



TEXAS  
ASSOCIATION OF  
BUSINESS

THE TEXAS STATE CHAMBER



# TELEMEDICINE

THE 21<sup>ST</sup> CENTURY  
ANSWER TO THE  
CALL FOR BETTER  
HEALTH CARE

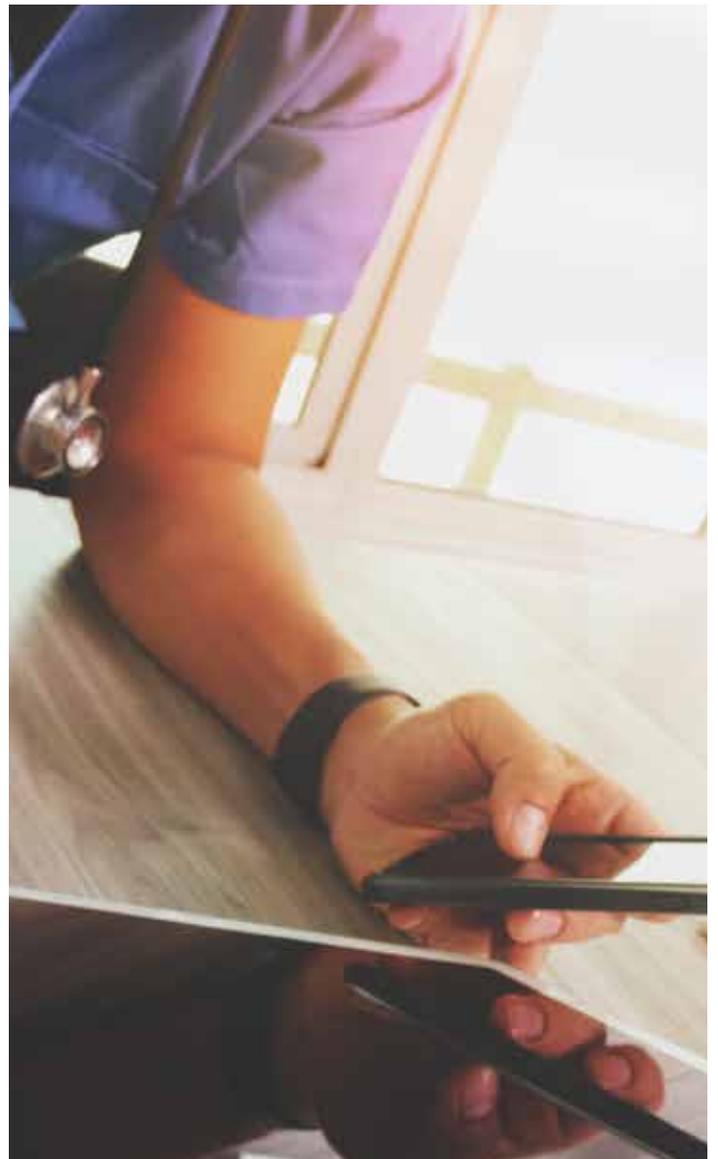
September 2016

# EXECUTIVE SUMMARY

Texas currently faces a dangerous combination of health care problems – low physician supply, rising health care costs and poor health outcomes for its residents. In fact, Texas ranks 41<sup>st</sup> in the nation in per capita active care physicians and 43<sup>rd</sup> in the nation in per capita primary care physicians. Twenty-two percent of Texans have been deemed “medically disenfranchised” by the National Association for Community Health Centers because of severe primary care physician shortages in their area. For rural and minority Texans, this outlook is even more bleak. Texas now has the seventh-highest levels of health status disparities among residents in the nation, even though the state spends more than 46 other states per Medicare patient. From 2001 to 2011, annual Texas Medicaid spending grew more than 150 percent, from \$6.2 billion to \$16.1 billion. In a survey conducted last year, 30 percent of Texans reported that health care costs had caused “very serious” or “somewhat serious” financial problems for their family in the previous two years, and Texas Association of Business (TAB) members consistently rank health care as one of the most critical and challenging issues for employers and their employees.

Innovation in the health care sector, particularly the growth of telemedicine services, is providing opportunities to disrupt this growing crisis. However, Texas lags behind other states in establishing a supportive regulatory environment for the expansion of these services. Defined as the practice of medicine using electronic communications, information technology or other means between a licensed physician

**TEXAS RANKS 41<sup>ST</sup> IN THE NATION IN PER-CAPITA ACTIVE CARE PHYSICIANS AND 43<sup>RD</sup> IN THE NATION IN PER-CAPITA PRIMARY CARE PHYSICIANS.**



in one location and a patient in another with or without an intervening health care provider, telemedicine is a proven health care model and is used to complement traditional health care delivery models. As a health care tool, telemedicine connects providers and patients in new ways – promoting new efficiencies, helping to eliminate long-standing disparities in health care access and giving patients more control over their care.

Texas has been slow to maximize technological innovations in the health care delivery system and is now at a critical juncture in addressing statewide health care needs.

As many as one-third of medical issues now resolved in doctors’ offices, urgent care centers or emergency rooms may be amenable to telemedicine interventions, providing increased access and cost savings to patients, employers and the state.

Telemedicine's potential is held back only by limitations imposed by regulators with the mindset that the status quo is sufficient. Texas patients are ready for telemedicine.

In a recent poll conducted by Baselice & Associates, 70 percent of Texas voters favor the use of telemedicine to diagnose common medical conditions such as sinus infection, rash, urinary tract infection, or pink eye. Of those polled, 25 percent have used an emergency room to treat such common conditions – a much more costly and time-consuming alternative to telemedicine.

Despite the fact that Texas has some of the most onerous regulatory hurdles for telemedicine technologies, some applications of telemedicine are beginning to reach Texans. In a February 2016 hearing at the Texas Legislature, testimony was provided about employing telemedicine to check on transplant patients within their home environment. In fact, this insight into the home gave a more telling portrait of the patient's post-operation wellbeing than an office visit would have.

Telemedicine must be part of the solution to Texas' health care crisis. For this to become a reality, Texas must:

- Ensure that the standards of practice for telemedicine and in-person care are consistent with the end goal of increasing access to quality health care and lower consumer cost;
- Adopt a technology-neutral definition of telemedicine, which allows for patient choice and physician discretion in selecting the encounter with the technology they deem safe and appropriate; and
- Only require a patient to be examined in-person or travel to a facility when medically necessary.

Telemedicine allows patients to be diagnosed and treated sooner, which contributes to improved outcomes and less costly treatments. It also reduces time away from work, benefiting both the employee and the employer. The Texas Association of Business strongly supports these initiatives and urges lawmakers to tap into the potential of telemedicine. This paper will consider the benefits offered by telemedicine as well as outline specific policy steps the state should take to support the growth of these services.



# HEALTH CARE IN TEXAS: A GROWING CRISIS

## PHYSICIAN SHORTAGES

*“Data have shown year after year that Texas is faced with two clear trends: (1) the population is growing faster than almost any other state in the U.S., and (2) the number of health care providers is not keeping pace with that rate of growth.” — Statewide Health Coordinating Council<sup>1</sup>*

The state ranks 41<sup>st</sup> in the nation in per capita active care physicians<sup>2</sup> and 43<sup>rd</sup> in the nation in per capita primary care physicians.<sup>3</sup> According to a study by the Dallas-based physician search and consulting firm Merritt Hawkins, it would require 12,819 additional physicians right now to bring Texas in line with the national averages.<sup>4</sup> Twenty-two percent of Texans—or about 5.6 million individuals—have been deemed “medically disenfranchised” by the National Association for Community Health Centers because of severe primary care physician shortages in their area.<sup>5</sup> Low-income Texans are medically disenfranchised at twice this rate, with 48 percent of Texas households earning below 200 percent of the federal poverty level living in medically disenfranchised communities.<sup>6</sup>

Nearly a third of Texans lack a personal doctor,<sup>7</sup> and those who do have a doctor often face excessively long wait times for appointments.



The average wait time to see a family physician in the state's largest city, Houston, is 19 days, with wait times as long as 178 days being reported in the area.<sup>8</sup>

Fifty-one percent<sup>9</sup> of Texans believe access to health care providers has gotten more difficult over the past several years.

In rural Texas, the outlook is even bleaker. While the five most populous counties in Texas average 228 physicians per 100,000 residents, there are only 52 physicians per 100,000 residents in counties of 40,000 people or fewer.<sup>10</sup> Eighty counties in the state have five or fewer physicians, and 35 counties have no physicians of any kind.<sup>11</sup> Twenty-four percent of Texans surveyed have to drive more than 30 minutes to visit their primary care physician.<sup>12</sup>

## EXPLODING POPULATION

These health care professional shortages will only worsen. Texas has the third-fastest growing population in the United States. Between 2010 and 2014, the state population grew by almost 10 percent, outpaced only by Washington D.C. and North Dakota.<sup>13</sup> While this trend is generally good for Texas, it hastens the need for the state to address serious shortcomings in its health care system.

## PRONOUNCED HEALTH DISPARITIES

Texas has the seventh-highest level of health status disparities among residents in the nation;<sup>14</sup> the state lags behind 36 other states in preventable hospitalizations;<sup>15</sup> and Texans have the eighth-highest levels of infectious disease in the country.<sup>16</sup>

## OUT-OF-CONTROL COSTS

Health care costs continue to present a serious financial burden to both the state of Texas and its residents and businesses. From 2001 to 2011, annual Texas Medicaid spending grew more than 150 percent, from \$6.2 billion to \$16.1 billion.<sup>17</sup> During that same time period, the average annual premium for family coverage in an employer-sponsored health plan in Texas more than doubled.<sup>18</sup> Texas spends more than 46 other states per Medicare patient and a full 10 percentage points more than the national average.<sup>19</sup> In a 2013 study of health care costs in 24 urban areas nationwide, Dallas and Austin were found to have the third- and fourth-highest

cost-per-episode index of the cities analyzed, performing better than only San Francisco and Denver.<sup>20</sup>

And it's not just the state that pays. In a 2015 survey conducted by the Robert Wood Johnson Foundation and the Harvard T.H. Chan School of Public Health, 30 percent of Texans reported that health care costs had caused "very serious" or "somewhat serious" financial problems for their family in the last two years. Of those Texans, one-third said that they had spent all or most of their personal savings to pay for health care; 29 percent said they had to forgo basic necessities like food, heat, or housing to pay medical bills; and one in 20 reported having to declare bankruptcy due to health care costs.<sup>21</sup>

This poor outlook not only affects the wellbeing of Texas residents, but it is a consideration for future employers in deciding whether Texas is the place to move their business. U.S. employers expect health care costs to increase 5 percent in both 2016 and 2017, with average employee per-year costs to rise to \$12,338 in 2016 and nearly \$13,000 in 2017.<sup>22</sup> Rising health care premiums, lost productivity due to illness, and quality of life associated with health costs and outcomes all impact the state's ability to attract and retain the best businesses and workers. To combat the problem, Texas must find innovative solutions to the health care needs of its citizens.



## THE PROMISE OF TELEMEDICINE

Innovation in the health care sector is providing opportunities for Texas to expand access to health care throughout the state while simultaneously lowering health care costs and patients' out-of-pocket spending. Chief among those innovations is telemedicine technology, which provides a tool to overcome many of the challenges faced by traditional models of care delivery including access, cost, and patient choice.

Telemedicine allows patients to be diagnosed and treated earlier, which contributes to improved outcomes and less costly treatments. It also saves time away from work, benefiting both the employee and the employer.

### WHAT IS TELEMEDICINE?

"Telemedicine" is the practice of medicine using electronic communications, information technology, or other means between a licensed physician in one location and a patient in another with or without an intervening health care provider.<sup>23</sup> Telemedicine, sometimes also referred to as "telehealth," includes a broad array of technologies used to perform a variety of functions in a number of different clinical settings, ranging from remote diagnosis and treatment of common conditions via phone or video to mobile devices that let users track health indicators or supply diagnostic data and share those results with a health provider in another location. These interventions will only continue to multiply and diversify as new technologies and applications are developed.

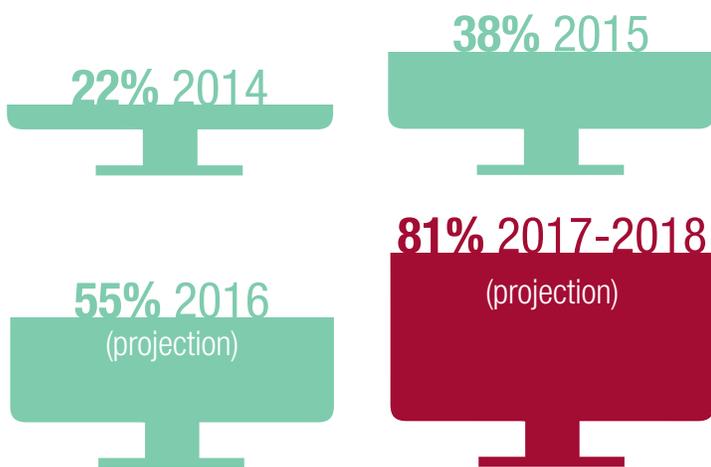
### GROWTH OF TELEMEDICINE

The telemedicine industry is growing rapidly. Analysis by market research firm RNCOS Business Consultancy Services predicts that the telemedicine market will show a cumulative annual growth rate of 18.5 percent worldwide between 2012 and 2018.<sup>24</sup> However, due to physician shortages, changes in payment structures under the Affordable Care Act, and other factors, growth in the U.S. is expected to dramatically outpace global averages. IHS, Inc., another market research firm, predicts a 56 percent cumulative annual growth rate of telemedicine in the U.S. from 2013-2018.<sup>25</sup> In a recent survey of TAB members, 18 percent of respondents indicated their company offers

telemedicine as part of its employee health benefit package.<sup>26</sup> The majority of companies decided to provide telemedicine because of both cost savings to the company and the employees.<sup>27</sup>

Researchers at Towers Watson, a leading HR consultant firm, estimate that as many as 81 percent of U.S. employers will offer telemedicine services to their workers as part of their company health plans by 2018.<sup>28</sup>

#### U.S. EMPLOYERS OFFERING TELEMEDICINE BENEFITS



#### EFFECTS ON AMBULATORY CARE

Telemedicine has tremendous potential to shift patients from ambulatory care, when appropriate. Cascadia Capital estimates that one-third of medical issues now resolved in doctors' offices, urgent care centers, or emergency rooms are amenable to telemedicine interventions, providing convenience and cost savings to patients, employers, and the state.<sup>29</sup>

On average, a telemedicine consultation represents a savings of 95 percent over a trip to the emergency room and 72 percent over a trip to an urgent care center, for similar issues.<sup>30</sup> A 2015 report by Towers Watson predicts that effective use of telemedicine services to deliver non-urgent primary care could save U.S. employers \$6 billion in annual health care costs.<sup>31</sup> Texas' leading provider of telemedicine consultations covered 2.4 million Texans in 2015, providing \$79 million in health care savings to state employers.<sup>32</sup>

In addition to cost savings for both patients and employers, this shift will lessen burdens on these providers and free up access to critical services for patients who truly need them.

**25% OF TEXANS POLLED HAVE USED AN EMERGENCY ROOM TO TREAT COMMON CONDITIONS OR AILMENTS SUCH AS A SINUS INFECTION, RASH, URINARY TRACT INFECTION, OR PINK EYE – A MUCH MORE COSTLY AND TIME-CONSUMING ALTERNATIVE TO TELEMEDICINE.**

#### COST-SAVINGS FROM TELEMEDICINE

The cost-saving potential of telemedicine has sometimes been questioned on the basis that offering more convenient and affordable health care options may actually add to health spending by increasing utilization. However, one recent study of the impact of the introduction of telemedicine consultations to employee benefits packages for a major national retailer found that in addition to saving an average of \$1,157 per encounter for those who used the service, these services saved \$21.30 per month, per enrolled employee, across the company.<sup>33</sup> Although additional research is necessary, these results suggest that even when it replaces zero cost self-care, in some instances, telemedicine can reduce company-wide health care spending.

**\$930 | E.R. VISIT**  
**\$160 | URGENT CARE**  
**\$45 | TELEMEDICINE**

#### REDUCED USE OF EMERGENCY CARE

Across Texas and the nation, emergency room overuse is driving up health care spending and diluting services for patients facing true medical emergencies. Twenty-five percent of Texans polled have used an emergency room to treat common conditions or ailments such as a sinus infection, rash, urinary tract infection, or pink eye – a much more costly and time-consuming alternative to telemedicine.<sup>34</sup>

A 2011 study of emergency rooms in the Houston area showed 40 percent of visits were for problems related to primary care.<sup>35</sup> Telemedicine can play a role in eliminating access-driven emergency room overuse. In fact, data released by the University of Rochester Medical Center found that telemedicine could eliminate nearly one in five emergency room visits among older adults.<sup>36</sup>

In addition to wasteful spending, studies have shown that emergency room overcrowding leads to more complications and higher mortality rates, especially for patients experiencing cardiac emergencies. A 2015 study published in *Health Affairs* looking at the outcomes of heart attack patients whose ambulances were diverted from crowded emergency rooms found that the patients had a 9.8 percent increase in one-year mortality compared to non-diverted patients.<sup>37</sup>

## INCREASED ACCESS TO CARE

*“One of the clearest benefits of telehealth is the ability to expand access.”*

— President’s Council of Advisors on Science and Technology<sup>38</sup>

Telemedicine has the ability to improve health care access by addressing primary care physician shortages, especially in rural and medically underserved communities. Telemedicine also plays a role in increasing access to medical sub-specialties, including psychiatry, neurology, and geriatric care, as well as coordinating long-term care for chronic conditions. In Alaska—another state with large, medically underserved rural areas—telemedicine has long been used to combat physician shortages. For example, a program there using store-and-forward technology to connect patients with



ear, nose, and throat subspecialists saw the number of new patients waiting 5 months or longer for a consultation decrease from 47 percent to 8 percent, and average wait times for appointments decreased from 4.2 to 2.9 months.<sup>39</sup> In North Dakota, a collaboration between the North Dakota State University College of Pharmacy, the North Dakota State Board of Pharmacy, and the North Dakota Pharmacists Association led to the development of a statewide telepharmacy program that brought more than 40,000 rural citizens in 55 percent of the state’s counties access to pharmacy services within their community. The rate of dispensing errors for the program was under one percent, compared with a national average of about two percent for brick-and-mortar pharmacies.<sup>40</sup>

Additionally, the convenience and cost savings of telemedicine reduce barriers to access such as lack of paid time off, family obligations, and mobility issues. Analysis by the RAND Corporation of the use of telemedicine consultations at a California agency serving public employees found that the one in five utilizations of the service were by individuals who had not connected with a physician in the previous year. Based on their analysis, the researchers concluded that the service “might have been the entry point into the health care system for people who did not have frequent contact with a primary care provider or had difficulty accessing their regular physician.”<sup>41</sup>

## TELEMEDICINE AND MENTAL HEALTH

Over three million Texans report having some form of mental illness, and more than one million Texans over the age of 18 and 262,000 Texans between the ages of 12 and 17 report having had a major depressive episode in the past year.<sup>42</sup> However, the Kaiser Family Foundation estimates that the current number of mental health care providers in Texas meets the need of less than half of the state’s population, leaving many Texans without the critical services they need to lead happy, productive lives.<sup>43</sup> Not only does inadequate mental health care affect the wellbeing of many Texans, it also costs the Texas economy substantially in terms of lost productivity. In Houston alone, Merritt Hawkins estimates that \$5.6 billion in earnings is lost annually as a result of severe mental illness.<sup>44</sup>

The situation is particularly dire in rural areas of the state, where 185 counties are without a psychiatrist.<sup>45</sup> Texas also lacks sufficient linguistic and cultural diversity among its providers. Studies show that outcomes of

mental health treatment are improved when patients have access to providers who share their native language or cultural or ethnic background.<sup>46</sup> Yet, as of 2009, just 12.3 percent of Texas psychiatrists were Hispanic and 3.8 percent were African American, despite Hispanic and African American residents making up 38 percent and 10 percent of the Texas population respectively.<sup>47</sup> Telemedicine can help close this linguistic and cultural gap in mental health care by connecting patients of a particular background in one area with physicians who share that background in another.

Across backgrounds and needs, telemedicine has shown tremendous promise connecting individuals in need of mental health services with qualified providers. In a comprehensive review comparing telepsychiatry services with in-person services, researchers found that telepsychiatry increased access to care, connected patients with appropriate specialists, and generated positive health outcomes.<sup>48</sup> A recent study published in *JAMA Psychiatry* found that for rural older adults with generalized anxiety disorder, telephone-administered cognitive behavioral therapy successfully reduced anxiety symptoms and depression.<sup>49</sup>

## BETTER HEALTH OUTCOMES

*“Sample studies of telemedicine used in the treatment of medical conditions and in various settings suggest that efficient use of telemedicine technologies can improve overall health of outcomes.”* – American College of Physicians<sup>50</sup>

When deployed effectively, telemedicine yields results equivalent to or better than other delivery methods. In a study of 8,000 patients, *The Journal of the American Medical Association* found no difference in the outcome of care of patients using telemedicine instead of in-person visits.<sup>51</sup> Two separate studies looking at the same national provider of telemedicine primary care consultations found that participants who used the company’s services actually had lower rates of follow-up visits for their condition than participants who went to the emergency room or primary care offices, suggesting that the care they received through these services was as good or better than the care received by participants using other service providers.<sup>52,53</sup> Antibiotic prescription rates—often identified as an area where differences in quality of care can be discerned—have been found to be similar for telemedicine encounters and in-person settings.<sup>54</sup>

One reason telemedicine users may experience better outcomes is that by lowering barriers to accessing care, these technologies encourage individuals to seek intervention for their health concerns early, before their conditions have worsened. According to data compiled by the Texas Department of State Health Services, in 2013 alone, adult residents of Texas received more than \$8.8 billion in charges for hospitalizations that could have been prevented if the patient had access to and cooperated with earlier outpatient interventions.<sup>55</sup>

A growing body of evidence has shown that telemedicine applications can:

- Reduce hospital admissions<sup>56,57</sup>
- Cut back on unnecessary emergency room visits<sup>58,59</sup>
- Decrease bed days for patients with chronic illnesses<sup>60</sup>
- Increase patient satisfaction<sup>61,62,63</sup>
- Enhance quality of life<sup>64</sup>

## CHRONIC CONDITIONS AND LONG-TERM CARE

Over two thirds of Texans aged 65 and older enrolled in Medicare have two or more chronic conditions, and nearly 40 percent have a disability.<sup>65,66</sup> Chronic diseases represent the single largest burden on the health care industry nationwide, accounting for more than 80 percent of all U.S. health care spending annually.<sup>67</sup> As the population ages, the strain will become more severe. Analysis by the Milken Institute, an independent economic think tank, estimates that chronic disease will cost the Texas economy \$332 billion a year in direct treatment costs and lost productivity by 2023.<sup>68</sup> A number of studies have shown that telemedicine technology can play a role in managing and monitoring chronic conditions including diabetes, congestive heart failure, and stroke,<sup>69</sup> saving Texas money and improving



quality of life and outcomes for patients, especially those facing geographic, mobility, or other barriers to accessing care.

## BENEFITS FOR CAREGIVERS

Telemedicine also offers intrinsic benefits to more than 3 million family caregivers in Texas. One in eight Texans provides care for chronically ill or disabled family members.<sup>70</sup> In 2015 alone, these caregivers provided over 3 billion hours of care to their loved ones.<sup>71</sup> By eliminating travel time to get to appointments and providing in-home support to family caregivers, telemedicine can reduce stress, increase productivity, and improve the quality of life for these Texans. Access to primary care and consultation via telemedicine may also make it more likely that caregivers receive high-quality health care for themselves, as these individuals can face significant logistical barriers to getting to a doctor's office.

## CASE STUDIES:

### TELEMEDICINE AND CHRONIC CARE

In 2003, the Veterans Health Administration launched a Care Coordination/Home Telehealth program for veterans with chronic conditions. Between 2003 and 2007, the program grew 1,500 percent and saw a 25 percent reduction in bed days, a 19 percent reduction in hospital readmissions, and 86 percent patient satisfaction for participating veterans.<sup>72</sup>

Researchers analyzing the Health Buddy Program, a program that integrates telehealth into care for chronically ill Medicare beneficiaries, found spending reductions between \$312 and \$524 per participant, per quarter.<sup>73</sup>



# TELEMEDICINE IN TEXAS: WHERE TEXAS IS GOING WRONG

With its vast stretches of rural areas and severe maldistributions of primary and specialty care, Texas should be leading the way with policies that encourage the advancement of telemedicine in the state. However, over the last several years, the Texas Medical Board has moved to carve out telemedicine from other medical practices and unnecessarily impose more stringent standards for telemedicine than in-person services. In their latest analysis of gaps in state practice standards and licensure for telemedicine, the American Telemedicine Association (ATA) singled out Texas and Arkansas for creating the most stringent clinical practice rules for telemedicine compared to in-person encounters. According to ATA, Texas's score "suggest[s] many clinical practice barriers and little opportunity for telemedicine advancement" in the state.<sup>74</sup> Rather than provide for patient safety, these regulations make it more difficult for qualified physicians to use telemedicine services to reach patients.

## TELEMEDICINE POLICY RECOMMENDATIONS

In order to take full advantage of telemedicine innovations, the Texas legislature should:

- 1. Ensure that legislative and regulatory action is designed to maintain consistent telemedicine and in-person practice standards and promote competition for enhanced quality and lower consumer cost.**

Nineteen states, including neighboring New Mexico, receive an "A" from ATA for having requirements for telemedicine that are on par with requirements for in-person services. Texas is one of only two states with an "F" rating from ATA for requirements that are much more stringent for telemedicine than for in-person services.<sup>75</sup>

- 2. Adopt a technology-neutral definition of telemedicine, allowing doctors to facilitate the encounter with the technology they deem safe and appropriate.**

Texas is one of only four states that mandate the type of technology that may be used in a telehealth or telemedicine encounter. This policy undermines the expertise of physicians to make their best judgments about patient safety and unfairly restricts access to important telemedicine services for Texans.

**3. Where not medically necessary, do not require a patient to be examined in-person, travel to a medical facility, or have medical personnel present as a condition to being diagnosed via telemedicine.**

Diagnosing certain common, uncomplicated conditions does not require in-person examination or that the patient travel to a medical facility. According to ATA, Texas is one of only three states that generally require a “telepresenter” (a licensed medical professional) to be present with the patient for diagnosing new conditions (with the exception of mental health). While a telepresenter may be appropriate in some settings, this requirement unnecessarily restricts the delivery of telemedicine, especially those business-to-business telemedicine services that have been shown to cut costs and increase patient choice and satisfaction. Texas should join 47 other states and Washington D.C. in eliminating this requirement.

**In order to take full advantage of telemedicine technology, Texas must address its regulatory imbalance between in-person medical care and telemedicine. The Texas Association of Business strongly supports these initiatives and urges lawmakers to tap into the potential of telemedicine.**

## TECHNOLOGY NEUTRALITY IN TELEMEDICINE: A SAMPLE OF STATES THAT ARE GETTING IT RIGHT

### CALIFORNIA

“Telehealth” means the mode of delivering health care services and public health via information and communication technologies to facilitate the diagnosis, consultation, treatment, education, care management, and self-management of a patient’s health care while the patient is at the originating site and the health care provider is at a distant site. Telehealth facilitates patient self-management and caregiver support for patients and includes synchronous interactions and asynchronous store and forward transfers.

[CA. Bus. & Prof. Code § 2290.5]

### COLORADO

“Telemedicine” means the delivery of medical services and any diagnosis, consultation, or treatment using interactive audio, interactive video, or interactive data communication.

[CO Revised Statutes, 12-36-102.5]

### INDIANA

“Telemedicine” means the delivery of health care services using electronic communications and information technology, including: (1) secure videoconferencing; (2) interactive audio using store-and-forward technology; or (3) remote patient monitoring.

[IN Code Title 25, Article 1, Chapter 9.5]



## OREGON

“Telemedicine” means the provision of health services to patients by physicians and health care practitioners from a distance using electronic communications.

[OR Revised Statutes §442.015(26)(2013)]

## SOUTH CAROLINA

“Telemedicine” means the practice of medicine using electronic communications, information technology, or other means between a licensee in one location and a patient in another location with or without an intervening practitioner.

[Act No. 210, 2016 S.C. Acts 1506]

## TENNESSEE

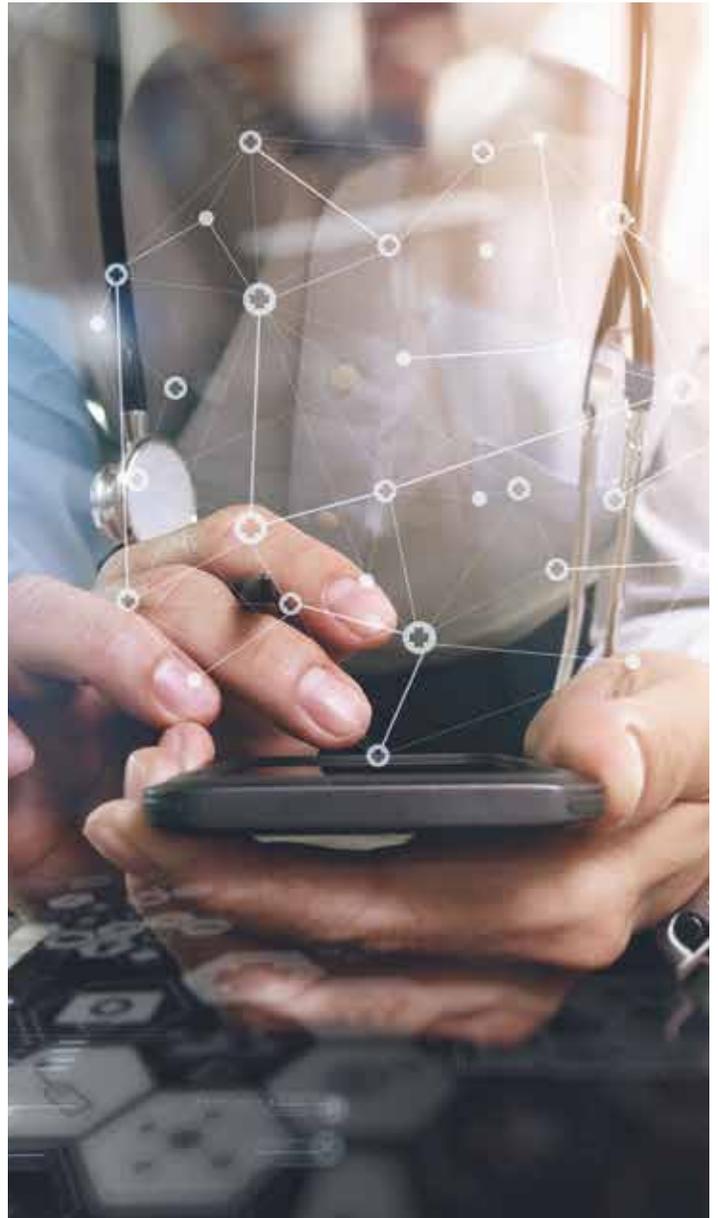
“Telehealth”, or “telemedicine,” means...the use of real-time audio, video, or other electronic media and telecommunications technologies that enable interaction between the healthcare provider and the patient, or also store-and-forward telemedicine services...for the purpose of diagnosis, consultation, or treatment of a patient in another location where there may be no in-person exchange.

[TN Code Annotated § 63-1-155]

## VIRGINIA

“Telemedicine services,” as it pertains to the delivery of health care services, means the use of electronic technology or media, including interactive audio or video, for the purpose of diagnosing or treating a patient or consulting with other health care providers regarding a patient's diagnosis or treatment.

[VA Code Annotated § 54.1-3303.A(2015)]



- <sup>1</sup>Statewide Health Coordinating Council. “2011-2016 Texas State Health Plan.” 2010.
- <sup>2</sup>North Texas Regional Extension Center. “The Physician Workforce in Texas.” Prepared by Merritt Hawkins. April 2015. ([http://www.merrithawkins.com/UploadedFiles/MerrittHawkings/Surveys/Merritt\\_Hawkins\\_NTREC\\_Physician\\_Workforce\\_Survey.pdf](http://www.merrithawkins.com/UploadedFiles/MerrittHawkings/Surveys/Merritt_Hawkins_NTREC_Physician_Workforce_Survey.pdf))
- <sup>3</sup>United Health Foundation. America’s Health Rankings, 2015 Annual Data. (<http://www.americashealthrankings.org/TX>)
- <sup>4</sup>North Texas Regional Extension Center. “The Physician Workforce in Texas.” Prepared by Merritt Hawkins. April 2015. ([http://www.merrithawkins.com/UploadedFiles/MerrittHawkings/Surveys/Merritt\\_Hawkins\\_NTREC\\_Physician\\_Workforce\\_Survey.pdf](http://www.merrithawkins.com/UploadedFiles/MerrittHawkings/Surveys/Merritt_Hawkins_NTREC_Physician_Workforce_Survey.pdf))
- <sup>5</sup>National Association of Community Health Centers. “Profiles of Medically Disenfranchised: Communities Experiencing Shortages of Primary Care Physicians in Texas.” Created by Robert Graham Center. 2014. (<http://www.nachc.com/client/documents/research/maps/TXPS.pdf>)
- <sup>6</sup>Ibid.
- <sup>7</sup>Kaiser Family Foundation. State Health Facts. 2014. (<http://kff.org/other/state-indicator/percent-of-adults-reporting-not-having-a-personal-doctor-by-raceethnicity/>)
- <sup>8</sup>Merritt Hawkins. “Physician Appointment Wait Times and Medicaid and Medicare Acceptance Rates.” 2014. (<http://www.merrithawkins.com/uploadedFiles/MerrittHawkings/Surveys/mha2014waitsurvPDF.pdf>)
- <sup>9</sup>Baselice & Associates. (2016). “Texas Voter Survey on Telemedicine.” Question 1 of 34, June 21-26, 2016.
- <sup>10</sup>North Texas Regional Extension Center. “The Physician Workforce in Texas.” Prepared by Merritt Hawkins. April 2015. ([http://www.merrithawkins.com/UploadedFiles/MerrittHawkings/Surveys/Merritt\\_Hawkins\\_NTREC\\_Physician\\_Workforce\\_Survey.pdf](http://www.merrithawkins.com/UploadedFiles/MerrittHawkings/Surveys/Merritt_Hawkins_NTREC_Physician_Workforce_Survey.pdf))
- <sup>11</sup>Ibid.
- <sup>12</sup>Baselice & Associates (2016). “Texas Voter Survey on Telemedicine.” Question 6 of 34, June 21-26, 2016.
- <sup>13</sup>United States Census Bureau. “Quick Facts.” Accessed online April 20 2016. (<http://www.census.gov/quickfacts/table/PST045215/00,48>)
- <sup>14</sup>United Health Foundation. America’s Health Rankings, 2015 Annual Data. (<http://www.americashealthrankings.org/TX>)
- <sup>15</sup>Ibid.
- <sup>16</sup>Ibid.
- <sup>17</sup>Nelson, Jonathan. “Primary Care in Texas: Condition Critical,” *Texas Family Physician Vol. 63, No. 3*. Summer 2012. (<http://www.tafp.org/Media/Default/Downloads/advocacy/primary-care-condition-critical.pdf>)
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**TELEMEDICINE THE PULSE OF TEXANS**

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Texas health care consumers are calling for new ways to receive care. They want immediate access without time-consuming waits. They want providers to use technology to streamline services. They want care at a better price. Their employers want to offer all of that in health benefits packages. Innovation is key to solving Texas' health care gaps. Telemedicine has the potential to transform traditional health care delivery models. Telemedicine is ready to answer the call.

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TAB surveyed 600 registered Texas voters to understand their viewpoints on telemedicine and their use of health care. Key findings of the results include:

**70%** of Texans favor the use of telemedicine to diagnose common medical conditions.

**25%** of Texans have used an emergency room to treat such common conditions – a much more costly and time-consuming alternative to telemedicine.

**51%** of Texans believe that access to health care providers has gotten more difficult.

**24%** of rural Texans have to drive 30 minutes or more to get to the doctor's office.

**23%** of Texans have to wait 14 or more days to see their doctor.

TAB also surveyed 159 of its member businesses, the majority of which are small businesses. Here are some key findings of the results:

**77%** favor the use of telemedicine to diagnose common medical conditions.

**70%** believe that access to health care providers has gotten more difficult.

**18%** of companies offer telemedicine as part of its employee health benefits package. The top reasons given were that telemedicine is an innovative benefit offering and provides cost savings to the company and employees.

**100%** of companies who currently offer telemedicine as a benefit plan to continue offering it, and **24%** have plans to expand the benefit.

**66%** reported positive feedback on employees' experience using telemedicine, and **0%** reported a negative response from employees.

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