We thank you for allowing us to spend our time with purpose and to strive each and every day to make the world a better place.
Letter from the Director

Watershed is a word most people have heard. It has two common definitions. One definition is “an area or ridge of land that separates waters flowing to different rivers, basins, or seas.” The other is “an event or period marking a turning point in a course of action or state of affairs.” This past year in the F. Marie Hall Institute was just such a year. It was our watershed.

This year the Texas Tech University Health Sciences Center embarked on a journey toward a values-based culture. It’s our intention to live out our life at work guided by what we say we believe. We have decided we will fulfill our vision and mission as one team, being kindhearted, acting with integrity, being visionary, and going beyond service. We have together as members of TTUHSC staked the high ground and from henceforth our river will flow to a different place. For the Institute, it is a reminder of how we have tried to work since our beginnings – a recommitment to what has set us apart that is now the culture around us and we are committed, even enthusiastic, about the change.

This year we have been very successful in writing grants and contract proposals. Of the seven applications we submitted, five were funded. Our team has brought in new state and federal funding and programs and we have sustained some of our legacy, bedrock programs. In this report you will probably recognize both the new and the continuing programs. The key thing about the Institute’s funding is that we have three streams of funding – endowment, grants and contracts, and state appropriations. As any civic-minded Texan knows, we are about to enter into the political season with the upcoming biennial legislative session. Unless we prevail in educating our legislators about the enormous value of the West Texas AHEC and those others in the state, too, we eliminate a very successful way that youth are recruited to health careers through efforts like Texas Hot Jobs, the AHEC Scholars Program, and shadowing with preceptors that is a proven way to ensure graduates remain to work in rural areas.

The Office of Rural Health is on the block as well; part of a special line item that has been funded for years, the subject of a last minute compromise to sustain all such funding items in the last legislative session, it is not expected to be funded this time around. The Office of Rural Health has been the entity around which many innovative programs in health has been sustained – things like community needs assessments that are required for all critical access and rural hospitals to keep their non-profit status with the IRS. Those studies would cost over $25,000 if not available from the Office of Rural Health, which provides them as a service to entities that often operate on a razor-thin margin to stay in business. Moreover, it is the Office that provides much of the required matching funding for grants like HB131 that fund the innovative and much-acclaimed Telemedicine Intervention Triage Wellness and Referral (TWITR) Project that provides much needed mental health resources to ISDs in rural areas that lack enough mental health resources for the children that need them.

~ Dr. Billy U. Philips, Jr.

Dr. Billy U. Philips, Jr., PhD, MPH
Why is it so crucial for the state to be concerned with health care across this rural and remote half of the state? The answer lies within the vast resources that West Texas contributes and the people who make it all possible.

West Texas plays a significant role in the daily lives of most Americans as a primary source of food, fuel, and fiber. West Texas is home to major beef and pork production, including some of the world’s largest cattle feedlots. We have some of the top producing oil and gas fields in the nation as well, and the region also serves as a prominent source of agriculture for the country.

The Texas Tech University Health Sciences Center is centered in the midst of this perfect rural research environment and is uniquely situated to lead efforts that go beyond statistics to create real-world rural health solutions.

Serving West Texas

OUR FOCUS

HEALTH TECHNOLOGY

1. Telemedicine and telehealth training, health IT support, practice management, clinical quality coaching and network improvement support.

HEALTH EDUCATION

2. Coordination of pipeline activities to recruit and engage students to enter the health care workforce and practice in rural West Texas.

BEHAVIORAL HEALTH

3. Behavioral health counseling, triage, intervention and referral for West Texas public school students via LPCs and telemedicine.

Administration Staff

ADMINISTRATION STAFF (LEFT TO RIGHT): Miguel Carrasco, IT Support Technician; Laura Lappe, Associate Director; Sarah Lomeli, Director of Staff Relations; Tamara Lawrence, Admin Assistant; Camarano Onks, Attorney; Dolores Parrish, Assistant for Staff Relations; Christina Smith, Admin Assistant.
Innovations in Healthcare Technology (InHT)

Telemedicine, Telehealth, and Health IT Support

Our Innovative Healthcare Transformation division (InHT) assists health care providers and hospitals in modernizing their organizations with the use of telehealth and telemedicine technology.

TRAVIS HANSON, JD, MS
InHT EXECUTIVE DIRECTOR
The Texas Tech University Health Sciences Center (TTUHSC) Telemedicine Program continues to bridge access barriers in the 108-county service area of West Texas.

The TTUHSC Telemedicine Program provides patient services including rural health clinic-based specialty care, school-based clinic primary care, correctional telemedicine, and mental health services, including a school-based triage and referral project and an HIV+ clinic for uninsured and underserved patients.

Telemedicine encounters and miles saved for FY 2017-18 included the following:

- 1,246 Total Patient Encounters
- 438 Correctional Patient Encounters
- 708 Community Patient Encounters
- 216 Infectious Disease Clinic Patient Encounters

The telemedicine program at Texas Tech University Health Sciences Center has been recognized nationally through several distinctions and honors.

Telemedicine program staff provided demonstrations to 518 people in FY 2017-18, exceeding their target of reaching 500 with Telemedicine demonstrations.

Telemedicine also provided practical training opportunities to TTUHSC students and residents to better prepare them for future use of such technologies.

Looking ahead, the TTUHSC Telemedicine program will continue to create awareness of telemedicine programs and the use of technology in medical practice among local physicians, administrators, and health service providers, as well as in surrounding areas. Awareness includes the advancements of telemedicine and other technologies, improvements in reliability, simplicity of equipment/software use and the potential that exists to expand telemedicine to West Texas communities and beyond, seeking help to overcome barriers to care and increase access to health services.
The TexLa Telehealth Resource Center is a federally funded program designed to provide technical assistance and resources to new and existing Telehealth programs throughout Texas and Louisiana. Nationally, there are a total of 14 TRCs, which include 12 Regional Centers, all with different strengths and regional expertise, and 3 National Centers, one focusing on Technology Assessment, one on Telehealth Policy and one providing technical assistance regarding State policies affecting the use and deployment of telehealth services. The TexLa TRC works to eliminate barriers and supports the expansion of telehealth throughout the region.

The Frontiers in Telemedicine Course is a unique program that trains clinical staff about telemedicine, including clinical encounters, telemedicine technology, etiquette and ethics, and telemedicine billing.

A total of 57 providers were trained in the FIT Lab in FY 2017-2018.

New curriculum was created to train students from the School of Health Professionals Clinical Counseling program.

New curriculum was created to train students in the Community Health Workers Bridge to Excellence course.

The FIT Lab teaches students in a hybrid format, with online modules, live lectures, and hands-on demonstrations and practices.

Student competency is tested through the use of Objective Structured Clinical Examinations (OSCEs) using standardized patients.

The TexLa Telehealth Resource Center reached 103,899 individuals in FY 2017-18 by outreach and education through speaking engagements, workshops, conference exhibits and booths, websites and social media.

164K OUTREACH CONTACTS IN FY 2017-18

435 CLIENTS ASSISTED IN FY 2017-18

The TRC provides technical assistance to advance telehealth across Texas and Louisiana. Technical assistance describes the information, tools and resources provided addressing such telehealth topics as technology, policy and reimbursement.

TRAINING CLINICAL STAFF

From February 1, 2016, the FIT Lab has trained 240 professionals in Emergency Medicine, Dermatology, Psychiatry, Pediatrics, Internal Medicine, and various Public Health specialties, including department chairs from multiple campuses of TTUHSC.
Next Generation 911 Project

PILOT PROJECT

Created and funded by Texas House Bill 479, the Texas Commission on State Emergency Communications and TTUHSC were asked to establish a pilot project which would place telemedicine equipment in Emergency Medical Service (EMS) units.

FY 2017-2018

The project successfully installed telemedicine equipment in an additional rural EMS unit in 2018, bringing the total to five: Scurry County EMS and Cogdell Memorial Hospital, Medical Arts Hospital EMS, Andrews EMS and Permian Regional Medical Center, Seminole EMS and Seminole Hospital District and Bailey County EMS.

LOOKING AHEAD

We plan to implement additional ambulances next year. Other goals of the project include improving care communications and proving cost savings by directing patients to more appropriate treatment facilities without screening in hospital emergency departments.

The TTUHSC Telemedicine, Wellness, Intervention, Triage and Referral (TWITR) project was created following a grant from the Criminal Justice Division, Office of the Governor for the State of Texas to create a model for identifying students at risk for committing school violence and intervening with those students before acts of violence occur.

The TWITR screening process utilizes Licensed Professional Counselors (LPCs) that visit partner school districts to aid in identifying the need for crisis intervention and other behavioral problems experienced by adolescents.

When the screening of a student by LPCs indicates the need for an appointment with a psychiatrist, that visit and referrals for ongoing care occurs via telemedicine almost immediately which reduces what can often be a months-long wait for an initial visit with a psychiatrist. This process is especially important in rural west Texas as there is a lack of availability of mental health professionals.

Once a student is identified and screened by a TWITR LPC, a telemedicine laptop and speakers are connected to the Lync Microsoft Software to a video conference with a TTUHSC psychiatrist. During this virtual visit, the student becomes a patient of the TTUHCS psychiatry department and begins treatment through the video conference.

Telemedicine, Wellness, Intervention, Triage and Referral (TWITR)

The TTUHSC Telemedicine, Wellness, Intervention, Triage, and Referral project was created following a grant from the Criminal Justice Division, Office of the Governor for the State of Texas to create a model for identifying students at risk for committing school violence and intervening with those students before acts of violence occur.
In partnership with the Texas Department of Agriculture State Office of Rural Health (TDA SORH), the Texas Tech University Health Sciences Center (TTUHSC) F. Marie Hall Institute for Rural and Community Health (FMHIRCH) offered an Ultrasound Education Initiative to Small Hospital Improvement Project (SHIP) hospitals in Texas. This project provided training about the benefits/uses of handheld ultrasound and demonstrations of a handheld ultrasound device.

Training took place in four quadrants of Texas in 2017, and each live training was preceded by a webinar-offering of the same training, for eight training opportunities in total. Handheld ultrasounds were then purchased/deployed to interested facilities for approximately one-month trial use. Facilities were asked to complete data sheets during the trial, and data about handheld ultrasound use will be collected and sent to the TDA SORH. Facilities that were interested in purchasing a similar device had the opportunity to purchase at bulk pricing, using SHIP funding, and several took advantage of that opportunity.

Four Quadrants
Training took place in four quadrants of Texas in 2017:
- Potter County in June
- Lavaca County in July
- Ector County in August
- Limestone County in September

Eight Devices
Eight handheld ultrasounds were purchased/deployed to interested facilities for approximately one-month trial use. Facilities were asked to complete data sheets during the trial, and data about handheld ultrasound use will be collected and sent to the TDA SORH. Facilities that were interested in purchasing a similar device had the opportunity to purchase at bulk pricing, using SHIP funding, and several took advantage of that opportunity.

Fifty-Four Facilities
We managed routing of handheld ultrasound units to participating SHIP hospitals and provided technical assistance as needed until 06/19/2018.

South Plains Veterans Telemedicine Services

Veterans often have difficulty accessing mental health care when they need it. We serve those who served.

According to the latest American Community Survey estimates, nearly nine percent of the almost 16,000 Lubbock County veterans live below the poverty level, a higher rate than Austin, San Antonio, Houston, El Paso or Dallas/Ft. Worth.

The VETSTAR grant project, 34 veterans with other than honorable discharges were assessed for mental health dispositions involving PTSD and Military Sexual Trauma, and 25 of the veterans were treated through counseling and other services. A total of 75 sessions were provided to the veterans in FY 2017-18. Veterans, veteran family members, and surviving spouses were all considered eligible to participate in the program.

By the Numbers

Why Telemedicine?
Telemedicine provides access to mental health services not available in rural areas. Tele-psychiatry helps to minimize the costs to veterans of traveling to distant cities for care.

How great is the need?
44 percent of veterans need some mental health care. 40 percent of West Texas veterans live in rural areas where mental health professionals are in short supply.

What counties do we serve?
All 20 of the counties the program serves are located in rural West Texas and have been designated Mental Health Professional Shortage Areas (MHPSA).
Transforming Communities through Outreach, Recruitment & Education (T-CORE)

Education and outreach, youth recruitment and counseling, and community health worker training

T-CORE was created to describe the programs that have evolved within the West Texas AHEC division of the F. Marie Hall Institute for Rural and Community Health. In addition to West Texas AHEC, programs under T-CORE include Community Health Worker Development Bridge to Excellence, Scrubs Club, Double T Health Service Corp and the Youth Empowerment Training Initiative (YETI).

DEBRA FLORES, PhD, MA
EXECUTIVE DIRECTOR OF T-CORE

T-CORE Staff

T-CORE STAFF (TOP TO BOTTOM, LEFT TO RIGHT): Jeff Carr, YETI Program Coordinator; Adrienne Harrell, Program Manager; Celeste Hoffman, Health Careers Promotion Coordinator; Estela Salazar, Senior Community Health Worker; Frances Quintana, Senior Health Promotions Coordinator.
West Texas AHEC accomplishments for FY 2017-18 include:

- Provided health career education to 26,216 students
- Exceeded the stated target of placing 454 students in rotations
- Initiated 30 youth health service corps, also known as AHEC Jr. Scholar programs
- Supported 2 Double T collegiate student groups
- Exceeded the set goal by supporting a total of 2,914 health professionals via an annual conference and other hosted continuing education and professional development events for health care professionals.

In 2018-19, West Texas AHEC will continue to focus on establishing Youth Health Service Corps programs throughout the region, stipends for students through the AHEC Scholars program and community-based learning experiences through the CHW Bridge to Excellence and Telemedicine programs.

West Texas AHEC has designed a comprehensive longitudinal AHEC Scholars Program. The Scholars Program curriculum will consist of 80+ hours of didactic and interdisciplinary training, to be delivered over the two year period (40 hours per year), addressing each of the six (6) core topic areas at various parts of the course.

West Texas AHEC’s Scholars Program begins with a formal application process. To ensure AHEC Scholars will reflect a diverse student body with representation from disadvantaged backgrounds and underrepresented minorities. Each of the six (6) AHEC Centers will take part in the Scholar Program and administer the curriculum to a cohort of 15 – 25 new students per year. Students will be drawn from a variety of institutions, backgrounds, and professions. Each cohort will include students from multiple disciplines. Interprofessional practice and education are critical to optimizing patient outcomes and safety and meeting the challenges of the triple aim. The West Texas AHEC Scholars Program activities are structured to emphasize interdisciplinary learning objectives and outcomes throughout the course, including activities that cover descriptions of different job specialties, modules that teach students how to effectively work as an interdisciplinary team, and interviews with currently practicing health professionals from a variety of professions.

Desert Mountain AHEC: Daniel Camacho, Center Director for Desert Mountain AHEC received Mentor of the Year Award from HOSA. The Desert Mountain HOSA team won the following awards during the National HOSA Competition:

- Provided health career education to 26,216 students
- Exceeded the stated target of placing 454 students in rotations
- Initiated 30 youth health service corps, also known as AHEC Jr. Scholar programs
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- Exceeded the set goal by supporting a total of 2,914 health professionals via an annual conference and other hosted continuing education and professional development events for health care professionals.

Desert Mountain AHEC: Daniel Camacho, Center Director for Desert Mountain AHEC received Mentor of the Year Award from HOSA. The Desert Mountain HOSA team won the following awards during the National HOSA Competition:
Other outreach activities included:
• Provided logistical support for the Texas Nurses Association, District 2, Panhandle Great 25 Nurses event.
• Obtained additional IV equipment for Frank Phillips College’s Licensed Vocational Nurses, Associate Degree Nursing program to allow each campus, Dalhart, Perryton, and Borger to have IV equipment available to train their students.
• Obtained additional IV equipment for Clarendon College’s Licensed Vocational Nurses, Associate Degree Nursing, Certified Nurse Aide, and Phlebotomy programs for student learning.
• Obtained stethoscopes for student learning when doing clinicals at the Health City faith based clinic whose patient mix is low income, underserved populations. Stethoscopes will be utilized by the Amarillo College and WTA-MU Nursing programs.
• Continued providing clinical scheduling support for area college nursing programs, hospitals and clinics. Will begin incorporating area high schools with advanced health career programs into the schedule beginning in FY 18-19.
• AHEC was able to provide supplies needed to teach various nursing skills at Odessa College for the Medical Assistant program.
• Provided UTBPF nursing staff with simulation equipment that would give nurses “hands on” training.

AHEC of the Plains offered CE credits for the following: Mental Health First Aid, UCP Seminars, Texas DSHS Immunization Provider Training, SHS School Nurse Workshop, Suicide Symposium, Perinatal Experts Forum and migrant health education. Ahec of the Plains also hosts an Annual Nursing Conference, an all day event where local nurses will attain anywhere from 6-8 continuing education credits.

Panhandle AHEC will be implementing a Community Health Worker continuing education program in conjunction with the West Texas AHEC Program office to provide required education programs to maintain an individuals existing Community Health Workers certification.

Perrin Basin AHEC, under the direction of Elisa Williford, Center Director, continues to work with the Youth Health Service Corp. establishing shadowing opportunities at Midland Memorial Hospital & Seminole Hospital District. Two more YHSC programs will begin this Fall at Winkler County Hospital District in Kermit, TX, and Martin County Hospital in Stanton, TX. Kermit, Seminole, and Stanton are all rural communities.

North Central AHEC hosts the West Texas Jr. Scholar program, the West Texas Scholar Program and clinical rotations for high school students at Kemp Kermer.

The Bridge to Excellence program provided certification training for 40 new CHWs in FY 2017-18 and provided continuing education training to 34 additional CHWs.

Youth Engagement Training Initiative

The Bridge to Excellence Community Health Worker (CHW) program is a hybrid class consisting of traditional face-to-face classroom in Lubbock coupled with virtual connectivity through telemedicine equipment to the traditional class in Abilene, and students attending via the ZOOM platform from the comfort of their homes in rural areas of West Texas.

The Bridge to Excellence CHW program graduated its first class in 2017.
Research, Reporting & Data Management (R2DM)

R2DM is the Institute clearinghouse for research administration and performs collection, analysis and management of data and information needed for grant proposal preparation and other special projects. Other academic and community-based activities performed by R2DM include community health needs assessments and information dissemination. During FY 2017-2018, R2DM assisted staff members in the preparation of four new funding proposals and published four issues of Rural Health Quarterly (RHQ) magazine and the Institute’s Annual Report for 2017. In addition, the Atlas of Rural Health was updated and revised for 2018.

CATHERINE HUDSON, MPH
DIRECTOR FOR RURAL HEALTH RESEARCH

R2DM Staff

R2DM Staff (Top to Bottom, Left to Right): Luciano Vilas Boas, Section Supervisor; Debra Curti, Research Associate; Gordon Gong, Senior Director of Study Design and Biostatistical Analysis; Rhonda Isome, Administrative Assistant; Scott Phillips, Senior Editor.
Grant Applications and Awards

The Institute was successful at submitting seven grant applications (4 new and 3 non-competing renewals) for funding during FY 2017-18. The Staff Attorney was also successful in assisting departments within the Institute in developing and executing a total of 51 contracts during FY 17-18. These included local agreements for the TWITR Project and State and Federal contracts for AHEC and other programs.

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<th>GRANT</th>
<th>START DATE</th>
<th>STATUS</th>
<th>TOTAL</th>
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<tr>
<td>Model State-Supported AHEC (HRSA)</td>
<td>September 1, 2017</td>
<td>Awarded</td>
<td>$1,090,000</td>
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<td>Next Gen 9-1-1 Telemedicine Project</td>
<td>September 1, 2017</td>
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<td>Telehealth Resource Center Grant Program</td>
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<td>Texas Veteran’s Family Alliance Grant Program</td>
<td>June 1, 2017</td>
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<td>Texas SHPP Hospital Ultrasound Education</td>
<td>March 1, 2017</td>
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<td>TWITR Project - SF-13-120-27317-03</td>
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<td>Behavioral Health Workforce Education</td>
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Funding for FY 2017-18

ENDOWMENTS
- The Marie Hall Chair in Rural Health $173,398
- Smith/Vela/Patterson Senior Fellowship for Rural Health Research $138,842
- F. Marie Hall Institute for Rural and Community Health $1,233,008

STATE APPROPRIATED LINE ITEM FUNDING
- Rural Health Care $708,482
- West Texas AHEC Program $1,824,000

ALLOCATED FUNDING TO SUPPORT TELEMEDICINE SERVICES
- Correctional Managed Health Care Contract, Billed Clinic Services, and Community Telemedicine Network $395,868
Scholarly Activity

PUBLICATIONS


The following manuscripts are in preparation:


PRESENTATIONS


Kelley, J., Curti, D., Hudson, C. Analysis of potential disparities in access to emergency care in West Texas versus East Texas. Student Research Week March 22, 2018.

April-August 2018

Developer AHEC Scholar Curriculum to include the following modules; “Healthcare Transformation”, “Rural Health Issues”, “Motivation Interviewing for Healthcare Professionals” and “Interprofessional Education”.

January-July 2018


2017

CHWS and Telemedicine

STUDENT ENGAGEMENT

Dijo John (MPH Practicum and Project) “Developing a training module for the ongoing Opioid Crisis for Community Health Workers”

Leslee Castro (MPH Practicum and Project) “Developing an interactive dental health overview for Community Health Workers”

Caleigh Cole (SOM Summer Research Project) “Correlation of D-Dimer with BNP in decompensated heart failure.”

Lisa Sea (SOM Summer Research Project) “Lubbock Healthcare Centenarians’ beliefs on factors affecting longevity: A pilot study through interviewing.”

Helayna Abraham (SOM Summer Research Project) “Impact of Community Health Workers on Triple Aim.”

John Kelly (SOM Summer Research Project) “Analysis of potential disparities in access to emergency care in West Texas versus East Texas.”

Dr. Debra Flores, American Public Health Association (CHW section & CBPR Section).