

Catalyzing Adoption of Telemedicine for Population Health and Health Equity in Texas

SUMMARY

In August 2018, the Texas Health Improvement Network (THIN) convened a two-day meeting focused on issues surrounding the adoption and expansion of telemedicine in Texas. The time was divided between four expert panels that focused on 1) infrastructure, 2) starting up new projects, 3) regulatory issues and 4) legal issues. In addition, THIN solicited information on telemedicine billing from the large academic health systems in Texas. This report summarizes key issues identified through this process and provides a set of actionable recommendations for policy makers and others committed to increasing adoption of telemedicine in Texas.

Texas Health Improvement Network Telemedicine Committee, 2018. *Catalyzing Adoption of Telemedicine for Population Health and Health Equity in Texas, Austin, TX: Texas Health Improvement Network.*

<http://www.texashealthimprovement.org/telemedicine-in-texas/>

RECOMMENDATIONS

- Explore an option for Medicaid patients who are eligible for a travel benefit to alternatively be eligible for a **site presenter benefit**, which would allow a visiting nurse or other professional to facilitate the telemedicine encounter **for medically fragile patients in their own homes**.
- **Incorporate telemedicine into healthcare network adequacy regulations** in a manner that expands and complements patient access to care, continues current requirements for network adequacy and engagement of local physicians.
- Explore **Medicaid financing options for Project ECHO**, a telementoring model that links primary care clinicians with specialists via teleconferencing technology.
- **Ensure close coordination of Texas programs with federal programs that target internet service availability**, such as the FCC's federal universal service program and the program administered by USDA's Rural Utility Service.
- Work with the Drug Enforcement Administration (DEA) to modify laws on what is considered a DEA-registered site, to **allow prescriptions for controlled substances** to be provided **via telemedicine in state-regulated settings**.
- Expand the requirement for state regulated health plans to provide information on **telemedicine policies** to more expressly **include consumer-facing information**.
- Establish a state-funded **grant opportunity** for eligible entities to **purchase telemedicine equipment**. Such equipment should meet any guidelines or recommendations set by the state.
- Explore options for a **shared telemedicine tech support pool** that could provide a combination of onsite and virtual services for rural and underserved areas in Texas.
- Make significant progress in **increasing internet adoption** in rural areas with policies that address digital literacy, relevancy, and costs.
- Systematically and comprehensively **document and assess challenges related to telemedicine reimbursement**. Work with all relevant parties to address identified issues.
- Systematically assess, summarize and disseminate experiences and **lessons from DSRIP-funded telemedicine pilots**.

1- Center for Health Care Strategies, Inc. Medicaid Financing Models for Project ECHO. September 2017. https://www.chcs.org/media/ECHO-Financing-Matrix_120117.pdf

BACKGROUND

The Texas Health Improvement Network (THIN) was established by the 84th Texas Legislature to address urgent health care challenges and improve health and health care in Texas. This initiative has brought together a diverse, multi-institutional, cross-sector group of leaders focused on catalyzing population health improvement and health equity. The THIN advisory council identified telehealth, including telemedicine, as a key tool in this work.

Telemedicine, defined as medical care delivered to a patient at a different location than the physician or the physician's delegate,² can remove obstacles to care by bridging distances due to geography or circumstance. Removing challenges to accessing care is essential to reducing health disparities and improving population health in Texas. Texas has made great strides in removing barriers to utilizing telemedicine in this state, most recently with passage of Senate Bill 1107 and other telehealth bills in 2017. In 2018, THIN sought to build on this progress by identifying remaining challenges and developing recommendations to accelerate adoption and utilization of telemedicine, particularly in the service of health equity.

PROJECT OVERVIEW

In August 2018, THIN convened a two-day meeting focused on issues surrounding the adoption and expansion of telemedicine in Texas. The time was divided between four expert panels that focused on 1) infrastructure, 2) starting up new projects, 3) regulatory issues and 4) legal issues. (See Appendix for list of the THIN telemedicine committee, expert panelists, and meeting agenda). The format for the panels, which were moderated by the THIN telemedicine committee co-chairs, included 10-12 minutes of prepared remarks by each panelist followed by 40 minutes for audience questions and discussion.

In addition, to better understand current telemedicine utilization and billing practices and experiences, THIN solicited information on telemedicine billing from the large academic health systems and other major providers in Texas.

This report summarizes key issues identified through this process and provides a set of actionable recommendations for policy makers and others committed to increasing adoption of telemedicine in Texas.

2- Texas Senate Bill 1107, passed during the 2017 legislative session, defined a telemedicine medical service as "a health care service delivered by a physician licensed in Texas, or a health professional acting under the delegation and supervision of a physician licensed in the state, and acting within the scope of the physician's or health professional's license to a patient at a different physical location than the physician or health professional using telecommunications or information technology." This definition became official state law on May 27, 2017 and is consistent across all Texas state agencies.

SUMMARY OF PANEL DISCUSSIONS

Cross-Cutting Themes

1. The significance and potential impact of telemedicine in Texas is substantial.

“Most people in rural Texas view this as a game-changer.”

Panelists provided an array of examples illustrating telemedicine’s potential for population health improvement and health equity. Examples included the use of telemedicine to provide access to mental health services in schools; reduce social isolation in older adults and facilitate aging in place; and provide effective care for conditions with the greatest health disparities, including diabetes. Perhaps some of the biggest opportunities for telemedicine to address health disparities relate to supporting rural health systems of care by providing remote access to both primary and specialized care. This can help rural hospitals retain patients and allow patients to receive care in their home communities. The size of Texas and its rural areas (Texas is the second largest U.S. state in population, total area, and rural area³) make telemedicine especially valuable and applicable to this state.

The impact of telemedicine

John Henderson, CEO at Texas Organization of Rural & Community Hospitals (TORCH), shared the story of a family in Childress, Texas that had been driving their sixteen-year-old child 1300 miles per week to receive dialysis from a pediatric-licensed facility in Dallas. Using telemedicine, the hospital in Childress was able to provide dialysis to the patient with virtual oversight by his pediatric nephrologist. This allowed the teen to re-enroll in and graduate from high school, and his father was able to return to work.

2. Many of the key pieces necessary to enabling telemedicine’s growth are already in place in Texas, but there is still work needed to facilitate adoption.

“It’s up to us.”

Some of the most significant legal and policy barriers have been addressed, and the needed broadband infrastructure, although still not comprehensive, is increasingly available. While further effort is needed to identify and resolve lingering gaps in infrastructure and challenges to reimbursement, much of the remaining work relates to education and awareness. The need for education extends to medical training. Widespread telemedicine adoption will also require changes in perception and culture to avoid replicating existing silos and to ensure full integration of telemedicine across the system of care. The perception that care delivered via telemedicine is substantively different than care delivered through traditional in-person visits creates a barrier to adoption, both for providers⁴ and patients.

Infrastructure Key Themes

Telemedicine infrastructure includes high-speed internet connectivity (i.e., broadband) and equipment (imaging technology and peripherals).

1. Infrastructure needs vary substantially by setting.

Telemedicine settings include hospitals, clinics, provider offices, schools, skilled nursing facilities, and private homes. Each telemedicine setting (whether an originating or distant site) requires both connectivity and equipment, though differences in the type and acuity of the care delivered will require varying levels of technology and support. This variety results in different entities specializing in specific areas they wish to address through this medium. For example, the state is particularly involved in supporting rural hospitals, as these hospitals are often the only source of certain kinds of care, such as trauma care. To reach the full potential of this technology, however, other settings must also have the necessary infrastructure, including homes of older adults (to support aging in place), and

3- U.S. Census Bureau. Percent urban and rural in 2010 by state. <https://www.census.gov/geo/reference/ua/urban-rural-2010.html>

4- Throughout this document, the term “providers” refers to physicians and health professional acting under the delegation and supervision of a physician licensed in the state, in accordance with the telemedicine definition established in SB1107

clinics or independent provider offices in rural and frontier communities that are far from a hospital.

2. Broadband is not one-size-fits-all.

Broadband comes in many forms and speeds. Some broadband technologies are fixed (e.g., fiber optic cable) and others are mobile (e.g., wireless/LTE). Current mobile technologies are typically slower than fixed, although new mobile technology such as 5G rivals fixed forms in terms of speed and reliability. The FCC speed benchmark for fixed broadband is 25 megabits per second (Mbps) download and 3 Mbps upload. The FCC has not set a benchmark for mobile broadband speed. Much of the focus on broadband infrastructure has been on fixed forms, due to their historically greater speeds and reliability. However, mobile forms play an important role for telemedicine, especially in rural areas and applications used by emergency responders and mobile clinics.

Telemedicine applications vary in the speed they require and the lag time that can be tolerated. Applications such as behavioral health sessions via videoconferencing can operate at speeds of 25 Mbps. A remote surgery operation requires speeds of 1 gigabit or greater with identical upload/download times and zero latency or delay in the transmission. While there is no need to “gold-plate” broadband infrastructure for many telemedicine applications, differences in broadband needs must be considered when evaluating the appropriateness of telemedicine in various settings. Redundancy of access to broadband is important in all settings, so that patient care is not interrupted.

3. Lack of coordination between state and federal universal service programs, aimed at expanding broadband, creates inefficiencies and fragmentation.

The growing need for broadband extends to many sectors, including health care, education, government, and public safety. A variety of state and federal programs administer funding mechanisms that target internet service availability in unserved areas, including universal funds. Lack of coordination between these

different programs can diminish their effectiveness and the efficiency with which they pursue their shared goal of wider access to internet service. Proper coordination is needed to avoid having different programs supporting service availability in the same area and to ensure that support goes to areas without broadband service and without the likelihood of receiving it in the foreseeable future. The lack of geographic data on what type of services are available where and under what circumstances makes such coordination difficult.

4. Although broadband is increasingly available, pockets without access remain.

As of 2016, 93.4% of Texans live in areas with access to fixed broadband. This overall rate obscures the geographic disparity, as 27.7% of the rural population in Texas does not have access to fixed broadband, compared to 2.4% of the urban population.⁵ Mobile LTE at 5Mbps/1Mbps is nearly universally available, but many telemedicine applications require faster speeds. Mobile technologies are rapidly improving, however, and may offer the best solution for many persistent broadband gaps.

5. Broadband availability is not the same as broadband adoption.

The existence of broadband infrastructure in a geographic area does not ensure that all settings are connected to that infrastructure. This issue is particularly true in the home setting. In 2016, the overall adoption rate in Texas was 41.4% for fixed broadband⁵ and 80.5% for broadband of any type.⁶ Barriers to adoption are often financial. Among households with annual incomes below \$25,000, just 58% had broadband subscriptions of any type.⁶ Additional barriers may include discomfort with or low perceived value of technology.

6. Equipment owned by one provider cannot be used to enable access for other providers.

Hospitals and clinics can avoid start-up costs by using equipment loaned by an academic health science center or other organization. However, in this situation, the equipment can only be used to connect with providers

5- Federal Communications Commission 2018 Broadband Deployment Report. <https://www.fcc.gov/reports-research/reports/broadband-progress-reports/2018-broadband-deployment-report>

6- Ryan C. Computer and Internet Use in the United States: 2016. American Community Survey Reports, ACS-39, U.S. Census Bureau, Washington, DC, 2017. <https://www.census.gov/content/dam/Census/library/publications/2018/acs/ACS-39.pdf>

from the organization that owns the equipment. The equipment is used as a tool to practice telemedicine by providers in the medical group that owns it, just as if it were a non-electronic piece of equipment. Any attempt to “gift” a hospital or clinic the necessary equipment could run a provider group afoul of the anti-kickback provisions in state and federal law, which prohibit providing an item of monetary value in return for purchasing medical services from a given group.

To be able to use the equipment for different provider groups, the hospital or clinic would need to incur the start-up costs to own the equipment themselves. Providers must also make sure that any equipment they purchase meets industry standards and can be used to connect to multiple telemedicine platforms.

7. Privacy issues and HIPAA compliance must be addressed.

Imaging technologies such as Facetime are easy to use, but security must always be taken into consideration. Telemedicine is still medicine, and as such all HIPAA requirements still apply. While many applications and vendors market themselves as HIPAA compliant, this is not always accurate, and the legal and regulatory obligations still rest with the HIPAA-covered entity.

Topic area: Regulatory and Federal Issues

The regulatory and federal issues panel provided information on the current regulatory landscape for telemedicine and how it is evolving in response to a changing environment at the state and federal levels. Regulators on the panel noted that, while they are responsible for implementing the direction given by the Legislature, other decisions and even changes in their culture can be positively made at the agency level.

1. Texas Department of Insurance (TDI) regulations cover only a small proportion of Texans.

Many providers look to the state regulatory agency to enforce payment and policies. However, most Texans are not covered by TDI-regulated health plans. TDI does not regulate Medicare or self-funded (ERISA) plans, leaving just 17% of the population covered by TDI. Therefore, an ERISA plan may only offer service through a telemedicine vendor and only for limited

purposes such as non-urgent primary care. These plans do not have to meet the requirement of SB 1107, which states that a health benefit plan may not exclude from coverage a covered health care service or procedure delivered by a preferred or contracted health professional to a covered patient as a telemedicine medical service or a telehealth service solely because the covered health care service or procedure is not provided through an in-person consultation.

Texas offers “consumer choice” plans where certain state-mandated benefits can be removed from the benefit package, but telemedicine is not eligible to be removed. TDI produces an annual report titled “Texas Mandated Benefit Cost and Utilization Summary” which contains data from health plans on the mandated benefits that can also be part of a consumer choice plan. Telemedicine had appeared as a line item in previous reports, but due to the changes made by SB 1107, it will not be a component of the 2017 report.⁷ As a result, TDI does consider telemedicine to be a baseline component of state regulated, fully insured health plans.

2. Information on telemedicine is not easy to find on health plan websites.

SB1107 requires that on their web sites health plans “display in a conspicuous manner” information on their telemedicine policies and payment practices (not including contracted rates). As of September 2018, many plans have not complied with this requirement. Further, clarification is needed on whether such information should be written for providers, members, or both. The availability of information tailored to both health plan members and physicians may promote the use of telemedicine in Texas.

3. Telemedicine can be used to enhance network adequacy.

Network adequacy standards aim to ensure that each health plan’s provider network is sufficient to provide reasonable access to care for its members. Texas’ standards establish maximum travel distances to access care. In rural areas, provider shortages can limit a plan’s ability to meet these standards. Incorporating telemedicine in areas with inadequate physician availability

7- <https://www.tdi.texas.gov/health/mbindex.html#Reporting>

could increase access in rural areas. However, such efforts should be done in a manner that complements, rather than replaces, local resources, while maintaining the standard of care.

4. The benefits of telementoring services such as Project ECHO cannot be fully realized without a financing mechanism.

Telementoring equips providers, such as primary care physicians in rural areas, with the expertise they need to appropriately treat high-need patients in their communities. Medicaid Programs in other states, including New Mexico, Oregon, and Colorado, have developed mechanisms to finance Project ECHO.

5. Some home telemedicine encounters require facilitation.

For people with physical disabilities or limitations, getting to doctor's visits can be extremely difficult, even if the office is nearby. For the rural disabled, the burden of travel for health care can be physically and emotionally overwhelming. Even though many of these patients are eligible to have their transportation costs covered, the experience of being transported, and waiting to see the provider, can cause significant discomfort and distress. For such patients, seeing their provider via a telemedicine visit offers tremendous value. However, assistance in facilitating the telemedicine encounter may still be needed. In settings such as nursing homes, site fees help cover costs for this facilitation, but private homes are not eligible for site fees. Having the option to send a health professional to the home to facilitate the telemedicine encounter rather than transporting the patient to the provider's office would greatly improve the patient's care experience, at the same or lower cost to the state.

Topic area: Telemedicine Start-up

The telemedicine start-up panel identified factors, including barriers and facilitators, that impact getting new telemedicine programs started. Much discussion focused on telemedicine start-up in rural contexts. Many issues discussed not only affect the initial adoption and start-up phase, but also affect adoption maintenance.

1. Early wins are critical to telemedicine adoption.

"For rural sites, they need to have a day one win." To encourage adoption of telemedicine, particularly in risk-adverse and low-resourced contexts, the first experiences with telemedicine need to be successful, straightforward, and clearly advantageous over current practice.

2. Reimbursement challenges, both real and perceived, undermine adoption.

Physicians and other providers need to know whether they will be paid for services they provide. This is especially true in rural areas. According to a 2017 study, 4 in 10 rural hospitals in Texas are operating on negative margins.⁸ Data documenting telemedicine reimbursement challenges are limited, but anecdotes abound. The resulting perception of uncertainty and complexity has created an inhospitable climate for telemedicine start-up.

To supplement information from the panel testimony and discussions, THIN queried academic medical centers about their telemedicine billing experiences. Most institutions responded that although they do provide telemedicine services, they have not yet billed for telemedicine. Of eight institutions that responded, only two reported submitting a substantial number of claims. Each of these institutions submitted close to 1000 claims between January 2007 and June 2018 and were paid for 91%-94% of their submitted claims at the contractually allowable amount within 90 days. Payors for these claims included private and governmental plans.

These pilot data suggest that a few early adopter hospitals have well-established telemedicine programs and successful

8- Topchick, M. Rural Relevance 2017: Assessing the State of Rural Healthcare in America. The Chartis Center for Rural Health. <https://www.chartisforum.com/wp-content/uploads/2017/05/The-Rural-Relevance-Study-2017.pdf>

reimbursement processes. Other large institutions are still working out technical aspects and workflow processes before beginning to bill for services. In any case, smaller operations with less diverse funding streams can ill-afford to absorb costs while developing telemedicine implementation and billing processes.

Teasing out the specific issues around reimbursement will require focused study. One known issue is that reimbursement policy varies tremendously across payors. Further, policy may not always align with practice. One panelist reported that providers have received information from health plan call center representatives that contradicted the health plan's stated telemedicine policies.

3. Access to technical support staff is often extremely limited.

Successful telemedicine delivery requires some degree of technical support, particularly during the start-up phase. Small hospitals, provider offices, and rural communities typically lack a technical workforce, have limited ability to train or retain technical staff, and may not have enough demand for full-time technical staff.

4. Credentialing and privileging are significant issues in starting up a telemedicine program.

The credentialing and privileging process applies to all providers, whether they provide services in person or via telemedicine. These processes, while critical to patient safety, are time-consuming and expensive for hospitals. (This issue was also raised in the legal panel.)

5. The same quality measures should be applied to both in-person and virtual visits, although impact measures for telemedicine may differ.

Telemedicine is medicine. Texas law requires that a physician providing a telemedicine service is subject to the standard of care that would apply to the provision of the same service in an in-person setting. Thus, quality measures should be the same for in-person

and virtual visits. However, telemedicine has unique impacts that are still being understood. The National Quality Forum has produced standardized metrics that could be used to track telemedicine quality and outcomes, including access, cost, cost-effectiveness, and patient/physician experiences. Consistent measures are needed to accurately capture the impact of telemedicine.

6. Telemedicine should be used to help prevent rural hospital closures and provide access in the face of closures.

Texas is experiencing a steady rate of rural hospital closures, as the services offered in those facilities simply do not earn enough revenue to cover expenses. Telemedicine should act as a complement to, not a replacement for, health care obtained locally, and it can support in these scenarios by providing access to additional revenue streams and provider coverage services otherwise unavailable in the area. When done appropriately, this model can create continuity of care for the patient, but caution must be exercised in these care models to prevent fracturing of care. The provider-patient relationship must be respected. While this theme is relevant beyond the start-up phase, it must be taken into consideration when projects are being launched.

7. The experiences of the many telemedicine-related DSRIP (Medicaid waiver) projects can provide invaluable information for other telemedicine initiatives.

Approximately 80 projects focused on telemedicine were funded during the first six years of the Medicaid waiver. Much can be learned from the experiences of these pilot projects.

8. The payor mix in rural areas and Medicare limitations pose challenges for telemedicine.

An older overall population in rural areas means a greater proportion of Medicare patients for rural health care systems. Currently, the Medicare telemedicine benefit is extremely limited, even for those patients who count as rural. For telemedicine to truly flourish, Medicare's approach to telemedicine needs significant reform.

Topic area: Legal

This panel focused on current legal issues that impact telemedicine in Texas.

1. Legal restrictions aimed at curbing opioid abuse can have the unintended consequence of limiting access to mental health care via telemedicine.

Telemedicine has great potential to increase access to mental health care in Texas. To follow the standard of care in many psychiatric care scenarios, however, requires prescriptions of controlled substances, such as the drugs commonly used in the treatment of ADHD or opioid use disorder. Under current law, an in-person exam is required before prescriptions for controlled substances can be made. While the Ryan Haight Act allows for an exception to be made if telemedicine is used, the exception is extremely narrow. To obtain an exception, either another DEA-registered care provider has to be in the same location as the patient, or the patient has to be in a DEA-registered site. The list of DEA-registered sites in Texas is short, and many telemedicine originating sites, such as nursing homes and schools, do not qualify. Controlled substances laws are important tools in the fight against opioid abuse, and any telemedicine model must not aggravate this ongoing health crisis. The current model, though, leaves many patients without the care they desperately need.

2. The liability risk falls to the provider, not the telemedicine company/technology provider.

Physicians need to be aware of the liability issues and discuss their telemedicine practices and risks with their insurance provider.

3. Co-payments are a big challenge in telemedicine, particularly with high deductible plans.

For a telemedicine visit, a copay cannot be collected at the time of care because the originating site (where the patient is located) cannot collect payment for the distant site (where the service provider is located). The collection of the copay falls to the distant site, which means it is less likely to be paid.

Additionally, if copays are required for telemedicine services, it may serve as a disincentive for patients in

high deductible plans to seek care. This is a broader issue for the health care system but is worth noting for its impact on consumer behavior related to telemedicine.

4. Standard of Care is a critical issue.

SB1107 explicitly states that providing a health care service as a telemedicine medical service is subject to the standard of care that would apply to the provision of the same health care service in an in-person setting. If the standard of care requires vital signs to be taken, for instance, either a site presenter must take them in person or appropriate peripherals must be available to collect and transmit the information. Additionally, standard of care laws are state-based, so telemedicine providers from outside Texas must adhere to Texas standards. As telemedicine is increasingly adopted, it will likely have an impact on standards of care, as new opportunities are created and patients' expectations around care shift.

5. Licensing is an issue for out-of-state providers serving Texas but is not a critical issue for telemedicine adoption in Texas.

While it can be expensive and time-consuming to get licensed in multiple states, this is not an issue that can easily be addressed. Further, it does not create a significant impediment to telemedicine adoption in Texas. Texas is a large state with significant physician capacity, and telemedicine can help better distribute that capacity.

Several states have adopted the Interstate Compact for Medical Licensure, which enables improved application processes for physicians who are already credentialed in another participating state. Participation in the Compact would allow Texas providers an easier way to expand their telemedicine services into other states, or to manage situations where their patient base may stretch across state lines.

6. Privileging and credentialing are big issues for telemedicine.

This issue was also raised in the start-up panel. Privileging and credentialing new providers can be an extremely lengthy process, easily lasting several

months. To address this issue the Joint Commission and CMS approved a streamlined privileging process for telemedicine providers, known as credentialing by proxy, permitting the hospital originating site to rely on the privileging and credentialing decisions of the

distant site. However, the potential civil liability for a hospital relying on privileging documents from a different group remains a huge unknown, and therefore is often a risk that hospitals are not willing to take.

CONCLUSION AND NEXT STEPS

Texas is well-positioned to apply telemedicine to the benefit of rural and underserved populations across the state. As with all other advances in health care delivery, however, steps are needed to ensure that telemedicine serves all Texans and fulfills its potential to improve population health. The issues and recommendations identified through this process are one step. THIN will seek partnerships and opportunities to move these recommendations forward.

APPENDIXES

Appendix A: Glossary

Broadband: A general term for high-speed internet that encompasses fixed and mobile DSL, cable, fiber optic, and other options. The Federal Communications Commission (FCC) defines fixed broadband as a download speed of 25 megabits per second (Mbps) and an upload speed of 3 Mbps. The FCC has not set a mobile broadband speed benchmark. <https://www.fcc.gov/reports-research/reports/broadband-progress-reports/2018-broadband-deployment-report>

Credentialing: Credentialing is the process by which an employer, most frequently a hospital or health maintenance organization (HMO), verifies that a practitioner has the required education, training, and experience to practice in the state. [http://www.astho.org/Programs/Preparedness/Public-Health-Emergency-Law/Scope-of-Practice-Toolkit/Understanding-Licensing,-Credentialing,-Certification,-and-Privileging\(2\)/](http://www.astho.org/Programs/Preparedness/Public-Health-Emergency-Law/Scope-of-Practice-Toolkit/Understanding-Licensing,-Credentialing,-Certification,-and-Privileging(2)/)

Distant site: Location of the health care professional providing the service.

ERISA: Employee Retirement Income Security Act of 1974 (ERISA) is a federal law that sets minimum standards for most voluntarily established pension and health plans in private industry to provide protection for individuals in these plans. <https://www.dol.gov/general/topic/health-plans/erisa>

ERISA Plan: A term that is used to refer to self-funded (self-insured) health plans, typically used by larger employers. These plans are not regulated by Texas Department of Insurance.

Facility fee: A fee paid to the patient site/originating site in a telemedicine visit.

Licensing: Formal recognition by a regulatory agency or body that a person has passed all the qualifications to practice that profession in that state. [http://www.astho.org/Programs/Preparedness/Public-Health-Emergency-Law/Scope-of-Practice-Toolkit/Understanding-Licensing,-Credentialing,-Certification,-and-Privileging\(2\)/](http://www.astho.org/Programs/Preparedness/Public-Health-Emergency-Law/Scope-of-Practice-Toolkit/Understanding-Licensing,-Credentialing,-Certification,-and-Privileging(2)/)

Nurse Licensure Compact (NLC)/enhanced NLC (eNLC): Under the NLC, nurses can practice in other NLC states, without having to obtain additional licenses. The eNLC, which is an updated version of the original NLC, allows for registered nurses (RNs) and licensed practical/vocational nurses (LPN/VNs) to have one multistate license, with the authority to practice in person or via telehealth in both their home state and other eNLC states. <https://www.ncsbn.org/nurse-licensure-compact.htm> ; <https://www.ncsbn.org/11281.htm>

Patient site/Originating site: Location of the person receiving the telemedicine service.

Privileging: Like credentialing, privileging typically arises in the healthcare context for hospitals, HMOs, and other healthcare providers to allow a practitioner to practice in or in a capacity associated with their institution. The granting of privileges to a practitioner will define the scope of permitted activities the practitioner may engage in while at the facility. A practitioner's credentials are checked as part of the privileging process. [http://www.astho.org/Programs/Preparedness/Public-Health-Emergency-Law/Scope-of-Practice-Toolkit/Understanding-Licensing,-Credentialing,-Certification,-and-Privileging\(2\)/](http://www.astho.org/Programs/Preparedness/Public-Health-Emergency-Law/Scope-of-Practice-Toolkit/Understanding-Licensing,-Credentialing,-Certification,-and-Privileging(2)/)

Project ECHO: ECHO = Extension for Community Health Outcomes. Links expert specialist teams at an academic 'hub' with primary care clinicians in local communities – the 'spokes' of the model. Together, they participate in weekly teleECHO™ clinics, which are like virtual grand rounds, combined with mentoring and patient case presentations. <https://echo.unm.edu/about-echo/model/>

Standard of Care: That which a minimally competent physician in the same field would do under similar circumstances (Legal definition) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3088386/>

APPENDIX B: THIN TELEMEDICINE COMMITTEE AND EXPERT PANELISTS

TELEMEDICINE COMMITTEE MEMBERS

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Texas Tech University Health Science Center

Sauren Patel, MD
Chief Medical Officer
Access Physicians

Julian Rivera, JD
Partner
Husch Blackwell

TELEMEDICINE LEGAL ISSUES

Mari Robinson, JD
Director of Telehealth
University of Texas Medical Branch

Travis Hanson, JD, MS
Director of West InHT (Innovative Healthcare
Technology)
Texas Tech University Health Sciences Center

Sarah Churchill Llamas, JD
Shareholder
Winstead PC

Griffin Mulcahey, JD
CoFounder/President
Enzyme

APPENDIX C: EXPERT PANEL MEETING AGENDAS

Increasing Adoption of Telemedicine for Population Health and Health Equity Expert Panel Meetings

Purpose: To identify and understand issues that impact the optimal adoption of telemedicine, particularly for reaching underserved populations. This information will inform strategies and recommendations to increase use of telemedicine in Texas for population health improvement and greater health equity.

Location: UT System Administration Building
Room 2.206B
210 W. 7th St.
Austin, Texas 78701

Day 1: August 22, 2018; 10am-3pm

Day 2: August 23, 2018; 8am-2pm

AGENDA (Day 1: 8/22/18)

Time	Length	Description	Presenters/Panelists
10-10:15a	15 min	Welcome, introductions and overview of agenda and process	David Lakey, UT System Nora Belcher, Texas eHealth Alliance
10:15-11:15a	60 min	Infrastructure and Preparedness Panel: Presentations	Jordana Barton, Federal Reserve Bank of Dallas Blake Hutson, AARP John Henderson, TORCH Hany Fahmy, AT&T
11:15-11:55a	40 min	Infrastructure and Preparedness: Q&A/ discussion	Moderator: David Lakey
11:55a-12p	5 min	Closing/next steps	David Lakey
12p-1p	60 min	Lunch and Discussion	
1:00-1:10p	10 min	Welcome, introductions and overview of process	David Lakey Nora Belcher
1:10-2:10p	60 min	Regulatory and Federal Issues Panel: Presentations	Martha Luevano, Workers' Compensation Stephanie Stephens HHSC Doug Danzeiser, Texas Department of Insurance Latoya Thomas, American Telemedicine Association
2:10-2:50p	40 min	Regulatory and Federal Issues: Q&A/discussion	Moderator: Nora Belcher
2:50-3pm	10 min	Closing/next steps	David Lakey Nora Belcher

Increasing Adoption of Telemedicine for Population Health and Health Equity Expert Panel Meetings

AGENDA (Day 2: 8/23/18)

Time	Length	Description	Presenters/Panelists
8-8:15a	15 min	Welcome, introductions and overview of agenda and process	David Lakey, UT System Nora Belcher, Texas eHealth Alliance
8:15-9:15a	60 min	Telemedicine Start Up Panel: Presentations	Nancy Dickey, MD, Texas A&M Becky Jones, Texas Tech/TexLa Telemedicine Resource Center Saurin Patel, MD, Access Physicians Julian Rivera, Husch Blackwell
9:15-9:55a	40 min	Start Up Q&A/discussion	Moderator: David Lakey
9:55-10am	5 min	Closing/next steps	David Lakey
10am-10:15a	15 min	Break	
10:15-10:25a	10 min	Welcome, introductions and overview of process	David Lakey Nora Belcher
10:25a-11:25a	60 min	Legal Issues Panel: Presentations	Sarah Churchill Llamas, Winstead PC Travis Hanson, Texas Tech Griffin Mulcahey, Enzyme Mari Robinson, UTMB
11:25a-12:05p	40 min	Legal Issues Q&A/discussion	Moderator: Nora Belcher
12:05-12:10p	5 min	Closing/next steps	David Lakey Nora Belcher
12:10-12:40p	30 min	Break/lunch buffet	
12:40-1:45p	65 min	Facilitated discussion on all panel presentations	David Lakey Nora Belcher
1:45-2p	15 min	Closing/next steps	David Lakey Nora Belcher