

# 12

YEARS  
OF  
SERVICE

F. Marie Hall  
Institute for  
Rural and  
Community  
Health

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FY 2020-2021  
Annual Report



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## F. Marie Hall Institute for Rural and Community Health

### MISSION & VISION

The F. Marie Hall Institute for Rural and Community Health exists to work in close collaboration with the people of West Texas for the advancement of health through innovative and scholarly research, the advanced use of technology, comprehensive education and community outreach.



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.



**F. MARIE HALL**

**MOTTO:** We focus our imagination, our talents and our energy to improve the health and well-being of the people and communities of West Texas and beyond.

## Letter from the Director



**DR. BILLY U. PHILIPS, JR.**

As a leader in rural health, we were the first unit at Texas Tech University Health Sciences Center (TTUHSC) to work remotely, practicing what that might look like before the COVID situation forced us to do so. In fact, we wrote and distributed a primer for others to follow thinking it might be useful. Little did we know that it would become a guide for others to follow over the next year.

On our teams, we reworked all of the operational workflows and processes. Our first transformation was to begin meeting by Zoom and Skype. We quickly equipped all of the people of the FMHIRCH to work from home with desktop grade equipment. That transformed everything from a kitchen table to a bedroom vanity into a remote location workspace that we continue to use as I write this; because we learned that some kinds of work are best done from those locations. Then we recognized that this strange new way to work was going to be isolating so we began a transformation of our culture to staff development. We had weekly all-staff meetings. We identified the great resource of Employee Assistance for mental health counseling and we began to give each other more grace. And we took time to “stand down” from time-to-time so people could do things like get their groceries by curbside. All of these transformations taught us a valuable lesson; even though we “put in” less hours we began to see more productivity and resourceful people.

It is humbling to work with a team of people so committed to the health of the people of west Texas, one of the most rural areas of the country. The past 19 months have been challenging yet transformative. Who could have foreseen the COVID pandemic and all the ways it challenged us and now all the ways it has begun to transform the world? As you read this annual report, you will see that the F. Marie Hall Institute for Rural and Community Health (FMHIRCH) has continued to be

We saw other transformations as well. Across the TTUHSC, we began to see the change of new leadership in Dr. Lori Rice-Spearman, our new President, and a strategic plan that highlights as a centerpiece a new goal, Comprehensive Telehealth. During COVID, we saw a tidal wave of new telemedicine visits by Texas Tech Physicians at all of our campus locations. Of course, we had so many technical assistance requests we had a team that rotated the duty. That is a sign that we have yet to transform the culture of health care. A new book by Shantanu Nundy, MD entitled, *Care After COVID*, predicts that three main trends will mark this transformation.

The first is that care will happen where health happens, shifting from physicians’ offices and clinics to where patients are such as at work or in homes. I think that means that like many other acts of commerce like banking, many acts of health care will migrate to smart phones. Then a second transformation will be digitally enabled health care, driven by better information and technology. An example may be on your wrist such as my Apple Watch that currently tracks my pulse rate, oxygen saturation, respiration, exercise, and dietary habits, and if I choose can perform an electrocardiogram. That’s real-time information from a wearable device that can be supplemented by remote monitoring of things like blood glucose levels (important in managing diabetes) and over fifty other currently approved items that will transform how we manage chronic and acute illness. I think that means care will become more team based, less siloed, more continuous and more preventive. The days of one-size-fits-all and the health disparities that go with it will be ending. Finally, we will see the resources and decisions about care shifting more to the consumer, us, to work with our providers to achieve better outcomes.


As you read this annual report with those things in mind, think about how relevant the F. Marie Hall Institute is in these changing dynamics. Think about the innovations that have come from the InHT division in electronic health record adoption, and proving the concept that mental health care can be delivered in schools through the TWITR program that is now the TCHAT part of the Children’s Mental Health Consortium, that we can run telemedicine technology in EMS units and triage on the fly to save lives and we can continue to educate practitioners through the FITLAB. As we move forward and you read about T-CORE and its AHEC program notice the

high school curriculum and training project, where students learn on the latest equipment and become the very first telemedicine care technicians, an entirely new health career. Think also that if care is decentralized as is predicted, how important training community people as Community Health Workers, equipped to guide people to use all these new approaches and technologies. T-CORE is leading the way with a new initiative to eliminate health disparities that is just beginning. Read about R2DM and the research team that published maps on things like broadband availability, published leading papers on models of COVID-19 spread in rural west Texas, that linked spikes to various risk factors and is continuing to unravel why we continue to have such spikes. That team is the team that connected the West Texas 3D COVID-19 Relief Consortium, who made PPE and other essentials to protect health care workers on the front lines, to the rural hospitals and clinics that so desperately needed such help. Without the F. Marie Hall Institute, these kinds of transformations would not have happened.

When you read this annual report know that in the last dozen years, the F. Marie Hall Institute has obtained external funding in the amount of \$35,868,146, much of it through peer-reviewed applications where we competed effectively against many others who do our kind of work. We did that while we served the needs of communities and people going through the worst pandemic in modern history. There have been many times in this unusual era that I have thought of my old friend, Marie Hall, who endowed this enterprise. I remain grateful to her for her transformative gifts to TTUHSC and how carefully she specified the things for which those funds were to be used. It was her legacy to transform people, whether students on scholarships or people who comprise the FMHIRCH or innovative simulation learning centers, and ultimately the landscape of health care across rural west Texas. She truly was visionary and she truly did as she was fond to say, “put her money where her heart led”.

~ Dr. Billy U. Philips, Jr.

*EVP for Rural and Community Health, Director of the F. Marie Hall Institute for Rural and Community Health, Professor of Family and Community Medicine (SOM), Professor of Public Health (GSBS)*

 TTUHSC F. Marie Hall Institute for Rural and Community Health







★ TTUHSC Area Health Education Center Office

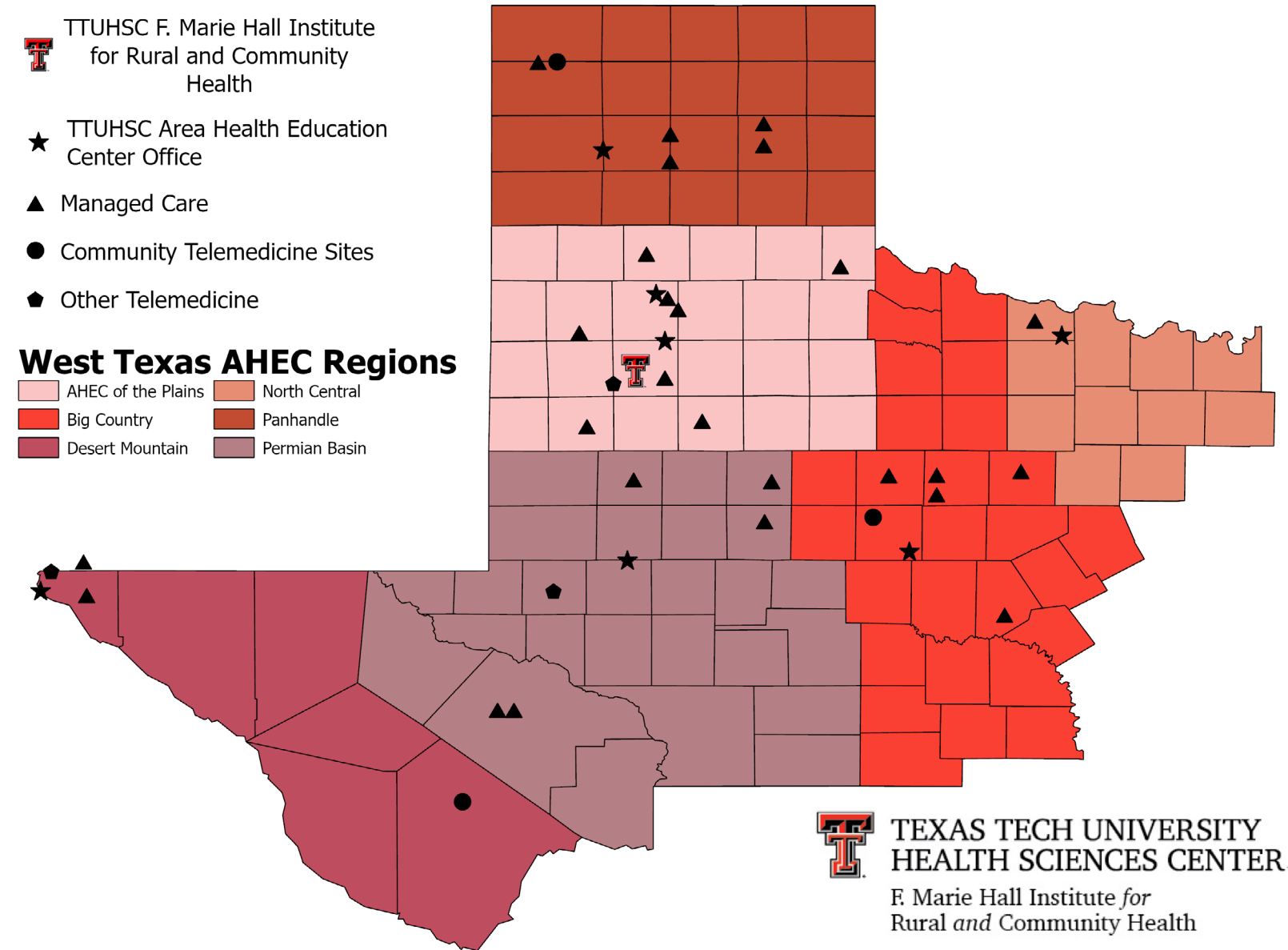
▲ Managed Care

● Community Telemedicine Sites

◆ Other Telemedicine

### West Texas AHEC Regions

 AHEC of the Plains  North Central  
 Big Country  Panhandle  
 Desert Mountain  Permian Basin



**TEXAS TECH UNIVERSITY  
HEALTH SCIENCES CENTER.**

F. Marie Hall Institute for  
Rural and Community Health

# Serving West Texas

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, 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.

## OUR FOCUS

1

### HEALTH TECHNOLOGY

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

2

### HEALTH EDUCATION

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

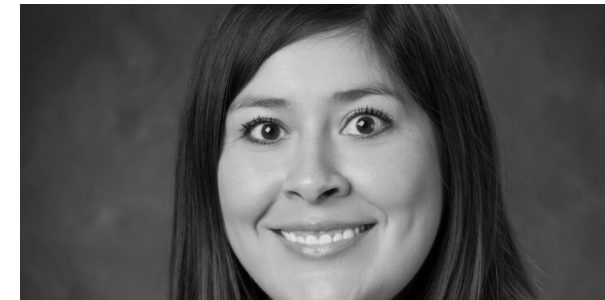
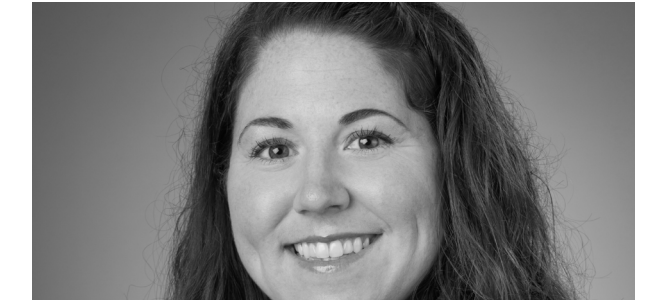
3

### HEALTH RESEARCH

Cutting edge data collection, reporting, and research to highlight rural health solutions in West Texas and beyond.



# Administration Staff



ADMINISTRATION STAFF (LEFT TO RIGHT):  
Jessica Williamson, Sr. Admin Asst.; Sarah Looten, Director of Staff Relations; Denise Lopez, Director of Finance; Michelle Crump, Sr. Office Asst; Jill Russell, Contract Development Manager; Dolores Parrish, Assistant for Staff Relations.



## Innovations in Healthcare Technology (InHT)

InHT assists healthcare providers and hospitals in modernizing their organizations with the use of telehealth technology. Because of its work in telehealth and telemedicine, InHT continues to be recognized as experts in the field and are called upon to provide technical support and health care expertise to individuals across the region.

Currently, of the 108 counties in the TTUHSC service region, 20 have no practicing physician and 11 have no physician, nurse practitioner, or physician's assistant. Outside the seven urban centers – Lubbock, Amarillo, Midland/Odessa, El Paso, Wichita Falls, San Angelo, and Abilene – there are few, if any, specialty providers, resulting in many patients having to travel long distances to seek medical care.

InHT addresses these access barriers related to distance through its Telemedicine department, yielding better quality patient care that meets the local needs of rural and urban communities that are great distances from specialists and other kinds of providers. Telemedicine has expanding innovations in several areas, including: Rural Telemedicine; HIV Services in Abilene; EMS Trauma Point of Care Telemedicine Services; Telehealth Resource Center servicing Texas and Louisiana Telemedicine Services; and our state of the art Frontiers in Telemedicine Training Laboratory (FIT Lab).



CAMERON ONKS, JD  
PROGRAM DIRECTOR, InHT

## InHT Staff



InHT STAFF (LEFT TO RIGHT): Kelly Munoz, InHT Program Manager; Sharon Rose, EMS Project Manager; Max Richards, Technology Manager; Becky Bounds, TexLa Program Manager; Yogis Mayoaran, Financial Analyst; Laura Lappe, Telemedicine Project Manager; Frances Quintero, FIT Program Manager; Laura Rauwald, Section Coordinator; Lisa Wynn, Senior Office Assistant.



## Telemedicine in West Texas

The Texas Tech University Health Sciences Center (TTUHSC) Telemedicine Program continues to bridge access barriers across West Texas.

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

Telemedicine encounters for FY 2020-21 included the following:

- 783 Total Patient Encounters\*

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- 626 Correctional Patient Encounters

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- 157 Community Patient Encounters

*\*ID Clinic ceased operations in March 2020 for patient safety due to COVID-19 pandemic*

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

In FY 2020-21, Telemedicine facilitated patient encounters for telemedicine clinics in Correctional Managed Care, as well as trained Managed Care staff to provide telemedicine clinic support. Telemedicine equipment has been deployed to launch the TTUHSC Family Medicine Residency Telemedicine clinic in Midland/Odessa, and the program also provided camera equipment to support services at the TTUHSC School of Medicine when in-person services were restricted due to COVID-19.

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.

## Frontiers in Telemedicine (FIT)

The Frontiers in Telemedicine Course was launched in 2016 as a unique program to train clinical staff about telemedicine. Today, students complete hands-on simulation center training, online modules, and objective structured clinical examinations (OSCEs) designed to educate them on telemedicine equipment, procedures, etiquette and ethics. The program also trains licensed health care professionals who desire to gain a certificate of completion in telemedicine.

After completion of training, students should be able to:

- Demonstrate the basic knowledge of telemedicine and telehealth and define those who could benefit from this technology
- Demonstrate knowledge of the originating/patient site and distant/provider site, as well as the clinician and staff roles at each one
- Demonstrate knowledge of the operation of telemedicine technology
- Demonstrate knowledge of a telemedicine encounter
- Demonstrate the basic ability to assess a patient in the ambulatory telemedicine setting
- Demonstrate the utilization of knowledge required to present and manage the patient with a specific problem
- Demonstrate the application of communication skills in patient and medical team communication



## FIT Certificate Course

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

- 51 providers were trained in the FIT lab in FY 2020-2021
- Developed new curriculum for the High School Telemedicine Course/Telemedicine Tech Course
- Converted in-person FiT Lab content to be available for online learning during COVID-19
- Created the "Online Patient Encounter" module for students to experience a simulated telemedicine encounter in a real-world setting

### TRAINING CLINICAL STAFF

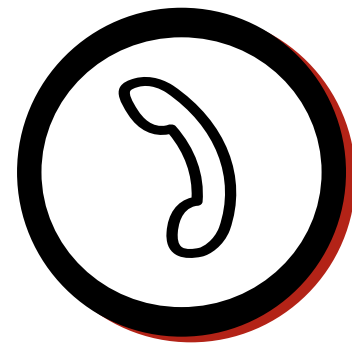


From February 1, 2016, the FIT Lab has trained 441 professionals in Emergency Medicine, Dermatology, Psychiatry, Pediatrics, Internal Medicine, and various Public Health specialties, as well as department chairs from multiple TTUHSC campuses.

# TexLa Telehealth Resource Center

The TexLa Telehealth Resource Center (TRC) 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 two national centers, one focusing on technology assessment and one on telehealth policy. The TexLa TRC works to eliminate barriers and supports the expansion of telehealth throughout the region.

## TECHNICAL ASSISTANCE



125

CLIENTS ASSISTED IN FY 2020-21

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.

## OUTREACH AND EDUCATION



1K

OUTREACH CONTACTS IN FY 2020-21

The TexLa Telehealth Resource Center reached 1,549 individuals in FY 2020-21 by outreach and education through speaking engagements, workshops, conference exhibits and booths, websites and social media.



# Next Generation 911 Project



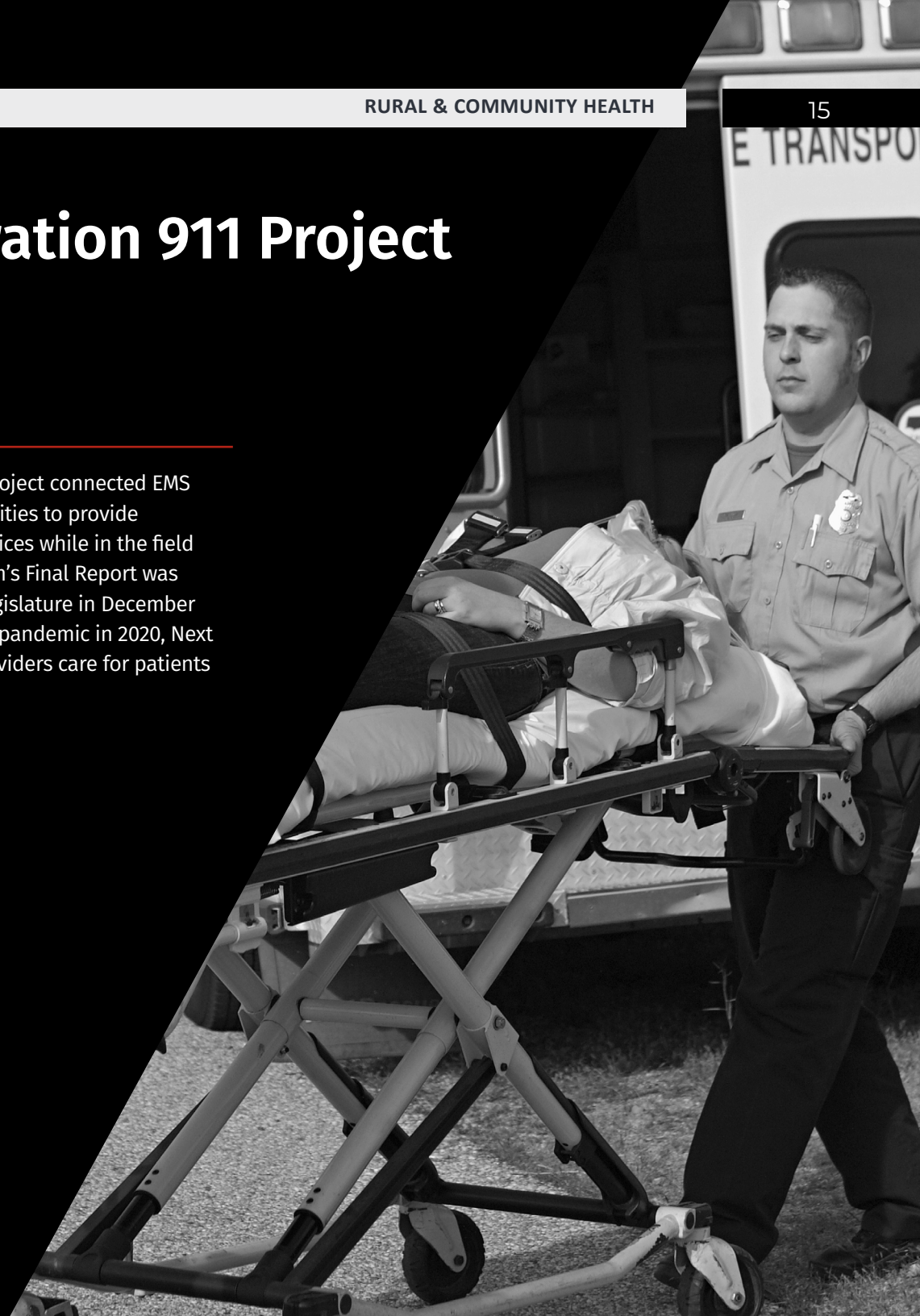
FY 2020-2021

The Next Gen 9-1-1 pilot project connected EMS providers and trauma facilities to provide telemedicine medical services while in the field and in transit. The program's Final Report was submitted to the Texas Legislature in December 2020. During the COVID-19 pandemic in 2020, Next Gen was able to assist providers care for patients while in-transit.



FY 2020-2021

The Next Generation 911 project monitored and collected data from 5 rural EMS providers and their community hospitals: Scurry County EMS and Cogdell Memorial Hospital, Medical Arts Hospital EMS and Medical Arts Hospital, Seminole EMS and Seminole Hospital District, Bailey County EMS and Muleshoe Area Medical Center, and Granbury/Hood County EMS and Lake Granbury Medical Center. The project implemented three Regional Trauma Centers: University Medical Center, Covenant Health System Adult ED and Pediatric ED.





## TexLa Telehealth Resource Center Best Practices Project

In order to further its mission of being a trusted advisor and resource for the adoption, implementation, and effective use of telehealth resources, the TexLa Telehealth Resource Center, part of the F. Marie Hall Institute for Rural and Community Health at Texas Tech University Health Sciences Center, set out to discover the best practices among rural clinics in its service region.

TexLa's Best Practices Project sought to collect information from Federally Qualified Health Centers to create a teaching document that would help lead providers through the complexities of practicing via telehealth. To do this, TexLa adapted three surveys to be completed by an administrator, an IT professional, and a provider at a given clinic.

After completion of the surveys, a TexLa administrator conducted interviews of the clinic staff that responded to the surveys to better understand the written data. These interviews, which were conducted during the COVID-19 pandemic, took place via video conferencing and sought to add dimension to the best practices listed in the survey answers.

At the close of its efforts, TexLa received survey answers from seven clinics and conducted twenty-one interviews. The data collected by TexLa was synthesized and included in a larger report compiled by the National Consortium of Telehealth Resource Centers, an affiliation of the fourteen Telehealth Resource Centers (TRCs)—12 regional TRCs and 2 national TRCs, funded individually and through cooperative agreements from the Health Resources and Services Administration, Office for the Advancement of Telehealth.

## Telehealth Needs Project

The F. Marie Hall Institute for Rural and Community Health (FMHIRCH) collaborated with Texas Association of Community Health Centers (TACHC) to identify barriers to telehealth implementation and utilization, as a means for identifying training and technical assistance support that would assist in the adoption and meaningful use of telehealth.

Topics included uses in diagnoses and management of acute and chronic diseases as well as in strategies that lead to health promotion and disease prevention. Workflows and integration of digital enhancements in remote monitoring are high priorities along with coding, billing and compliance with ethical and legal requirements.

The Institute developed and disseminated a survey to participating Health Centers, conducted follow-up interviews, and generated individual Health Center reports in addition to a comprehensive final report. As part of the final report, the Institute advised TACHC on key policy considerations to further telehealth efforts that would benefit Community Health Centers.

# Transforming Communities through Outreach, Recruitment & Education (T-CORE)



Education and outreach, youth recruitment and community health worker training

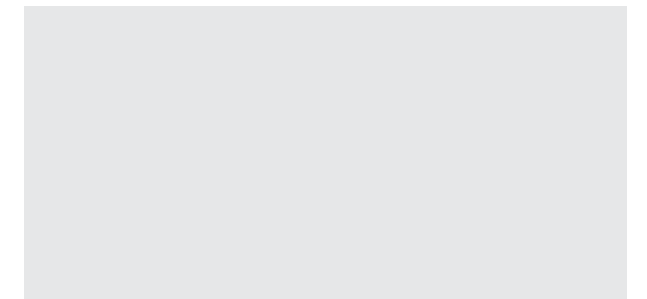
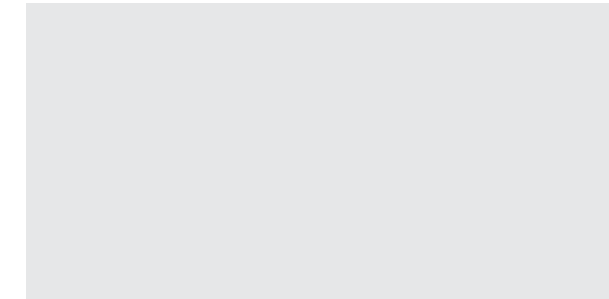
The T-CORE division of the Institute encompasses the community outreach arm of TTUHSC programming.

In addition to West Texas AHEC — a program that works to reduce health service disparities, health care provider shortages, and barriers to health care access — programs under T-CORE include the Community Health Worker Development— Bridge to Excellence Program, the Behavioral Health Workforce Education and Training Program, AHEC Scholars, AHEC Jr. Scholars and the Double T Collegiate Health Service Corps.



CATHERINE HUDSON, MPH  
PROGRAM DIRECTOR, T-CORE/  
WEST TEXAS AHEC

## T-CORE Staff



T-CORE STAFF (LEFT TO RIGHT): Wendy Bryan, T-CORE Project Manager; Estela Salazar, BHWET Coordinator; Celeste Hoffman, AHEC Data Coordinator; Jesse Jenkins, Database and Reporting Specialist; Olugbenga Olokede, Health Career Promotion/Outreach Coordinator.

## West Texas AHEC



Area Health  
Education  
Centers

The West Texas AHEC program has six regional offices—Canyon, Plainview, Midland, Abilene, El Paso, and Wichita Falls. Goals for the West Texas AHEC program include coordination of pipeline activities to recruit and engage students to enter the health care workforce.

Additionally, the West Texas AHEC Program expands community-based opportunities to increase health professions training capacity, provides community-based clinical training for health professions students through the new AHEC Scholars Program, provides practice entry support, introduces youth to health careers through AHEC Jr Scholars programs, and supports placement and retention of health professionals in high-need areas.

West Texas AHEC was successful in addressing health care provider shortages and underrepresented populations in health careers programs as they placed 155 students in rotations, initiated 3,233 students into their new youth health service corps (also known as AHEC Jr. Scholar programs), provided health career pipeline education to a total of 1,603 students, and supported 151 students in the two Double T Health Service Corps in FY 2020-21.

### AHEC Jr. Scholars

West Texas AHEC implemented a Jr. Scholar program in September 2018, targeted at rural schools in an effort to recruit students at the high school level. The goal is to target students who already know they want to pursue a career in health care, regardless of the field of study. Each year each center is charged with recruiting new schools to participate in this program. To date, the centers have recruited 53 schools for a total of 3,233 active participants in more than 30 health service corps. This approach yields a greater impact due to the ability to provide resources such as shadowing opportunities, tours of the different health career programs and a curriculum created for future health care professionals.

### Continuing Education Programs and Health Careers

During FY 2020-21, 2,590 participants took part in West Texas AHEC's Continuing Education Units (CEUs), training courses designed for certified Community Health Workers (CHWs). The CHW Bridge to Excellence Program also offers intermediate-level CHW training and a certification course.



West Texas AHEC's accomplishments for FY 2020-21 include:

- West Texas AHEC's Bridge to Excellence CHW Program provided certification training for 23 new CHWs on the (BHWET) community health worker track. 11 students were certified on the core CHW track.
- West Texas AHEC provided 45 continuing education units for health professionals, with topics covering social work, ethics, and COVID-19 policy.

### Student Rotations

- Rotations were facilitated for 155 health care profession students in the West Texas AHEC region at the TTUHSC Free Clinic.

# High School Telemedicine Certificate Course



Powered by TTUHSC, TexLa, and WTAHEC

The High School Telemedicine Technical Certificate Course powered by TTUHSC is a one-of-a-kind training program and the first telemedicine certificate program tailored specifically to high school students in the United States. This one-of-a-kind curriculum and course provides students with competency-based training on telemedicine clinical procedures, technology, and business.

The High School Telemedicine Technical Certificate Course provides students with the information and experiences necessary to build and demonstrate their telemedicine competencies. Students who complete the curriculum and obtain a passing score from their instructor(s) will receive a technical certificate of completion from TTUHSC which shows they have demonstrated competency in telemedicine.

## PARTICIPATING SCHOOLS



5

PARTICIPATING SCHOOLS IN FY 2020-21

## GRANT ACTIVITIES



100

PARTICIPATING STUDENTS IN FY 2020-21

Five schools participated in the Telemedicine Pilot Project that is the High School Telemedicine Certificate Course, part of the AHEC

CARES Act Supplemental Grant.

City View High School - Wichita Falls, TX

Bel Air High School - El Paso, TX

Comanche High School - Comanche, TX

San Saba High School - San Saba, TX

Midland ISD - Midland, TX

# CARES Supplemental Grant Program



During the COVID-19 pandemic, West Texas AHEC applied for and received a supplemental grant through the Coronavirus Aid, Relief, and Economic Security (CARES) Act, in order to expand telehealth and telemedicine technologies.

The grant, totaling \$95,455, was used to prepare health career students and health care providers to use telehealth technology, which would improve patient care during the COVID-19 pandemic and beyond.

Grant activities included:

- Piloting health technology curriculum to train health career students on the use of telehealth technology in health care settings that are level one functions. Curriculum also integrated telehealth training in telemental health and medication management for community health workers, certified nursing assistants, pharmacy technicians and medication assistant aides and other entry-level personnel.
- Produced a library of telehealth-in-action instructional material to serve a variety of audiences, from medical doctors to students, to rural clinic staff.
- Collaborated with community partners and other organizations to provide training on the proper use of personal protective equipment (PPE) to rural providers. As an example, mask fitting is a routine procedure that should be done in health care facilities with a fitting machine. However, this aspect of PPE use can often be overlooked or inadequately done in smaller hospitals or clinic settings.

# Research, Reporting & Data Management (R<sup>2</sup>DM)

Research, data collection,  
report preparation and other  
communications

**R**<sup>2</sup>DM is a resource within the Institute which supports endeavors throughout the Texas Tech University System as well as the communities within the TTUHSC service area.

The R<sup>2</sup>DM supports academic and community endeavors by providing information through geomapping and analysis, needs assessments, gathering data for grant research, and developing reports, maps and other publications for TTUHSC and Institute special projects.

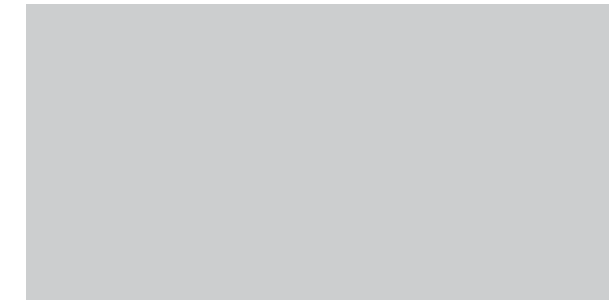
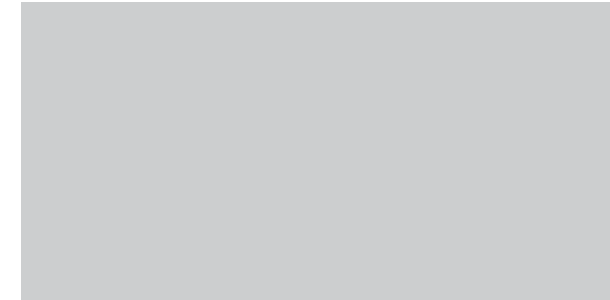
In addition to developing media material and enhancing the Institute's social media presence, R<sup>2</sup>DM produces the *Rural Health Quarterly* magazine which is available both in print and digital format ([www.ruralhealthquarterly.com](http://www.ruralhealthquarterly.com)).



MIKE PENULIAR, MA, MBA  
PROGRAM DIRECTOR, R<sup>2</sup>DM



## R<sup>2</sup>DM Staff



R<sup>2</sup>DM STAFF (LEFT TO RIGHT): Miguel Carrasco, Chief Analyst; Debra Curti, Research Associate; Candice Clark, Senior Editor; Rhonda Isome, Senior Office Assistant.

# Research, Analysis, & Modeling

During FY2020-2021, R<sup>2</sup>DM focused much of their efforts on combating the COVID-19 pandemic. The team provided modeling to help track and predict COVID-19 cases in Lubbock County and Texas Tech University. This modeling led to two publications in the *Texas Public Health Journal*, both providing analysis and informing readers on how to model for their own locales using the R<sup>2</sup>DM modeling tool.

R<sup>2</sup>DM worked on other significant research projects as well. One R<sup>2</sup>DM study compared the COVID-19 growth rates of rural and urban counties that contained major universities. A preprint of this research was lauded by *Reuters*, who shared it worldwide. That study's results were also presented at the 2021 Texas Public Health Association Annual Education Conference (TPHAAEC), and a final manuscript is currently being prepared for submission. R<sup>2</sup>DM also authored a path analysis manuscript that analyzed social determinants and behaviors on COVID-19 fatalities. Finally, R<sup>2</sup>DM contributed to the field of health economics in which they examined the relationship between gross domestic product loss and COVID-19 deaths in rural versus urban areas.

R<sup>2</sup>DM was a powerhouse in providing research, analysis, and modeling of the COVID-19 and vaccination rates at the local, regional, state, and national levels to keep FMHIRCH, TTUHSC, and the surrounding area abreast during the pandemic, especially during the surges of Winter 2020 and Summer 2021. R<sup>2</sup>DM worked with medical, hospital administration, and academic professionals to analyze COVID-19 data, to predict local and regional hospital occupancy rates during COVID-19 surges. R<sup>2</sup>DM then provided insight for a TTUHSC public service announcement, to help West Texas combat the deadly spread of COVID-19. The R<sup>2</sup>DM team also worked with the West Texas 3D Relief Consortium to provide PPE for healthcare workers. The Consortium was one of two winners for the 2021 President's Excellence in Engaged Scholarship Award at Texas Tech University; Debbie Curti, our R<sup>2</sup>DM Research Associate, was one of three Institute employees who received recognition for their efforts.

Outside of COVID-19 research, R<sup>2</sup>DM helped mentor a TTUHSC medical student in a project that sought to better understand the mental health and patient demographics of those who utilize the TTUHSC Free Clinic. R<sup>2</sup>DM researchers presented this work at the 2021 TPHAAEC, and a paper based on the collected data is being prepared. In addition, R<sup>2</sup>DM has enjoyed working collaboratively within the Institute. R<sup>2</sup>DM has provided mapping, research, and analytics services for the FMHIRCH administration, InHT, and T-CORE. They have also collaborated with InHT and T-CORE on several survey research projects on topics such as telemedicine and health professions.

Finally, R<sup>2</sup>DM provided a county health needs assessment report in which Nacogdoches County, Texas, was benchmarked against Walker County, Texas, and the State of Texas. This paper allowed Nacogdoches County to strengthen its knowledge to elevate its public health infrastructure. R<sup>2</sup>DM has also increased its *Rural Health Quarterly* online presence by providing more research and analytics-based articles and high quality health and science journalism. Lastly, R<sup>2</sup>DM provided numerous analytical, research mapping, and graphic design services to FMHIRCH and TTUHSC for many other important public health projects.



Main Street - Nacogdoches, TX



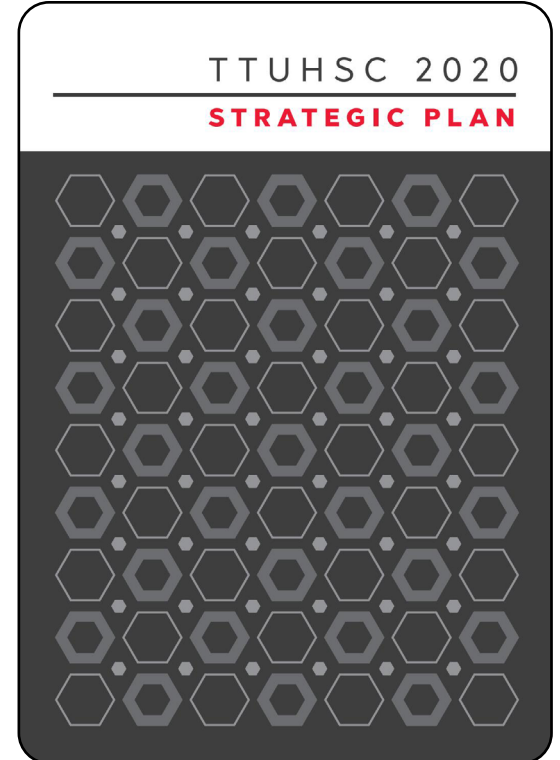
# FMHIRCH Weave

For the 2020-2021 Fiscal Year, the F. Marie Hall Institute received an "Excellent" score for their TTUHSC Weave Plan. Weave is part of Texas Tech University Health Sciences Center's Continuous Improvement Plan Process, submitted every fiscal year and based off of TTUHSC's Strategic Plan.

A member of the Texas Tech University System, TTUHSC has been accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) as a separate institution from Texas Tech University since 2004.

TTUHSC received its last reaffirmation of accreditation from SACSCOC in 2019, and will submit a Fifth-Year Interim Report in the spring of 2025.

For more information on Weave, visit [www.ttuhscc.edu/academic-planning-compliance](http://www.ttuhscc.edu/academic-planning-compliance).



# Grant Applications and Awards

The F. Marie Hall Institute for Rural and Community Health's (FMHIRCH) numerous strategic partnerships present a wide range of contractual needs. Over the course of FY21, FMHIRCH managed a total of 55 contracts with external entities to support its more than 45 external strategic partnerships.

The Institute also developed and maintained internal partnerships with other departments throughout TTUHSC such as the Graduate School of Biomedical Sciences, Department of Public Health/Master of Public Health Program and the Department of Internal Medicine.

Through these strategic partnerships and the contracts that helped to form them, FMHIRCH furthered its mission to collaborate with the people of Texas for the advancement of health through innovative and scholarly research, the advanced use of technology, comprehensive education, and outreach.

Through its contract management and strategic partnerships, FMHIRCH embodies the Institutional vision of transforming health care through innovation and collaboration.

GRANT	START DATE	STATUS	TOTAL
Model State-Supported AHEC (HRSA)	September 1, 2017	Awarded	\$ 3,089,864
Next Gen 9-1-1 Telemedicine Project	September 1, 2017	Awarded	\$ 1,500,000
Behavioral Health Workforce Education	September 30, 2017	Awarded	\$ 484,384
Telehealth Resource Center Grant Program	September 1, 2019	Awarded	\$ 755,768
Coronavirus Telehealth Resource Centers	April 1, 2020	Awarded	\$ 828,571
AHEC Program - COVID	May 1, 2020	Awarded	\$ 95,455
<b>TOTAL</b>			<b>\$6,754,042</b>

# Funding for FY 2020-21

## ENDOWMENTS

The Marie Hall Chair in Rural Health	\$ 173,229
Smith/Vela/Patterson Senior Fellowship for Rural Health Research	\$ 180,442
F. Marie Hall Institute for Rural and Community Health	\$2,053,806

## STATE APPROPRIATED LINE ITEM FUNDING

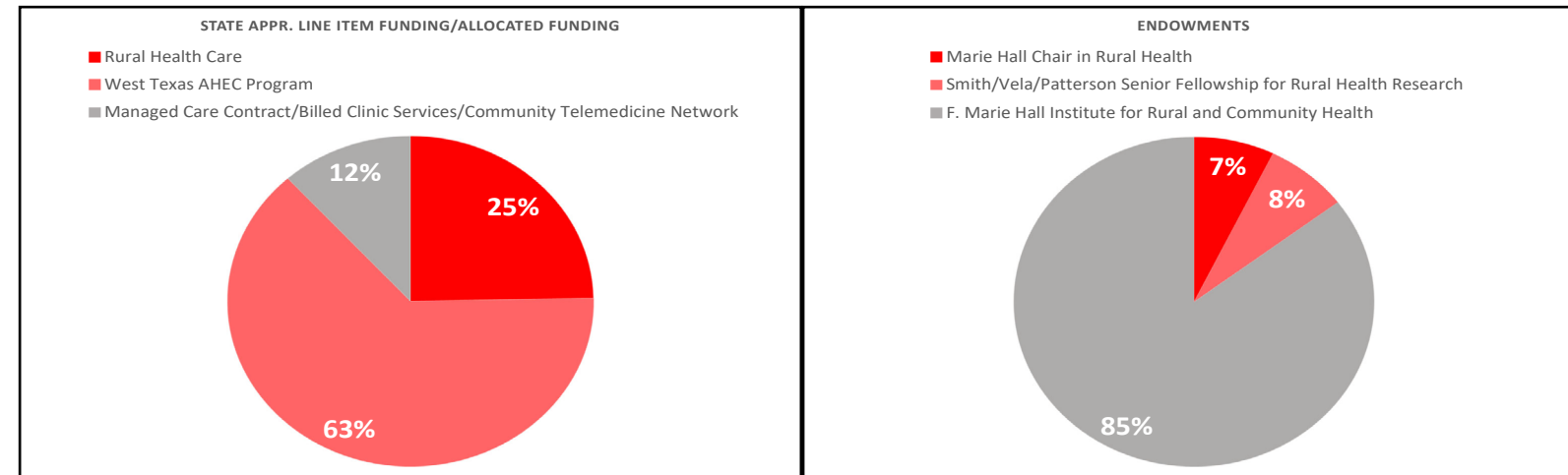
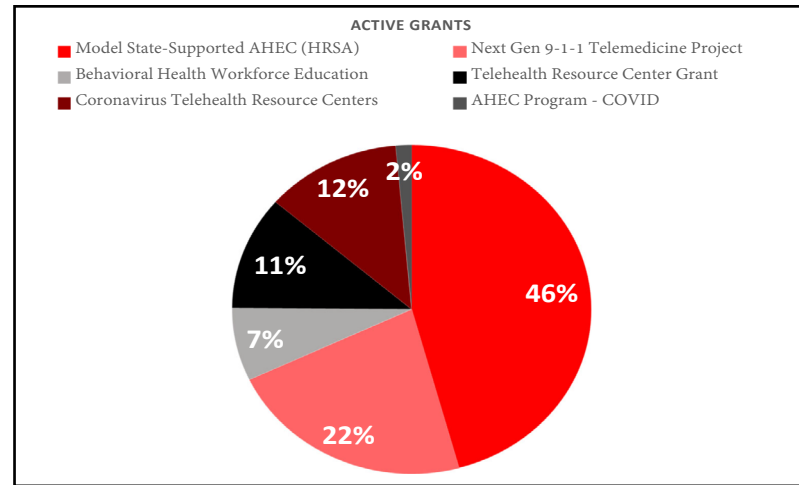
Rural Health Care	\$ 708,482
West Texas AHEC Program	\$1,824,000

## ALLOCATED FUNDING TO SUPPORT TELEMEDICINE SERVICES

Correctional Managed Health Care Contract, Billed Clinic Services, and Community Telemedicine Network	\$ 335,018
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Funding

# Funding for FY 2020-21 Pie Chart Breakdown



# Scholarly Activity

## PUBLICATIONS

Penuliar, M., Clark, C., Phillips, S., Curti, D., Hudson, C., & Philips, B. (2020). Simple COVID-19 Susceptible-Infected-Recovered Model with Social Distancing Levels Across Time: A West Texas Example. *Texas Public Health Journal*, 72(4).

Penuliar, M., Clark, C., Curti, D., Hudson, C., Philips, B. (2020). COVID-19 Growth in Rural versus Urban Counties with Major Universities at the Start of the 2020 Academic Year. *medRxiv* 2020.11.25.20238642; doi: <https://doi.org/10.1101/2020.11.25.20238642>

Penuliar, M., Clark, C., Curti, D., Hudson, C., Philips, B. (2020). Universities and COVID-19 Growth at the Start of the 2020 Academic Year. *medRxiv* 2020.11.25.20238899; doi: <https://doi.org/10.1101/2020.11.25.20238899>

Penuliar, M., Clark, C., Curti, D., Hudson, C., & Philips, B. (2021). Fall 2020 COVID-19 Growth: A Texas University Susceptible-Infected-Removed (SIR) Model. *Texas Public Health Journal*, 73(3).

## PRESENTATIONS

Bounds, B. (2020). Starting a Telemedicine Program. 9.10.2020\*

Bounds, B. (2020). Telehealth Guest Lecture. 10.7.2020\*

Richards, M. (2020). Rural Health Workshop. 10.7.2020\*

Bounds, B. (2020). Texas Tribune Rural Event. 11.11.2020\*

Santos, A. (2020). Early Dedication to Medical Education: A Career in Surgery and Telemedicine. 12.14.2020\*

Munoz, K. (2020). Telehealth 101. 12.16.2020\*

Bounds, B. (2021). Telehealth Hack Prep: FQHCs. 1.25.2021\*

Bounds, B. (2021). Nursing Informatics Telehealth Guest Lecture. 1.27.2021\*

Onks, C. (2021). Telehealth 101. 3.23.2021\*

TexLa Staff. (2021). Telehealth in Practice Webinar Series. 1.14.2021\*, 1.28.2021\*, 2.11.2021\*, 2.25.2021\*, 3.11.2021\*, 3.25.2021\*, 4.8.2021\*, 4.22.2021\*, 5.6.2021\*, 5.20.2021\*, 6.10.2021\*

Garcia, A., Penuliar, M., Hudson, C., Philips, B. (2021). Chronic Depression and Prescription Likelihood as a Function of Race and Sex in a Low-Income Clinic Sample, 2021 Texas Public Health Association Annual Education Conference. 5.17-5.19.2021\*

Penuliar, M., Clark, C., Curti, D., Hudson, C., Philips, B. COVID-19 Growth in Rural versus Urban Counties with Major Universities at the Start of the 2020 Academic Year, 2021 Texas Public Health Association Annual Conference. 5.17-5.19.2021\*

Philips, B. (2021). Impact of COVID on West Texas Healthcare. Economics and Health Issues Affecting West Texas, Permian Basin AHEC. 5.27.2021

TexLa Staff. (2021). TexLa Crossroads Conference. 7.21.2021\*

Philips, B. (2021). 911 EMS in Texas, Testimony to State of Texas House of Representatives-Committee on Public Health.

## STUDENT ENGAGEMENT

### Ana Garcia

Garcia, A., Penuliar, M., Hudson, C., Philips, B. (2021). Chronic Depression and Prescription Likelihood as a Function of Race and Sex in a Low-Income Clinic Sample. Texas Tech University Health Sciences Center Student Research Week Conference.

\*Virtual Presentations



## OFFICES/BOARDS/COMMITTEES

### Billy Philips

**2014-Present**

Member, Telemedicine Stakeholders Committee, Texas Medical Board

**2016-Present**

Member, Texas Health Improvement Network (THIN) Committee

Member, eHealth Advisory Board, Health and Human Services

**2017-Present**

Member, Statewide Behavioral Health Coordinating Council

**July 2019-Present**

Member, Clinical Integration Task Force Committee

**March 2020-June 2021**

Member, West Texas 3D COVID-19 Relief Consortium

### Catherine Hudson

**2001-Present**

Member, Assoc. of Clinical Research Professionals

Member, SOCRA (Board of Directors since 2019)

**2016-Present**

Member, National Rural Health Assoc.

**2017-Present**

Member, American Evaluation Assoc.

Member, American Public Health Assoc.

Member, Texas Public Health Assoc.

Member, Texas Rural Health Assoc.

**March 2020-June 2021**

Member, West Texas 3D COVID-19 Relief Consortium

### Sarah Looten

**July 2019-Present**

Member, Clinical Integration Task Force Committee

**March 2020-June 2021**

Member, West Texas 3D COVID-19 Relief Consortium

### Dolores Parrish

**2010-Present**

Member, Latin/Hispanic Faculty Staff Assoc.

**2016-Present**

Member, Society of Human Resource Management

### Laura Lappe

**September 2018-Present**

Board Member, Plainview Foundation for Rural Health Advancement

### Wendy Bryan

**August 2019-Present**

Member, National Council of University Research Administrators

### Debra Curti

**1994-Present**

Member, American Health Information Mgmt. Assoc.

**2014-Present**

Lone Star Coders, Lubbock Chapter

**2016-Present**

Board Member, Texas Tech Women's Club

**January 2019-Present**

Member, Governor's Emergency/Trauma

Advisory Council Injury and Prevention Committee

**2020-Present**

Member, American Public Health Assoc.

**March 2020-June 2021**

Member, West Texas 3D COVID-19 Relief Consortium

### Candice Clark

**2020-Present**

Member, Health Literacy Texas

Member, Association of Health Care Journalists

**2021-Present**

Member, American Public Health Assoc.

### Kelly Munoz

**2017-Present**

Member, National Council of University Research Administrators (NCURA)

Member, Healthcare Information and Management Systems Society (HIMSS)

Member, National Consortium of Telehealth Resource Centers (NCTRC), Governance Committee

### Frances Quintero

**2017-Present**

Member, Texas Rural Health Association (TRHA)

**2018-Present**

Member, Health Science Industry Leadership Council-LISD

**2020-Present**

Member, Health Information and Management Systems Society (HIMSS)

### Denise Lopez

**March 2015-Present**

Member, National Council of University Research Administrators (NCURA)

**March 2020-Present**

Member, People and Operations Taskforce-TTUHSC

### Lisa Wynn

**2021-Present**

Member, International Association of Administrative Professionals (IAAP)

## Rural Health Champion of the Year - James Beauchamp

It was the summer of 2014 when I first met James "Jimmy" Beauchamp. Jimmy is the President of MOTRAN (Midland Odessa Transportation Alliance) and a Commissioner for CSEC (Commission for State Emergency Communications). He had come to talk about a report (*The Golden Hour*, published by the F. Marie Hall Institute for Rural and Community Health) that described the many needs in rural west Texas for better trauma services. He had read it line-for-line along with other things published by the F. Marie Hall Institute. One of these included telemedicine options for improving aspects of the first critical hour after traumatic injury.

Over the course of many discussions and meetings that followed, he led, with the help of Representative Drew Darby (R-San Angelo), a successful effort to fund what has come to be known as the Next Gen 9-1-1 Project, that is described elsewhere in this annual report. Like the Phoenix (the project ended in December 2020, it was awarded additional funding in the 87th-3rd Special Session of the Texas Legislature.

Once again, the key person behind that success was Jimmy Beauchamp. There are people in west Texas that owe their lives to that program and its primary champion, Mr. James "Jimmy" Beauchamp.

Congratulations to the Rural Health Champion of 2021!

-Dr. Billy U. Philips, Jr.



*James "Jimmy" Beauchamp, President of MOTRAN, pictured with Dr. Billy Philips presenting the Rural Health Champion of the Year Award and Challenge Coin*








F. MARIE HALL  
INSTITUTE FOR  
RURAL AND  
COMMUNITY  
HEALTH

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