

APPENDIX N

CHARGE 5

Occupational Outlook Survey of Health Care Professions

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Profession	Definition & duties	Information Source	Occupational Outlook
Biostatistician	<p>Biostatistics is a subdiscipline of statistics that focuses on research design, data collection, choosing and implementing appropriate methodologies, and interpretation of experimental results.</p> <p>A Blood Bank Specialist is a laboratory technician who performs specialized medical tests in blood banks and blood collection centers.</p>	<p>Terry Pali, Executive Director Texas Public Health Association (512) 451-1846</p> <p>Laura Edgar, Mgr. of Exam. Development & Research, American Society Of Clinical Pathologists Board of Registry (312) 738-5800</p>	<p>Number practicing in Texas: unknown National standards for minimum practitioners per 100,000 population: none Outlook: unknown</p> <p>Number practicing in Texas: approximately 318 National standards for minimum practitioners per 100,000 population: none Outlook: growth rate greater than 15%</p>
Blood Bank Specialist	<p>A Blood Bank Specialist is a laboratory technician who performs specialized medical tests in blood banks and blood collection centers.</p>	<p>Laura Edgar, Mgr. of Exam. Development & Research, American Society Of Clinical Pathologists Board of Registry (312) 738-5800</p>	<p>Number practicing in Texas: unknown National standards for minimum practitioners per 100,000 population: none Outlook: "growth rate around 16%" (Coil); "we can expect an extreme shortage of technicians" (Moriarty); profession expected to grow as fast as average through 2008¹</p>
Cardiovascular Technologist	<p>Cardiovascular technologists perform clinical tests, at the request of a physician, to diagnose and provide therapy for heart disorders.</p>	<p>Kathy Moriarty, Program Director, Cardiovascular Tech. Program El Centro College (241) 860-2314</p> <p>Nicki Coil, Program Director, American Society of Cardiovascular Professionals (540) 370-0015</p>	<p>Number practicing in Texas: unknown National standards for minimum practitioners per 100,000 population: none Outlook: "growth rate around 16%" (Coil); "we can expect an extreme shortage of technicians" (Moriarty); profession expected to grow as fast as average through 2008¹</p>

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Cytotechnologist	Cytotechnologists are specially trained medical technologists who prepare and evaluate cell samples from gynecologic and nongynecologic sources.	Rene Abner, Gerry Piskowski (Director), American Society Of Clinical Pathologists Board of Registry. (312) 738-5800	Number practicing in Texas: 693 certified National standards for minimum practitioners per 100,000 population: none Outlook: there is currently an 8.8% vacancy rate (not considered excessive). Outlook is hard to project, since current professionals are an aging population, and their retirements may fuel openings.
Dental Laboratory Technician	Dental technology is the art and science of making and repairing dental appliances such as dentures, dental crowns, bridges, implants, and braces. Technicians are like pharmacists in that they fill prescriptions from a dentist.	Danny Diebel, Chair Dental Licensure Committee (advisory committee to Texas State Board of Dental Examiners) (512) 451-9754	Number practicing in Texas: approximately 990 National standards for minimum practitioners per 100,000 population: none Outlook: we can expect an increased demand due to fewer students & schools (Diebel). There should be little or no change in the current growth rate through 2008. ¹
Diagnostic Medical Sonographer	Diagnostic medical sonographers operate ultrasound equipment under the supervision of a doctor to reveal internal anatomy and conditions that cannot be captured by x-rays.	Office of Dale Cyr, Executive Director, American Registry of Diagnostic Medical Sonographers (800) 541-9754	Number practicing in Texas: approximately 1900 National standards for minimum practitioners per 100,000 population: none Outlook: 1-2% per year growth rate (ARDMS); growth rate should be about as fast as average. ¹

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Electro-neurodiagnostic technologist/ Electro-encephalographic technologist	These technicians perform tests to record the electrical activity of the brain and nervous system. Physicians use the test results to diagnose brain diseases and injuries.	Corinna Cody, Administrative Assistant, American Society of Electroneurodiagnostic Technologists (407) 788-6308	Number practicing in Texas: unknown National standards for minimum practitioners per 100,000 population: none Outlook: employment growth rate slower than average ¹
Emergency Medical Services Personnel	Emergency Services Personnel evaluate, stabilize, and transport trauma victims to a health facility for further treatment.	Phil Lockwood EMS Standards Team Leader Texas Department of Health 512-834-6732	Number practicing in Texas: 42,947 certified National standards for minimum practitioners per 100,000 population: none Supply: understaffed in rural, good supply urban. Outlook: growing need in rural areas.
Environmental Health Specialist	These specialists promote public health by inspecting community and public facilities such as restaurants and swimming pools. They may collect and analyze specimens, maintain monitoring equipment and enforce regulations.	Brian Collins, President Texas Environmental Health Association 972-941-7334	Number practicing in Texas: 3400 licensed National standards for minimum practitioners per 100,000 population: none Outlook: Current needs are not met because of land mass in Texas (specially in southern Texas). Demand for services should increase.

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Epidemiologist	Epidemiologists identify and monitor diseases in a population and develop methods to prevent or control the spread of new diseases.	Terry Pali, Executive Director Texas Public Health Association (512) 451-1846	Number practicing in Texas: unknown National standards for minimum practitioners per 100,000 population: none National standards: none Outlook: unknown
Gerontologist	Gerontologists specialize in working with elderly persons. A specialist may have a degree in gerontology or may be trained in nursing, sociology, psychology or another service profession.	Cheryl Cordell, Ombudsman Texas Department on Aging 512-424-6840	Number practicing in Texas: 300 members in Gerontological Society, although not all members are currently practicing. National standards for minimum practitioners per 100,000 population: none Outlook: Demand for services should increase due to aging population
Health Educator/ Promoter	Health educators/promoters provide information and knowledge on lifestyle and health issues to the public.	Donna Nichols, Program Administrator, Texas Department of Health 512-458-7111	Number practicing in Texas: 250 certified, although a large percentage are uncertified National standards for minimum practitioners per 100,000 population: none National standards: none Outlook: Demand for services should increase.

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Histotechnologist	Histologic technicians prepare slides of body tissue for microscopic examination. Histotechnologists perform more complex, supervisory tasks that involve analysis of tissue structure and cell components.	Rene Abner, Gerry Piskowski (Director), Amer. Soc. Of Clinical Pathologists Bd. of Registry. (312) 738-5800	Number practicing in Texas: 1,165 certified National standards for minimum practitioners per 100,000 population: none Outlook: Southern region has a 15% vacancy rate. Demand for services should increase.
Medical Laboratory Technician	Medical Laboratory Technicians work under the supervision of medical technologists or others to perform routine laboratory tests.	Geraldine, Piskorski, Director Applicant and Certificat Activities American Society of Clinical Pathologists Board of Registry (312) 738-5800	Number practicing: 4,005 certified in Texas National standards for minimum practitioners per 100,000 population: none Outlook: 21% vacancy rate in 1998; expected high growth rate
Medical Technologist	Medical technologists analyze human blood, tissues, and body fluids and supervise the performance of thousands of medical laboratory tests.	Geraldine, Piskorski, Director of Applicant and Certificat Activities, American Society of Clinical Pathologists Board of Registry (312) 738-5800	Number practicing: 11,944 certified in Texas National standards for minimum practitioners per 100,000 population: none Outlook: 11.2% vacancy rate in 1998; expected high growth rate

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Nuclear Medicine Technologist	Nuclear Medicine Technologists work under physician supervision to perform nuclear medicine (i.e., radioactive) procedures to diagnose and treat illness.	Marsha Firk, Program Administrator, Society of Nuclear Medicine (404) 315-1739	Number practicing in Texas: unknown National standards for minimum practitioners per 100,000 population: none Outlook: 31% growth ² ; growth should be about as fast as average ¹
Nursing Assistant/ Patient Care Assistant	Nursing assistants perform basic patient care, often in a nursing home, under the supervision of registered nurses and licensed vocational nurses. Patient care assistants have additional training and an expanded role in hospitals, nursing homes, and private homes.	No certification required No professional association found	Number practicing in Texas: unknown National standards for minimum practitioners per 100,000 population: none Outlook: unknown
Pharmacy Technician	Pharmacy technicians work under the supervision of licensed pharmacists to perform technical and clerical duties in a pharmacy.	Karen Reagan Senior Director of Public Affairs Texas Pharmacy Association (512) 836-8350	Number practicing in Texas: approximately 16,000 National standards for minimum practitioners per 100,000 population: none Outlook: expected growth rate is faster than average ¹
Psychologists (licensed)	Psychologists collect and apply knowledge related to the mental, emotional, and behavioral characteristics of individuals and groups. They may specialize in numerous areas, including clinical, counseling, experimental, and organizational psychology.	Jennifer Noack, Physical Mgr., Texas State Board of Examiners of Psychologists. (512) 305-7700	Number practicing in Texas: 3,316 National standards for minimum practitioners per 100,000 population: none Outlook: projected 16% growth rate ²

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Radiation Therapy Technologist	Radiation therapy technologists work under the supervision of physicians who use radiation to treat cancer. Technicians assist in planning a procedure, preparing and administering radioactive treatments, and monitoring patient responses.	Jeanette Hilsabeck, Program Administrator, Medical Radiologic Technologists Certification Program, Texas Dept. of Health (512) 834-6617	Number practicing in Texas: Medical Radiologic Technologists: 16,000; Radiation Therapy Technologists: 487 National standards for minimum practitioners per 100,000 population: none Outlook: projected 34% growth rate
Recreational Therapist	Recreational therapists use medically approved recreational programs to rehabilitate patients who have chronic handicaps.	Erika Tindell, Credentialing Specialist, National Council for Therapeutic Recreation Certification 914-947-4346	Number practicing: 635 certified in Texas, not all practitioners are certified. National standards for minimum practitioners per 100,000 population: none Outlook: projected growth 40% rate by 2005

Much of this information was collected in a telephone survey conducted in July 2000.

Additional sources:

1. U.S. Dept. of Labor, Bureau of Labor Statistics, *Occupational Outlook Handbook, 2000-2001 Edition*. <http://stats.bls.gov/ocohome.htm>.
2. The Center for Rural Health Initiatives, *H.O.T. Jobs, Health Opportunities in Texas*

		DATA SOURCES			
		REQUIREMENTS:	SUPPLY:		
		Specifications / For most recent year / Population projections	For most recent year / Population projections		
Audiologist	Licensing Board Texas State Board of Examiners of Speech-Language Pathology and Audiology		TDH / SDC	Definition of Practitioner Supply Includes all active audiologists & intern audiologists with a Texas address. Data are by county of practice based on zip code. Excludes assistant audiologists and those with out-of-state addresses.	
Chiropractor	Texas Board of Chiropractic Examiners		TDH / SDC	Includes all active chiropractors with a Texas practice address. Data are as of September 1999.	
Dental Hygienist	Texas State Board of Dental Examiners		TDH / SDC	Includes all dental hygienists with active practice or expired code and a Texas primary address. Excludes dental hygienists with out-of-state addresses and who are not actively practicing. Primary address may be either the residence or practice address.	
Dentist	Texas State Board of Dental Examiners		TDH / SDC	Includes all primary care dentists with active practice or expired status in Texas. Excludes specialists (e.g., orthodontists, periodontists, etc.) and dentists with out-of-state primary addresses. Primary address may be either the home or practice address.	
Licensed Professional Counselor	Texas State Board of Examiners of Licensed Professional Counselors		TDH / SDC	Includes all active counselors with a Texas practice address. Data are by county of practice.	
Marriage & Family Therapist	Texas State Board of Examiners of Marriage and Family Therapists		TDH / SDC	Includes all active Marriage and Family therapists with a Texas practice address. Excludes therapists with out-of-state address. Data are by county of practice.	
Occupational Therapist (OT)	Texas Board of Occupational Therapy Examiners		TDH / SDC	Includes all active occupational therapists with a Texas address. Excludes therapists with out-of-state addresses or inactive status. Data are primarily by county of practice or by mailing address if practice address is unavailable.	
Occupational Therapist Assistant/Aide	Texas Board of Occupational Therapy Examiners		TDH / SDC	Includes all active occupational therapist assistants with a Texas address. Excludes therapist assistants with out-of-state addresses or inactive status. Data are primarily by county of practice or by mailing address if practice address is unavailable.	

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Optician			TDH (partial) / SDC	Licensing Board The Opticians' Registry	Definition of Practitioner Supply Defined as an eye wear provider trained to select, manufacture and dispense eyeglasses and sell or deliver contact lenses from a prescription written by an optometrist or ophthalmologist. Data includes all <i>voluntarily</i> registered active opticians with a Texas address, sorted by their county of residence.
Optometrist		IRM / TDH / SDC	TDH / SDC	Texas Optometry Board	Defined as a professional trained to diagnose signs of ocular, neurological and systematic health problems and treat vision disorders. Data includes only active optometrists with a Texas practice address, and are primarily by their county of practice or by mailing address if the practice address is unavailable.
Nurses: See below. Advanced Practice Nurse: Nurse Practitioner, Clinical Nurse Specialist, Certified Nurse Anesthetist, and Certified Nurse Midwife		IRM / TDH / SDC	BNE / SDC	Texas Board of Nurse Examiners	Data include all licensed Advanced Practice Nurses (APNs) with a Texas address. An APN is recognized in one or more of four specialties: Nurse Practitioner, Clinical Nurse Specialist, Certified Nurse Midwife, and Certified Nurse Anesthetist. Data include APNs who may be unemployed, working in other occupations, or working parttime; these data are not adjusted to full time equivalents. Data are primarily by county of practice or by mailing address if practice address is unavailable.
Licensed Vocational Nurse			TDH / SDC	Texas Board of Vocational Nurse Examiners	Includes all active LVNs with a Texas practice address except those in the military, were unemployed or retired. Data are primarily by county of practice or by mailing address if practice address is unavailable.
Registered Nurses			TDH / SDC	Texas Board of Nurse Examiners	Includes all active registered nurses employed fulltime or parttime in the profession in Texas. Excludes federal nurses. Data are as of September 1999 and are by county of employment.
Pharmacist			TDH / SDC	Texas State Board of Pharmacy	Includes all active pharmacists with a Texas residence address. Excludes pharmacists with out-of-state addresses and inactive status. Data are by county of residence.
Physical Therapist (PT)			TDH / SDC	Texas Board of Physical Therapy Examiners	Includes all active physical therapists assistants with a Texas address. Excludes therapist with out-of-state addresses or inactive status. Data are primarily by county of practice or by mailing address if practice address is unavailable.

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		REQUIREMENTS:	SUPPLY:		
		Specifications / For most recent year / Population projections	For most recent year / Population projections		
				Licensing Board	Definition of Practitioner Supply
Physical Therapist Assistant/Aide			TDH / SDC	Texas Board of Physical Therapy Examiners	Includes all active physical therapists assistants with a Texas address. Excludes therapist assistants with out-of-state addresses or inactive status. Data are primarily by county of practice or by mailing address if practice address is unavailable.
Physician	IRM / TDH / SDC	BME / SDC			Physician data are from the May 2000 Statistical Demographic Information file. They include all active licensed physicians with a Texas address. Data are primarily by county of practice or by mailing address if practice address is unavailable. These data are not adjusted to full time equivalents.
Physician Assistant	IRM / TDH / SDC	TDH / SDC		Texas State Board of Physician Assistant Examiners and the Texas State Board of Medical Examiners	Includes all active physician assistants with a Texas practice address. Excludes physician assistants with out-of-state address. Data are primarily by county of practice or by mailing address if practice address is unavailable.
Podiatrist	IRM / TDH / SDC	TDH / SDC		Texas State Board of Podiatric Medical Examiners	Includes all active podiatrists with a Texas address. Excludes podiatrists with out-of-state addresses and inactive status. Data are primarily by county of residence or practice address if residence address is unavailable.
Respiratory Care Technician/Therapist		TDH / SDC		Texas Department of Health	Includes all active respiratory care practitioners with a Texas address. Excludes practitioners with out-of-state addresses. Data sorted by county of practice.
Social Worker/Clinical Social Worker	IRM / TDH / SDC	TDH / SDC		Texas State Board of Social Worker Examiners	The IRM projects clinical social workers, which comprise a sub-specialty within the overall social worker category. Comparable Texas supply data were unavailable at the time this report was prepared.
Speech/Language Pathologist		TDH / SDC		Texas State Board of Examiners of Speech-Language Pathology and Audiology	Includes all active speech-language pathologists and interns with a Texas address. Excludes assistant pathologists and pathologists with out-of-state addresses. Data are primarily by county of practice or by mailing address if practice address is unavailable.