

### WHITE PAPER

# Fast-Track to Teledentistry

Removing Barriers to Care While Maximizing Overall Health



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### Contributors

CareQuest Institute for Oral Health

### Matt Jacob

Science Writer and Communication Consultant CareQuest Institute for Oral Health

#### Julie Frantsve-Hawley, PhD, CAE

Director of Analytics and Evaluation CareQuest Institute for Oral Health

### Sean G. Boynes, DMD, MS

Vice President of Health Improvements CareQuest Institute for Oral Health

### Eric P. Tranby, PhD

Data and Impact Manager, Analytics and Evaluation CareQuest Institute for Oral Health

### Ilya Okunev, MA

Senior Data Analyst, Analytics and Evaluation CareQuest Institute for Oral Health

### Kirill Zaydenman, MS

Vice President of CareQuest Innovation Partners

### Molly M. Fubel, MBA

Vice President, Marketing CareQuest Institute for Oral Health

### **Rebekah Mathews, MPA**

Director of Value-Based Care CareQuest Institute for Oral Health

### **Stefanie Rudolph**

Marketing Communications Manager CareQuest Institute for Oral Health

### Vuong K Diep, MPH

Health Science Specialist, Analytics and Evaluation CareQuest Institute for Oral Health

### **External Reviewers**

### Amy Martin, DrPH, MSPH

Professor and Director for the DPOH James B. Edwards College of Dental Medicine Medical University of South Carolina

### Alan Morgan, MPA

Chief Executive Officer National Rural Health Association

### Eli Schwarz, KOD, DDS, MPH, PhD, FHKAM, FHKCDS, FACD, FRACDS

Professor and Chair, Department of Community Dentistry School of Dentistry Oregon Health and Science University

### Mark Deutchman, MD

Professor, University of Colorado School of Medicine, Deptartment of Family Medicine Director, Rural Track, School of Medicine Associate Dean for Rural Health Professor, University of Colorado School of Dental Medicine University of Colorado

#### Paul Glassman, DDS, MA, MBA

Professor and Associate Dean for Research and Community Engagement College of Dental Medicine California Northstate University

#### Sharity Ludwig, EPDH, MS-HAIL

Director of Clinical Innovations Advantage Dental from DentaQuest

### Scott L. Tomar, DMD, DrPH

Professor and Associate Dean for Prevention and Public Health Sciences UIC College of Dentistry

### William D. Bailey, DDS, MPH

Delta Dental Endowed Chair in Early Childhood Caries Prevention and Professor Director, Center for Oral Disease Prevention and Population Health Research School of Dental Medicine University of Colorado Anschutz Medical Campus



## **Executive Summary**

- In times of crisis, telehealth can avoid disruptions in care that would otherwise send people to already overwhelmed clinics and hospitals. In addition to COVID-19, hurricane damage, earthquakes and terrorist attacks are other examples of events that can disrupt or delay care, or prompt patients to visit hospital emergency departments (EDs), quickly overwhelming these facilities. Greater access to telehealth can allow the elderly, medically compromised, or other vulnerable populations to remain safely at home without losing all access to medical or dental services. Even in a crisis, dental providers could use telehealth to consult with patients, triage their needs, and offer limited emergency services.
- 2. Even in normal times, many Americans aren't getting the dental care they need. Millions of Americans live in areas with a shortage of dental professionals, and even outside these shortage areas, many people struggle to get care because of transportation or other hurdles. Dental access is a particular concern in rural communities. Rural adults are more likely to have untreated dental decay and more likely to be missing all of their teeth. A federal report cites telehealth as a vehicle for improving dental health in rural America.
- When people don't receive dental care, both oral health and overall health deteriorate. A lack of access to dental care can lead to untreated tooth decay or other infections

that leave Americans with no viable options other than visiting hospital emergency departments, where treatment is costly and can disrupt more urgent needs in a time of crisis. Growing research has connected poor oral health with diabetes, stroke and other health conditions. Untreated periodontal (gum) disease makes it harder for people to manage their diabetes.

### 4. Telehealth offers multiple forms of technology to improve health.

Telehealth can connect patients and providers in different physical locations, as well as enable different providers who treat the same patients to share information. Telehealth includes an array of digital tools, ranging from Fitbit — a wrist band that tracks physical activity — to much more sophisticated programs. In Oregon, for example, a rural teledentistry program enables dental hygienists to assess schoolchildren's mouths visually, chart likely areas of tooth decay, take pictures and X-rays of a child's mouth, and use laptops to transmit this information to a remote dentist, who reviews these materials and develops a treatment plan for each participating child.

5. Teledentistry helps close the gap in access to dental services. From Missouri to California, teledentistry efforts are expanding access to care. An analysis of a teledentistry program in Colorado found that most of its patients had not received dental services in more than a year, and 10 percent

had never obtained such care before this program began. These data show how teledentistry reaches many people who otherwise would go without care.

- 6. Teledentistry can save money for states and consumers. Using telehealth approaches in dentistry would save money by getting people the care they need, keeping them healthy and reducing the need for costly treatments especially by curbing visits to hospital EDs. Research from multiple states demonstrates telehealth's ability to reduce health care costs. More specifically, teledentistry can save money in various ways, including managing oral health conditions that might otherwise make it harder to control diabetes or raise seniors' risk of aspiration pneumonia.
- 7. Teledentistry and other telehealth initiatives can create and preserve jobs, especially in rural areas. Job growth in the health care sector is expected to rise faster than other industries, and states can benefit from this trend by

## Introduction

At a time when the COVID-19 pandemic has kept millions of Americans at home, federal health officials have taken urgent steps to promote telehealth as a way to connect Medicare and Medicaid patients with the care they need<sup>1</sup>. These officials recognized that services provided through telehealth help to free up medical offices and hospital EDs for patients with coronavirus or other truly urgent conditions. Insurers are following suit, acting quickly to ensure coverage and awareness of telehealth options among their members, even where telehealth was previously available, to maximize its immediate benefit<sup>2</sup>.

COVID-19, hurricanes, earthquakes and terrorist attacks are among the events that can disrupt or delay care for publicly- and privatelyinsured patients — or prompt patients to visit hospital EDs, which may already be overwhelmed with critically ill or linjured patients.

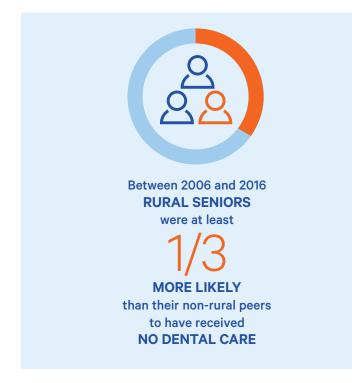
Even before COVID-19 reached our nation, there were excellent reasons for states to encourage telehealth. These technology tools can help prevent disease and, equally important, assist Americans in managing diabetes and other chronic diseases, which, if uncontrolled, can be life-threatening. Many of these chronic diseases are associated with oral health. In recent years, most states have expanded their Medicaid programs, opening the door to health care for millions of new individuals. Unfortunately, many of these newly-insured people struggle to obtain dental services for two reasons: 1) most states don't offer comprehensive establishing a legal and regulatory environment in which teledentistry can flourish. In recent years, many rural hospitals have closed. Hospitals are usually among the largest employers in rural areas, and their financial stability could be enhanced by serving as a hub for teledentistry programs.

8. States should take steps now to address barriers to teledentistry. There are four key areas that state policymakers should examine. These areas include ensuring that policies permit *all* members of the dental workforce to practice at the highest level of their skill and training. In addition, reimbursement policies should be updated so that both public and private insurers cover remote provider-patient interactions through live video or store-and-forward mechanism. States can also help teledentistry expand by bringing clarity to legal issues such as liability coverage for dental providers, data security and rules of compliance with the Health Insurance Portability and Accountability Act (HIPAA).



dental benefits for adults, and 2) the nearest dental provider is located many miles away or doesn't participate in Medicaid. In fact, a Pennsylvania study revealed that newly Medicaidinsured adults are much less likely to have a dental home (a regular dentist) than they are to have a medical home (a regular physician)<sup>3</sup>. Yet access to dental care is a major problem for *all* states, regardless of whether they have expanded Medicaid or not. More than 56 million Americans live in an area with a shortage of dental professionals, and only six states have most of the dentists they would need to eliminate these shortages if those dentists were distributed more evenly<sup>4</sup>.

Dental access is especially a concern within rural communities. Roughly 27 million Americans live in what are called "micropolitan statistical areas," which are areas of small towns and rural communities<sup>5</sup>. Nearly one in four rural residents is at least 65 years old, and many of them are medically compromised due to one or more chronic diseases. Between 2006 and 2016, rural seniors were at least one-third more likely than their non-rural peers to have received no dental care<sup>6</sup>. Additionally, rural adults are more likely to have untreated dental decay and more likely to be missing all of their teeth<sup>7</sup>.



A 2016 report noted that hourly jobs are common in rural areas and getting approved leave time from work to receive dental care — especially when it requires lengthy travel — was seen as economically burdensome. Patients with hourly jobs who cannot get approved leave must sacrifice pay, and even approved leave may not be paid leave<sup>8</sup>. Even people who live close to a dental clinic may have nowhere to turn if they suffer a toothache or other oral health issues during an evening or weekend, when dental practices are typically closed. Beyond the issues related to hourly jobs, other factors can limit access to dental care. People with physical disabilities, limited mobility or lack of transportation also face challenges in accessing care. Additionally, people who are medically compromised, such as having weakened immune systems, could jeopardize their health by traveling a considerable distance to obtain care.

It doesn't have to be this way. For example, take a look at online banking and how it's taken for granted. Through Amazon and other companies, e-commerce enables consumers to quickly purchase products they could not have bought 25 years ago because they lived far from these retailers. The health care industry has started to take similar steps to leverage technology that will connect more patients to the medical, dental and behavioral health services they need to live healthy lives.

Telehealth is not a specific service; this term describes a range of technology-based tools that enable a health provider to offer services to a patient in a different physical location, or for a provider and patient in one location to gain remote access to a specialist who can offer advice. One example is a care team using a web-based connection to consult with a person with diabetes using an internet-based monitoring system to keep track of their blood glucose levels. Research demonstrates the ability of telehealth programs to manage chronic diseases, improve care access and reduce wait times<sup>9, 10</sup>. But progress has come slowly.

In 2018, a bipartisan group of five governors from different regions released a plan to move the health care system to a more value-based approach — one that will "produce better health outcomes at a lower cost to governments, employers and individuals<sup>11</sup>." Telehealth is an important vehicle for moving toward a system that places a greater focus on value.

Yet many legislators may not be aware of how their states are unintentionally making it more difficult for telehealth initiatives to expand and serve more patients. In response to the coronavirus pandemic, both federal and state officials announced a variety of steps to incentivize telehealth, but many of the legal and regulatory barriers to teledentistry endure, limiting efforts to improve access to dental care. This report examines how teledentistry can benefit both consumers and states, and explores how state legislators and other policymakers can reduce barriers to teledentistry.



## Impact of Not Receiving Care

The shortage of dentists in many areas of the country and other factors that reduce access have negative consequences. When children or adults struggle to get dental care, their health declines, and not just within their mouths. Extensive research connects poor oral health with diabetes, and some studies link oral health to stroke<sup>12</sup>, osteoporosis<sup>13</sup>, and other broader health conditions<sup>14</sup>. Untreated periodontal disease can make it harder for people with diabetes to manage their blood glucose levels<sup>15</sup>. In addition, researchers have reported that "uncontrolled periodontal disease could trigger or exacerbate" the neuroinflammatory phenomenon seen in Alzheimer's disease<sup>16</sup>. Preterm births and other adverse outcomes of pregnancy are also associated with periodontal disease<sup>17</sup>.

People who lack access to dental care are more likely to put off or be unaware of an oral health issue that might eventually cause an infection that leads them to a hospital ED, where treatment is costly and usually fails to address the underlying cause. "The emergency department is about the least appropriate, most expensive place you can go for dental care," said Dr. Scott Tomar, a professor of dentistry at the University of Florida. "In most cases, they give the patient a painkiller and antibiotics, and tell them they really need to get to a dentist<sup>18</sup>." Using teledentistry to connect patients with dental providers could help ease the demands on Florida's EDs, creating more capacity for other cases and reduce the wait times.

Given that many people visit EDs because they lack access to a dental clinic, this cycle often repeats itself. The obstacles to care require that states explore new approaches. One promising strategy is telehealth, using digital apps or other technology to connect patients with dental providers — or connect providers with each other. A 2018 report by the U.S. Department of Health and Human Services cited the expanded use of telehealth as one of the positive trends in improving dental health in rural America<sup>19</sup>. Although telehealth offers a variety of options for connecting individuals regardless of their geographic locations, most of the early approaches have focused on improving access to medical or dental services for rural residents.

## Telehealth: A Growing Trend

Telehealth is being used in numerous ways and offers the potential to improve health outcomes while reducing costs for consumers and taxpayers. Approaches to telehealth vary widely in their purpose and sophistication. For example, the website Cool Quit was created by two physicians to help people end their tobacco addiction by using telehealth to gain easy and inexpensive access to inhalers, nicotine gum and other products<sup>20</sup>. Telehealth's appeal is strong because it offers the flexibility of care settings, including hospital clinics, acute care locations, community sites and private residences, combined with the expanding application of services to a wide variety of health conditions<sup>21</sup>.

In many states, the healthcare industry is rapidly accelerating its investment in telehealth services. The American Hospital Association reports that the use of telehealth technologies increased 53 percent over a recent one-year period — nearly four times faster than utilization of urgent care centers<sup>22</sup>. As of 2019, nearly all states have a definition for telehealth or telemedicine, and live video services for medical or behavioral health encounters are reimbursed by Medicaid in all states<sup>23</sup>. In a survey of more than 2,000 U.S. consumers, two-thirds said they were open to using telehealth. People age 65 and over were most interested in telehealth's ability to connect them to care more quickly, while other Americans cited the convenience that telehealth offers<sup>24</sup>.



53% INCREASE in use of telehealth technology

**OF PEOPLE** 

are open to using telehealth



Teledentistry is the provision of patient care or education using one of these four forms of technology<sup>30</sup>:



### Live video (synchronous)

This is two-way, "real-time" interaction between a health provider and someone else (a patient, their caregiver or another provider) using telecommunications technology.



### Store-and-forward (asynchronous)

Patient care can be facilitated by transmitting photographs, video, X-rays or other recorded health information via a secure electronic system to a health provider, who uses the information to evaluate a patient's condition and/or update a patient's treatment plan without live interaction.



#### Remote patient monitoring (RPM)

This telehealth mode allows personal health or medical data to be collected from an individual in a different location, allowing a health provider to monitor a specific condition or vital sign, such as the individual's blood pressure, heart rate, blood glucose levels or electrocardiograms.



### Mobile health (mHealth)

This form uses smartphones, tablet computers, or other mobile devices to enhance communication in various ways. For example, mHealth facilitates mobile medication management, which allows health providers to answer questions from patients about prescription drugs. Another example is a downloadable app enabling people to test the pH of their saliva, a level that affects their risk of tooth decay<sup>31</sup>.



With many rural hospitals struggling financially, some experts see telehealth as a cost-efficient way to help these hospitals manage patients in their intensive care units (ICUs). In a rural part of Virginia, Winchester Medical Center is using an off-site care team to help monitor ICU patients through video and audio connections. Since it began using this telehealth service, the hospital has reduced its ICU mortality rate by 32 percent compared with a model of likely outcomes without telehealth. Additionally, the hospital reduced its ICU length of stay by 34 percent<sup>25</sup>. By freeing up space in ICUs, telehealth could leave hospitals better prepared for national or regional crises.

State Medicaid programs, hospitals and health systems could reduce their costs through telehealth approaches to medical or dental care. A Pennsylvania health system saved money by offering consumers live consultations with health professionals. Researchers found this telehealth program saved between \$19 and \$121 per encounter by diverting these patients from seeking care in more expensive medical settings<sup>26</sup>.

Although most states are supporting some form of telehealth, progress is happening slowly in the area of teledentistry<sup>27.</sup> One teledentistry expert describes this field as being only in its infancy<sup>28</sup>. Experts point to inconsistency within state policies that "creates a confusing environment" for those who wish to engage in telehealth initiatives<sup>29</sup>. This is a missed opportunity because existing models of teledentistry show the benefits for patients and the broader health care system.

### Telehealth is associated with:







## Potential Savings for States

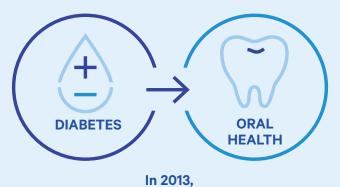
In the 1990s, the U.S. Department of Defense determined teledentistry's ability to save time and money by evaluating its Total Dental Access program, which remotely connected the military's field dentists with specialists, dental lab technicians or other key people<sup>32</sup>. Accordingly, by connecting more people to the dental care they need, teledentistry can help states gain better control over the costs paid by their Medicaid or CHIP programs. Each year in the U.S., there are approximately 2 million hospital ED visits for nontraumatic dental problems<sup>33</sup>,

In Florida, more than 489,000 RESIDENTS visited hospital EDs for dental conditions OVER A 3 YEAR PERIOD



and most of these visits were for oral health needs that could have been addressed at a dental office<sup>34</sup>, including care delivered through teledentistry. In Florida, there were more than 489,000 visits to hospital EDs for dental conditions over a three-year period, and roughly four in 10 visits were reimbursed by its Medicaid program<sup>35</sup>. Helping more Floridians access dental care through teledentistry could save money by helping to reduce future ED visits. Reducing unnecessary ED visits is critical in Florida and other states with large populations at greater risk of mortality from COVID-19. In 2019, Florida's governor signed a telehealth law that should expand teledentistry initiatives and will permit out-of-state providers who register to provide such services<sup>36</sup>.

Because diabetes and other health conditions are linked to oral health, they present other areas of potential savings for states. Research shows that preventing or treating periodontal disease can help people control their diabetes<sup>37, 38, 39</sup>. In 2013, diabetes-related medical expenditures paid by Medicaid programs in eight states reached nearly \$26 billion<sup>40</sup>. Moreover, diabetes-related complications were the 12<sup>th</sup> most expensive condition billed to Medicaid during that same year<sup>41</sup>. This situation gives states a strong financial incentive to limit diabetes complications by exploring new ways to connect people with dental services.



DIABETES-RELATED MEDICAL EXPENDITURES paid by Medicaid programs in eight states reached nearly

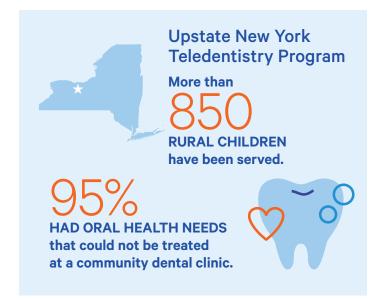
26 billion



## **Teledentistry Shows Promise**

Teledentistry can take many different forms. The University of Nebraska Medical Center's teledentistry program allows dental providers in rural areas to conduct patient consultations through two-way audio/video with dental specialists at the college. The program's hub is based in the city of Lincoln, and teledentistry equipment connects it to diverse sites in nine communities around the state, including a hospital and a community health center<sup>42</sup>.

In upstate New York, the University of Rochester's Eastman Institute for Oral Health piloted a teledentistry program. It formed a partnership with a federally qualified health center (FQHC) that serves a rural area 50 miles away. Through the program, a pediatric dentist uses a video connection to talk with children and their parents and uses an oral camera to examine a child's mouth. The dentist discusses the exam's findings with the parents and develops a care plan. This teledentistry program has served more than 850 rural children, and 95 percent of the kids had oral health needs that could not be treated at a community dental clinic. A University of Rochester dentist believes this program's success shows the potential for integrating teledentistry into a broader telehealth program, allowing multiple providers to address more than one of a patient's needs on a single day<sup>43</sup>.



Some teledentistry approaches can enable dental care teams to serve patients who might otherwise avoid or delay dental care due to feelings of anxiety. Many people with autism spectrum disorder (ASD) or other special needs struggle to remain still in dental care settings, which are typically punctuated by loud noises and bright lights<sup>44</sup>. A report by the Oral Health Workforce Research Center cited a teledentistry program that permits many children with ASD to obtain services in a more comfortable environment<sup>6</sup>.

In California, the Virtual Dental Home (VDH) model relies on specially trained dental hygienists and assistants who collect dental records and provide preventive care for patients in schools, Head Start programs, and nursing homes. These dental professionals send information through a secure telehealth system to a dentist at a clinic or dental office who determines a diagnosis and develops a dental treatment plan. In addition to preventive procedures, the hygienist or assistant — if directed by a dentist to do so — may provide a small protective filling called an "interim therapeutic restoration." which stabilizes the tooth until the dentist can decide if additional treatment is needed. Patients who require more complex treatment are referred to a dentist and assisted in securing a dental appointment<sup>45</sup>.

A six-year demonstration project confirmed that the VDH model was a safe, effective, and less expensive way for people to obtain dental care. No adverse outcomes were reported for any of the procedures performed by dental hygienists, and an analysis showed that VDH delivered significantly more preventive and early intervention services at a lower cost per patient than the state's Medicaid program<sup>46</sup>. Impressively, roughly two-thirds of the children and half the adults with complex health conditions seen through VDH were able to obtain all the care they needed at the community site. These are services they most likely would not have received otherwise<sup>47</sup>. A survey of VDH patients revealed that 95 percent would choose to continue with the program if it remained an option for dental care<sup>48</sup>.

The VDH model has proved so successful that health leaders have adopted it in Colorado, Hawaii, Missouri, and other states. Since 2015, Colorado's VDH program has provided more than 10,000 dental visits across the state<sup>49</sup>. Most of these patients had not received dental services in more than a year, and 10 percent had never obtained such care. These statistics show this Colorado teledentistry program is reaching many people who might otherwise have gone without care and potentially suffered dental abscesses or other serious issues that would have required costly treatment<sup>50</sup>.

By updating their laws and rules, states can remove barriers that may stand in the way of VDH and other teledentistry programs. In 2017, for example, Texas took a positive step to improve its policy landscape by adopting a law enabling health providers to establish a physician-patient relationship by telehealth, without requiring an initial face-to-face meeting<sup>51</sup>. Teledentistry and other forms of telehealth provide all states with a tremendous opportunity.



Colorado's **Virtual Dentistry Home Program** 

More than

**DENTAL VISITS** 

**IN 12 COUNTIES** 

22222222222 Most of these patients had not received dental services in more than a year.

had never obtained such care.

## What States Can Do

A variety of barriers within a state make it harder for health systems, hospitals and safety-net clinics to adopt teledentistry initiatives. One example is states inappropriately regulating the communication tools that enable teledentistry as if these tools were distinct health services. Although the obstacles vary somewhat from state to state, there are some common barriers faced across the nation:

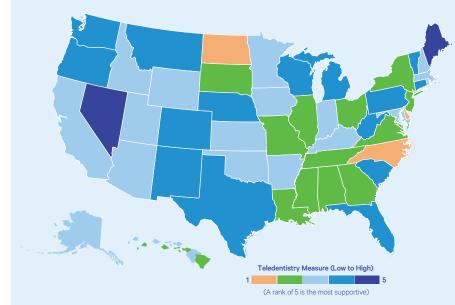
### Expanding the workforce:

Dentists are critical providers when it comes to improving oral health within a state or community. At the same time, the non-dentist workforce - comprised of allied professionals such as dental hygienists, dental therapists, community dental health coordinators, and dental assistants — must also be tapped to make teledentistry reach its full potential. This takes a cue from the medical sector and its understanding that non-physician personnel play meaningful roles in the success of telehealth initiatives. In most states, the so-called "scope of practice" acts do not recognize the important role of dental hygienists and therapists as providers of teledentistry, and few states truly have a fully-enabling policy environment<sup>21, 52, 53</sup>. State dental licensing boards can erect barriers that stagnate telehealth adoption. Teledentistry programs are much more likely to succeed when a state creates a State Practice Act that permits each dental provider to practice at the highest level

of his or her skill and training. Accordingly, State Practice Acts should enable care to be provided in community settings by non-dentists while having appropriate regulations to ensure oversight, instead of imposing direct supervision rules.

### Updating reimbursement policies:

Although the American Dental Association (ADA) has added CDT codes<sup>54</sup> for dentists to use when providing teledentistry services, reimbursement for such care is limited by insurers' unnecessarily stringent rules. Currently, few public or private insurance carriers reimburse for teledental services. Given that interest in teledentistry is spurred by its ability to improve access while reducing per capita cost, reimbursement structures need to be updated. Public and private insurers should allow coverage for remote providerpatient interactions through live video and store-and-forward mechanisms, should not place undue restrictions on the use of the CDT code (consultation code D0140), and should pay a reasonable fee for the code so providers will use it. Insurers also should offer some degree of a value-based framework, incentivize the employment of risk-stratified care and allow for predictable financial strategies to sustain teledentistry services. Additionally, policymakers, benefits companies, and professional organizations should seek reimbursement that gives teledentistry parity with traditional dental care



### States Ranked by Policy Environments that Support Teledentistry

#### Methodology for the Teledentistry State Map

Data dataset from three interactive maps on the Scope of Practice Policy website, designed by the National Conference of State Legislature (NCSL) and the Association of State and Territorial Health Officials (ASTHO), was used to gauge state-based environments on Teledentistry based on 3 parameters:

1) dental hygienists with direct access,

2) recognition of dental therapists as a member of the oral health team, and

3) states that allow the practice of Teledentistry. Information provided in the maps was used to evaluate each state on these parameters on a scale of 1-5, with 1 representing low environment and 5 being high environment. and should not discriminate in their reimbursements based on the type of dental provider that rendered the service. Reimbursement parity should be secured in all medical and dental plans. As the COVID-19 outbreak intensified, Texas Governor Greg Abbott issued an emergency rule requiring parity for telehealth visits, but the order's impact was limited because it only applied to state-regulated health plans, covering about 16 percent of Texans<sup>55</sup>.

### Enhancing legal clarity:

Some concerns about legal issues are discouraging providers from engaging in telehealth efforts, thereby undermining the goal of expanding the reach of medical and dental care. These issues include concerns about liability coverage for health care providers, compliance with the Health Insurance Portability and Accountability Act (HIPAA)<sup>56</sup>, getting "credentialed" or approved for participation in an insurer's provider network; and data security. HIPAA should not be viewed as an obstacle, as there are a variety of effective teledentistry models that comply with this law. Teledentistry efforts have gained momentum in recent years, but it can be difficult for dental programs using remote technology to comply with some laws written before this advanced technological era. For example, teledentistry models may struggle to meet the requirements for making patient records available on request. Rules like this can obstruct the most basic types of information-sharing and often limit teledentistry care to only preventive services<sup>21, 57</sup>. States should address and clarify these issues so uncertainty does not linger.

## Making it easier for providers to share patient information:

Electronic health records (EHRs) are an important vehicle for enhancing the quality of care. Because oral health and overall health are so interrelated, it is imperative for dental and medical providers to be able to share critical patient information through EHRs. Collaborative efforts are proceeding through the Health Level 7 framework to develop a comprehensive standard for the exchange of dental-related information between all health care providers<sup>58</sup>. The American Dental Association and other stakeholders are working to encourage certification standards that would enable dental practices to know that a technology product meets a set of criteria that include interoperability<sup>59</sup>. Adopting and using electronic health systems to store, share or analyze patient data impose additional cost and personnel time on dental providers, and this can slow adoption and efforts to achieve interoperability of EHRs. State health commissioners and Medicaid directors can play helpful roles, convening health systems, software vendors, and other stakeholders to discuss strategies that advance interoperability, including mandating that certified health IT products adopt the dental exchange standard. Policymakers should encourage hospitals and health systems to prioritize interoperability of dental and medical EHRs. Achieving interoperability would help in many ways, including ensuring that medical and dental providers are aware of all medications their patients have been prescribed, lessening the odds of adverse drug interactions<sup>60</sup>. States can take supportive steps in this area, backed by a rule issued in March 2020 by the U.S. Department of Health and Human Services that seeks to increase interoperability and prevent "information blocking" practices within the health care industry. This federal rule requires EHRs to provide the clinical data necessary, including core data classes and elements, to promote new business models of care<sup>61</sup>. Policymakers and other stakeholders should be vigilant in ensuring that dental information and teledentistry are recognized as essential elements as health information systems and vendors adopt to this federal rule. Finally, states should explore financial incentives or subsidies to enable dental care organizations and care teams to improve or upgrade technology and provide necessary training to staff as infrastructure evolves.

## Seizing an Opportunity

Teledentistry is a key tool for moving toward a value-centered system that improves the population's health while saving money. States that address the legal and regulatory barriers to teledentistry could benefit in multiple ways:

- Promoting telehealth for dental and medical care would make a state better prepared to weather a crisis. States that create a good climate for teledentistry would help ensure that a national or regional crisis (from COVID-19 to natural disasters) does not cut off people's access to care for many days or weeks. Telehealth would allow many people to receive services or education in compliance with social-distancing guidelines and averting visits to hospital EDs that are already overwhelmed.
- Using teledentistry would improve oral health while reducing costs to consumers and states. Researchers have cited teledentistry's role "in reducing the costs of and barriers to accessing oral health care, improving oral health outcomes, increasing use of oral health care resources and leading to the establishment of a dental home for underserved children62." Adults also benefit from teledentistry models that offer them flexible options for receiving care, consulting with dental providers, or obtaining educational information about their oral health.
- Teledentistry makes dental care more convenient, and expanding the reach of care can improve overall health. Providing more Americans with access to dental services and oral health education will lead to healthier mouths, which, in turn, strengthens overall health. Studies demonstrate a clear bidirectional relationship between periodontal disease and diabetes, and research cites "strong evidence that treating one condition positively impacts the other63." Pneumonia, a leading cause of infections among nursing home patients, is another

example of how access to oral health services affects overall health. Research shows that improving oral hygiene among medically fragile seniors holds promise for reducing the morbidity and mortality from aspiration pneumonia64. The strong connection between oral health and systemic health is reflected by the Mayo Clinic's observation that oral health is a "window to your overall health65."

• Teledentistry and other telehealth initiatives can create jobs and could potentially enhance rural hospitals' financial stability. Employment in the health care sector is projected to grow through the year 2028 at a faster rate than for any other job sector66. States that want to fully capitalize on this trend should encourage more telehealth programs. Besides generating new jobs, teledentistry and other tech-driven health initiatives could help reverse or slow the tide of rural hospital closures; since 2013, 109 rural hospitals have closed67. As noted previously, a hospital is typically one of the largest employers in a rural community. Hospitals in rural areas could strengthen their role as a cornerstone of care by exploring their potential role as a hub for teledentistry.

Employment in the health care sector is projected to grow through the year 2028 at a faster rate than for any other job sector... Hospitals in rural areas could strengthen their role as a cornerstone of care by exploring their potential role as a hub for teledentistry



## Conclusion

Rebuilding our health care system around value — better patient outcomes at the lowest possible cost — will require various changes, including leveraging technology to connect patients and providers for services and information sharing. With more than 56 million Americans residing in areas with a shortage of dental professionals, it's time to fully tap the potential that teledentistry offers to improve access to care. Access is not just a rural issue; many people living in urban or suburban areas, including seniors with limited mobility and others with complex medical issues, encounter barriers to care in traditional settings.

Teledentistry can improve the health of Americans while saving money because care and education can be delivered more quickly and efficiently. Bringing care to where people are can reach the millions of children and adults who are not receiving services now in the oral health system, rather than leaving people with no alternative except to visit hospital EDs, where care is typically fragmented and costly. In addition to improving their residents' health, states that take crucial steps now to promote teledentistry can boost their economic growth in several ways. When states have the appropriate regulatory and policy environment, it can facilitate the adoption of effective telehealth business models, resulting in the creation of new jobs and better care for local residents<sup>68</sup>. Rural hospitals, which can serve as a hub for teledentistry efforts, are often among the largest employers in their communities and possess a unique ability to offer high-skilled jobs<sup>69</sup>. Incorporating teledentistry in rural hospitals could help ease the financial distress confronting many of these institutions<sup>70</sup>. For states, inaction could be costly and undermine their effort to weather a major crisis.

Millions of children and adults are going without dental care. By helping teledentistry grow, states can improve their residents' oral health and overall health, reaching people earlier in the disease cycle — managing or treating conditions before they deteriorate into serious infections that require expensive care, cause school or workplace absences, and potentially threaten lives.

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