PANHANDLE HEALTH

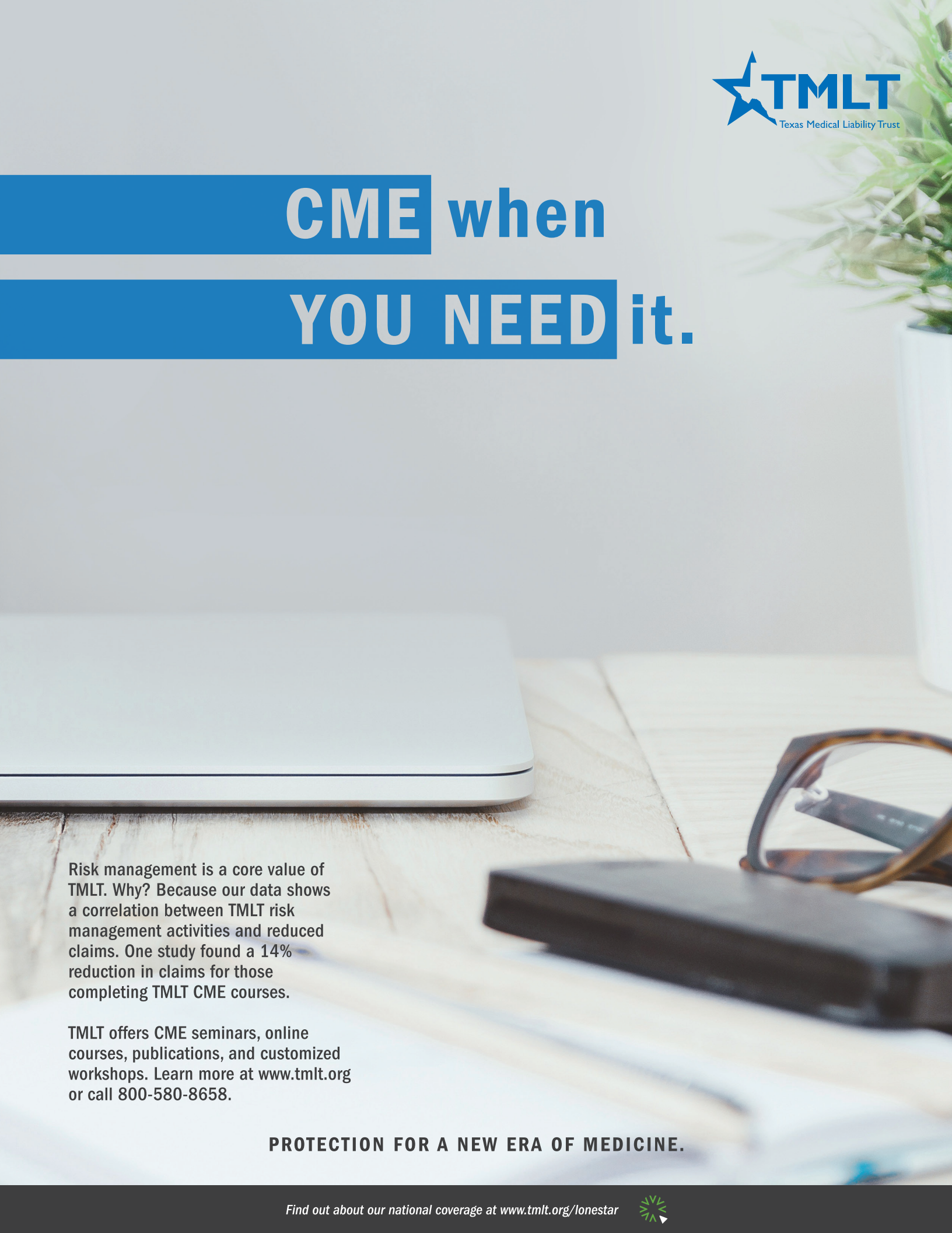
A QUARTERLY PUBLICATION OF THE POTTER-RANDALL COUNTY MEDICAL SOCIETY

SUMMER 2016 | VOL 26 | NO. 3

Celebrating 25 Years of Success in Our Medical Community

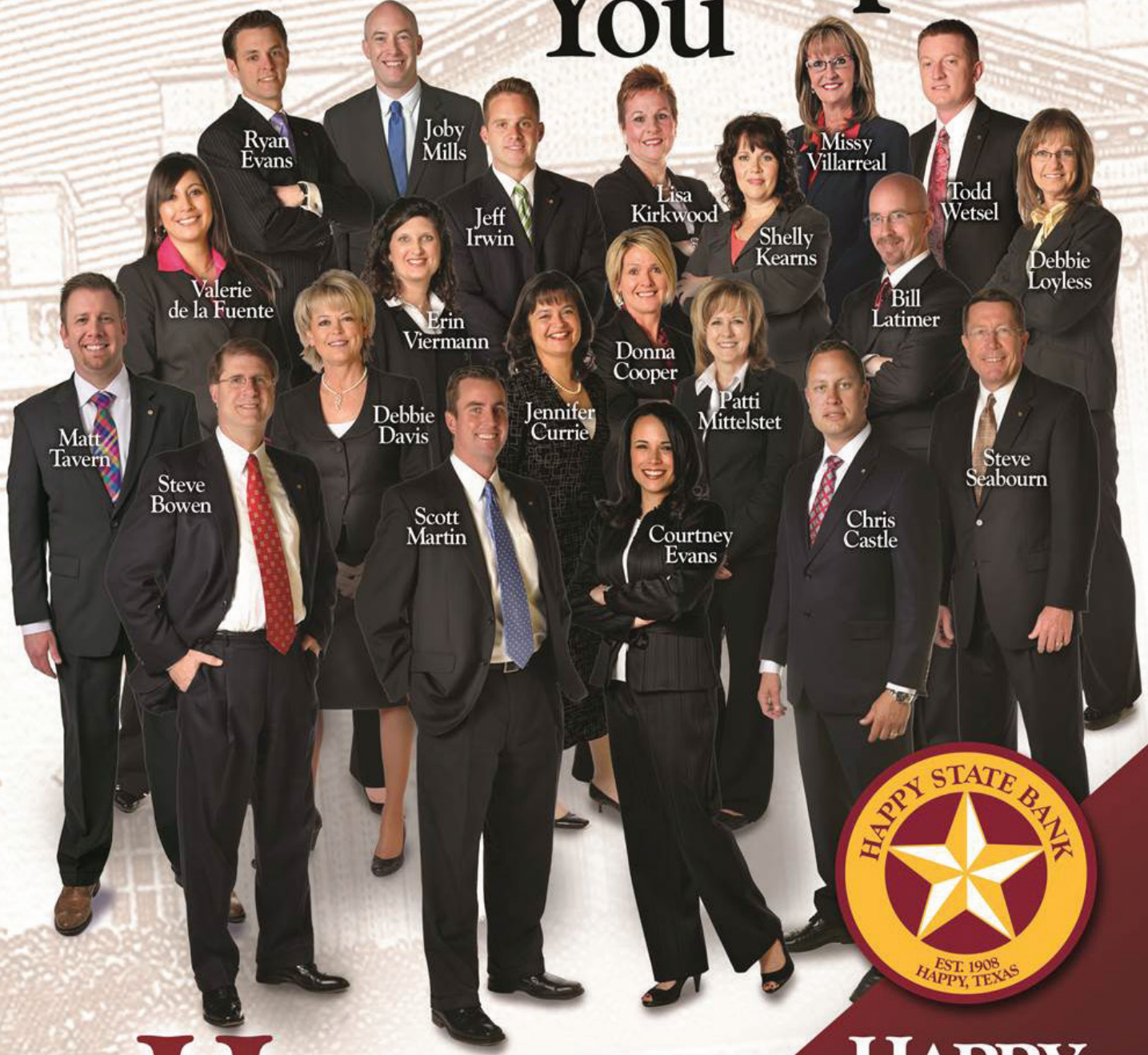
Allied Professions:

Health Care Professions Distinct from Nursing, Medicine, and Pharmacy


TMLT
Texas Medical Liability Trust
CME when
YOU NEED it.
Risk management is a core value of TMLT. Why? Because our data shows a correlation between TMLT risk management activities and reduced claims. One study found a 14% reduction in claims for those completing TMLT CME courses.
TMLT offers CME seminars, online courses, publications, and customized workshops. Learn more at www.tmlt.org or call 800-580-8658.
PROTECTION FOR A NEW ERA OF MEDICINE.
Find out about our national coverage at www.tmlt.org/lonestar

Happy • Abilene • Amarillo • Borger • Canadian • Canyon • Dalhart • Dallas Metroplex • Dumas • Floydada • Fort Worth • Hereford
Higgins • Lockney • Lubbock • Olton • Pampa • Panhandle • Plainview • Shamrock • Silverton • Stratford • Sunray • Texline

Working to Keep You



HAPPY STATE BANK
EST. 1908
HAPPY, TEXAS

Happy

HAPPY STATE BANK
AND TRUST COMPANY

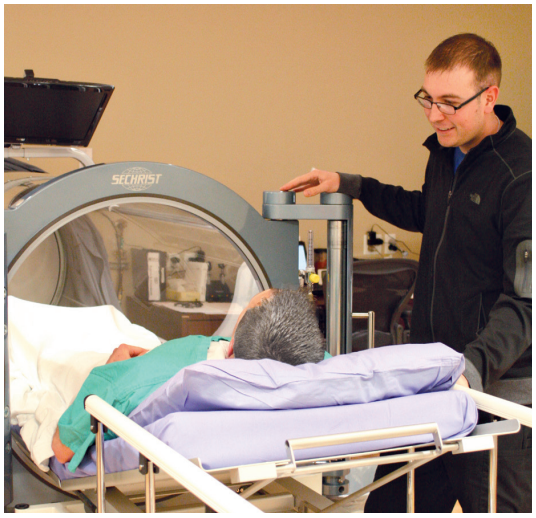
happybank.com

Member FDIC

BSA
ADVANCED WOUND CARE
A Department of BSA Hospital

Hyperbaric Oxygen Therapy
Accelerating the healing process

DR. MARK DREW AND THE BSA ADVANCED WOUND CARE TEAM



Hyperbaric Oxygen Therapy (HBOT) is one of several advanced treatment modalities offered by BSA Advanced Wound Care. During HBOT, plasma oxygen concentration can be increased up to ten times above normal levels, thereby accelerating the wound healing process.

Our experienced and specialized team is focused on rapidly healing your patients and improving the quality of their lives.

INDICATIONS FOR HYPERBARIC OXYGEN THERAPY

- Diabetic foot ulcers
- Refractory osteomyelitis
- Osteoradionecrosis
- Soft tissue radionecrosis
- Compromised skin grafts
- Injuries
- Necrotizing infections
- Radiation cystitis

BSA ADVANCED WOUND CARE • 1000 S. COULTER • AMARILLO, TEXAS 79106 • 806-212-4700 • BSAHS.ORG

PANHANDLE HEALTH

A Publication of the Potter-Randall County Medical Society

SUMMER 2016 | VOL 26 | NO. 3

CONTENTS

Allied Professions: Health Care Professions Distinct from Nursing, Medicine, and Pharmacy

On The Cover: *"Sring Peonies"*, by Malcolm Hughes

PANHANDLE HEALTH is published quarterly by the Potter-Randall County Medical Society, (806) 355-6854. Subscription price is $12.00 per year. POSTMAN: Send address changes to PANHANDLE HEALTH, 1721 Hagy, Amarillo, Texas 79106. ISSN 2162-7142

PHOTOCOMPOSITION AND PRINTING BY CENVEO.

President's Message:
Hippocratic Oath Update – 2016

by L. Edwin Dodson, M.D.

About 25% of the original text of the Hippocratic Oath, one of the most ancient surviving medical texts, is devoted to a complex description of the obligations of Physicians in educating subsequent generations of practioners. Today, few of us get a chance to fulfill this traditional duty, and I feel that something important is lost because of this.

I was privileged to have students from the Amarillo Area Center of Advanced Learning (ACAL) Health Science Program spend time in my office getting practical experience in patient treatment. These High School Seniors got their first exposure to actual patient care by assisting my staff in registering patients and taking vital signs. A few were able to draw blood, and give intramuscular injections. Most of all, they asked a lot of questions, and lifted our spirits with their enthusiasm.

I recently learned that all members of the the 2015- 2016 class passed their Certified Nursing Assistant exam, the first time the program has had a 100% passing rate. I heartily congratulate the entire class for their good work.

Congratulations to the Class of 2015-2016!

Juan Anchando
Kim Baker
Miranda Boatright
Abby Cuellar
Gabe Garcia
Jasmin Gutierrez
Magaly Miramontes
Parand Askari
Erin Pass
Alejandra Patino
Adrian Ruiz
Roger Vasquez

C.N.A. is not the last exam these students will receive. Rena Kuehler, BSN,RN, the Director of the Health Science Program at ACAL, told me that about 80% of her students go on to achieve a nursing degree. A few students have gone on to Medical School, and several have completed degrees as Pharmacy, Surgical, or Dental Technicians. About 30% use their CNA degree to help them fund their higher education.

MS. Kuehler tells me that the class size is increasing to 40 next year and places will be needed for the additional students. I hope the Medical Society membership will take advantage of having these well trained and enthusiastic students spend time in their offices and in so doing give future Nurses, Doctors, and Medical Technicians a boost.

Alliance News

by Irene Jones, Co-President

The Alliance had their annual ladies Spring Social on April 22nd at the home of Dr. & Mrs. Scott Miller. Thank you, Elisia, for opening your beautiful home to all of us. Our next event will be a couples social at the home of Dr. & Mrs. Holloway. We are working on getting plans together and will keep you posted on details.

The Alliance has also been planning for our first New Years Eve fundraiser benefiting "Our Children's Blessing". In the next issue of the magazine, we will have details about sponsorship levels. "Our Children's Blessing" is a nonprofit organization founded by a group of couples who all experienced the tragedy of losing a child. With this tragedy, a family not only suffers emotional pain but also a financial burden. Most families do not possess the finances to cover the funeral costs, hospital bills, and the myriad other expenses. Many people fall deep into debt and depression, and it can become so overwhelming that they feel like there will never be a brighter day. Our Children's Blessing was created to help provide support during a family's time of need, both financially and emotionally.

New Years Eve Gala will be held at the Amarillo Botanical Gardens and catered by OHMS. Save the date and join us for a wonderful evening supporting your local Alliance and "Our Children's Blessing".

Member Spotlight:

Kristen Atkins will be joining our board. She will be taking Shelby Neichoy's spot as Co-President. We wish Shelby all the best. Kristen and her husband recently moved here from Louisiana. Her husband Dr. Aaron Atkins works at Amarillo Oral & Maxillofacial Surgery. They have two boys, John (5) and Andrew (3). Welcome to Amarillo and the Alliance. We are excited to have you here!

Ladies Spring Social 2016

Social Events:
September: Fall Couples Social September TBA
December 31st: NYE GALA
Amarillo Botanical Gardens
Have A Wonderful Summer,
Irene Jones (Co-President)

Ongoing Volunteer Opportunities:
Ronald McDonald House:
Contact: Jamie
jbwilliams364@gmail.com

Northwest Pediatric Unit:
Contact: Kristen
kristenatkins@hotmail.com

Snack Pak 4 Kids: March 8th
Contact: Elisia
elisiamiller123@gmail.com

Hygiene Closet:
Contact: Irene
irene.jones83@gmail.com

2015-2016 OFFICERS

Co Presidents:
Irene Jones & Shelby Neichoy

Past President:
Kiki Brabham

VP of Memberships/Fundraising:
Jamie Williams & Lacie Schniederjan

Treasurer:
Amy Slaton

Community Grants/Scholarships:
Kensie Wolcott

Medical Liaison/Community Outreach:
Courtney Wagner & Elisia Miller

Members at Large:
Kasey Daniels and Anna Holland

We are looking to partner with local organizations to create more volunteer opportunities. If you know of any particular ones that could use the extra hands or help, please contact us: *potterrandallalliance@yahoo.com*

Executive Director's Message

by Cindy Barnard, Executive Director

The Summer issue of *Panhandle Health* is entitled Allied Professions. For those unfamiliar with that term, allied health professions are "health care professions distinct from nursing, medicine, and pharmacy, which according to some sources, could make up as much as 60 percent of the total United States workforce" (Wikipedia). In September 2012, the organization of International Chief Health Professions Officers (ICHPO) provided an agreed definition of Allied Health Professionals. Briefly, these professionals "prevent disease transmission, diagnose, treat and rehabilitate people of all ages and all specialties. Together with a range of technical and support staff, they may deliver direct patient care, rehabilitation, treatment, diagnostics and health improvement interventions to restore and maintain optimal physical, sensory, psychological, cognitive, and social functions." Many allied health professions are specialized and must adhere to national training and educational standards and must prove their skills through degrees, diplomas, and certifications. Some of these specific allied health professions will be described in this issue.

The new 2016-2017 Panhandle Area Physicians Roster will be available the first of July. Call or come by the Medical Society Office to purchase your new Directory. Every active member physician will receive a complimentary Roster in the mail.

The Retired Physicians Group met for lunch in April at the Medical Society. If you are interested in joining this most active group and are not getting our mailouts, call the Society office at 355-6854, and let us know. They are planning a potluck supper sometime this summer.

ON THE COVER:

Our cover for this issue is entitled "Spring Peonies." The artist in Malcolm Hughes. Hughes, a former Amarillo artist, now lives in Virginia. His work is available at Town Square Frame & Art in Canyon TX.

Our Next Issue Of

Panhandle Health

Features:

History of Medicine in the Panhandle

Editor's Message

by Ellen Hampsten, M.D.

In this edition of *Panhandle Health*, we are spotlighting the health professions that work together for health and healing. While each health professional's education focuses on his or her particular area of interest, there is a broader training intertwined. Health professionals are being trained on how to work together to improve patient care and safety, and it is making a difference.

In our community, we are fortunate to have SimCentral, a simulation center founded as a collaboration of Texas Tech University Health Sciences Center, West Texas A&M University and Amarillo College. Students from health professions from each institution gather together and, under the instruction of their faculty and SimCentral's staff, participate in various patient simulations and teamwork exercises.

Each semester, SimCentral holds 3-4 Interprofessional Events, where students are given a scenario to work through together. Since these started in 2010, up to 220 students have participated each year. Students involved include third year medical students and third year pharmacy students from TTUHSC, bachelor of science in nursing students from WTAMU and, from Amarillo College: emergency medicine services professions students, respiratory therapy students, lab technician students and students from their 2 nursing programs.

The events start with an introduction where teamwork and communication are discussed. Then, students are given a scenario with a patient simulator to work through as a team. As the scenario progresses, each participant works in his or her professional role to care for the patient. Faculty members are standing by to guide and instruct. In the end, all attend a debriefing session to summarize the events and learning points from the exercise.

While a large portion of educational time in any health professions field is spent in actual clinical settings, exposure to the roles other professions hold is limited. With interprofessional simulations, students become aware of each team member's scope of practice and role. Communication improves as students practice closed-loop communication and situational awareness while reporting patient situations to one another. This leads to smoother, safer and more directed patient care. Practice in a simulated environment can help prevent mistakes in a real-life patient situation.

If you would like more information about SimCentral and the role of simulation in health profession education, please visit their website, www.Sim-Central.com.

Guest Editor's Message

by Michael E. Hooten, EdD., FACHE
Regional Dean, School of Health Professions, Texas Tech University Health Sciences Center

Healthcare services involve an "interprofessional" approach to patient care, and allied health professionals reflect that approach. Most patients will associate their health care with their physician, the nursing staff and pharmacists. Allied health professionals support many areas of healthcare service delivery system. The term "allied health" is applied to a group of diverse healthcare professionals who perform essential work in collaboration with those in medicine, nursing and dentistry. Each allied health profession consists of workers with different types and levels of skill and knowledge. Advantages are professional development, personal fulfillment and opportunity for career advancement.

Entry –level degree programs range from certificate or associate degree programs to bachelor and graduate level programs. Typically, graduates of a two year program must be under the supervision of those with more advanced training. Allied health professionals have many opportunities to advance their careers.

Knowledge in the health sciences has grown, especially after World War II and the implementation of Medicare. Technology began to play a larger role in diagnosis and treatment. Technology and specialized interventions placed greater demands upon physicians and nurses. A need to train other professionals who could serve as adjuncts was recognized. Allied professional needed specialized training with the intent to complement the work of physicians and nurses.

There were a series of federal legislative acts in the 1960s and 1970s that supported the development of allied health programs across the country through the existing healthcare education system. The increasing complexity of healthcare and improving technology prompted the need for an increase in allied health professionals. The U.S. Department of Health and Human Services, Health Resources and Services Administration has followed these developments and has supported training for the last several decades.

It is estimated that allied health professionals make up approximately 60 percent of the U.S. healthcare workforce. These professionals can be divided into two broad categories: technicians or assistants and therapists or technologists. Typically technicians and assistants receive two years of training and require supervision from therapists with more advanced training.

In a healthcare system, the allied health areas can be categorized as diagnostic and therapeutic:

Diagnostic
1) Cardiopulmonary laboratory
2) Clinical laboratory
3) Diagnostic imaging
4) Other such as audiology

Therapeutic
1) Rehabilitation services – PT, OT, Speech, Respiratory Care
2) Radiation therapy
3) Emergency services
4) Social and counseling services

The academic programs use scientific principles and evidence based practice in their curriculum. The programs have oversight by their professional associations. Students complete their academic coursework in modern, high-tech lecture rooms with access to electronic resources and on-campus dedicated laboratory space with modern equipment. Students develop their technical and clinical skills in a safe and secure environment. Once students are deemed competent in the basic skills, they are scheduled for clinical rotations in healthcare facilities where discipline-specific skills continue to be developed and refined. After the student has completed his or her program of study, the graduate will take any required national and/or state board examinations that, upon successful completion, provide

the needed credentials to legally practice in their respective profession.

The healthcare facilities of the Harrington Regional Medical Center and throughout the Panhandle of Texas have a need for these professionals. They serve at all levels of the continuum of care. A few examples are outpatient clinics, hospitals, Long Term Acute Care and Home Health.

The School of Health Professions, Texas Tech University Health Sciences Center began in 1981 when the 67th Texas Legislature approved funding for the school. In 1983, the first students (19) accepted. In 1985, full accreditation was received for programs in Physical Therapy, Occupational Therapy and Medical Technology. The school has grown tremendously with 19 undergraduate and graduate programs and over 1400 students.

Academic degree programs offered include Doctor of Audiology (Au.D.); Doctor of Philosophy in Communication Sciences & Disorders (Ph.D); Doctor of Philosophy in Rehabilitation Sciences (Ph.D., RS); Doctor of Physical Therapy (DPT); Doctor of Science in Physical Therapy (Sc.D., PT); Master of Science degrees in Molecular Pathology, Clinical Practice Management, and Speech-Language Pathology; professional Masters' degrees in Athletic Training (MAT), Occupational Therapy (MOT), Physician Assistant Studies (MPAS), and Rehabilitation Counseling (MRC); and Bachelor of Science degrees in Clinical Laboratory Science, Speech, Language and Hearing Sciences, Clinical Services Management, and Health Sciences. Post-Baccalaureate programs include Clinical Laboratory Sciences and Speech, Language, and Hearing Sciences, and a Certificate in Clinical Laboratory Sciences.

The Health Sciences Division, Amarillo College began in 1968 as the School of Biomedical Arts and Sciences on the Washington Street Campus of Amarillo College. At that time, 5 programs of study were offered with about 100 declared majors and 5 faculty. In 1974, the Health Sciences Programs were moved to their present location on the West Campus.

Today, the Health Sciences Division at Amarillo College offers 16 programs of study with approximately 1200 declared majors, 33 full-time faculty and a host of part-time and adjunct faculty to help us educate our students. Each of the faculty members are veterans in their professional disciplines and possess appropriate academic degrees along with national and/or state credentials to support the subjects they teach. Many of the other Health Sciences Programs award an Associate in Applied Science Degree (AAS) to their graduates. These programs are 4 to 6 semesters in length and require a core of fifteen semester-hours of general academic courses in addition to the health-related courses of the discipline. Programs offered are Dental Hygiene, Emergency Medical Services, Medical Laboratory Technology, Nuclear Medicine, Occupational Therapy Assistant, Physical Therapy Assistant, Radiation Therapy, Radiography, Respiratory Care, and Surgical Technology.

References

1) Texas H.O.T Jobs 6th edition Funding provided by the Bureau of Health Professions, US Department of Health and Human Services, 5600 Fisher's Lane, Rockville, MD. p. 12
2) Shi L. and Singh D.A. Delivering Healthcare in America: A Systems Approach. Jones and Bartlett Publishers, Sudbury, MA. 2004; p.143-145
3) Griffith J.R. and White K.R. The Well Managed Healthcare Organization; 6th edition Health Administration Press, Chicago, IL. 2007; P.294

History of Physiotherapy in the United States

by Rouzbeh K. Kordestani, MD, MPH

Introduction and purpose

Physical therapy is defined as "the treatment and management of physical disabilities, malfunction or pain, by exercises, massage, hydrotherapy, etc, without the use of medicine, surgery or radiation."(American Physical Therapy Association website). With this definition in mind, the field of physical therapy serves as an adjunct to the field of medicine. Now, physical therapists are thought of as critical team members that assist physicians and other health care professionals as patients heal from medical illness or from surgical wounds. Even though physical therapy, or physiotherapy as it was originally described, was mostly associated with wounds and injuries from wars (World War I, II and Korea), the field has adapted, grown and become much more.

The World Wars, Polio, and beyond

During World War I, orthopedic surgeons found that they were in dire need of nurses and other team members who would be able to help with the wounds and the recovery of wounded soldiers. Nurses or women professionals who were adept in massaging and additional modalities of therapy were designated as "reconstruction aides" and given the task of helping soldiers recover from orthopedic injuries. Since no specific physical therapy specialty existed, these reconstructive aides became essential partners and team members under the control of orthopedic surgery/orthopedic surgeons. Soon their usefulness was recognized as the Office of the Surgeon General assigned them to a new division, the Division of Special Hospitals and Reconstruction in the United States Army Office of the Inspector General (1917).

After World War I, the field of physiotherapy continued to prove its worth and to become more ingrained into the mainstream. A 1920-1921 poliomyelitis outbreak invoked a great need for reconstructive aides and their special abilities to help patients without the use of surgery. Since this disease process was viral in nature, the treatment in most cases was supportive. In such a manner, physiotherapists were able to show that other modalities could be used to treat and comfort these patients.

Soon, the presence of reconstructive aides in a non-battle setting showed its usefulness. The training in physiotherapy became more formalized. Teacher's College in Columbia University became the first college teaching physiotherapy. This was soon followed by Reed College, in Portland, Oregon.

By the time World War II began, the presence of physiotherapists and reconstructive aides was an accepted fact. They worked diligently alongside orthopedic surgeons in the United States and abroad. Their focus on recovery with outside non-surgical modalities allowed patients to recover faster than previously possible. After World War II, two national epidemic outbreaks of poliomyelitis, one in the 1940s and another in the 1950s, reaffirmed the needed for physiotherapists.

The Salk vaccine finally ended the plague of poliomyelitis. When this occurred, many thought that the field of physiotherapy would slowly fade. However, as the Korean conflict began, a new paradigm was noted. Prior to the Korean conflict, patients with significant injuries most often died. However, now, at the onset of the Korean conflict, with new technologies and with the advent of antibiotics, most patients lived through their injuries. They could be stabilized and slowly allowed to recover. These same injured soldiers were now even more in need of rehabilitation and physical therapy. In this way, the physical therapists and their understanding and skills were seen as an essential and critical part of the recovery process from wartime injuries and surgical injuries in general.

In 1967, amendments to the Social Security Act included outpatient physical therapy services as part of essential services for patients following injuries. With the inclusion of this amendment, the field of physical therapy was formally recognized as a medical professional field, and its members were allowed appropriate reimbursement for their work.

The Story of Mary McMillan

Any story about the history of physical therapy would be incomplete without mentioning Ms. Mary McMillan. Mary Mc Millan is thought to be the first physiotherapist in the United States. She had a unique set of skills as a therapist. She lived in England and worked under the tutelage of Sir Robert Jones, an orthopedic surgeon, in the early part of the century. When war broke out in England, she worked alongside the orthopedic surgeons, and her skills were quite valued. She was not allowed to join the British Army because of a minor medical condition. For this reason, she returned to United States. In the United States, her skills were quickly recognized and she gained a great deal of respect.

In 1918, she was appointed to the Walter Reed Hospital, where she took over as the head of the reconstruction aides. Soon after, she assisted in the foundation of the program at Reed College in Portland, Oregon. In 1919, she returned to Walter Reed Hospital and became the Head Aide for the hospital system there.

In 1919, Mc Millan wrote what is thought to be the first textbook of physical therapy in the United States, Massage and Therapeutic Exercise. Her efforts in the field and outside had much to do with the establishment of the original American Women's Physical Therapeutic Association (AWPTA), and eventually the American Physical Therapy Association (APTA). The APTA still holds her in great esteem and

has an annual award in her name, the Mary Mc Millan Award.

The American Physical Therapy Association

By the end of World War I, a great number of trained physiotherapists who were skilled and highly prized by orthopedic surgeons as helpful aides in their offices. Many of these physiotherapists banded together in smaller societies. In 1921, these smaller associations officially formed the first national association, the American Women's Physical Therapeutic Association. Since all of the early physiotherapists were women, this worked. However, soon, this organization and its named changed as men were also trained to become physiotherapists. In 1923, as the first 2 men joined the national organization, its name changed to the American Physiotherapy Association. In 1947, the organization was officially renamed as the American Physical Therapy Association. The APTA is very much alive today and has over 90,000 active members, which includes over 59,000 physical therapists, 6,000 physical therapy assistants and more than 25,000 students in training.

Be A Part Of The Circle

Gold Level

Amarillo National Bank • Baptist Community Services • Duncan & Boyd Jewelers
Neely, Craig & Walton Insurance Agency • Texas Medical Association Insurance Trust
Texas Medical Liability Trust

Silver Level

Interim Healthcare • Happy State Bank
Panhandle Eye Group, L.L.P. • Support Hose Plus

Bronze Level

The Cottages at Quail Creek • First Bank Southwest
Christy Price Ufford, Realtor

Be a part of the circle. In 2006, Potter Randall County Medical Society introduced the Circle of Friends, a program designed with the business of medicine in mind. Members of the Circle of Friends are companies that pay an annual fee to participate in Medical Society events. Their financial commitment allows PRCMS to provide quality programs throughout the year, such as the Annual Meeting, Doctors Day, Resident Reception, Family Fall Festival, Retired Physicians Lunch and Women in Medicine. In return, these companies are invited to attend these events and discuss with the physicians the benefits that their companies offer a physicians practice.

We are grateful for the support of these organizations and anticipate another great year of serving the needs of our members. The purpose for Circle of Friends is to provide a valuable base of resources to assist the physician in the business of medicine so their practice of medicine can improve.

This program has proven to be a valuable resource of services such as liability insurance, accounting, banking and much more. This year, we hope to expand the Circle to include services the physician may use in his or her personal life. Through this program, we can invite businesses serving physicians to support the Society and increase their visibility among its members. Corporate support contributes to the Society's ability to advocate and care for physicians and patients in Potter and Randall Counties.

The Medical Society thanks all of its supporters as it offers new opportunities to its membership.If your business is interested in being a part of our Circle of Friends, please contact Cindy Barnard at 355-6854 or e-mail prcms@suddenlinkmail.com.

The Physician Assistant Profession

by Michael Taylor, MPAS PA-C (left) and James Jankowski, MPAS PA-C (right)

With the growing needs for healthcare providers, Physician Assistants (PA) are in high demand to help provide high quality healthcare for our diverse populations. A PA is a person who is educated, certified, and licensed to perform histories, physical exams, make diagnoses, order and interpret diagnostic studies and treat various medical conditions under the supervision of a licensed physician. PA's can work in every medical and surgical specialty, providing an excellent option to help expand a physician's practice.

One of the earliest suggestions to create this type of medical provider came in 1961 from Charles Hudson, then president of the National Board of Medical Examiners. Hudson put forth the notion of "externs" for physicians. The rationale for a new type of health care provider was grounded in changing hospital staffing demands and innovations in technology. Hudson planned for the extern to be directly responsible to a physician. He expected that nursing professionals would resist the creation of such a physician adjunct. While Hudson contended that the "goals of nursing would be redefined as part nursing and part medicine," he predicted that nurse leaders would frown on "the proposal of a medicine-nursing hybrid"(1).

It was another four years before Dr. Eugene A. Stead, Jr., at Duke University, transformed Hudson's prophecy into reality by developing the first formal training program for the health-care worker that Hudson had proposed, which Stead renamed the physician assistant. As the role developed, it hurdled nearly every obstacle that Hudson had foretold (2). As new PA programs continued to develop through the 1960s, similar curriculum models emerged around the central themes of physician-dependent practice and competency-based education. What began as a student population of predominantly male military veterans became a more diverse mix as the Vietnam era passed. By 1971, there were 16 PA programs, with many based on the Duke model. By 2007, there were 136 accredited programs in the United States, with 106 (79%) offering a master-degree curriculum(3). As of 2016, there are roughly 199 accredited PA programs in the US.

PA students obtain formal education through a program that is accredited by the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA). Physician Assistant programs average about 27 months of full-time study for completion. Depending on the program, roughly the first year is in didactic studies. Then the students will spend around another year in clinical rotations. Courses during the didactic year include basic sciences such as anatomy, physiology, pathophysiology, and pharmacology. Physical examination and medical Interviewing skills are included in the curriculum. As the student progresses, clinical medicine course are incorporated into the curriculum. During the clinical year, there are a set of disciplines that are required by ARC-PA. These include Pediatrics, Family Medicine, Surgery, Internal Medicine, OB/GYN, and Behavioral and Mental Health care(4). During these supervised clinical experiences, students gain first-hand experience of patient care by performing history and physical examinations, ordering diagnostics studies, diagnosing illness, and developing treatment and health maintenance plans.

After graduation, students are required to pass the Physician Assistant National Certifying Examination (PANCE).They are licensed by the state they intend to practice in. PAs are required to earn 100 hours of continuing education credits (CME) every two years, and they must pass a recertification exam (PANRE) every 10 years. Also in the 10-year certification maintenance cycle, 20 of the 50 Category 1 CME credits must be earned through self-assessment CME and/or performance improvement CME (PI-CME).

How a physician assistant practices varies. It is dictated by the state in which the physician assistant is licensed. It is also dictated by the type of physician who supervises the physician assistant. The state dictates the laws by which the physician assistant must work. And the physician assistant's supervisor will dictate what the scope of care of the physician assistant will be. For example, if a physician assistant has experience in orthopedics from a previous job but their current supervising physician only works in dermatology, then the physician assistant will be limited to the scope of care of their current supervising physician and their practice of medicine will be limited to diseases of the skin.

In primary care in the U.S., PAs, as well as nurse practitioners (NPs), fill a variety of roles, including serving as the primary care provider for patients, providing acute care, and providing chronic disease management(5).

How the work of primary care is divided among teams of physicians, NPs, and PAs depends on many factors, such as the regulatory environment, local availability of providers, and local population needs. For example, NPs and PAs more often provide care and serve as patients' primary care providers in rural areas, where physicians are scarcer, and in states with less restrictive practice regulations(5).

There are more than 100,000 PAs in the U.S. and of that 100,000 there are more than 6,000 PAs in TEXAS (6).

Who does the typical PA help in Texas?

- 61-70 patients per week
- 17.2% of patients are uninsured
- 20.0% of patients are Medicaid beneficiaries
- 27.8% of patients are Medicare beneficiaries
- 10.2% of patients are dual-eligible
- 19.1% of patients live in rural areas
- From AAPA Annual survey 2013, state profile(7)

Physician assistants are well educated, valuable members of the heathcare team. They provide a valuable service to the state of Texas and the nation. Texas

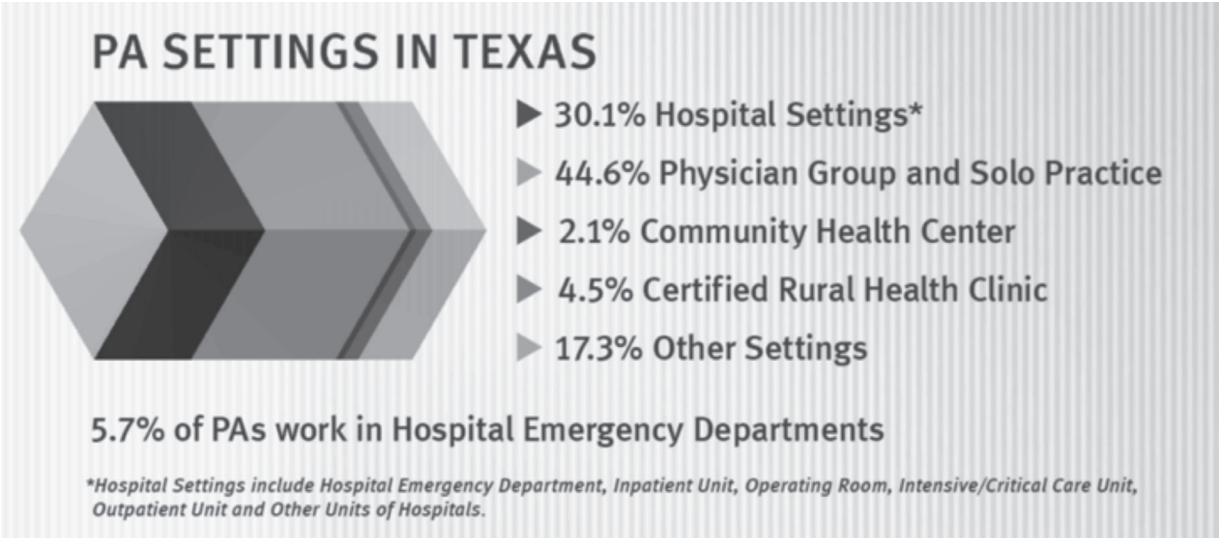
Tech University Health Sciences Center (TTUHSC) sponsors one of eight PA programs in the state of Texas. We at TTUHSC would welcome any and all providers who would like to contribute to the training of this valued team member. Feel free to contact either of the authors if you are interested in becoming a preceptor.

References

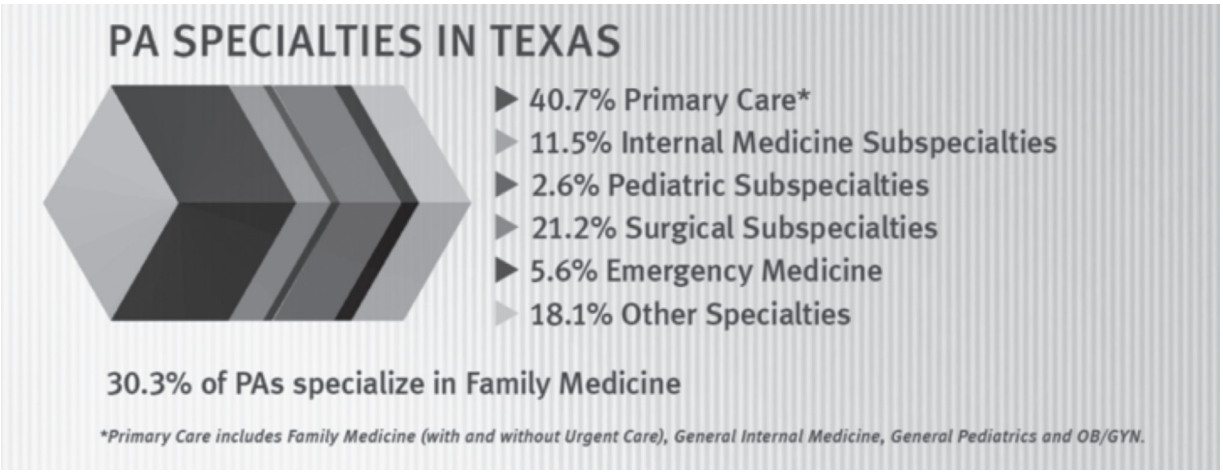
1. Cawley JF, Cawthon E, Hooker RS. Origins of the physician assistant movement in the United States JAAPA. 2012;25(12):36-40, 42
2. Hart N. "Confession's Masterpiece": The development of the physician assistant program. Bulletin of the History of Medicine.1998;72:246-278
3. Jones PE. Physician Assistant education in the United States. Academic Medicine. 2007;82(9):882-887
4. Accreditation Review Commission on Education for the physician Assistant (ARC-PA) http://arc-pa.org/documents/standards4theditionwithclarifyingchanges9.2014%20FNL.pdf. Accessed 3/31/2016.
5. Morgan P, Everett C, Hing E. Nurse practitioners, physician assistants, and physicians in community health centers, 2006-2010. Healthcare 3 (2015) 102–107. doi: 10.1016/j.hjdsi.2014.06.002.
6. American Academy of Physician Assistants annual survey 2013. https://www.aapa.org/research/national-survey/. Accessed 3/31/2016.
7. American Academy of Physician Assistants annual survey 2013 state profile, https://www.aapa.org/WorkArea/DownloadAsset.aspx?id=1644. Accessed 3/31/2016.

Michael A. Taylor, Associate Professor, has been a Physician Assistant for more than 30 years, and has been at Texas Tech University Health Sciences Center School of Health Professions PA program since 2004. He has a practice background in orthopedics and an academic background in Anatomy, Physical Exam, clinical skills training and Orthopedics. Mr. Taylor has his bachelor's degree from University of Oklahoma and his Masters degree from the University of Nebraska.

Mr. James Jankowski is an Assistant Professor for Texas Tech University Health Sciences Center School of Health Professions Physician Assistant program since 2004. He obtained his Physician Assistant degree from Texas Tech in 2006. Mr. Jankowski also has a Bachelor in Medical Technology and a Master of Education in Biology degrees. He has clinical experiences in Family Medicine and Orthopedics. He is a former U.S. Naval Officer, serving 15 years in the U.S. military.



Where do PA's work in Texas? PA Settings **From AAPA Annual survey 2013, state profile(7)**



What kind of work do Texas PA's do? PA specialties **From AAPA Annual survey 2013, state profile7**

"I Heard You, But I Did Not Understand You!"

by Dr. Kerry Ormson

The science of audiology developed rapidly at the end of World War II because of the needs of the many returning veterans with service-connected hearing losses. In the intervening years audiology has taken several directions. Although it was originally intended as a rehabilitative profession, it seemed that audiologists became interested primarily in the medical and diagnostic aspects of hearing loss. Events in recent years have brought about a more balanced audiological approach to the total management of hearing-impaired individuals.

Audiologists are licensed by the state of Texas, and they hold either Board Certification in Audiology from the American Academy of Audiology or Certificate of Clinical Competence from the American Speech-Language and Hearing Association. To have board certification one must hold a doctoral degree in audiology.

Audiology is the scientific study of hearing and its disorders. Audiologists are primarily concerned with the identification, evaluation, and management of patients with auditory disorders, as well as the prevention of hearing impairment.

The scope of the practice of audiology includes such diverse areas of the evaluation of the vestibular system and risks for falling, noise assessment, psychoacoustics, and occupational and environmental hearing conservation. An audiologist may also be involved in the neurophysiologic recording of CNS evoked potentials as well as measuring various neurological functions during surgical procedures, called intra-operative monitoring. Treatment of tinnitus patients is a relatively recent advancement in the field of audiology.

The title of this article repeats a phrase that I hear patients saying to family and friends everyday in my practice as a clinical audiologist. When a normal hearing person hears this statement, to them, it is like someone saying "I see you but I do not see you!" This begs the question "How can you see me and not see me? How can you hear me and not hear me?" A majority of individuals with hearing loss are not deaf, meaning they can hear but just not always understand. This common type of hearing loss is one of the most frustrating types of hearing losses to have for the individual as well as the family.

Individuals with this type of hearing loss are frequently accused of having selective hearing, hearing only what they want to hear, or they are just ignoring. The hearing impaired individuals are constantly repeating the title of this article to

| *continued on page 18*

family, friends, and co-workers, "I heard you, I just did not understand you."

This type of hearing problem affects around 48 million people. The Center for Hearing and Communication has listed the statistics and facts regarding hearing loss;

- **FACT:** 48 million Americans have a significant hearing loss.
- **FACT:** Over 90% of deaf children are born to hearing parents.
- **FACT:** 14% of those ages 45-64 have some type of hearing loss
- **FACT:** 15% of children between the ages of 6-19 have a measurable hearing loss in at least one ear.
- **FACT:** Hearing loss occurs in 5 out of every 1,000 newborns.
- **FACT:** Exposure to a noisy subway, for just 15 minutes a day over time, can cause permanent damage to hearing.
- **FACT:** Hearing aids can offer dramatic improvement for most people with hearing loss.
- **FACT:** A mild hearing loss can cause a child to miss as much as 50% of classroom discussion.
- FACT: Listening to an MP3 Player at high volumes over time can cause permanent damage to hearing.
- **FACT:** With early identification and appropriate services, deaf children can develop communication skills at the same rate as their hearing peers.
- **FACT:** Noise is one of the leading causes of hearing loss.
- **FACT:** Tinnitus (ringing in the ears) affects 50 million people in the United States.
- **FACT:** Babies are never too young to have their hearing tested.
- **FACT:** Speech reading is the more current word for lip reading.
- **FACT:** People with hearing loss wait an average of 7 years before seeking help.
- **FACT:** Only 16% of physicians routinely screen for hearing loss.
- **FACT:** 15 million people in the United States with hearing loss avoid seeking help.
- **FACT:** 1 out of 3 people over age 65 have some degree of hearing loss.
- **FACT:** 2 out of 3 people over 75 have a hearing loss.
- **FACT:** Approximately 3 million children in the U.S. have a hearing loss; 1.3 million of them are under the age of three.

As stated previously, hearing loss affects 48 million people in the United States. Hearing loss can occur at birth or can develop at any age. There have been many advances in all aspects of hearing health care, so that from the youngest infant to the eldest senior citizen, there are new and exciting options available to help. Treatment options vary depending on the degree or type of hearing loss, age of onset and individual lifestyle needs.

A major review of research on hearing loss published in the American Medical Association concluded:

"Hearing loss is one of the most common chronic health conditions and has important implications for patient quality of life. However, hearing loss is substantially undetected and untreated."

The authors recommended that physicians routinely screen for hearing loss during physical examinations of their patients over 55 years old. A 1999 study by the National Council on the Aging found a strong correlation between hearing loss and depression, as well as social isolation, low self esteem, and functional disability.

Where do people turn when they think they may have a hearing loss? Most adults with hearing loss list their primary care physician as their most important source of information about where (and whether) to go for professional care, such as an audiologist.

Another important issue that is of growing concern to audiologists is the relationship between hearing loss and cognitive decline. A study in the Journal of American Geriatrics Society found that for individuals older than 60 years, more than one third of the risk for dementia was associated with hearing loss.

A study by Obuchi investigated hearing aid use and cognition in a small group of elderly adults. The group of hearing loss without hearing aids showed the lowest scores on the Wechsler Intelligence Scale-Revised (WISC-R), while there were no differences in the normal hearing group and the hearing loss and using hearing aids group.

A recent large scale prospective study of 3,670 patients, in the Journal of American Geriatrics Society, randomly selected adults over a 25 year period and examined the relationship between hearing loss, hearing aid use, and cognitive decline. At the 25 year follow-up, subjects not using hearing aids declined more rapidly on cognitive measurements than those who used hearing aids.

Untreated hearing loss has been associated with social isolation, anxiety, and depression. These data support the hypothesis that social isolation may be an important factor contributing to cognitive decline in patients with untreated hearing loss. The use of hearing aids minimizes that social isolation and may explain the lack of corresponding cognitive decline in this group.

Audiologists are acutely aware of the negative impact hearing loss plays in the lives of pediatric to geriatric patients. An area that is also of significant importance, but not able to be addressed at this time in this article, is the role that middle ear problems play in the development of speech and language skills in pediatric populations. Audiologists, pediatricians, and otolaryngologists have been made aware for many years from experience and from their professional academies regarding the detrimental effects of middle ear problems in regards to academic and social skills of this population.

References:

Senior Resaeach Group, National Council on Aging. The Consequences of Untreated Hearing Loss in Older Persons. May 1999,

Yueh B, Shapiro N, MacLean C, Shekelle P. Screening and management of adult hearing loss in primary care; Scientific Review. JAMA. 2003;289(15):1976-1985.

Amieva, et.al., Self-reported hearing loss, hearing aids, and cognitive decline in elderly adults: a 25 year study. Journal of American Geriatrics Society (2015); 63: 2099-2104.

Obuchi C., Harashima T. , Shiroma M. Special Issue on Adult Hearing Care: New perspectives, age-related changes in auditory and cognitive abilities in elderly persons with hearing aids fitted at the initial stages of hearing loss. Audiology Research (2011); 1.

Dr. Ormson is a board certified Clinical audiologist by the American Board of Audiology. Dr. Ormson is presently completing his second six year term on the State Board of Examiners for Speech-Language and Audiology. Dr. Ormson is the owner of an audiology private practice, Ormson Hearing Health Care, located in Amarillo, Texas He has practiced in Amarillo since 1975 as a clinical audiologist and holds two doctoral degrees from Texas Tech University and Pennsylvania School of Optometry-College of Audiology. His research and clinical interests are in auditory processing disorders, neurophysiology, and tinnitus treatment. He had previously been appointed to the clinical faculty in the department of pediatrics at Texas Tech University Medical School, Amarillo Campus. Dr. Ormson has also served on the Council of Academic Accreditation (CAA) with the American Speech-Language and Hearing Association. The CAA was responsible for the accreditation of graduate programs in speech pathology and audiology throughout the United States. His professional affiliations include American Speech-Language and Hearing Association, American Academy of Audiology, Texas Speech and Hearing Association, American Auditory Society, and the American Academy of Otolaryngology-Head and Neck Surgery.

The Role of Therapies in the Ever-Evolving Healthcare Industry: What Is A Pt, Ot, Slp?

by Aaron DeLong PT, ScD

In order to understand how therapy interrelates with healthcare as a whole, one must first understand what therapy is. In general terms, the bulk of therapy is separated into three categories: Physical Therapy (PT), Occupational Therapy (OT), and Speech and Language pathology (SLP). (I would venture a guess that, were I an OT or SLP, they would be listed in a different order.) Each of these disciplines serves a specific purpose in the recovery process of patients with physical deficits, and has unique educational requirements and specializations.

Physical Therapy is defined as the preservation, enhancement, or restoration of movement and physical function through physical means. At their most basic, Physical Therapists strive to improve a person's ability to create adequate strength and motion so they may meet the demands of their daily life. Schooling for PT is currently 4 years of undergraduate work, followed by 3 years of graduate school with a final degree of DPT or Doctor of Physical Therapy.

Occupational Therapy is for those recovering from physical or mental illness who have impairments in activities of daily life. The goal of the Occupational Therapist is to lead people through recovery and allow them to perform the tasks necessary for them on a daily basis. Schooling for OT is currently 4 years of undergraduate work, followed by 2 years of graduate school with a final degree of a Masters degree in Occupational Therapy.

Speech Language Pathology is the process of evaluating and treating people who have difficulty with speech, language and swallowing. This is a broad field that encompasses many aspects of recovery both mental and physical. The main goal of the SLP is to enhance the patient's ability to formulate and produce functional speech, as well as the ability to process and swallow food. Schooling for SLP requires 4 years of undergraduate work, followed by 2 years of graduate school with an entry level of a Masters degree in SLP.

Many of the goals, processes, and tools used by these professions are similar and often duplicated. As the goal of healthcare progressively evolves to produce the best results in the shortest time-frame, it is imperative that the three disciplines work closely with each other to avoid replication of services. In any setting, the therapists must communicate on a regular basis, or outcomes will suffer. If the rehabilitation team does not communicate effectively, recipients of therapy will progress more slowly than would someone seen by a cohesive, highly effective team.

Where Did the Therapies Come From?

The origins of the therapies are all somewhat similar. All therapies saw their birth around the same timeframe, and were developed initially for similar reasons. During and after WWI, there was a large demand for improving the recovery of soldiers returning from war with physical and mental disabilities. The need for a process to improve physical function resulted in the creation of the Reconstruction Aide. This was a group consisting initially of women whose job it was to assist recovering soldiers in regaining strength and function following a battlefield injury. This professional progressively grew and developed into the field of physical therapy.

Occupational Therapy shares a similar past. During the first half of the 19th century a better process was developed for treating the mentally ill; this was known as the moral treatment movement. Over time, this field expanded to incorporate ones "occupation" to treat mental illness — occupation being defined as spending ones energy and focus on achieving a specific goal. After WWI, the profession expanded to incorporate physical as well as mental deficits while still embracing the moral treatment mindset and using occupation to regain function.

Speech Language Pathology found its origins in the education field rather than in post-war recovery. SLP has been around for centuries and began as a process to improve pronunciation and elocution. As the field developed, it became more focused on pathological disorders of speech such as stuttering and word finding difficulties.

Where Do Therapists Practice?

All disciplines of therapy can work in similar settings. There are currently more PTs practicing in the United States than there are OTs or SLPs. This means that, as a general rule, practice settings will have physical therapy even if they do not have OT or SLP. All therapy settings are better served by a mix of the therapies, but there are not enough therapists existing in the US to meet the demands of all healthcare settings. Currently in the US, there are about 200,000 PTs, 115,000 OTs, and 135,000 SLPs in active practice. However, each of these fields has a job outlook designated as "much higher than average" over the next 10 years by the Bureau of Labor Statistics. This means that the average person will have better access to better therapy in the coming years.

Currently therapists can be found in almost every realm of healthcare, from emergency rooms to home health care. The skill of the therapist allows them to intervene at any point in the recovery process. Most therapists work in the hospital setting or in an outpatient clinic. However

| *continued on page 20*

the number of therapists performing home care is increasing. If a person were to suffer a debilitating incident, it would not be unusual for them to see therapists from the initial visit in the emergency room all the way through returning home and attempting to regain independence there.

What Does Therapy Do, and Why Are There Different Types?

It would be very easy to expound on the similarities and differences in the therapies over an entire volume of literature. For the most part, the average person is not interested in the details. They would like a simple answer as to why they need PT vs. OT vs. SLP. To that end, I will attempt to answer that question as succinctly and simply as possible. Make no mistake, the answer is complicated, and any therapist will be happy to explain the details. For the purposes of this article, a simple primer answers that question.

- Physical Therapy will focus on gross movements such as walking, transferring, strengthening muscles, and improving motion.
- Occupational Therapy will focus on activities required for daily life or "ADLs." They will use the motions, strength, and coordination necessary to complete those tasks to improve overall function and allow a person to live as independently as possible.
- Speech Language Pathology will focus on oral function. This may include the physical act of speaking or swallowing, the ability to form thoughts that become words, or the overall ability to communicate an idea in an understandable way.

The easiest way to think about the roles of the therapies is through an example. Often people who have suffered a stroke require the services of all three therapies. A typical therapy model might look something like this. PT would assist the person to transfer to the edge of the bed, stand, and walk to the bathroom. The OT might assist the patient to shower, perform grooming activities, or dress. The SLP would spend time assisting the patient to swallow safely, communicate thoughts clearly, and develop thoughts that lead to clear statements. There are parts of each therapy that can be performed by the other therapies, but this provides a birds-eye view of how therapists work together to meet the overall goal of returning a patient to as much independent function as possible.

What Does All of This Mean?

As healthcare develops and the entire industry attempts to do thing better, faster, and (of course) more inexpensively, the role of the therapists will progress to fill that demand. Over the past 50 years we have all seen the hospital develop from a place where a person was admitted and might stay for a week or two, to a place where the goal is to get you better and home as quickly as possible. Most people would prefer to recover in their home setting than in a hospital, and the industry is quickly moving more and more toward that model. In that case, the average person will be doing the majority of their recovering in a setting other than a hospital. Much of that recovery will involve the active participation of Physical Therapy, Occupation Therapy and Speech Language Pathology. The movement of healthcare from a central setting to a multi-tiered recovery process means that the average person will be seeing the services of therapy earlier, longer, and in more diverse settings. Unless therapists can practice in an ever expanding marketplace, they will fail to meet what is required by their patients and by the industry. All therapists of any type are (or should be) looking to be available throughout the recovery process and to expand their individual "toolboxes" to treat multiple problems in multiple settings. With the ability to adapt to the new model of healthcare, therapists will continue to meet their goals of helping patients regain the independent quality life they strive for.

References:

1. A brief history of occupational therapy. Missouri College News. Student Life Section. December 3, 2014.
2. APTA: Americal Physical Therapy Association. ATPA History. on the internet at http://www.apta.org/History/ (visited April 02, 2016)
3. Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-17 Edition, Occupational Therapists, on the Internet at http://www.bls.gov/ooh/healthcare/occupational-therapists.htm (visited April 04, 2016).
4. Lubinski R. Speech Therapy or Speech-Language Pathology. In: JH Stone, M Blouin, editors. International Encyclopedia of Rehabilitation. 2010. Available online: http://cirrie.buffalo.edu/encyclopedia/en/article/333/

Author: Aaron DeLong PT, ScD

Aaron DeLong received his Bachelor of Science in Biology from WTAMU in 1995, Master of Physical Therapy from Texas Tech in 2001, and Doctorate of Science from Texas Tech in 2003. He has been at Northwest Hospital for 18 years and has been a PT Tech, Staff Therapist, Manager, and Director there. He established the Balance Center at Northwest Texas Healthcare System in 2002, and is currently the Director of Physical Medicine and Neurosciences at Northwest Texas Healthcare System in Amarillo.

GB GRAHAM BROTHERS JEWELERS

Buyers and Sellers of important

ESTATE JEWELRY *and* FINE WATCHES

HERRING BANK TOWER | 2201 CIVIC CIRCLE
SUITE 505 | AMARILLO, TEXAS | 806.352.0082
GRAHAMBROTHERSJEWELERS.COM

Our new freestanding ER will offer you and your family high-quality, around-the-clock care that's convenient. **... 24 hours a day ... 7 days a week ...** including specialty pediatric emergency care.

Located at Hillside and Soncy, Northwest Emergency at Town Square will offer a range of emergency services under one roof!

As a part of Northwest Texas Healthcare System, we can assist you in a direct admission if necessary by ambulance to a private room at our hospital.

Easy to find ...
Easy access to
the care you need.

Northwest Emergency
at Town Square
Hillside/Soncy • Amarillo, TX 79106
www.nwtexashealthcare.com

Physicians are independent practitioners who are not employees or agents of Northwest Texas Healthcare System. The system shall not be liable for actions or treatments provided by physicians. 150051

Professional Healthcare Management

Medical Billing and Collection Services

Operations Efficiency Assessments

Billing and Collection Audits

www.professionalhealthcaremanagement.com

Professional Healthcare Management, LLC
2750 Duniven Circle, Suite C
Amarillo, TX 79109
806-381-1155

Lu Ann Weldon, President
RN, MSHA, CPC, CMIS, CPB
prohealth1@amaonline.com

Ridgeview Medical Center

1600 South Coulter, Amarillo, Texas

Leasing Information: 806-467-9600

JSW Properties, Inc., a locally owned and operated office complex management group, has immediate upscale office space available at Ridgeview Medical Center, located at 1600 S. Coulter. This property offers the following amenities:

- Negotiable, Favorable amd Below Market Rates
- Aggressive Terms
- Custom Tenant Renovations / Finish Out
- Reserved Parking Within a few Feet of Building Entrances
- New Parking Lot
- Located Directly Across Coulter from BSA Hospital
- On-site Management and Maintenance Personnel
- Local References

If you have any interest in relocating your offices or medical practice, JSW would appreciate your consideration of Ridgeview Medical Center. JSW's team is ready to accommodate your every need. For more information and a personal appointment to see these offices, please call Joe Watkins or Jessica Rodriguez at 806-467-9600.

3131 Bell-Palo Duro Office Plaza
Office Space Available

1800 S. Washington *Washington & I-40*
Office Suites Available - 2,000 & 4,000 Sq. Ft.

JSW PROPERTIES, INC. **806-467-9600**

YOUR LOCAL TEAM FOR YOUR HIGH-TECH RADIOLOGY NEEDS

- Local experienced team:
  - 10 technologists with 224 years of combined experience
  - 26 radiologists with 525 years of combined experience
- On-site radiologist at each location
  - Results to your physician in a timely manner
  - Radiology consulting
- In-depth experience in all major fields of radiology
  - Neurology
  - Muscularskeltal
  - Pediatric
  - Women's Imaging

ADVANCED IMAGING
CENTER OF AMARILLO

7400 Wallace Blvd. • 806.353.8333
7010 W. Ninth Ave. • 806.351.8480
amarilloimaging.com

Diagnosing and Treating Autism Spectrum Disorder: A Collaborative Approach

by Bruce Moseley, Executive Director, Turn Center

Imagine feeling completely overwhelmed all the time by everything. Lights are super intense and pierce your eyes. The slightest noise echoes loudly over and over as several other noises layer on top of the next in a vicious cycle. Loud noises are unbearable. Certain things that you come into contact with throughout the day make your whole body itch and burn. Foreign or strong smells make you extremely nauseous. In other words, imagine all of your senses are acting on overload all day every day, causing you extreme discomfort. For many Texas Panhandle children, this is a daily reality.

Autism Spectrum Disorder ("ASD") is not new, but the frequency of diagnoses has continued to increase over the years, and it has become a major health concern. According to the Center for Disease Control, 1 in 68 children were diagnosed with ASD in 2010. This represents a dramatic increase in diagnoses when you consider that, as late as the 1970s, the best estimates for autism prevalence in Europe were 1 in 2,500. Experts have been speculating as to why we have seen so many more diagnoses, and most agree that recent changes in diagnostic criteria and financial incentives for families and healthcare professionals have contributed significantly.

The Fifth Edition of the Diagnostic and Statistical Manual of Mental Disorders ("DSM-5") made significant changes to the diagnosis of autism. Under the previous DSM-4, there were five separate diagnoses related to autism:

(1) Asperger syndrome;
(2) Autistic disorder ("classic" autism);
(3) Childhood disintegrative disorder;
(4) Pervasive Developmental Disorder (PDD); and
(5) Pervasive Developmental Disorder Not Otherwise Specified (PDD-NOS).

The DSM-5 now makes all of these specific diagnoses "Autism Spectrum Disorder" and no longer recognizes these distinctions. People with an earlier (DSM-4 or earlier) diagnosis of Asperger syndrome, autistic disorder, PDD, or PDD-NOS, should now be given a diagnosis of ASD.

Prevalence Explosion

- 1970s in Europe: 1 in 2,500 = .04%
- 2000: 6.7 in 1,000 = .67%
- 2004: 8 in 1,000 = .8%
- 2006: 9 in 1,000 = .9%
- 2008: 1 in 88 = 1.1%
- 2010: 1 in 68 = 1.47%

Interesting facts about ASD Prevalence:

- Boys are 5 times more likely to be diagnosed with ASD;
- Caucasians are 3 more likely to be diagnosed with ASD; and
- The average age of diagnosis is 6 years old

From the recent explosion in diagnoses came a number of governmental agencies and non-profit organizations dedicated to studying and treating ASD, and an overwhelming number of evidence-based interventions for children with ASD has emerged.

While the cause of ASD is not known, the consensus is that there are genetic and environmental factors that contribute to how the brain forms.

How is it diagnosed?

The diagnosis of ASD requires a complex process involving a multidisciplinary team that may include a psychologist, psychiatrist, speech pathologist, pediatrician, and neurologist. Parents and teachers play a critical role in identifying behavior that would lead to an initial screening.

Toddlers with ASD often do not reach developmental milestones such as talking and walking; this usually becomes noticeable between ages two and three. In some severe cases, parents notice their infant either violently arching their back or remaining limp while being held. In school, autistic children often show signs of difficulty with communication, social skills, and cognition. Other signs include repetitive behaviors such as hand flapping or rocking, self-injury such as biting or head-banging, hyper-activity, and/or attention deficits.

To realize that a collaborative approach by health care providers is needed, consider the number of individuals who might be involved in diagnosing a child with ASD:

1. Pediatrician
2. Teacher
3. School diagnostician
4. Social worker
5. Nurse
6. Child psychologist
7. Speech-language pathologist
8. Child neurologist
9. Child psychiatrist

Pediatricians play in important role early in the recognition of ASD symptoms because they conduct periodic developmental screens to determine if a child is learning basic skills when expected. In Texas, speech-language pathologists can legally diagnose a child with ASD, but it is widely agreed that the best practice is to have a team consisting of the SLP, child psychologist, and pediatrician all agree on the diagnosis.

Under the DSM-5, published in 2013, a child must show three types of impairments in social interaction and at least two types of restrictive or repetitive behavior. These impairments are characterized by deficits in social-emotional reciprocity, nonverbal communication, and developing, maintaining and understanding relationships.

Deficits in social-emotional reciprocity include:

(1) difficulty having back-and-forth conversation;
(2) reduced sharing of interests or emotions; or

(3) failure to initiate or respond to social interactions.

Deficits in nonverbal communication include:

(1) trouble integrating gestures and language;
(2) poor or no eye contact/body language; or
(3) little or no change in facial expressions.

Deficits in developing, maintaining and understanding relationships include:

(1) difficulty adjusting behavior to different contexts;
(2) problems sharing in imaginative play;
(3) difficulty making friends; or
(4) lack of interest in peers.

In addition to the impairments in social communication and interaction, to be diagnosed with ASD, a child must also show at least two of the following four types of restrictive or repetitive behavior:

(1) repetitive movements, speech or use of objects;
(2) insistence on sameness or ritualized patterns of behavior;
(3) highly restricted, fixated interests that are abnormal in focus/intensity; and
(4) over-reaction or under-reaction to sensory input.

Repetitive movements usually manifest in hand-flapping or head-banging, repeating the same phrase, lining up toys/objects, or flipping objects over and over. Insistence on rituals becomes apparent when the child exhibits extreme distress at small changes in routine. Interests become abnormal when the child can only focus on one subject all the time and has no interest in any other subjects. Sensory inputs can often reveal a child suffering from ASD when the child responds adversely to certain sounds or textures, shows indifference to pain, or becomes fixated on smelling or touching certain objects.

Finally, to be diagnosed with ASD, these impairments must: (1) be present in early development; (2) cause impairment in social, occupational or other areas of functioning; and (3) not be better explained by intellectual disability.

How is it treated?

It is clear there is a need for a collaborative approach among many professional healthcare providers and educators to treat ASD, including:

- Pediatricians
- Teachers
- Special Education Administrators
- Child Psychologists
- Speech Language Pathologists
- Occupational Therapists
- Physical Therapists

Treating ASD at a children's rehabilitation center has become a collaborative approach amongst Speech Pathologists, Occupational Therapists, and Physical Therapists. They all work together to develop a holistic plan for treatment, which includes sensory strategies and behavioral interventions.

Occupational and physical therapy can help children with autism perform better in school, home and community environments. Occupational therapy focuses on goals related to fine motor skills such as handwriting, shoelace tying, buttoning, etc. Physical therapy focuses more on gross motor skills and core strength and works on skills such as crawling, sitting, walking, running, and jumping.

Occupational and Physical therapists work collaboratively with Speech Pathologists to provide children with ASD a unified and coordinated treatment plan. The team meets often to discuss specific strategies for specific children. The collaborative meetings often include the following:

- Discussing and implementing sensory strategies such as weighted vests/lap pads, pressure vests, lotion massage, rocking, swinging, etc. The team identifies all strategies that will help the child to best reach the different goals that are being addressed in all therapies;
- Discussing the use of visual or verbal schedules that will allow the child to follow along with the task at hand or make choices on their own;
- Collecting data to determine what type of rewards/reinforcements can be used to help decrease a child's negative behaviors.
- Conferencing with families as a therapy team to determine what goals and interventions are appropriate for the child.
- Speech therapists can help the therapy team to understand what language is best to facilitate smoother sessions with an autistic child. Oftentimes, less is more, and it is suggested therapists use one to two word phrases to best communicate with a child.

Earlier Intervention

Most children do not receive a formal autism diagnosis until age three. Historically, doctors and clinicians agreed that there were too many other possibilities that could explain abnormal behavior during the infant and toddler years. For example, if a child is not speaking, it could be autism, but it could also be hearing loss, an intellectual disability or a language disorder.

Recent research indicates that diagnosing autistic children as early as 18 months can have a dramatic positive impact on their progress to assimilate in the public school system. A child diagnosed with ASD before age three has access to early-intervention services and appears to have a greater chance for academic, vocational/career and social success and potentially lower education costs.

As professionals involved in diagnosing and treating this disorder, we must always be careful not to over-diagnose, while at the same time, diagnosing children appropriately as early as possible and involving as many people as possible in the ongoing treatment of a disorder that has no cure.

References

American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders. 5th ed. Arlington, VA: American Psychiatric Association.

National Institute of Child Health & Human Development. (2010). Autism spectrum disorders. Retrieved March 28, 2016, from http://www.nichd.nih.gov/health/topics/autism

Volkers, V. (2016, April). Earl Signs: Based on a developing area of research pinpointing traits of autism spectrum disorder in infants and toddlers, new tools and resources are emerging to help practitioners diagnose it earlier. The ASHA Leader. Retrieved April 1, 2016 from http://leader.pubs.asha.org/article.aspx?articleid=2506032.

Family-Centered Care Replacing the Newborn Nursery in An Amarillo Hospital

by Poonam Thakore, MD; Zachary Graff, MSIV; Rebecca Parrish, MSIV; Mubariz Naqvi, MD; Tetyana Vasylyeva, MD, PhD, FAAP

Affiliations: Texas Tech University Health Sciences Center School of Medicine, Department of Pediatrics, Amarillo, TX

Abstract:

Background: Couplet care is a relatively old concept; however, the implementation of this family-centered model has been delayed as many hospitals only offer the traditional model of a newborn nursery.

Objective: To evaluate satisfaction with a newly transitioned postpartum family-centered program and the potential benefits couplet care offers to the mother and baby.

Method: A survey was conducted using nine questionnaires to assess the care provided in the couplet care unit. The designed survey was distributed in a paper format to all postpartum mothers who were above 14 years of age and whose primary language was English. After exclusion, 197 postpartum mothers participated in this survey. Five-level Likert scale was used to grade their learning experience (1-strongly disagree, 2-disagree, 3-neutral, 4-agree, and 5-strongly agree).

Results: The summary of responses was: A. Was your sleep interrupted when the baby was in the room? Strongly agree/ agree: 23.5%, neutral: 32.0%, strongly disagree/disagree: 44.5%; B. Did you enjoy spending time with your baby? Strongly agree/ agree: 95.0%, neutral: 4.5%, strongly disagree/disagree: 0.5%; C. Did you wish your baby had spent more time in the new born nursery? Strongly agree/ agree: 7.5%, neutral: 14.5%, strongly disagree/disagree: 78.0%; D. Did you want the same nurse for you and your baby during the hospital stay? Strongly agree/ agree: 95.0%, neutral: 5.0%, strongly disagree/disagree: 0%; E. Did you enjoy watching the physical examination of your baby in your room? Strongly agree/ agree: 91.5%, neutral: 7.5%, strongly disagree/disagree: 1.0%; F. Were you satisfied with doctors? Strongly agree/ agree: 98.0%, neutral: 2.0%, strongly disagree/ disagree: 0%; G. Were you satisfied with the nurses? Strongly agree/ agree: 99.0%, neutral: 1.0%, strongly disagree/disagree: 0%; H. Were you satisfied with medical student? Strongly agree/ agree: 84.5%, neutral: 13.5%, strongly disagree/disagree: 2.0%; I. Overall, were you satisfied with your hospital stay? Strongly agree/ agree: 96.5%, neutral: 3.0%, strongly disagree/disagree: 0.5%;

Conclusion: Mother-baby care promotes continuity of care, increase patient education and satisfaction. There is also the benefit of better communication and teamwork. Thus, mother-baby couplet care remains the best model of care for postpartum mothers, health care providers and healthcare facilities.

Introduction

There are two models of postpartum care implemented in hospitals currently. Family-centered care, also known as mother-baby couplet care, places the mother and baby in the same hospital room during the postpartum hospital stay under the care of same nurse. The second system involves the newborn staying primarily in the newborn nursery instead of the mother's room. As nearly 90% of American hospitals have transitioned to family-centered facilities, their primary goals were to facilitate family bonding, coordination of care, and overall patient satisfaction [1]. In addition, family-centered care also increases opportunities for teaching and initiating successful breastfeeding, easing the transition to motherhood [1, 2]. The purpose of this study was to evaluate patient satisfaction with a newly transitioned postpartum family-centered program at Northwest Texas Hospital and the potential benefits couplet care offers the mother and baby.

Method

A survey consisting of nine questionnaires on the topic of family couplet care was conducted at Northwest Texas Healthcare system, Amarillo, TX after IRB approval. A paper format questionnaire was distributed among the first time mothers and the multiparous women to compare their experience and satisfaction in family-centered care to the traditional nursery, and evaluate overall rates of satisfaction and breastfeeding in newly implemented family couplet care unit. We included all postpartum mothers who were above 14 years of age whose primary language was English. We excluded mothers whose babies were transferred to the neonatal intensive care unit. After exclusion, 197 postpartum mothers participated in this survey. A five-level Likert scale was used to grade their learning experience (1-strongly disagree, 2-disagree, 3-neutral, 4-agree, and 5-strongly agree).

Result

The results of the questionnaire analysis are presented in Table 1.

Discussion

Mother-baby couplet care is an old global concept yet its implementation in hospitals in developed countries has been delayed, and many hospitals still only offer the traditional model of a newborn nursery. Mothers and babies have a physiologic need to be together which significantly improves maternal and newborn outcome. According to the World Health Organization and United Nations Children's Fund, breastfeeding women should have uninterrupted skin to skin contact with their babies immediately after birth. Oxytocin, a maternal reproductive hormone which crosses through the placenta to the baby, increases significantly after the first hour of birth and plays an important role in promoting maternal/newborn attachments, preventing neonatal hypothermia, reducing maternal and newborn stress, and help-

ing the newborn transition to postnatal life [3, 4]. Also, keeping women and newborns in the same room has positive effects on breastfeeding during hospital stay and at discharge [5, 6, 7].

It has been documented that mother-baby couplet care provides more continuity of care [8]. Family couplet care gives an opportunity to have the same nurse provide care for both mother and baby. In this survey, 95% of the mothers strongly agreed with having the same nurse for them and their babies and 99% mothers were satisfied with the care provided by the same nurses. It was noted that 91.5 % mothers reported that they enjoyed watching physical examination of their babies in front of them, thereby reducing the communication gap regarding health history of both mother and baby. Also, 98% of the mothers were satisfied with care provided by the physicians in their room. Also, 84.5% of mothers were satisfied with care provided by medical students who are a part of the medical team in our hospital. Mother-baby couplet care is not only beneficial for mother and babies but also for the health care providers. One study reported that the nurses in single room maternity care showed great work satisfaction and were able to provide better care and teaching for families [9]. Mother-baby couplet care also promotes peer support, teamwork and coordination between nurses, physician, mothers and their families [9].

Family couplet care enhances mothers' satisfaction with their hospital stay [1, 7, 10]. In our survey, 96.5 % of mothers were satisfied with their hospital stay in a family couplet care unit. In addition, 76.5 % of mothers did not report that their sleep was interrupted when their child was in the same room and 78% mothers strongly disagreed that their newborn should be admitted to newborn nursery. It is well known that when mother is kept with her baby, she quickly learns to provide the best care and comfort for him. Also, newborn babies sleeping in close proximity to their mothers will enhance suckling frequency which plays an important role during early postpartum period to initiate successful breastfeeding [11].

Although our survey is limited by a relatively small sample size from a single hospital in Amarillo, Texas, its strength lies in the strong positive response received from the mothers who participated in this survey. Mother-baby couplet care promotes continuity of care, increase patient education and satisfaction, and benefits communication and teamwork. Thus, mother-baby couplet care remains the best model of care for postpartum mothers, healthcare providers and healthcare facilities.

References:

1. Waller-Wise R. Mother-baby care: The best for patients, nurses and hospitals. Nurs Womens Health.2012; 16(4), 273– 278.
2. DiGirolamo AM, Grummer-Strawn LM, Fein S. Effect of Maternity care practices on breastfeeding. Pediatrics 2008; 122(Supp 2):543-549.
3. Buckley SJ. The hormonal physiology of childbearing. New York, NY: Childbirth Connection. 2014.
4. Moore ER, Anderson GC, Bergman N, Dowswell T. Early skin-to-skin contact for mothers and their healthy newborn infants. Cochrane Database of Systematic Reviews. 2012; (5), CD003519.
5. Bramson, L, Lee JW, Moore E, Montgomery S, Neish C, Bahjri K, Melcher CL. Effect of early skin-to-skin mother-infant contact during the first 3 hours following birth on exclusive breastfeeding during the maternity hospital stay. Journal of Human Lactation. 2010; 26(2), 130–137.
6. Crenshaw JT. Healthy birth practice #6: Keep mother and baby together—It's best for mother, baby, and breastfeeding. Journal of Perinatal Education. 2014; 23(4), 211–217.
7. Rodgers M. (2012). Two peas in the same pod: Transitioning to couplet care. Journal of Obstetric, Gynecologic & Neonatal Nursing. 2012; 41(Suppl. 1), S96.
8. Driscoll D, Caico C. Critical pathways and mother-baby coupling. Nursing Management.1996; 27(12), 22–25.
9. Janssen PA, Harris S J, Soolsma J, Klein MC, Seymour LC. Single room maternity care: The nursing response. Birth. 2001; 28, 173–179.
10. Elliot t-Carter N, Harper J. Keeping mothers and newborns together after cesarean: How one hospital made the change. Nursing for Women's Health. 2012; 16(4), 290–295.
11. Ball HL, Ward-Platt MP, Heslop E, Leech SJ, Brown KA. Randomised trial of infant sleep location on the postnatal ward. 2006; 91(12): 1005–1010.

Table 1

Questions	Strongly agree/agree	Neutral	Strongly disagree/disagree
Was your sleep interrupted when the baby was in the room?	23.5 %	32.0 %	44.5 %
Did you enjoy spending time with your baby?	95.0 %	4.5 %	0.5 %
Did you wish your baby had spent more time in the new born nursery?	7.5 %	14.5 %	78.0 %
Did you want the same nurse for you and your baby during the hospital stay?	95.0 %	5.0 %	0 %
Did you enjoy watching the physical examination of your baby in your room?	91.5 %	7.5 %	1.0 %
Were you satisfied with doctors?	98.0 %	2.0 %	0 %
Were you satisfied with the nurses?	99.0%	1.0%	0%
Were you satisfied with medical student?	84.5%	13.5%	2.0 %
Overall, were you satisfied with your hospital stay?	96.5 %	3.0 %	0.5 %

Registered Respiratory Therapist - Not Your Traditional Inhalational Therapist

by Becky Byrd BS, RRT-NPS, RCP, Director of Clinical Education, Respiratory Care Instructor, Amarillo College

To many, a Registered Respiratory Therapist (RRT) may have the appearance of any other health professional. Allied health professionals are often mistaken for nurses in the hospital setting, but all it takes is a closer look to see distinct differences in the professions. The RRT has specialized job responsibilities that have developed over years of the profession's existence; these alone can differentiate the Respiratory Therapist from the nursing profession and other allied health professions. The American Association for Respiratory Care (AARC) has outlined milestones of the respiratory care profession in a virtual museum setting on their website: www.AARC.org. Below are some of the remarkable findings.

The profession of respiratory care initially was an 'on the job training' (OJT) program that was created by Dr. Edwin R. Levine at Michael Reese Hospital in Chicago, Illinois, in 1943. Dr. Levine's students were referred to as oxygen orderlies, and in July 1946, they along with doctors and nurses formed the Inhalation Therapy Association in Chicago. In 1957, a resolution was introduced to the American Medical Association House of Delegates to develop schools of inhalation therapy. The resolution called for a 3-year trial period for "Essentials for an Approved School of Inhalation Therapy Technicians." The schools were successful, and inhalation therapists were able to obtain a Registry Certificate beginning in 1960. By 1969, the American Association for Inhalation Therapy began credentialling through the Technician Certification Board for inhalation therapy technicians. From 1969-1974, over 10,000 practitioners were recognized as certified respiratory technicians (CRTT).

Locally, the Amarillo College Respiratory Care Program began in September 1972, on the Washington Street Campus, with the first graduating class in 1974. The Allied Health Sciences Building on Amarillo College West Campus was dedicated and opened in the fall semester of 1974, serving students studying the professions of Dental Assisting, Dental Hygiene, Radiography, Medical Lab Technology, and Respiratory Care. To date, these five programs are still supplying our local healthcare workforce with graduates and new employees. Amarillo College Respiratory Care Program has had a total of 396 graduates since inception, according to Tina Babb, Associate Registrar at Amarillo College. AC will add 13 new

graduates to that number in August for a total of 409 Associate of Applied Science degrees in Respiratory Care.

The Respiratory Care Practitioner (RCP) license is governed by the Texas Medical Board (TMB). Initially, RRT's were granted state licensure in Texas through the Texas Department of State Health Services (TDSHS) in 1986. With the passing of Senate Bill 202, the RT licensing authority passed from TDSHS to TMB, thus ensuring safety of the patient population through fingerprinting as well as DPS and FBI criminal history checks. Personal patient safety extends to therapeutic patient safety with the added health care responsibilities of the RRT. Gone are the days when the oxygen orderlies merely gave oxygen therapy, humidity therapy and aerosol therapy. Over the years, responsibilities of the respiratory therapist have increased in both their number and their complexity. Depending on the area in which the respiratory therapist is employed, their job descriptions vary. According to the AARC website, the following is an example of a day in the life of a respiratory therapist:

- Diagnosing lung and breathing disorders and recommending treatment methods.
- Interviewing patients and doing chest physical exams to determine what kind of therapy is best for their condition.
- Consulting with physicians to recommend a change in therapy, based on the therapist's evaluation of the patient.
- Analyzing breath, tissue, and blood specimens to determine levels of oxygen and other gases.
- Managing ventilators and artificial airway devices for patients who cannot breathe normally on their own.
- Responding to Code Blue or other urgent calls for care.
- Educating patients and families about lung disease so they can maximize their recovery.

Students earning an Associate of Applied Science in Respiratory Care are ready for the work force immediately upon graduation. This is due to the intense training received during the Respiratory Care Program. Respiratory Care students spend 1,000 hours in clinical training while attending AC. This does not include the hours spent in the simulation laboratory on West Campus or during the Inter-Professional Events held at TTUHSC SiMCentral, which have proven to be priceless. These strategies and techniques prepare future therapists with critical thinking scenarios and the knowledge base to function in emergency and critical care settings.

I was one of those 396 students who have graduated from the Amarillo College Respiratory Care Program. I feel blessed to have learned from the best instructors in the classroom and in facilities. By instructors, I not only include respiratory therapists, but doctors, nurse practitioners, RNs, LVNs, physical therapists, occupational therapists, EMT/paramedics, speech therapists, radiography technicians, and my list could go on and on. As respiratory therapists, we have the opportunity to practice our profession and to work with others who are specialists in their own fields—a combination that produces a symphony so unique that it alters the lives of our patients and their families. Respiratory therapists choose to fight for healing, for life, and for each breath!

The author would like to thank the following for contributing to this article: Neil Allen, RRT; Tina Babb; Valerie Hansen, RRT; Bill Young, RRT

I am a Paramedic Striving to Fulfill My Obligations to the Public Trust

by Paul Whitfield, Associate Professor Amarillo College EMSP Program

At any moment, on any day, someone might be faced with the most terrifying, desperate, helpless feeling of their life. They witness a small child being struck by a car. They discover a parent lying on the kitchen floor in some variable state of consciousness. They feel acute chest pain, dizziness and shortness of breath with an implosive, morbid sense of impending doom. They do the only thing they know to do – call 9-1-1.

Imagine the dire chaos and suffering one might witness in a hospital emergency department. Doctors are expediently yet methodically practicing the art and science of emergency medicine: placing central intravenous lines, relieving the tension of a collapsed lung, intervening to alleviate the manifestation of Acute Coronary Syndrome. Emergency nurses are working at an unrelenting pace to monitor the patient's condition and carry out doctor's orders. Phlebotomists are drawing blood for stat lab work. Radiographers are feverishly taking X-rays. Everyone there has a job to do and they execute their tasks with precision, their sole focus to give this acutely ill or injured person a second chance at life.

Now imagine the aforementioned scenario but in a street, residence, or other location 15 miles removed from a climate-controlled hospital. There are no electrically elevated, tilting and rotating treatment beds. There are no bright lights to be pulled from above to illuminate the work area. The only equipment available to assist me is in the ambulance I rode to the scene, and the only additional personnel is my partner. I am a paramedic.

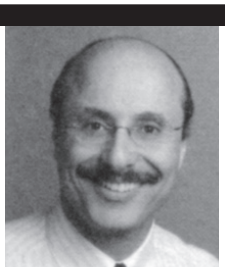
Though fully capable and licensed to work in a hospital environment such as an emergency department or critical care unit, most licensed paramedics work in the pre-hospital environment. We staff ground ambulances, helicopters and fixed-wing aircraft. The expected outcome of my performance is nothing less than that performed by my colleagues in the emergency department. The differences, though, are many. When something unanticipated happens or something goes wrong, there is no one but my partner to help. I cannot push a code button and summon a team of specially trained personnel for stat assistance. I cannot call to the room next door and summon a doctor or nearby colleague. It is just my partner and me … no one else.

The resolution of a patient's condition is up to us alone to stabilize or improve. We are responsible for dealing with any type of acute illness or injury one might find in an emergency department. Be it trauma, an acute cardiac event, a patient suffering an acute diabetic crisis, a broken bone, a dislocated joint, a collapsed lung … the list of maladies is virtually endless. Whether this patient lives or dies frequently depends on the care given by licensed paramedics prior to delivery to the hospital emergency department.

I am not an "ambulance driver," I am a paramedic. I am a medical practitioner of the often forgotten third emergency service. I work in the same environment as my brothers and sisters in law enforcement or the fire service; our professions are indeed symbiotic. In order to practice I am required to have a college degree and to graduate from a program that is nationally accredited by the Commission on Accreditation of Allied Health Education Programs. I am required to hold a National Registry attained by passing a national, standardized examination of didactic knowledge and psychomotor skills. I am required to attain and maintain a license issued by the Texas Department of State Health Services. I must regularly meet extensive, stringent continuing education requirements.

I work long shifts in all weather conditions, day or night. I am away from my family for long periods of time. I work in an incredibly stressful and often dangerous environment that regularly tests my courage, as well as my physical and emotional limits. I am a paramedic striving to fulfill my obligations to the public trust.

Note: Paul Whitfield is an Associate Professor in the Emergency Medical Services Professions Program at Amarillo College. Mr. Whitfield began his professional career as a firefighter with the City of Amarillo Fire Department while also working for Amarillo Medical Services, the 9-1-1 ambulance service. He holds an associate of applied science degree in emergency medical services professions from Amarillo College, a bachelor of science degree in biology from WTSU and a master of science degree from WTAMU in health education with an emphasis in wellness program development.



Syphilis

Reported by Tarek Naguib, M.D., MBA, FACP

Why syphilis?
The City of Amarillo, Department of Public Health, has reported 31 new cases of syphilis since the beginning of 2016 till the end of April, reflecting an increase from the comparable period last year that, in turn, witnessed an increase from the year 2014.

What is syphilis infection?
Syphilis is a sexually transmitted infection that initially causes skin lesions that can disappear spontaneously but the disease goes on to invade the blood causing rash and disfiguring perianal lesions and, years later, it invades the heart and the brain. Syphilis can also increase the risk for contracting HIV disease. Pregnant females who have the disease can cause problems during pregnancy and for the newborn.

How do I suspect syphilis infection?
Syphilis infection is suspected whenever a person notices a sore over the genitals with or without discharge days following sexual relation with someone who may be harboring the disease. However, the sore may not be visible in women if it lies on the cervix.

How to diagnose syphilis infection?
A diagnosis is suspected in the appropriate setting, as outlined above, and must be confirmed by a simple blood test.

What is the cause of syphilis infection?
The cause of syphilis infection is bacteria (called spirochetes) that spreads from genital discharge of the infected human to another during sexual activity. Spirochetes cannot be grown in usual bacterial cultures.

Risk factors for syphilis
These include:

- Unprotected sex (anal, oral, and vaginal sex)
- Anonymous sex (utilizing social media, apps, and websites to locate partners)
- Intravenous drug use

Severe cases of syphilis infection
Long standing syphilis infection for years may produce life threatening changes in the heart valves and the brain with dementia and weakness (called general paralysis of insane).

How do doctors treat syphilis infection?
Early on, syphilis responds well to appropriate antibiotics injections. However, whenever it affects the heart and the brain, the bacteria could be killed by antibiotic intravenous treatment, but the structural damage is not reversible.

How can I avoid syphilis infection?
Avoid syphilis by getting tested for STD regularly if you have risk factors and by reducing the number of your sex partners. Also, the use of condoms for every sexual encounter is protective against syphilis.

What is the difference between the sores of syphilis and herpes?
The herpes sores are shallow, small, and tender to touch, whereas syphilis sores are usually bigger and non-tender. Both disappear spontaneously, but while the herpes sores reappear later, the syphilis sores deceivingly do not reappear, but the infection goes on to other stages to involve the blood, skin, and later on, the heart and the brain.

As this page is provided for educational purposes only, it shall not be construed by any means to replace actual physician's management.

Sources reviewed: The United States Centers for Disease Control & Prevention website & Amarillo Bi-City, Bi-county Health Authority. http://www.cdc.gov/std/tg2015/default.htm.

Syphilis & other Infections in Amarillo - Amarillo Health Department Weekly Communicable Disease Report for the first 4 months of the year 2016 indicates 50 cases of dog bites, 38 cases of lead poisoning, and one case of Lyme disease. Also, 31 cases of syphilis were reported in Amarillo in the same period as compared with 47 cases in the whole year of 2015.

Syphilis Outbreak in Nevada County CDC (Nov 2015) – Public health officials declared an outbreak of syphilis in the Nevada county including Las Vegas making the county second only to Washington DC in the incidence of syphilis 12.8 vs 17.9 per 100,000 population.

First HIV-positive to HIV-positive Organ Transplant in US Infectious Disease News (4/1) – Johns Hopkins announced the first successful transplant among HIV-positive persons. The new approach will solve organ shortage problem for HIV-infected persons but requires matching HIV resistance pattern.

Trained Dogs Detect Bacterial Urine Infection Infectious Disease News (4/1) – trained dogs detected E.coli bacterial in 99.6% of infected urine samples (sensitivity) and recognized 91.5% of the negative samples as well (specificity). Dilution of the urine samples did not mislead the diagnosis by the dogs. Previously, trained dogs have been able to identify C. difficile infections in stool samples.

Antibiotics Stewardship Programs in VA Hospitals Infectious Disease News (4/1) – Out of 130 VA healthcare facilities surveyed only 38% (including Amarillo VA) had a team to control overuse of antibiotics.

VA Expands Hepatitis C Therapy for Veterans Infectious Disease News (4/1) – All veterans with hepatitis C infection will be eligible for treatment regardless of liver disease stage for fiscal year 2016, according to the Department of veterans Affairs, after Congress increased funding while drug prices decline.

Elderly to be treated for Hepatitis C Infectious Disease News (4/1) – Hepatology reported success of treating elderly persons with hepatitis C (genotype 1) with ledipasvir/sofosbuvir (Harvoni), making the case for providing treatment in this population.

HIV/HCV to be treated for hepatitis C Infectious Disease News (4/1) – Death toll has risen to 22% compared to 2% when treatment in this population was delayed until cirrhosis was well established, making the case for not delaying therapy in this population. This population that has both HIV and HCV exceeds 2.3 million globally, driven in part by persons who use intravenous drugs.

Flu Vaccine Successful Infectious Disease News (4/1) – The CDC reported that the 2015-2016 flu vaccine was successful at 59% as compared with the last year of 23%. The prevalent strain was H1N1 influenza A. In Amarillo, the peak was in early March while positive cases tapered down in May, according to the Amarillo Health Department.

Influenza Hits Poor People Harder JAMA (3/29) – Researchers evaluated hospital sites including 27 million people, or 9% of US population, over 2010-2012. They found an association between poverty and high influenza hospitalization rates regardless of geography, age, race, or ethnicity. Poorest hospitalized patients were less likely to be vaccinated against flu 35% compared with 48% of those living in most affluent areas.

Pacemaker with no Leads Approved JAMA (5/17) - A first of a kind pacemaker that regulates heart rate with no leads (wires) has received its FDAS approval. The one inch long device, that has less complication rate than conventional pacemakers, will be implanted directly into the right ventricle of the heart.

New Mexico Law Protects Patients Access to Care in Texas Texas Medicine (5/1) – A new law passed in New Mexico makes the liability laws of the state in which a patient received care now will govern cases involving New Mexicans seeking medical care across state lines, provided the patient signs a written consent before receiving treatment.

The new law improves access to care for New Mexicans in Texas after the ripples left by a law suit that was filed against a Texas doctor by a New Mexican - who received care in Texas - in New Mexico court.

Open Enrollment Up by One Million JAMA (3/29) – Approximately 12.7 million people enrolled in health insurance plans during the open enrollment ending Jan, 31, 2016, about one million people over the last year.

A Cost Analysis of Tuberculosis Screening and Treatment in a Refugee Population

AUTHORS: Cooper, Robert H1; Scott, Erica3; Smalligan, Roger2

Institutions: 1. Family Medicine, Texas Tech Univ HSC-Amarillo, Amarillo, TX, United States 2. Internal Medicine, Texas Tech Univ HSC-Amarillo, Amarillo, TX, United States 3. School of Medicine, Texas Tech Univ HSC-Amarillo, Amarillo, TX, United States

Purpose of Study:

The United States has a constant influx of refugees and they must be tested for illnesses endemic to their country of origin. Tuberculosis is one such infection which is typically screened for with a tuberculin skin test (TST) and read 48h later. The TST is highly sensitive in non-immunocompromised individuals with latent TB infection (LTBI). However, in people who have received the BCG vaccine or who have had non-tuberculosis mycobacterial (NTM) disease, the TST has a high false positive rate. Two interferon gamma release assay (IGRA) tests are available, including the T-SPOT, which has the advantage of not cross-reacting with the BCG or NTM. A drawback is the high cost of these tests which has limited their use. The aim of this study is to compare the cost of using the T-SPOT as confirmation of a positive TST in a refugee population versus treating all positive TST results.

Methods Used:

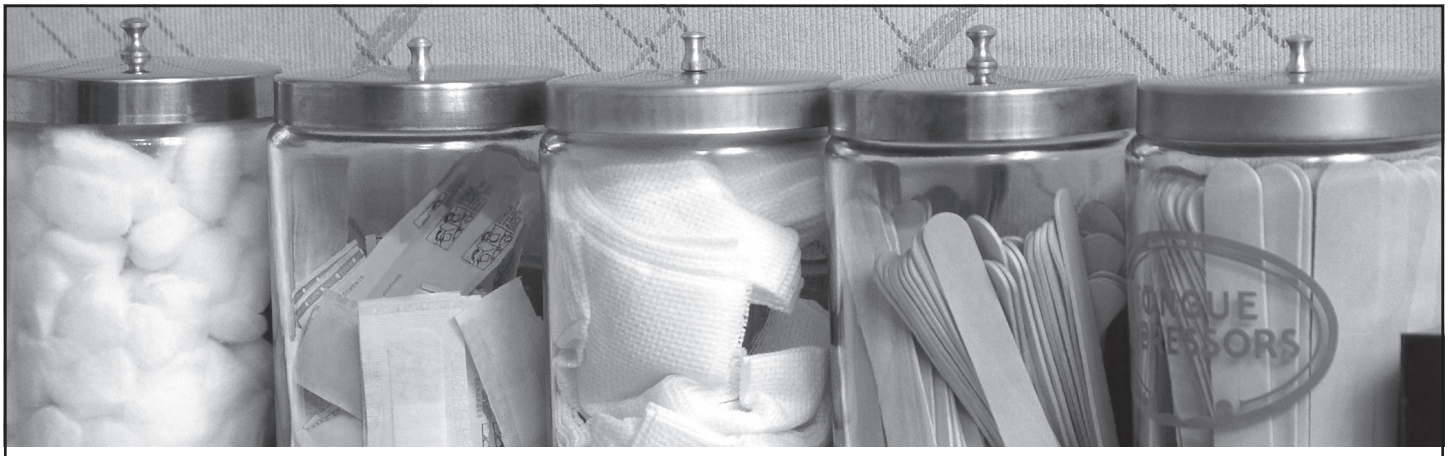
We reviewed data from January 2011 to August 2015 from the refugee program at the Amarillo, TX Public Health Department. During this time both the TST and the T-SPOT were used in order to identify who needed treatment for LTBI. Using the cost of tests, drugs, the office visits, medical personnel time and transportation, the total cost for treating positive TST patients was calculated. The cost difference of treating all positive TSTs versus only those with a positive confirmatory T-SPOT was calculated.

Summary of Results:

The false positive rate of the TST in this population, (T-SPOT=gold standard) was calculated to be 8.3%. The approach of treating only patients with positive TST confirmed by a T-SPOT resulted in a savings of $3,836 to the program.

Conclusions:

Treating all patients with a positive TST in a refugee population, with its inherent high false positive rate due to BCG vaccine and/or exposure to NTM is costly. Despite the high cost of using an IGRA test at the outset for all patients, the ultimate result is cost savings to the public health system. We propose that when the rate of false positives to the TST is increased, either all patients should be tested initially with an IGRA or any positive TST can be followed up with an IGRA. In the refugee population, the initial screen with an IGRA test saves even more time, effort and money in that the newly arrived patients do not have to be located 48h after placement of the TST for the reading.



PROFESSIONAL CARDS

Cardiology

AMARILLO HEART GROUP
Joaquin Martinez-Arraras, M.D.
Marc Moreau, M.D.
Prakash K. Desai, M.D.
Jon Luigi Haddad, M.D.
D. Gary Soya, M.D.
Agustin Cabrera-Santamaria, M.D.
Ismaile S.H. Abdalla, M.D.
Ernesto Rivera, M.D.
Arunava D. Ray, M.D.
A. Alan Chu, M.D.
Rajesh Nambiar, M.D.
1901 Port Lane
Amarillo, TX 79106-2430
(806) 358-4596 • 1-800-355-5858
www.amarilloheartgroup.com

Cardiovascular & Thoracic Surgery

Masoud A. AlZeerah, M.D., F.R.C.S.C.
Radiofrequency ablation for varicose veins & spider veins
1301 S. Coulter, Suite 103
Amarillo, TX 79106
(806) 463-1712 • Fax (806) 463-1715
www.amarilloveins.com

Dermatology

HIGH PLAINS DERMATOLOGY CENTER, P.A.
Turner Caldwell III, M.D.
Larry C. Roberts, M.D.
Scott D. Miller, M.D.
Jason K. Jones, M.D.
Christi A. Baker, M.D.
4302 Wolflin Ave.
Near I-40 & Western
355-9866

Gastroenterology

Abdul Thannoun, M.D.
3501 S. Soncy Road #107
Amarillo, TX
(806) 354-2400 • Fax (806) 354-8070
www.amarillogastro.com

Hearing

PHYSICIANS HEARING CENTER
Royce A. Armstrong, Au.D., CCC-A
Steven Allred, Au.D., CCC-A
3501 S. Soncy Road #140
Amarillo, TX
(806) 352-6901 • Fax (806) 352-2245

Hospice/Palliative Medicine

GENTIVA HOSPICE
Eric Cox, M.D.
Board Certified in Hospice & Palliative Care
3232 Hobbs Road
Amarillo, TX 79109
806-372-7696 (ofc)
800-572-6365 (toll free)
806-372-2825 (Fax)
www.gentiva.com

Internal Medicine

Ruth Pilco-Jaber, M.D.
Board Certified in Internal Medicine
3501 Soncy Road, Suite 131
Amarillo, TX 79119
(806) 467-9111 • Fax (806) 467-9333

Mouin M. Jaber, M.D.
Board Certified in Internal Medicine
3504 N.E. 24th
Amarillo, TX 79107
(806) 381-1732 • Fax (806) 381-0748

AMARILLO DIAGNOSTIC CLINIC
6700 W. Ninth
Amarillo, TX 79106
(806) 358-0200

Endocrinology
Susan T. Wingo, M.D.

Gastroenterology
Daniel A. Beggs, M.D.
R. Todd Ellington, M.D
Jake C. Lennard, Jr., M.D.
James E. Lusby, M.D.
Thomas L. Johnson, M.D.

Infectious Disease
J. Taylor Carlisle, M.D.

Internal Medicine
Holly Mitchell, M.D.
Joanna Wilson, D.O.

Neurology
Douglas Lewis, D.O.
Sean Milligan, M.D.

Nuclear Medicine
Bill F. Byrd, M.D.

Pulmonary Diseases
Bruce Baker, M.D.
Timothy S. Mooring, M.D., D, ABIM
Gary R. Polk, M.D., D, ABSM
Javier Dieguez, M.D.

Rheumatology
Ming Chen, M.D., Ph.D

Sleep Disorders
Timothy S. Mooring, M.D., D, ABIM
Gary R. Polk, M.D., D, ABSM

Physician Extenders
Tiffany Ferrell, RN, MSN, FNP-C
William A. Ledford, RN, MSN, FNP-C
Teresa Pattison-Thomas, P.A.-C
Cindy Anderson, RN, MSN, FNP-C
Kyla Beedy, RN, MSN, FNP-C
Ashley Quillin, RN, MSN, FNP-C

Neurosurgery

Jeffrey D. Cone, M.D., F.A.C.S.
Neurological & Spinal Surgery
Board Certified - American Board of Specialization
6822 Plum Creek Drive
Amarillo, TX 79124
(806) 373-3177 • Fax: (806) 373-0423

Bret D. Errington, M.D.
Board Certified by the American Board of Neurological Surgery - Cranial and Spinal Neurosurgery
7120 W. 9th
Amarillo, TX 79106
(806) 463-2251 • Fax: (806) 463-2252

J. Brett Gentry, M.D.
Neurological & Spinal Surgery
Board Certified - American Board of Neurological Surgery

Wayne S. Paullus, M.D.
Neurological & Spinal Surgery
Board Certified - American Board of Neurological Surgery

PROFESSIONAL CARDS

Wayne "CP" Paullus III, M.D.
Neurological & Spinal Surgery
#11 Medical Drive
Amarillo, TX 79106
(806) 353-6400 • (800) 358-2662
www.swneuro.com

OBSTETRICS & GYNECOLOGY

PANHANDLE OBSTETRICS & GYNECOLOGY
Dudley E. Freeman, M.D.
Gregory A. May, M.D.
Cullen Hopkins, M.D.
George Barnett, M.D.
Jamie Wilkerson, M.D.
Sarah Bergeron, RNC, WHNP
Brenna Payne, RNC, WHNP
Haylee DeVries, PA-C
7620 Wallace Blvd.
Amarillo, TX 79124
(806) 359-5468 • Fax (806) 358-1162

WOMEN'S HEALTHCARE ASSOCIATES, P.L.L.C.
Carin C. Appel, M.D.
Rhodesia A. Castillo, M.D.
Pamela A. Chandler, M.D.
David L. Chastain, M.D.
Brian J. Eades, M.D.
Jill A. Gulizia, M.D.
Clyde A. Meeks, M.D.
Amanda Murdock, M.D.
Stephanie Crockett, MSN, RN, FNP, BC
Brenna Melugin, FNP, BC
Brooke Hillard, FNP, BC
1301 Coulter, Suite 300
Amarillo, TX 79106
(806) 355-6330 • Fax (806) 351-0950
whaonline.net

TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER DEPARTMENT OF OBSTETRICS AND GYNECOLOGY
Amarillo Campus
1400 Coulter • 414-9650
www.ttuhsc.edu/amarillo/som/ob

OBSTETRICS & GYNECOLOGY
Hena Tewari, M.D.
Teresa E. Baker, M.D.
Paul E.Tullar, M.D.
Usha Sethi, M.D.
Nika Vinson, M.D.
Catherine Wheatley, M.D.
Jeffrey Wang, D.O.
Chad Winchester, MSN, WHNP
Diana R. Parker, RNC, WHNP
Carisa Sullivan, RNC, FNP

GYNECOLOGIC SURGERY
Hena Tewari, M.D.
Teresa E. Baker, M.D.
Paul E. Tullar, M.D.
Robert P. Kauffman, M.D.
Catherine Wheatley, M.D.
Nika Vinson, M.D.
Jeffrey Wang, D.O.

MENOPAUSAL MANAGEMENT
Robert P. Kauffman, M.D.
REPRODUCTIVE MEDICINE & INFERTILITY
PEDIATRIC GYNECOLOGY
GYNECOLOGIC ULTRASOUND
Robert P. Kauffman, M.D.

URODYNAMIC TESTING & INCONTINENCE MANAGEMENT
Paul E. Tullar, M.D.
Nika Vinson, M.D.

MATERNAL FETAL MEDICINE
OBSTETRIC ULTRASOUND
Heather J. Holmes, M.D.
www.ttuhsc.edu/amarillo/patient/obgyn/ultrasound

GENETIC COUNSELING
Shirley Karr, MSN
Heather Wheeler, RN

OPHTHALMOLOGY

PANHANDLE EYE GROUP, L.L.P.
Specializing in the Diseases & Surgery of the Eye
www.paneye.com
Amber Dobler-Dixon, M.D.
Glaucoma Laser & Surgery
Amarillo: 7411 Wallace Blvd.
(806) 350-1100 • (866) 567-0948
Robert E. Gerald, M.D.
Comprehensive Ophthalmology, Cataract & Refractive Surgery
7308 Fleming Ave.
Amarillo, TX 79106
(806) 359-7603 • (800) 283-8018
John W. Klein, M.D.
Comprehensive Ophthalmology, Cataract Surgery
13 Care Circle
Amarillo, TX 79124
(806) 353-2323 • Fax (806) 351-2323
(888) 393-7488

C. Alan McCarty, M.D.
Comprehensive Ophthalmology, Cataract Surgery
7411 Wallace Blvd.
Amarillo, TX 79106
(806) 351-1177 • (800) 782-6393
W. John W. Murrell, M.D.
Comprehensive Ophthalmology, Cataract & Oculoplastic Reconstructive Eyelid Surgery
7411 Wallace Blvd.
Amarillo, TX 79106
(806) 351-1177 • (800) 782-6393
J. Avery Rush, M.D.
Cataract & Refractive Surgery
Sloan W. Rush, M.D.
Cornea, Cataract & Refractive Surgery
7308 Fleming Ave.
Amarillo, TX 79106
(806) 353-0125 • (800) 225-3937
Bruce L. Weinberger, M.D.
Comprehensive Ophthalmology, Cataract & Refractive Surgery
700 Quail Creek Dr.
Amarillo, TX 79124
(806) 353-6691 • (800) 637-2287
J. Edward Ysasaga, M.D.
Antonio V. Aragon, II, M.D.
Ryan Rush, M.D.
Diseases & Surgery of the Retina, Vitreous, & Macula
7411 Wallace Blvd.
Amarillo, TX 79106
(806) 351-1870 • (888) 404-1870

ONCOLOGY

HARRINGTON PHYSICIANS, INC.
Power of ONE
MEDICAL ONCOLOGY
Brian Pruitt, M.D.
MEDICAL ONCOLOGY/HEMATOLOGY
Stewart Sharp, M.D.
Suhasini Nadesan, M.D.
Anita Ravipati, M.D.
Harrington Cancer Center
1500 Wallace Blvd.,
Amarillo, TX 79106
(806) 359-4673 • Fax (806) 354-5888
www.harringtoncc.org

PROFESSIONAL CARDS

Orthopaedic Surgery

Michael O. LaGrone, M.D.
Reconstructive Spine Surgery, Scoliosis, Pediatric Orthopaedics Board Certified
1600 Coulter, Bldg. B
Amarillo, TX 79106
(806) 354-2529 • Fax (806) 354 2956
www.scoliosismd.com

Michael S. Manderson, M.D.
Adult Reconstructive Spinal Surgery Board Certified
13 Medical Drive
Amarillo, TX 79106
(806) 322-1333 • Fax (806) 322-1334

James R. Parker, M.D.
Board Certified Specializing in Sports Medicine & Total Joint Replacement
7000 W. 9th Ave.
Amarillo, TX 79106
(806) 350-2663 • Fax (806) 350-2664

Aubrey L. Smith, M.D.
Orthopaedic Surgery, Arthroscopic & Reconstructive Surgery / Shoulder Surgery Board Certified - Fellow of the Academy of Orthopaedic Surgeons
1600 Coulter, Bldg. B
Amarillo, TX 79106
(806) 359-0718 • Fax (806) 359-9613

Otolaryngology (ENT)

PANHANDLE EAR, NOSE & THROAT
3501 South Soncy Road, Ste. 140
Amarillo, TX 79119-6405
(806) 355-5625 Fax (806) 352-2245
Stacie Morgan, M.D.
Amber Price, M.D.
Geoffrey Wright, M.D.

Pain Management/ Treatment

AMARILLO PAIN ASSOCIATES
Thomas E. Merriman, M.D.
1901 Medi Park Place
Suite 2002
Amarillo, TX 79106
(806) 353-4699 • Fax (806) 353-4551

ADVANCED PAIN CENTER
Robert Paige, M.D.
6819 Plum Creek
(806) 463-1789 • Fax (806) 355-2469

Victor M. Taylor, M.D.
7910 SW 34th
(806) 352-7431 • Fax (806) 352-2374

Pediatrics

Meganne Walsh, M.D.
716 North Polk
Amarillo, TX 79107
(806) 374-5900 • Fax (806) 374-5914

TEXAS TECH PHYSICIANS OF AMARILLO
Pediatrics/Pediatric Subspecialties
1400 S. Coulter • (806) 354-5437
Children with Special Needs/ Pediatric Surgery
1400 S. Coulter, Suite 1300
(806) 356-4760
Neonatal Intensive Care Service - (NWTH)
(806) 354-1390
Pediatric Intensive Care Service - (NWTH)
(806) 354-1585
Adolescent Medicine
Marita Sheehan, M.D.
Pediatric Behavior/Development
Angela Huang, M.D.
Pediatric Cardiology
Srilatha Alapati, M.D.
Pediatric Gastroenterology
Abiodun Johnson, M.D.
Pediatric Genetics
Golder Wilson, M.D.

TEXAS TECH PHYSICIANS OF AMARILLO
Pediatric Hematology/Oncology
Curtis Turner, M.D.
Pediatric Nephrology
Tetyana Vasylyeva, M.D.
Emily Howard, PA
Pediatric Pulmonary (Cystic Fibrosis)
Adaobi Kanu, M.D.
Pediatric – General
Todd Bell, M.D.
Oluyemisi Fatunde, M.D.
Amanda Griffin, M.D.
Shannon Herrick, M.D.
Vinod Sethi, M.D.
Marita Sheehan, M.D.
Andrew Relph, D.O.
Huang Petersen, NP
Brittany Thomas, PA
Pediatric Surgery
Janet Meller, M.D.
Jason Nirgiotis, M.D.
Children with Special Needs
Walter Bridges, M.D.
Rolf Habersang, M.D.
Pediatric Endocrinology
Alison Lunsford, M.D.
Sue Rankin, R.N., M.S.N., F.N.P.

Plastic & Reconstructive Surgery

Mary Ann Piskun, M.D.
Board Certified by the American Board of Plastic Surgery
1801 Halstead, Ste. B
Amarillo, TX 79106
(806) 358-8731 • Fax (806) 358-8837

Rouzbeh Kordestani, M.D., M.P.H.
Plastic, Aesthetic, Reconstructive & Hand Surgery
3501 Soncy, #137
Amarillo, TX 79119
(806) 322-5438 • Fax (806) 322-5505
www.drkordestani.com

Patrick Proffer, M.D., F.A.C.S.
Cosmetic, Reconstructive & Hand Surgery
Board Certified by The American Board of Plastic Surgery
Member of the American Society of Plastic Surgery
1611 Wallace
(806) 352-1185 • Fax (806) 352-4987
www.drproffer.com

PROFESSIONAL CARDS

Radiology

HIGH PLAINS RADIOLOGICAL ASSOCIATION
1901 Medi Park, Suite 2050
Amarillo, TX 79106
(806) 355-3352 • Fax (806) 355-5367
John Andrew, M.D.
Gary Aragon, M.D.
Branch Archer, M.D.
Richard Archer, M.D.
Gayle Bickers, M.D.
Charles Brooks, M.D.
Crandon Clark, M.D.
Stanley Cook, M.D.
Tully J. Currie, M.D.
Michael Daniel, M.D.
Aaron Elliott, M.D.
Christina Fox, M.D.
Stephan Haas, M.D.
Michael Hall, M.D.
Arouj Hashmi, M.D.
Richard Khu, M.D.
Rahul Mehta, M.D.
Paul Pan, M.D.
Robert Pinkston, M.D.
Matthew Scalapino, M.D.
Rakesh R. Shah, M.D.
Martin Uszynski, M.D.
Kimberly Waugh, M.D.
Lawrence Zarian, M.D.

Senior Living

THE CRAIG
Senior Living
5500 S.W. 9th Avenue
Amarillo, TX
(806) 352-7244
craigseniorliving.com

Surgery

Victor V. Hands, M.D., F.A.C.S.
Peripheral Vascular Surgery, General and Laparoscopic Surgery
BOARD CERTIFIED
2418 S.W. 8th Ave.
Amarillo, TX 79106
(806) 376-4385

Surgery

AMARILLO SURGICAL GROUP
6 Medical Drive
Amarillo, Texas 79106
(806) 212-6604 Fax (806) 212-0355

Peter Baay, MD
Cardiothoracic Surgery

David Langley, MD
General / Vascular Surgery

Shane Holloway, MD
Surgical Oncolory / General Surgery

Michael Lary, MD
General Surgery

Chance Irwin, MD
General / Vascular Surgery

John McKinley, MD
General Surgery

CliffNotes

Insurance Made Simple

Professional Liability
Commercial
Personal
Employee Benefits

Get it All with One Call

n&w INSURANCE

Cliff Craig, CPCU, CIC
(806) 376-6301
ccraig@neely.com

For more than 35 years, TMLT has proudly defended physicians in Texas. And now, for the first time, we're offering our strong, flexible medical liability coverage and winning defense strategies to physicians working outside the Lone Star State.

Introducing Lone Star Alliance, RRG, a risk retention group operated by TMLT. Through Lone Star, you can practice outside of Texas and still receive TMLT-level coverage and service. If you leave Texas (though we can't imagine why anyone would want to do that), you're still covered. With Lone Star, we can protect you, wherever you grow.

Learn more at www.tmlt.org/lonestar

LONE STAR ALLIANCE
A RISK RETENTION GROUP

PROTECTION WHEREVER YOU GROW.

512-425-5890 | sales@lonestara.com | www.lonestara.com

TMLT
Texas Medical Liability Trust

PANHANDLE HEALTH
A QUARTERLY PUBLICATION OF THE POTTER-RANDALL COUNTY MEDICAL SOCIETY

1721 HAGY
AMARILLO, TEXAS 79106

Non-Profit
Organization
U.S. Postage
PAID
Permit No. 247
Amarillo, Texas