitment to Health Workforce Planning, Collaboration and Implementation.
- Ensure Efficient and Effective Use of Health Workforce Funding Resources.

B. Goal 1: Regularly Assess the Status of Health Workforce in Texas - Monitor, Evaluate and Report

1. Objective 1.1: Standardize the Collection of Data on Licensed or Certified Health Providers to Better Inform Health Workforce Planners and Government Policy Makers

Priority Actions

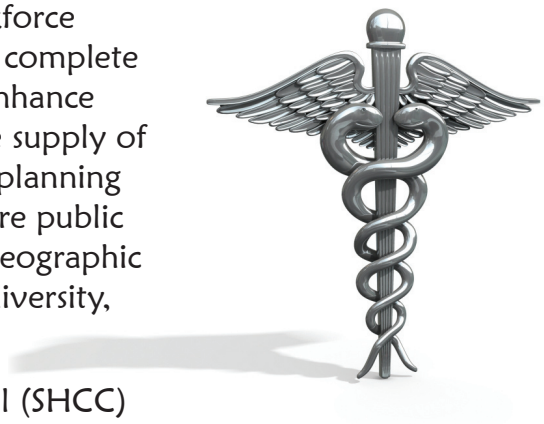
1.1.1 Work to ensure the state has reliable, accurate, complete, and timely health professions workforce data.

1.1.2 Amend Texas law to require all health professionals licensed or certified in Texas to provide the 37 data elements in the Minimum Data Set developed by the Statewide Health Coordinating Council (SHCC) in coordination with health provider organizations.

1.1.3 Amend Texas law to allow the full exchange of licensing and certification data among the Health Professions Resource Center, other state agencies, and institutions of higher education.

1.1.4 Establish Web-based tools to provide planners with electronic access to health workforce data.

a. In order to properly plan for the future, Texas workforce planners must have access to reliable, accurate, and complete health professions workforce data. This data will enhance the state's ability to evaluate and track trends in the supply of health care professionals. It will also help to guide planning for new education programs and funding, and ensure public policy decisions to address recruitment, retention, geographic maldistribution of health professionals, workforce diversity, and other areas are based on evidence.



b. In Texas, the Statewide Health Coordinating Council (SHCC) is charged with conducting overall health planning activities, with an emphasis on health professions workforce issues. By statute, the activities of the Health Professions Resource Center (HPRC) and the Texas Center for Nursing Workforce Studies (TCNWS) are governed by the SHCC. The HPRC receives data from 42 state licensing boards and conducts studies on the supply, distribution, and trends associated with the health professions in Texas. A surcharge on nursing license and renewal fees supports the work of the TCNWS, which was created in 2003 to study and address issues that affect the education, recruitment, and retention of nurses in Texas. HPRC also collaborates with the Texas Primary Care Office, compiling information used for the federal designation of Health Profession Shortage Areas (HPSAs) and Medically Underserved Areas (MUAs) for primary care physicians, dentists, and psychiatrists. The SHCC serves as a useful structure for monitoring health professions workforce.

c. The majority of the 42 state licensing boards submitting data to the HPRC are solely focused on the collection of data necessary to conduct their regulatory functions. Several boards, including the Texas Medical Board and the Texas Board of Nurse Examiners, determined it is in their best interest to collect more comprehensive data on their licensees. Integrating the Minimum Data Set with the information currently collected by all boards on state licensees will ensure the state has the necessary data elements to conduct analytical workforce supply and demand studies. It will also help to better focus activities by state legislators and state agencies, professional associations, educational institutions, and advocacy groups.

d. There is currently no system in place to monitor the supply of unlicensed assistive and public health personnel. Conducting a study on these professions could be beneficial for workforce planning.

2. Objective 1.2: Ensure Health Workforce Needs Assessments, Planning, and Development are Based on Evidence

Priority Actions

1.2.1 Establish an integrated process to assess and identify the appropriate level of health professionals necessary to meet the health care needs of Texas, with a particular focus on primary and preventative care.

1.2.2 Develop statistically based health workforce models to forecast the future supply, demand, and need for health professionals in Texas.

1.2.3 Implement effective mechanisms for assessing and reporting on the health profession higher education capacity in Texas.

a. While there appears to be shortages across a majority of the health professions, there is no consensus regarding the optimal number and ratio of health professionals necessary to meet the health care needs of Texas. Assessing the supply of and demand for health professions is based on many factors and the data for assessing the adequacy of the supply is limited. In order to ensure the health workforce in Texas meets the state's health care needs, Texas must develop supply and demand models that provide workforce planners and policy makers with the necessary information to project future health profession workforce needs.

b. The TCNWS in coordination with the U.S. Health Resources and Services Administration (HRSA) to develop a forecasting supply and demand model for nursing. This model or A similar model to track the supply, demand, need and distribution of physicians and other health professionals should be developed. This information is needed to guide future decisions on educational capacity and to assure the correct mix of health care providers are being trained by the state.

c. The TCNWS plays a crucial role, coordinating and addressing nursing workforce issues between key partners, including the Board of Nurse Examiners, Texas Higher Education Coordinating Board, the Center for Health Workforce Statistics at the University of Texas Health Science Center in San Antonio, the Texas Nurses Association, Texas Hospital Association, and other local and regional organizations focused on health workforce and education. Through this collaborative effort, the TCNWS is preparing studies on registered nursing staffing in hospitals, school of nursing capacity, and nursing demographics. All of these studies will provide pertinent information that will better inform policy makers. The TCNWS also works with the Board of Nurse Examiners to collect information from deans and directors of nursing programs concerning their programs, students, and faculty. The collection of this information is important for planning purposes.

d. The TCNWS should serve as a model for other health professions.

C. Goal 2: Demonstrate Commitment to Health Workforce Planning, Collaboration, Coordination, and Implementation

1. Objective 2.1: Ensure a Statewide Health Workforce Capability that Facilitates Collaboration, Coordination, and Leveraging of all Health Care System Resources to Provide High Quality Health Care to Texans

Priority Actions

2.1.1 Implement integrated, multi-agency initiatives to address health workforce challenges.

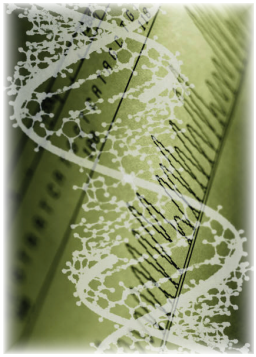
2.1.2 Support new models of care delivery that are patient-centered, outcome-oriented, and interdisciplinary team-based care.

2.1.3 Encourage greater use of technology to expand access to health care and to increase the productivity of health care professionals in Texas.

2.1.4 Support initiatives that promote a healthy and safe workplace environment for nursing and other health clinicians and ensure safe, quality care for patients and clients.

a. One of the primary roles of the Texas Health Care Policy Council and Texas Health Workforce Planning Partnership, a standing subcommittee of the Council, is to ensure greater coordination and collaboration among state agencies and institutions of higher education on health care challenges, including workforce issues. The Council and Partnership Workforce Subcommittee were formed and began meeting in 2006.

b. Texas will benefit from additional initiatives promoting the application of technology in clinical care throughout the health care continuum. This includes applications for initial professional and continuing education, recruitment and retention efforts, health care practice, and community health education. Other applications for the use of health information technology include but are not limited to:



- the use of telemedicine technology (telemedicine, teledentristy, telepsychiatry) to address and improve access to medically underserved populations of the state;
- the use of electronic health records to improve care and communication among health professional and health care providers/organizations;
- the use of information technology to maximize patient safety;
- the use of interdisciplinary clinical simulation centers to promote excellence in education, patient safety, training assessment and support of innovative educational research; and
- the use of information technology to transform to a health care delivery system focused on safe efficient health care delivery to contain escalating health care costs (e.g. medication reconciliation through e-prescribing).

c. Accreditation bodies should revise or establish standards so educational programs preparing health professionals are required to demonstrate, through process and outcome measures, that all health professionals are educated in both academic and continuing education programs to deliver competent, patient-centered care as members of an interdisciplinary team, emphasizing evidence-based practice, quality improvement approaches and informatics.

d. Employers of nurses and nursing programs should be encouraged to develop a model based on best available evidence that establishes reasonable limits on the number of hours beyond which nurses and nursing students should not provide direct patient care or care requiring clinical judgment.

e. The quality of health care in Texas could be improved through support of initiatives and pilot projects aimed at developing and studying the outcomes of establishing a non-punitive work environment. These initiatives should encourage disclosure of patient-related errors or near misses in order to examine the root causes of errors. Quality initiatives addressing medication errors should incorporate such strategies as medication reconciliation at admission and transfer of care. System wide approaches should be designed to minimize and eliminate health care errors.

f. A study should be conducted to identify innovative solutions to increase access to health care services and providers for residents in long-term care facilities throughout the state. The study should consider statutory or regulatory changes that would enable long-term care facilities to be designated, by the state as Site-Medically Underserved Populations and consider other ways that long-term care facilities could benefit from being located in a Federally Designated Medically Underserved Area or a Health Professional Shortage Area. The study should also consider the financial feasibility of increasing access to these underserved populations through the use of telemedicine, teledentistry, and telepsychiatry.

g. The Texas Legislature and regulatory agencies should consider legislation and rules allowing creative financing to support a quality training program for non-licensed direct patient care staff in the long-term care industry.

2. Objective 2.2: Maximize the Capacity of the Academic Education System and Health Workforce Training "Pipeline"

Priority Actions

2.2.1 Ensure greater coordination between health science centers, universities, and community colleges that provide health care professional training.

2.2.2 Establish new, interdisciplinary and collaborative models of education and training.

2.2.3 Strengthen collaboration between practice settings and education systems, including both higher education and public education.

2.2.4 Develop standards to measure the quality and direct the focus of continuing education and training so that they are consistent with overall state health policy and to assure a competent workforce.

2.2.5 Work with health professions associations and other organizations involved in health care delivery to develop joint public-private investments in education capacity, including the recruitment of quality faculty members.

2.2.6 Encourage public and private higher education institutions to partner with health facilities to develop additional health profession education opportunities.

2.2.7 Encourage the development of regional interdisciplinary clinical simulation centers which support innovative educational research and promote excellence in health professions education, patient safety, and training assessment.

2.2.8 Provide support for the health professions workforce to function competently in an ever changing health care environment supported by evolving technologies and emerging sciences.

a. The responsibility of managing the education of health professionals is shared among many parties in Texas, including Texas institutions of higher education and academic health centers, state agencies and licensure boards, federally funded Area Health Education Centers (AHECs), community hospitals, and health professional associations. Coordination and collaboration among all of these partners will be critical as Texas incorporates additional technology training into the curriculum at our clinical training institutions, establishes standards for continuing education, and continues to work to address faculty shortages and other areas impacting the education of health professionals.

b. Texas institutions of higher education should continue to work to adopt shared or combined curricula for health professionals, interdisciplinary classes across health programs, the use of multidisciplinary faculty or interdisciplinary teams among the health programs, and collaboration with practice settings in the development and use of clinical simulation, technology, and electronic portfolios for competency assessment.

a. According to a recent survey conducted by the Texas Medical Association, 44% of physicians that have already implemented an Electronic Health Record (EHR) and 63% of those physicians planning on implementing an EHR in their practice expressed concerns about the lack of "new system training." Clinical training curricula should be altered to include informatics for future health care providers. In addition, continuing education opportunities on health informatics should be made available for current physicians, nurses, and other clinicians.

b. Texas has three AHEC programs in place to support community-based health care workforce development and facilitate community health system activities and health literacy. The AHECs cover mutually exclusive geographic service areas through 19 fully operational regional centers. One additional center is in development in West Texas. These community-based networks play an important role in fostering local, regional, and public-private partnerships to meet the education needs of our health professionals.

c. Increasing the capacity and graduation rates in Texas nursing programs should continue to be a top priority, with particular focus on addressing the student admission bottleneck that has developed due to the shortfall of nursing professors and the attrition of nursing students. Financial incentives, such as the funding available through the Texas Higher Education Coordinating Board's Nursing Innovative Grant Program, are being used to develop innovative public-private partnerships to recruit and retain nursing students and faculty. Both the Texas Workforce Commission and local workforce boards have also launched initiatives focused on nursing.

d. Long-term care (LTC) industry leaders should work with health profession regulatory boards and with college, university, and health science nursing programs to develop a nursing training continuum that would provide college/university/health science center nursing program credit for certified direct patient care training (for non-licensed assistive personnel).

3. Objective 2.3: Enhance Recruitment and Retention Efforts

Priority Actions

2.3.1 Identify and address regulatory or other factors creating barriers to the practice of medicine in Texas.

2.3.2 Continue to identify innovative practice incentives to improve the supply of health professionals in medically underserved areas.

2.3.3 Evaluate efficacy of existing health profession loan repayment programs and practice incentive/benefit programs to ensure maximum state benefit.

2.3.4 Establish regional and local strategies to recruit and retain health professionals.

2.3.5 Provide schools with information on health professions, educate school officials and students about the growing opportunities for health care workers, and ensure greater coordination with preschool and education agencies to develop interactive tools and other methods to increase student interest in and comfort with basic science. Support innovative P-16 initiatives and pilots that promote understanding of age appropriate health and science principles to support interest and success in health science careers.

2.3.6 Adopt immunization schedules and protocols, such as Hepatitis B that would protect the public safety while facilitating the educational training and programs for nursing and allied health students.

2.3.7 Support initiatives to ensure a diverse and culturally competent health workforce in Texas, including:

- ✪ Programs that interest minority students in health careers;
- ✪ Curricula for preparing practitioners to recognize health disparities and to implement appropriate interventions;
- ✪ New models for education in the health professions;
- ✪ Strategies for reducing the loss of intellectual capital across regions; and
- ✪ Addition of multilingual and technological competencies.

2.3.8 Support initiatives to address geographic maldistribution of health professionals.

2.3.9 Support collaboration between long-term care providers and long-term care agencies to improve recruitment and retention of professional and direct care staff. These should focus on improving job satisfaction of employees within the workplace and expanding innovative service delivery models such as consumer-directed services.

2.3.10 Develop and execute a nationwide media and communications recruitment campaign focused on linking health provider employers in Texas with job seekers.

a. An adequate supply of qualified workers is a major concern for health care providers and is essential for health care quality and the economic viability of the health care system in Texas. This is particularly important in the rural and underserved urban areas of Texas where recruitment and retention has always been a challenge.

b. Texas is an attractive destination for any individual or family. Warm weather, excellent schools, low taxes, a diverse population, and an abundance of outdoor recreational activities, are all factors contributing to Texas as a popular choice for relocation. As a result of medical litigation reform in 2003, the number of physicians in Texas has increased and access to quality health care has improved. Highlighting the quality of life and positive business climate in Texas could attract new health care professionals to the state.

c. Over the next year, the Texas Medical Associations' Physician Distribution and Health Care Access Committee will be taking an in-depth look at physician licensure data in partnership with the HPRC and the Texas Medical Board. The purpose of the survey of newly licensed physicians will be to learn about their perception of the Texas practice environment, including why they choose to practice in Texas and where, as well as the factors impacting their desire to maintain their practice in Texas for their career. This is just one example of a public-private collaborative effort that could enhance Texas' ability to attract and retain quality health care providers.

d. The East and West Texas AHECs have developed a guide to health care job opportunities in Texas (www.texashotjobs.org). This site provides information on education, financial aid, and health-related career opportunities. Texas must continue to support and expand health career promotional activities.

e. The Texas health workforce does not currently represent the ethnicity of the state. The Texas Higher Education Coordinating Board administers the College for Texans Campaign to support diversity and minority participation in higher education. Additional information is available at: www.collegefortexans.com or www.thecb.state.tx.us/SAMC/overview. The Coordinating Board, through the Minority Health Research and Education Grant Program, is partnering with the East Texas AHEC, West Texas AHEC, and South Texas AHEC to conduct six health workforce diversity conferences in 2007.

f. Collaborations between LTC providers and LTC agencies could improve recruitment and retention of professional and direct care staff. These efforts should focus on improving job satisfaction of employees within the workplace and expanding innovative service delivery models such as consumer-directed services.

D. Goal 3: Ensure Efficient and Effective Use of Health Workforce Funding Resources

1. Objective 3.1: Maximize Coordination and Collaboration on Workforce Funding to Meet the Health Care Needs of Texas

Priority Actions

3.1.1 Catalogue all federal, state, local, and private health workforce programs underway in Texas.

3.1.2 Implement strategies to secure additional funding for health professional education, training, and workforce planning and development from federal and philanthropic sources.

2. Objective 3.2: Implement Strategies to Address Higher Education Capacity Issues for Health Profession Careers

Priority Actions

3.2.1 Ensure formula, special item funding, and tuition increases for nursing programs are adequate to meet future demand and used to:
- Increase admission, retention and graduation of nursing students;
- Stimulate graduate nursing programs to prepare more nursing faculty; and
- Address disparity between faculty and nursing salaries in the service sectors.

3.2.2 Review and evaluate tuition and student fees for health education programs at community colleges, universities, and health science centers and compare results to state and national averages.

3.2.3 Ensure adequate state and federal funding for medical schools and Graduate Medical Education (GME) necessary to support future demand.

3.2.4 Ensure adequate state and federal funding for allied health necessary to support demand.

a. Government agencies (federal, state, and local), health facilities, educational programs, and foundations throughout Texas have dedicated funding to address health workforce challenges and ensure highly qualified health professionals. In order to properly plan for the future and to ensure additional focus and synchronization of all health workforce planning activities in Texas, the state needs to catalogue all health workforce funding sources. This information will enhance the state's ability to leverage existing federal and foundation funding opportunities.

b. Texas has invested significant funding over the last three biennia to support additional nursing faculty and increase nursing education capacity. Procedures should be put in place to confirm this funding is indeed being allocated for nursing programs by institutions of higher education. Additional revenue generated by tuition increases for nursing, medical, and other health-related programs should be used to maintain the quality of and to grow the institutions respective health education programs.

SECTION FIVE:

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SECTION SIX:

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Health Profession Resources Center (HPRC)

Texas Academy of Physician Assistance

Texas Higher Education Coordinating Board

Texas Hospital Association

Texas Medical Association

Texas Nurses Association

Texas Public Health Training Center, School of Public Health, University of Texas at Houston

Texas State Board of Dental Examiners

Texas State Board of Examiners of Psychologists

Texas Health Care Policy Council Strategic Plan 2006-2011

Governor Rick Perry

TEXAS HEALTH CARE POLICY COUNCIL

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