CRITICAL CONNECTIONS TO CARE

Expanding the Use of Telemedicine in Florida will Improve Health Outcomes and Generate Savings

MARCH 2014

Florida TaxWatch

EXECUTIVE SUMMARY

Florida's demographic changes and health care needs increasingly call for a viable alternative to in-person medical consultation, and such an alternative is ready and waiting in telemedicine, exchanging medical information between locations via electronic communications for the purpose of improving patient care, treatment, education, and services. Telemedicine has been successfully used across health conditions and medical specialties, from pediatrics, to geriatrics, to chronic disease maintenance, to emergency treatment. Nationally, a majority of hospitals utilize some form of telemedicine, while federal and private efforts continue to promote and expand telemedicine use. In the state of Florida, telemedicine primarily exists in uncoordinated pockets of the state, and several well-reputed health care facilities have invested in telemedicine services on their own dollar.

The current Florida landscape does not support the statewide expansion of telemedicine, as reimbursement is uncertain or nonexistent in most instances, and the state has no requirement that either Medicaid or private payers cover telemedicine services. Medicare and Medicaid reimburse for telemedicine services equivalent to in-person services, but funding is limited to service locations and reimbursement varies for Medicaid from state to state. In Florida, most health entities bear the full burdens and benefits of offering telemedicine services.

Telemedicine can be used to increase access to quality care, and it can also be used as an innovative tool to reduce costly medical interventions such as emergency room utilization and length of hospital stay. Based on Florida data from 2012-2013, if the expansion of telemedicine could reduce these interventions by even 1%, the state would realize a cost-savings of more than $1 billion. In addition, telemedicine provides significant economic development opportunities for job creation in the telecommunications and health sectors, may extend career-life for aging health care practitioners, and provide an unprecedented opportunity to make Florida a worldwide virtual healthcare hub.

Momentum in favor of telemedicine has been steadily building in recent years. In 2013 and early 2014, business organizations, the Florida Board of Medicine, the Florida Medical Association, and thought leaders across Florida have convened to discuss telemedicine needs, practice, and policy. A Florida TeleHealth Workgroup was also convened in 2013 that meets regularly to review the detailed policy questions raised by telemedicine.

After extensive review of the literature, Florida TaxWatch recommends that policymakers remove disincentives or unnecessary barriers to the use of telemedicine statewide and lay a solid policy-based foundation for statewide expansion of telemedicine as a critical step toward long-term sustainability for the health of the state, its people, and its budget.

There is a Critical & Growing Need for Telemedicine

As Florida Grows, So Do Its Health Care Needs

With Medicaid costs constituting approximately one-third of Florida's state budget, and the changes brought by national health care reform, Florida needs innovative ways to provide a sustainable healthcare delivery system for Florida's evolving population in a time of change and uncertainty. Data suggests a rapidly growing critical need for access to quality health care for individuals across the state of Florida, with special attention to rural areas, individuals without higher education, individuals with disabilities and the aging, who may be non-ambulatory, without access to transportation, or very far away from needed medical care. The innovation of telemedicine holds promise to address Florida's health care needs by reaching more individuals in a timely fashion, before more costly interventions are needed, and by bringing quality care to Floridians at convenient locations to transcend issues of mobility, access, and distance.

In 2011, America's Health Rankings placed Florida 48th for geographic disparity, signaling a huge difference in mortality rates across Florida counties.[1] In 2013, Florida ranked 41st in Disparity in Health Status Difference suggesting a significant difference among the health statuses of adults without a high school degree and all others who report very good or excellent health.[2] Florida remains on track to become the 3rd most populous state within the next two years, breaking the 20 million mark in 2016.[3] The percentage of individuals over the age of 65 will increase to more than 24% of the population by the year 2030.[4] The prevalence of disabilities, including developmental disabilities, is increasing. For example, autism spectrum disorder is now estimated at 1 in 88 children.[5]

What is Telemedicine?

"Telemedicine" is defined differently across states and organizations, and does not constitute a separate medical practice but, rather, a way of delivering health services. The American Telemedicine Association defines telemedicine as the "use of medical information exchanged from one site to another via electronic communications for the health and education of the patient or health care provider and for the purpose of improving patient care, treatment, and services."[6] However, the federal Centers for Medicare and Medicaid Services (CMS) prefer the term "telehealth" to describe real-time, bi-directional communication between a patient and remote health care provider. Excluded from this definition are email, facsimile, and phone without separate video capability.

States such as New Mexico and Colorado use similar definitions for telemedicine. In contrast, states such as Montana and Kentucky include email, facsimile, and phone calls in statutory definitions of telemedicine. Within states, definitions can also vary based on purpose

and intent. Some entities use "telehealth" or "practicing medicine by electronic means" interchangeably with "telemedicine." In addition, some entities use "telehealth" to specifically reference a broader, full spectrum of health-related services or health information delivered or transmitted through technology. This report adopts the ATA's position, using "telemedicine" primarily but interchangeably with "telehealth," and focuses on the delivery of medical services.

Telemedicine delivery is often classified into categories based on the timing and method of consultative services. Common categories include: 1) live, interactive videoconferencing; 2) store and forward; and 3) remote monitoring or remote patient monitoring.[7] Some organizations will refer to other categories or use additional terminology as well.[8] For example, "hub-and-spoke" references a central base or receiving point that can provide health services to multiple locations; "originating site" or "presenting site" or "spoke site" references the location from which the patient is presented; and "distant site" or "receiving site" or "hub site" references the location from which the health care professional is providing remote consultation services.

Various models may depict the delivery of telemedicine. For example, in a presentation to the Florida Board of Medicine, Dr. Kim Landry, an emergency physician, business owner, and faculty member at the Florida State University College of Medicine, describes his original concept of six separate models of telemedicine delivery that involves physicians (allopathic or osteopathic), physician extenders (including nurses, paramedics, and aides), and patients.[9]

1. Physician examines the patient directly through an extender
2. Physician specialist assists the patient's primary care practitioner during a virtual bedside/office visit
3. Physician and patient discuss medical issue with minimal to no exam
4. Patient sends data to a central receiving center that is processed and forwarded to the physician
5. Medical assistant helps to obtain data then sent to central office for processing
6. Call center triages calls and offers medical advice

Telemedicine Uses

Telemedicine has been successfully used across the full spectrum of health care practices including, but not limited to: mental health through radiology,[10] telepsychiatry/telemental health,[11] developmental disabilities,[12] geriatrics,[13] teleneurology,[14] dermatology,[15] otolaryngology (ENT),[16] trauma and emergency care,[17] intensive and critical care,[18] genetics,[19] HIV,[20] cancer,[21] care of prison populations,[22] and for provider education.[23] The wide applicability of telemedicine, and the expansive possibilities of innovation, suggest that telemedicine will play a significant role in a new era of medical reform promoting preventive health practices and cost-efficiency.

Telemedicine has the opportunity to bridge gaps in health care delivery in rural health and underserved areas.[24] In addition, telemedicine can be used successfully in the management of chronic disease,[25] which is estimated by the Centers for Disease Control & Prevention to account for 75% of the nation's healthcare costs at an amount in excess of $1 trillion,[26] and to account for more than 99% of medical expenses for individuals over 65 years of age.[27] Other telemedicine uses include: provider education, patient education and self-management, post-acute patient stabilization, and routine, primary care checkups.[28]

National Experience with Telemedicine

Worldwide, and across the United States, the use of telemedicine is growing. According to the American Telemedicine Association, there are approximately 200 telemedicine networks, with 3,500 service sites across the country.[29] The federal Health Resources and Services Administration (HRSA)[30] within the Department of Health and Human Services (HHS) has a dedicated Office for the Advancement of Telehealth that administers telehealth grant programs, partners across federal, state, and private sector groups, provides technical assistance, evaluates telehealth technology and programs, creates telemedicine initiatives to improve access to care, and promotes knowledge exchange regarding "best telehealth practices." Across the United States, more than 50% of hospitals use some form of telemedicine,[31] and states have used telemedicine for rural populations (e.g., Minnesota[32]) and for more urbanized populations (e.g., Texas[33]). In the private sector, telemedicine is being used by recognized health industry names such as Kaiser Permanente[34] and the Mayo Clinic.[35]

Florida's Experience with Telemedicine

In the last few years, a limited number of telehealth pilot programs have received media attention. For example, Humana's telemonitoring partnership with Intel for congestive heart failure and UnitedHealthcare's partnership with Cisco for primary care telemedicine in underserved areas have been noted in Florida Trend.[36] However, stories of telemedicine being actively practiced throughout Florida have been underreported. Successful telemedicine innovation can be found in pockets among health care leaders throughout the state, but reimbursement is a barrier to increasing the benefit to Florida's residents and telemedicine efforts have not been formally coordinated or tracked. An entity's decision and ability to proceed with telemedicine is largely dependent on financial capacity, leaving the most advanced technology practices to larger cities and well-known health industry leaders. Best practices and ideas for additional telemedicine uses abound.

For example, Moffitt Cancer Center utilizes telehealth for remote diagnoses in Central and South America, and the Ryder Trauma Center at Jackson Memorial Hospital provides remote physician consultations to U.S. contractors in Iraq.[37] Telemedicine is being

used in several health systems for patient monitoring and consultation to manage known health needs. For example, Orlando Health has a Telemedicine Program that provides medical monitoring at home.[38] Telemedicine is also being used for improving access to underserved populations, diabetes management and education, and the prevention of hospitalization at the Florida Initiative in Telehealth and Education at the University of Florida.[39] In addition, telemedicine continues to be developed with SPARROWnet, a joint telemedicine initiative of the Florida Department of Health and the Florida Committee on Trauma that connects trauma centers in disaster and emergency response situations.[40] Furthermore, telemedicine is being used in local health businesses for emergency services in Northwest Florida and for multispecialty care (primary care, wound care, optometry, podiatry) to homebound patients in West Central Florida.[41]

The possible uses of telemedicine in the state of Florida are extensive and expanding with innovation. As one speaker[42] noted before the Florida House of Representatives, if the health subject has an "-ology" following it, telemedicine will likely be able to provide a viable alternative to traditional in-person services. While not all-encompassing, this section of the report highlights representative ways that telemedicine is currently needed and/or being used in Florida (entities are listed in alphabetical order).

Advent Christian Village (An Aging Community Hoping for Telemedicine)[43]

The Advent Christian Village (The Village) at Dowling Park is a retirement community located along the Suwanee River that offers a variety of "age in place" living options including assisted living, skilled nursing, and home ownership to its 800 campus residents. The Village is located 1.5 hours from Tallahassee and the nearest hospital is 17 miles away, making recruitment of primary and specialty care physicians a challenge.

Dermatological services are in high demand in the senior group, and early detection (e.g., of skin cancers) can prevent the need for higher-cost treatments and reduce the spread of skin conditions more easily transferred through communal living. The Village is currently working with a dermatology group out of Tallahassee to provide services to their residents and to explore ways to provide services through telemedicine. To do this would require a significant financial investment by both parties as there would be a need for a high-powered specialty camera located at the site, and a high resolution receiver at the specialist's site. A nurse would be present during the dermatology consultation to further describe the skin condition to the remote specialist.

Currently the Village has a medical center, where a board-certified geriatrician, and two mid-level professionals (ARNP and one PA) see patients. When needed, patients are referred to specialists outside the campus; however, it

is challenging for many of the senior residents to travel hours to see health professionals off campus. For example, many residents in skilled nursing facilities (SNF) and assisted living facilities (ALF) may have memory or mobility issues that would require staff accompaniment, such as a certified nurse assistant (CNA), and transportation assistance. Physician offices often request the presence of a residential staff member during exam, and these combined costs make specialty care inconvenient at best.

To help reduce this inconvenience, they invite specialists—including surgeons, gastroenterologists, podiatrists, and audiologists—to hold office hours once a month at the medical center. The specialists function as individual providers that rent the space and handle their own billing (mostly Medicare). However, the demand for on-site specialty care exceeds capabilities, and the three hours total of non-productive travel time precludes many specialists from even considering holding office hours at the Medical Center.

Reimbursement remains foremost on the community's mind as Medicare has not covered the provider's telemedicine costs and there is minimal reimbursement for telemedicine. Right now, "you have to touch the patient to be able to bill." The Village medical center is located in a designated Health Professional Shortage area and is a federally-designated, rural health clinic (Medicare) where the physician doesn't have to be all the time. Some of the residents are dually-eligible for both Medicare and Medicaid and more than 75% of their nursing home residents are on Medicaid.

Baptist Health South Florida[44]

Baptist Health South Florida (BHSF) has invested significant time and resources incorporating telemedicine and telehealth into quality health care practice. The BHSF electronic intensive care unit (eICU) LifeGuard, through which patients are monitored 24/7 remotely by a physician on call, has had a significant impact on patient outcomes and hospital costs. Over a seven-year period, a 41% hospital mortality reduction and 46% ICU mortality reduction were documented. During the same period, a 29% ICU length-of-stay (LOS) reduction and 33% hospital LOS reduction were observed. During a recent one-year period (containing 2012-13), approximately 8,476 ICU days were avoided, yielding an estimated $15 million savings at $1,800 per day, and more than 380 lives saved over the predicted number. The eICU has led to improved patient outcomes across various measures including expedited treatment, medication adjustment, avoidance of falls, and avoidance of self-extubation. BHSF recognizes this form of telemedicine as improving operating margins, enhancing clinician retention, and improving patient satisfaction and quality of care. In addition, BHSF has found that experienced RNs may prefer less physically demanding eICU practice in lieu of retirement.

BHSF started a telehealth program for home monitoring of patients sent home with a diagnosis of congestive heart failure/high blood pressure or at high risk for readmission. Equipment containing a Bluetooth-enabled scale, blood pressure monitoring, and/or pulse oximetry is placed in the patient's home and the data is collected and monitored by a nurse at a remote location. When a measurement is outside of set parameters, an alert is issued and the nurse validates the information and provides follow-up in consultation with a physician as necessary. In one year, BHSF has seen a readmission rate below the national average (15.5% compared to 18-24% nationally) for its 135 enrolled patients.

BHSF is also in the process of piloting an e-pharmacy program with their Home Health patients, focused on those with a diagnosis of congestive heart failure. In this program, a visiting nurse facilitates remote connectivity with a pharmacist and the pharmacist has a "face-to-face," live videoconference meeting with the patient and possibly the patient's family. Medications prescribed at hospital discharge are reviewed and reconciled, and needed interventions are implemented, such as patient education, omission/duplication of drugs, antibiotic monitoring, adverse drug reactions, dose adjustment, drug interactions, or RN notification. This pilot program has averaged four interventions per patient.

Florida State University College of Medicine[45]

"The leadership of the FSU College of Medicine recognizes the promise of telemedicine, particularly in bringing accessible and affordable primary care, as well as specialty and sub-specialty care, to rural communities and underserved patient populations. In many parts of the country, telemedicine care delivery is fully incorporated into routine care delivery systems-our vision for Florida." FSU College of Medicine has identified a growing need for appropriate policymaking across legislation and regulation to create a "viable, sustainable telemedicine infrastructure that will become a national leader in 21st Century healthcare delivery." To that end, FSU College of Medicine has undertaken co-leadership of the ad hoc statewide Telehealth Policy workgroup, which consists of more than 75 stakeholders across the state who seek to inform policymakers about the current and future uses of telemedicine as part of a sustainable health care delivery model.

Kim Landry, M.D., Mark Stavros, M.D., and other faculty members are introducing medical students to telemedicine use as an effective way of bringing primary care and emergency medicine to broad patient populations regardless of the patient's physical location. FSU College of Medicine has successfully used telemedicine across rural and urban settings, from Florida to Central America. Telemedicine is also useful for developmental disabilities. Amy Wetherby, Ph.D., an internationally-renowned expert and researcher in Autism Spectrum Disorder, uses "video-teleconferencing and store-and-forward technology to bring cutting edge Autism diagnosis and treatment to

patients and families throughout the Florida panhandle, to FSU's rural campus training site in Immokalee, and to a community in South Africa." In addition, FSU faculty members in geriatrics and clinical science are exploring "ways to use telemedicine to bring high quality health care to nursing homes and assisted living facilities, recognizing the growing needs for healthcare workforce innovation for this growing population in our state."

Mayo Clinic—Jacksonville[46]

The Mayo Clinic has been advancing the practice of medicine through telemedicine practices in some form for more than 45 years, and the Mayo Clinic in Jacksonville is no exception. The facility is currently equipped with telemedicine examination rooms and satellite equipment, and boasts highly successful utilization of telemedicine for stroke care. Telestroke networks for management of acute ischemic stroke utilize a hub-and-spoke system[47] and a team-based approach in which medical specialists can provide consultation to typically smaller spoke hospitals in rural or suburban areas that do not have similar capabilities or on-staff neurologists. The stroke center hub has a 24/7 in-house supported neurology staff. A research study from 2012 conducted in part at Mayo estimated an average cost savings of $385,435 annually for all patients within a telestroke network versus without in the first five years,[48] and more than $68,000 net annual savings to hospitals from Medicare patients alone.

The Mayo Clinic has also advanced Florida's discussion of telehealth. In August 2013, Mayo Clinic sponsored a well-attended Telemedicine Public Policy Symposium that was hosted by Representatives Mia Jones and Cary Pigman and brought together telemedicine leaders speaking on state and national telemedicine progress.

MDLIVE & SleepMed

Founded in 2006, and headquartered in Sunrise, MDLIVE provides telehealth services and software, providing telehealth, online and on-demand health care that benefits consumers, employers, payers, hospitals, physician practice groups and accountable care organizations, works with board-certified physicians and therapists nationwide to provide around-the-clock connected care. Through a cloud-based, Virtual Medical Office software platform, patients, healthcare professionals and plan administrators can collaborate seamlessly and securely via voice, video, email and mobile devices. Payers and providers can also utilize the HIPAA and PHI-compliant system to collect and share clinical data from patient medical records, lab results and in-home biometric devices for real-time risk assessments, wellness advice, diagnosis and treatment. MDLIVE physicians can diagnose, treat and, if needed, write prescriptions (non-controlled substances only) for routine medical conditions year-round, anytime, and anywhere.

Based in West Palm Beach, SleepMed, a sister company to MDLIVE, is the first national sleep medical benefit manager, helping employers

and insurance companies to identify members/patients that have trouble falling asleep or experience disruptive sleep. With 58% of Americans experiencing disrupted sleep annually, and the public danger of driving in a sleep-deprived state is comparable to or worse than driving under the influence, sleep issues are an important public health concern. Economically, employees with unmanaged sleep apnea are significantly more likely to miss work, and they consume 50% more healthcare dollars than they would if properly managed. SleepMed technology, which includes remote monitoring and other telemedicine modalities, is being used in all 50 states by providers, insurance companies and employers to address this $30 billion annual cost due to disruptive sleep.

Miami Children's Hospital[49]

At Miami Children's Hospital, the dedicated Telehealth Center facilitates complex pediatric specialty consultations through international physician-to physician videoconferencing and remote reading of diagnostic tests. Miami Children's Hospital's MCH Anywhere® is the first pediatric telehealth program of its kind in the world. The state-of-the-art Telehealth Command Center was designed by doctors and consumer experts to bring expert care and peace of mind to families and children – "wherever they are, whenever they need us." Through MCH Anywhere®, pediatric experts can provide multi-specialty team consultations, along with emergency care and pediatric subspecialty consultations. Through telemedicine, the expertise of 650 medical staff members at Miami Children's Hospital can be shared with the world to the benefit of children's health. In addition, the Telehealth Center allows patients, health professionals, and payers overseas interactive participation in timely care coordination and health education. The high-tech Telehealth Center is HIPAA-compliant, and consultation rooms can engage privacy screens at the push of a button.

Tallahassee Memorial HealthCare[50]

Tallahassee Memorial HealthCare (TMH) utilizes telemonitoring and telemedicine in a "hub-and-spoke" model. "Telemedicine does not change the way providers care for patients, but changes the delivery method for how the patient and provider communicate." At Tallahassee Memorial, telemedicine capabilities include the ability to monitor vital signs remotely, to conduct virtual medical assessments using specialized equipment such as otoscopes, ophthalmoscopes, and Bluetooth stethoscopes, and to virtually perform tests such as EKGs, ultrasounds, and X-rays. HIPAA-compliant secure videoconferencing, licensed providers, and trained presenting sites help to ensure that telemedicine maintains quality and privacy. At "presenting sites" patient information is gathered and transmitted, a health professional presents the patient to a provider by initiating telecommunication with the "provider site," and billing is only done for additional, non-telemedicine services provided at the presenting site. At the provider site, patient data is reviewed, a care plan

is sent to the referring provider after the consultation, and a charge bill is submitted for the telemedicine services. With a grant from the Florida Department of Health (DOH[51]), TMH has provided trauma carts to TMH Bixler ER at TMH, Weems Memorial in Carrabelle, Madison Hospital, and Doctor's Memorial in Perry. TMH has also invested in placing laptops at various clinics in their system, including in the rural locations of Madison and Carrabelle. TMH has partnered with Georgia TeleHealth as part of the Georgia-Florida TeleHealth Network, which facilitates secure, HIPAA-compliant communications. Remote monitoring of high-risk patients in the TMH transition center is accomplished through the Cardiocom program, which has demonstrated lowered emergency department usage. TMH recognizes that the use of telehealth can "prevent people from getting sicker," engage patients in prevention and maintenance, and allow for intervention before a patient is transferred to a higher level of care when that is unnecessary. TMH actively uses telehealth numerous times a day.[52]

UM TeleHealth at the University of Miami Miller School of Medicine[53]

At the University of Miami Miller School of Medicine, clinicians use teleconsultations to improve the health care of Florida's families and ameliorate the unmet needs for specialty care across the state's geographically diverse rural and urban areas.

UM neurologists work with Specialists on Call, Inc., a private telemedicine company to provide remote, timely diagnostic care and treatment for acute neurologic events such as stroke. This service links emergency departments in hospitals across Florida and other states with neurological expertise for 24-hour access to nationally-renowned care in complex vascular disorders and cerebral vascular diseases.

Teleconsultations are provided for several pediatric services. Patients supported by Children's Medical Services (CMS) of the Florida Department of Health, are evaluated with live interactive video consultations in dermatology, genetics, and psychiatry, and are reimbursed through a Florida Medicaid waiver. UM's pediatric mobile van travels to Homestead, Little Haiti and other areas in South Florida, and children are evaluated by dermatology and nutritionist teleconsultants with provider reimbursement funded through Children's Health Fund and Verizon Foundation grants.

The Verizon Foundation also has provided grants to UM for the development of a mobile application for parent-child interaction behavioral therapy, and also a grant for a VGo[54] robot with videoconferencing capability to enhance hospital discharge planning for patients transferred from the University of Miami Hospital to the Miami Jewish Home and to decrease readmissions. The Miami-Dade School Telehealth Initiative, which started in 2010, improves access to and quality of care for school children in elementary, middle and high schools in underserved areas of the North Miami Beach school feeder pattern.

This initiative is supported by the John T. MacDonald Foundation, Children's Health Fund, AHEC and an Innovations grant from the Centers for Medicare and Medicaid Services, and includes general pediatric, dermatology, nutrition, cardiology, dental and mental health teleconsultations.

Beginning soon, UM employees at the UHealth Clinic in Coral Gables will receive teleconsultations from dermatology, nutrition, and neurology specialists on the medical campus with provider reimbursement from Aetna which is UM's third-party administrator; UM is self-insured. In addition, patients in the Emergency Department of the Lower Keys Medical Center are evaluated by UM/JMH Ryder TeleTrauma faculty to optimize air ambulance utilization.

UM is a leader in telehealth outside of Florida and across the seas, providing teledermatology to crew members of Royal Caribbean Cruise Lines and Carnival Cruise Lines, to individuals through U.S. Indian Health Services in several states and to patients at remote clinics of the Alaska Native Tribal Health Consortium. In addition, the U.S. State Department contracts with UM/JMH Ryder Trauma for 24/7 acute and routine evaluations of Iraq contractors in multiple specialties including trauma and orthopedics.

University of South Florida (USF) Health[55]

As telemedicine technology is embraced and requested by patients, USF Health has increased its available services. For example, USF Health has a HRSA-funded staff-centered consultation program for HIV and HCV in which Adobe Connect is used for case consultations. In addition, telemedicine/telepharmacy services in both Tampa and The Villages are being considered as the technology becomes more accessible to patients in both populations. There will be increased emphasis on patient engagement with this technology. Also, the pediatrics department at USF Health is conducting full-day telemedicine clinics for genetics patients in Fort Myers on a quarterly basis and has the capability of extending telemedicine service for diabetes care. Furthermore, USF Health is finalizing three mental health programs: clearing involuntary patients from Brandon Regional Emergency Room via telepsychiatry; conducting telepsychiatric evaluations through Gracepoint, Inc. (formerly MHC, Inc.); and, proposing teleneurobehavioral health services to the Assisted Living Facility Association (ALFA) for comprehensive assessments (neurology, neuropsychology, and geriatric psychiatry). USF Health had previously considered a forensic contract for telemedicine services with the county jail system as well.

Reimbursement/provider compensation remains a barrier to telemedicine expansion. If reimbursement concerns are resolved, USF Health foresees great opportunities for telemedicine use across many health needs, particularly in home visitations for critical pulmonary and cardiac care, such as for congestive heart failure. In addition,

improved patient-centered care can result through telepharmacy when pharmacists and health professionals work together to coordinate medication needs and optimize patient engagement. Such optimization will also improve ACO quality metric ratings. Currently, there are reimbursement codes for telepsychiatry but no commonly-decided rates, with typical consultation rates in the community varying from $150-250/hour. USF Health is reviewing various guidelines and clinical collaborative protocols for patient-centered care in telemedicine.

USF Health also invests in a new generation of technology-savvy health professionals through CAMLS[56] (Center for Advanced Medical Learning and Simulation), a highly-accredited, cutting-edge, simulation-based training center that is the first designated American College of Cardiology Center of Excellence in Education and Training. With "hybrid operating rooms," virtual dissection technology, a Virtual Patient Care Center, and the Surgical & Interventional Training Center, CAMLS turns what was once science fiction into science fact.

Reimbursement Policy A Major Hurdle in Florida

A National Snapshot

For the most part, providers and hospital systems are not reimbursed for telemedicine services and, therefore, bear both the costs of investment and the rewards of savings. However, under certain circumstances, Medicaid and Medicare will reimburse telemedicine services. Medicaid reimbursement is state-specific and varies based on the state agreement with federal Centers for Medicare and Medicaid Service (CMS). States are encouraged to include telemedicine components in their Medicaid offerings. According to the National Conference of State Legislatures (NCSL), "The most common path being taken by states is to cover telehealth services in the Medicaid program. In fact, 43 states and the District of Columbia now provide some form of Medicaid reimbursement for telehealth services."[57] In addition, 10 states and the District of Columbia have enacted legislation requiring Medicaid coverage of telemedicine, generally of interactive videoconferencing, and an additional 6 states have proposed legislation to mandate Medicaid coverage of telemedicine.[58] New York, currently the third most populous state, has proposed legislation that would require private and Medicaid coverage for telemedicine, and provide Medicaid reimbursement for related capital costs.[59]

In addition, certain states mandate private payer coverage. To date, 20 states and the District of Columbia have mandated private payer coverage of telemedicine, and another 10 states have proposed legislation mandating private coverage.[60] Notably, California and Texas, the states with the two largest populations, both have mandated private payer coverage of telemedicine.[61]

Telemedicine Reimbursement in Florida

Florida statutes do not mandate either Medicaid coverage or private insurance/private payer coverage. However, it is inaccurate to say that telemedicine services are never reimbursed in Florida.

Certain telemedicine services in Florida are reimbursable, covered services within the Medicaid State Plan. As the state's statutorily designated contact for the federal (CMS), the Agency for Health Care Administration (AHCA) has authority to reimburse for certain telemedicine services through a CMS-approved amendment to Florida's Medicaid State Plan. Florida Administrative Code, section 59G-4, which incorporates various handbooks by reference, details promulgated rules for telemedicine service coverage.

Of note, Florida Medicaid-covered telemedicine does not include "store and forward" technology, and services must be real-time, interactive, two-way communication that is not audio-only, not written-only, and includes the use of audio and video equipment. Video cell phone conversations, such as FaceTime® calls, are not covered. In addition, reimbursement hinges on the location of the Medicaid recipient when the service is rendered. Covered locations, or "spoke" sites, are limited to physician offices, hospital inpatient and outpatient settings, and community behavioral health centers. The spoke site is not reimbursed unless the provider performs separate service for the recipient at the spoke site on the same day as telemedicine service.

Currently, Medicaid reimbursement for telemedicine is offered for specific services in behavioral health, dental services, and certain types of physician services. Physicians are permitted to bill for services provided through interactive communication as defined above, and also may bill for certain consultation services as detailed in the Medicaid Practitioner Services coverage and Limitations Handbook. Specialty medical services provided within Children's Medical Services are detailed in the section on DOH below. Covered behavioral health services include psychiatric medication management by allopathic and osteopathic medicine practitioners licensed under section 458 and 459, F.S.

Individual and family behavioral health therapy services provided as telebehavioral health services are covered when delivered by practitioners licensed pursuant to sections 490 and 491, F.S. Covered dental services, which include oral hygiene instruction, topical fluoride application and prophylaxis, are covered between a registered dental hygienist contracted by Medicaid-enrolled group provider and a licensed, supervising dentist.

Under the amendment to the Medicaid State Plan, reimbursement to a physician for covered telemedicine services is the same amount as for in-office services. However, no telemedicine reimbursement is provided to a practitioner that sits with a patient to facilitate the telemedicine service. And while

physicians, nurse practitioners, and physician assistants can initiate a consultation from a spoke site, with the referring practitioner present during the consultation, only physicians can deliver telemedicine services for reimbursement. As the Statewide Medicaid Managed Care (SMMC) program continues to roll out in 2014, managed care plans will be required to provide telemedicine services within the Managed Medical Assistance (MMA) component.[62] The federal Affordable Care Act is not expected to impact telemedicine reimbursement under Florida's Medicaid State Plan.

Funding for covered telemedicine services that are reimbursable by AHCA comes from a combined mix of state general revenue and federal match dollars.[63]

Children's Medical Services, housed in the Florida Department of Health, has a Telemedicine Program for children with special health needs. The program is primarily used for distance-consultation between a healthcare provider and a specialty physician. Physician specialty services provided via telemedicine may be reimbursed through a waiver to the Medicaid State Plan.

Under Medicare, telehealth is reimbursable for certain designated rural populations only through the use of telehealth-specific codes. In January 2014, CMS expanded the number of telehealth reimbursable codes, but the reimbursement is still limited to the rural populations, namely in a Health Professional Shortage Area (HPSA) or outside of a metropolitan statistical area (MSA). Reimbursement eligibility can be determined through a new Medicare TeleHealth Payment Eligibility Analyzer website.[64] Medicare covers some individual and group mental health services and related pharmacological management.[65]

Increasing Telemedicine Statewide Can Produce Significant Cost Savings

Economic Considerations

Recent meta-analysis of the literature in peer-reviewed journals suggests that quantifying cost-effectiveness in telemedicine is an inexact science as implementation quality varies across health facilities and benefits can be viewed from various perspectives, including those of the patient and the provider.[66] In fact, some researchers felt that the variation of facilities and metrics used in early economic evaluations of telemedicine did not follow traditional evaluation techniques.[67] In spite of variation, certain cost-evaluation measures for telemedicine have been preferred in estimating return on investment in recent years. Patients may benefit from telemedicine in quality of adjusted life years (QALYs), reduced absence from work, reduced morbidity and mortality, and reduced travel costs. On the provider side, measures such as number of hospitalizations or emergency department visits, charges, length of stay, and readmissions may be used in estimating cost savings from telemedicine.

According to AHCA data from April 2012 through March 2013,[68] across the 289 hospitals in Florida reported, there were an average of

9,398 hospitalizations per hospital with an average length of stay of 9.1 days and average charges per stay of $47,182. Total charges[69] for this period across all hospitals were more than $121 billion.

If telemedicine could be used for preventive and maintenance treatment that leads to avoidance of hospitalization, the state could realize significant savings. For example, if telemedicine could reduce hospitalizations by 10% across the state, Florida would see more than $12 billion in annual cost savings for hospital charges. Some would caution that this level of savings is not realistic given potentially large initial investments in equipment,[70] and telemedicine sessions potentially being charged the same amount as in-person consultations. However, given the demonstrated avoidance of more extensive health interventions facilitated by telemedicine, the cost-savings should still be extraordinary.[71] Scaled to even a 1% savings, hospital charges could be reduced by more than $1.2 billion annually based on hospitalizations alone. Similarly, if telemedicine reduced emergency department visits alone without subsequent admission by 10% across the state, Florida could see an annual reduction of more than $2.7 billion in total emergency department charges across the 211 reported emergency departments.

See Appendix, Tables 1 and 2, for county-level breakdowns of hospital and emergency room data.

Studies support cost savings with the use of telemedicine for these types of metrics. For example, a 2008 study suggested a 25% reduction in days of care and a 19% reduction in the number of hospital admissions for veterans with chronic conditions participating in a Veterans Administration national home telehealth program.[72] In addition, equipment costs appear to be manageable, with return on investment inuring to the telemedicine provider in the form of long-term cost-savings and increased ability to provide quality care to patients. On the health system level, technology costs may also be covered from savings realized in reduced hospital transfers, by savings realized from transportation to emergency departments from correctional facilities, and by both transfer and transportation savings for individuals in nursing homes.[73] Furthermore, studies suggest that the costs of providing telemedicine and telehealth are decreasing.[74]

Florida companies that offer health coverage to employees potentially can realize a significant cost-savings through telemedicine through reductions to days missed from work, emergency room visits, and hospital length of stay. Employers may see employees benefit using telemedicine for a variety of health reasons such as primary care, follow-up to acute episodic care, preventive care, chronic condition maintenance, and remote monitoring. For some employees, telemedicine may be better quality at a cheaper price.

Economic Development – A Florida Boon

Aside from the potentially huge cost-savings for employers over time with improved employee wellness and cost of care, telemedicine holds the potential for economic growth for Florida, from virtual medical tourism to more jobs in the telecommunications, information technology, and health care sectors.

Worldwide Virtual Health Care Hub

Medical tourism has been on the rise and Florida, with renowned medical expertise, health centers of excellence, desirable vacation locations, and multiple transportation access routes, is poised to capture a portion of that world market. However, Florida health care providers and facilities have borne the liability of non-payment in the event that medical visitors return to their countries of origin without paying their health care or hospital charges. The medical visitors cannot be located and collections are difficult to achieve. This issue has been a lynchpin in economic development concepts to build Florida into a worldwide health care hub. While these challenges are being solved for in-person medical tourism, telemedicine provides a way for Florida to become a world virtual health care hub, providing the world with access to Florida's health care expertise while potentially reducing concerns regarding non-payment of services.

Workforce and Business Impact

Telehealth requires quality technology. For telecommunications and information technology companies, telemedicine will bring businesses the opportunity to enter into the health care arena for significant service contracts. From high-speed Internet service with secured transmission of information to high-fidelity audio and video connectivity, the possibilities are tremendous. In addition, companies may provide services in previously unserviced arenas given the need for telemedicine use in rural areas and aging communities. The increase in business opportunities will require an increase in the workforce. For example, companies like Verizon (which has a dedicated health care department), AT&T, and Comcast could see an increase in state-of-the-art technology requests that would require trained, skilled workers dedicated to servicing telemedicine clients.

In the health care sector, telemedicine may bring new job opportunities for medical managers and coordinators, particularly for facilities with dedicated telemedicine capabilities. Importantly, telemedicine provides an option for highly-skilled, health care practitioners that are of retirement age to continue to remain in the workforce longer delivering quality health care with reduced physical and time demands, and without restriction to location. Telemedicine also allows practitioners flexibility for work-life balance, increases options for the

provision of concierge medicine, and enables patient-centered, collaborative/team-based care through virtual team consultation. By extending workforce capabilities through telemedicine, Florida can ameliorate the primary care practitioner shortage it faces and sustain a competent, effective workforce longer.

Moving the Telemedicine Policy Discussion Forward in Florida

Momentum for Telemedicine

Across the state of Florida, momentum has grown in support of telemedicine discussion and action. In late August 2013, the Mayo Clinic sponsored a Telemedicine Public Policy Symposium hosted by Representatives Mia Jones and Cary Pigman that highlighted various uses of telemedicine within Florida.[75] In the fall of 2013, the Florida Chamber of Commerce also launched a healthcare initiative that prioritizes telemedicine.[76] In January 2014, Associated Industries of Florida (AIF) hosted a panel discussion on telemedicine at its 2014 Florida Health Care Affordability Summit.[77] Moderated by Representative Jason Brodeur, the three-person panel highlighted current telemedicine work by the University of Miami, UnitedHealthCare/Optum, and CareSync to serve a variety of health needs such as telepsychiatry, digital diagnosis, teleradiology, teleneurology, and trauma care. The panelists noted that telemedicine allows practitioners to "get back to a person-centered, patient-centered world," and that with health care reform and consumerism, there is a "perfect storm" for the wide adoption of telemedicine. Attendees discussed whether proposed legislative language should reference the larger conceptual category of telehealth rather than telemedicine.

Telehealth Resource Centers & the Florida TeleHealth Workgroup

Across the United States, there are two national resource centers, and 12 regional resource centers, including the Southeastern TeleHealth Resource Center (SETRC). The SETRC in 2013 helped to form a Florida TeleHealth Workgroup consisting of interested parties across various health and business-related sectors that held meetings in July and November 2013, and most recently in January 2014. In order to facilitate participation, meetings were held in Central Florida, South Florida, and North Florida. The Workgroup, which consists of physician, nursing, academic, and business stakeholders, has had in-depth discussions on telehealth policy, legislation, advocacy, fraud avoidance, and reimbursement. The Workgroup voted in January 2014 to create a master inventory of existing telemedicine programs in Florida that will be grounded in evidence-based studies and will seek to capture patients served, cost savings, impact to quality, technical models for implementing telemedicine, and funding sources. The Workgroup met again at the end of February to discuss proposed legislation and policy issues.

Florida Board of Medicine & Florida Medical Association

Physician practice and licensure issues can act as a barrier to telemedicine if not addressed. In 2013, the Florida Board of Medicine formed a Telemedicine Subcommittee to specifically review telemedicine issues and to set standards for telemedicine practice. A similar committee was formed by the Florida Board of Osteopathic Medicine, and both Boards have conducted joint Telemedicine Subcommittee meetings to ensure congruous standards. James Orr, M.D., serves as Chair for the Joint Boards of Medicine and Osteopathic Medicine Telemedicine Subcommittee.

Currently proposed Standards for Telemedicine Practice speak to physicians (allopathic and osteopathic) and physician assistants. Nurse practitioners and other health professionals are not addressed. Proposed regulation requires that telemedicine would allow the physician and physician assistant to meet or exceed the prevailing standard of care for medical practice. Physicians would be allowed to prescribe a controlled substance for up to 72-hours dosage only if a prior medical diagnosis for the treated condition and a prior physician/patient relationship had been established. Notably, a physician-patient relationship can be established via telemedicine. Emergency treatment would be exempted from the regulation, and all privacy and recordkeeping requirements would remain the same as for in-person care.[78]

The Florida Medical Association (FMA) has publicly supported expanding the use of telemedicine, "provided uniform standards are established to protect patients' safety and privacy."[79] FMA is interested in ensuring that telemedicine is properly defined, that physicians practicing telemedicine are accountable to the Florida Board of Medicine through licensure or certification, that practitioners are properly trained in telemedicine technology, and that reimbursement incentivizes physician participation.[80]

Detailing the Policy Aspects of Telemedicine

These many ongoing discussions across stakeholders suggest that, while many groups are in favor of moving telemedicine forward in Florida, several important details of telemedicine policy still need to be fleshed out. These include the following, which will be addressed in this section:

- Patient Safety, Satisfaction & Quality of Care;
- Fraud & Abuse;
- Out-of-State Providers;
- To Whom Reimbursement is Paid;
- Medicaid and/or Private Payer Reimbursement Mandates;
- Reimbursement on Par with In-Person Services, or Free Market?;
- Responsibility, Liability & Malpractice;
- Telemedicine Competency & Medical School Curriculum;
- Privacy;
- Location, Location, Location;

- To Prescribe, or Not to Prescribe? A Tough Question;
- Is the Relationship Established?; and
- Incentives, Disincentives & Creative Options;

Patient Safety, Satisfaction, & Quality of Care

Hailing back to the Hippocratic Oath, a key tenet of health care providers and health care delivery is to "do no harm." In the realm of telemedicine, the questions of patient safety and quality of care must be considered. Is care delivered via telemedicine inherently more dangerous or less effective?

As to patient satisfaction, studies have suggested that patients are as satisfied with provider-patient communication via telemedicine as they are with in-person consultations.[81] Even elderly patients unaccustomed to newer technology exhibit satisfaction and improved self-health interest after being introduced to telemedicine by their primary care providers.[82]

While remote examination lacks the ability for the diagnosing/consulting physician to physically touch the patient, the combination of medical record, diagnostic tools, patient description, presenting provider descriptions, and interactive communication results in telemedicine evidencing a quality of care level equivalent to that of in-person examinations.[83]

Fraud & Abuse Concerns

Medicaid and Medicare fraud and abuse, fraudulent billing and coding in health services, and identity theft remain an important and costly issue in Florida and across the nation. While advancing technology and telehealth hold promise as the future of health care delivery, the transmission of data and the potential ability to generate fraudulent records or images suggests that any public policy for telemedicine should anticipate potential systematic abuses and provide a framework for prevention, early detection and intervention, ease of recoupment of government dollars when warranted, and appropriate sanctions.

Out-of-State Providers

Will out-of-state providers that are not separately licensed by the state of Florida be permitted to treat Florida patients via telemedicine? If so, would they have to meet additional requirements, such as registration or the payment of a fee? Florida has a long tradition of requiring out-of-state professionals to obtain separate licensure for in-Florida practice.[84]

To Whom Reimbursement is Paid

In addition, Medicaid only reimburses the receiving/diagnosing physician. In order to receive reimbursement, the presenting practitioner/facility must perform a separate service. Should both the presenting and receiving practitioners be reimbursed as a way to incentivize the use of telemedicine?

Medicaid and/or Private Payer Reimbursement Mandates

With health care reform comes the promotion of accountable care organizations, managed care models in which the entities in

partnership provide coordinated care to a patient while both bearing the risks and reaping the benefits of investments and health decisions. Such a model encourages cost-effectiveness and reduces unnecessary services. Currently without reimbursement, a majority of Florida entities that engage in telemedicine bear both the risk of investment and the benefit of any realized cost-savings.

According to the American Telemedicine Association, "fully enabling and appropriately reimbursing Medicaid MCOs to use telehealth for improving care, access, cost and quality can provide immediate benefits."[85] Florida may benefit from revisiting the parameters of the state's Medicaid agreement to allow for increased ability to reimburse while maintaining patient safety. For example, to address changing demographics, the state may seek a broadening of permissible "distance site" locations to allow maximum flexibility for Florida's seniors. A Medicaid mandate would clarify the extent to which policymakers want telemedicine to be used. Patients would benefit from increased access, and providers would have a financial incentive to utilize telemedicine. If the financial burden of telemedicine equipment falls on the providers, and Medicaid will pay the same as for an in-person visit, the state should not see a detrimental fiscal impact.

The issue of mandating private payer reimbursement is riddled with greater controversy. While a mandate could increase telemedicine use, it may also stifle the ability of free market forces to regulate supply and demand. In addition, it could place smaller payer companies with fewer resources at a disadvantage which, in turn, could end up in the offering of fewer plan options or additional pass-through costs to consumers. Florida entities currently engaging in telemedicine have already invested significant time and funding in telemedicine, and many of them have seen positive returns. Whether or not private payment is mandated in the 2014 legislative session, momentum suggests that companies will be increasingly willing to invest in telemedicine for long-term cost-savings.

However, policymakers should consider regionalized needs across the state of Florida, and determine whether networked connectivity from smaller hospitals and clinics to larger providers can be incentivized or promoted at city, county, or regional levels, with special consideration to support from health care taxing districts.

Reimbursement On Par with In-Person Services or Free Market?

Medicaid and some states require that telemedicine be reimbursed at the same amounts as in-person visits. In the Florida market, would parity of reimbursement guarantee a basic equality, or does it hinder free market forces and provide a disincentive for innovation? Several Florida industry leaders believe that free-market negotiated rates will serve the state better than prescribing rate parity.[86] Florida TaxWatch supports free-market negotiations to secure the most cost-effective prices for Florida taxpayers. However, policy

should consider whether long-term, this will incentivize or disincentivize telemedicine expansion.

Responsibility, Liability, & Malpractice[87]

In the event of a missed diagnosis due to faulty telemedicine equipment, faulty transmission of information, or practitioner error during a telemedicine consultation, who bears the legal responsibility?

Telemedicine Competency & Medical School Curriculum

Should a health care practitioner be required to undertake additional training to practice telemedicine? If so, would the training be limited to familiarizing the practitioner with the telemedicine equipment? To acclimate the next generation of health care practitioners to telemedicine, integration into medical and health professional school curricula is recommended.

Privacy

The interactive nature of videoconferencing leaves open the concern of a consultation being recorded, stored for later retrieval, or available for public use online. This is one reason that now-commonly-used methods of audio/video interaction such as Skype® or FaceTime®,which do not have adequate privacy assurances, are not contemplated for covered or approved methods of telemedicine delivery. Although health care practitioners are still bound by HIPAA and private health information requirements, privacy considerations should be addressed by policymakers directly. One option would be to adopt Medicaid communication requirements for telemedicine, that require compliance with state and federal patient privacy laws including HIPAA and require equipment to meet technical safeguards.[88] Another option would be to follow the lead of states like California, Colorado, and Kentucky that require heightened informed consent and privacy for Medicaid reimbursement of telemedicine.[89]

Location, Location, Location

Medicaid reimbursement is currently limited to physician offices, hospitals, and specifically-defined community health centers. To truly expand the use of telemedicine in Florida, to make telemedicine a strong alternative to in-person consultation, should the permitted locations be expanded? If Florida wants to address demographic changes and access, should telemedicine services delivered to other types of facilities such as nursing homes be permitted as reimbursable? Perhaps expanding permissions only to state-licensed/state-monitored facilities would be a first step toward meeting Florida's long-term sustainability goals. In this type of metered expansion, Florida would have the ability to ensure quality, monitor legal compliance, prevent fraud and abuse, and levy sanctions such as non-renewal of permits or fines if necessary as the entities already fall under the state's purview.

To Prescribe, or Not to Prescribe? That Is a Tough Question

The questions of whether and when to allow physicians to teleprescribe medications for their patients may not yield simple answers.

Should telemedicine practitioners be required to have a pre-established relationship with the patient before prescribing medication? Should policies be more stringent for controlled substances? Should teleprescribing only be allowed for acute need rather than for chronic condition medications, or does it make sense to allow remote prescribing for an ongoing condition to avoid hospital visits or the worsening of a condition? What about quantity? Should the amount of the medication prescribed via telemedicine be limited to say a 72-hour supply? Policymakers should consider the current standards of care and the likelihood of a timely re-evaluation after the telemedicine session in balancing patient need and patient safety.

Is the Relationship Established?

The level of confidence in telemedicine is increased when a patient has a previously established relationship with the practitioner. As with in-person consultations, a prior relationship suggests that the practitioner has a baseline familiarity with the patient and, therefore, may be able to more easily discern health changes. Policy and community-based discussions of telemedicine seek to permit flexibility such that a telemedicine encounter in which a practitioner and a patient see each other for the first time can qualify as establishing a relationship that can later form the basis of ongoing care or the prescribing of medication. This is logical; however, there is still potential for abuse if a patient could have more than one telemedicine consultation in a 24-hour period to avoid prescribing restrictions in a newly-established relationship.

Incentives, Disincentives, & Creative Options

The Patient Protection and Affordable Care Act (PPACA) brings many complex rules and changes to health care delivery. Florida will feel the impact of health reform even though it has not elected to expand Medicaid or implement a state-run health exchange. Payers offering health plans to Floridians on the federal exchange and employers offering health coverage will be seeking ways to reduce costs and avoid penalties. The demand for primary care is expected to grow with health reform, and telemedicine provides a viable option for reducing costs. In the changing landscape of Medicaid managed care, new accountable care organizations, concierge medicine, and patient-centered medical homes, telemedicine can provide options for better coordinated, lower cost, anytime/anywhere care.[90] Possibilities abound if telemedicine is permitted at nursing homes or adult community settings.

These many changes provide opportunities to incentivize greater adoption of telemedicine. From innovative health plan (or even exchange/marketplace) offerings that provide patient package discounts for high telemedicine usage to employer perks for high telemedicine usage (for chronic disease management, health education, etc.), payers, providers, and patients can find benefits in telemedicine if public and private policy move toward supporting telemedicine expansion.

Incentivizing greater telemedicine use among individuals that have high emergency room utilization and costly chronic conditions can cut private and public spending. For slower adapters to technology or the risk averse, telemedicine could be offered on a trial or pilot project basis prior to a larger rollout.

At minimum, state policymakers can remove or amend any statutes, regulations, or state policies that would create a disincentive to use telemedicine, that would create unnecessary administrative barriers to using telemedicine, or that would result in additional professional liability for health care professionals using telemedicine within their licensed scope of practice. Telemedicine could also be incentivized in state contract bids for provision of health services. For insurers participating in the federally-run exchange in Florida, telemedicine can be increasingly integrated into the plans offered and incentivized. In the private sector, health insurers and employers can negotiate telemedicine payments, designing plans and program offerings to encourage telemedicine use that benefits all parties.

Partnerships and collaborations can help increase accessibility. Policymakers and stakeholders should consider allowing telemedicine delivery by licensed health care professionals at non-traditional points of access. For example, individuals who live in rural areas or lack transportation resources may find it helpful to occasionally access telemedicine services not only at county health departments and federally qualified health centers, but also at pharmacies, supermarkets, workforce development offices, Medicaid offices, assisted living facilities, nursing homes, or even public libraries.

In Conclusion: TaxWatch Recommendations

Policy incentives, which may include reimbursement changes, can create a better environment for Florida to expand the use of telemedicine. Aside from access, this is important because statewide expansion of telemedicine has the potential over time to save Florida taxpayers more than $1 billion annually in health care delivery charges through quality care that reduces the need for more costly interventions such as hospitalizations and emergency room visits. The call for telemedicine expansion and policy support in Florida transcends political lines, county lines, and business categories. Facilitating the statewide adoption of telemedicine is critical in what many believe is an "unsustainable" health care environment of increasing costs and insufficient numbers of providers. Simply stated, from an economic perspective, the opportunity costs of not pursuing widespread adoption of telemedicine in Florida may be too high.[91]

Florida's demographic changes and health care needs increasingly call for a viable alternative to in-person consultation, and such an alternative is ready and waiting in telemedicine as many of the state's top healthcare entities have already demonstrated. Policymakers must decide the many fine details of telemedicine, and some questions may not present immediate answers.

At minimum, policymakers should consider removing or amending any existing statutory/regulatory language that creates disincentives or unnecessary barriers to the use of telemedicine statewide. In addition, while telemedicine details are determined, Florida should lay a solid policy-based foundation for statewide expansion of telemedicine as a critical step in a multiphase process toward greater long-term financial sustainability in health care delivery for Florida.

Florida TaxWatch recommends the adoption of policies to move telemedicine forward in Florida as a critical step toward developing a sustainable, cost-effective healthcare delivery system that will improve access to quality care, reduce the need for costly interventions, and promote long-term cost savings for Florida's taxpayers.

Appendix

Facility Type: Hospitals (n=289)					
Results for Time Period: April 2012 through March 2013					
County		**AHCA AREA #**	**Total # of Hospitalizations**	**Average Charges**	**Total Charges**
All Counties	Total	ALL	2,659,767	$13,352,595	$121,176,839,898
All Counties	Average	ALL	9,398	$47,182	$428,186,713
All Counties	10% Off Totals	ALL	265,977	$1,335,259.50	$12,117,683,989.80
All Counties	10% Off Averages	ALL	940	$4,718.2	$42,818,671.3
Escambia, Santa Rosa, Okaloosa, Walton	Total	1	98,122	$595,271	$3,990,269,763
	Average	1	7,548	$45,790	$306,943,828
	10% Off Total	1	9,812	$59,527	$399,026,976
	10% Off Avg	1	755	$4,579	$30,694,383
Bay, Calhoun, Franklin, Gadsden, Gulf, Holmes, Jackson, Jefferson, Leon, Liberty, Madison, Taylor, Washington, Wakulla	Total	2	85125	$491,475	$2,859,165,713
	Average	2	4480.263	$25,867	$150,482,406
	10% Off Total	2	8512.5	$49,148	$285,916,571
	10% Off Avg	2	448.026	$2,587	$15,048,241
Alachua, Bradford, Citrus, Columbia, Dixie, Gilchrist, Hamilton, Hernando, Lafayette, Lake, Levy, Marion, Putnam, Sumter, Suwannee, Union	Total	3	238,665	$1,268,355	$10,618,104,801
	Average	3	7,699	$40,915	$342,519,510
	10% Off Total	3	23866.5	$126,836	$1,061,810,480
	10% Off Avg	3	769.89	$4,091	$34,251,951
Baker, Clay, Duval, Flagler, Nassau, St. Johns, Volusia	Total	4	269,495	$1,120,358	$11,056,672,211
	Average	4	10,365	$82,989	$425,256,624
	10% Off Total	4	26,950	$112,036	$1,105,667,221
	10% Off Avg	4	1,037	$8,299	$42,525,662
Pasco, Pinellas	Total	5	182,984	$1,525,351	$9,448,327,274
	Average	5	7,624	$63,556	$393,680,303
	10% Off Total	5	18,298	$152,535	$944,832,727
	10% Off Avg	5	762	$6,356	$39,368,030
Hillsborough, Highlands, Hardee, Polk, Manatee	Total	6	346,879	$1,562,852	$15,834,546,501
	Average	6	10,840	$48,839	$494,829,578
	10% Off Total	6	34,688	$156,285	$1,583,454,650
	10% Off Avg	6	1,084	$4,884	$49,482,958

Brevard, Orange, Osceola, Seminole	Total	7	339,348	$1,539,869	$15,804,507,502
	Average	7	10,947	$49,673	$509,822,823
	10% Off Total	7	33,935	$153,987	$1,580,450,750
	10% Off Avg	7	1,095	$4,967	$50,982,282
Sarasota, DeSoto, Charlotte, Lee, Hendry, Glades, Collier	Total	8	208,444	$965,961	$8,821,020,039
	Average	8	9,475	$43,907	$400,955,456
	10% Off Total	8	20,844	$96,596	$882,102,004
	10% Off Avg	8	947	$4,391	$40,095,546
Palm Beach, Martin, St. Lucie, Okeechobee, Indian River	Total	9	271,074	$1,186,029	$12,653,326,146
	Average	9	10,843	$47,441	$506,133,046
	10% Off Total	9	27,107	$118,603	$1,265,332,615
	10% Off Avg	9	1,084	$4,744	$50,613,305
Broward	Total	10	261,613	$1,141,810	$11,534,380,529
	Average	10	11,374	$49,644	$501,494,806
	10% Off Total	10	26,161	$114,181	$1,153,438,053
	10% Off Avg	10	1,137	$4,964	$50,149,481
Miami-Dade, Monroe	Total	11	358,018	$1,955,264	$18,556,519,419
	Average	11	9,676	$52,845	$501,527,552
	10% Off Total	11	35801.8	$195,526.40	$1,855,651,941.90
	10% Off Avg	11	967.61	$5,284.50	$50,152,755.19

Facility Type: Emergency Departments (n=211)

Results for Time Period: April 2012 through March 2013

County	Facility	AHCA Area #	Total Emergency Department Visits	Average Charges	Total Charges
All	Totals	ALL	7,382,093	$776,987	$27,891,835,338
All	Averages	ALL	35,491	$3,736	$134,095,362
All	10% Off Total	ALL	738209.3	$77,698.70	$2,789,183,533.80
All	10% Off Avg	ALL	3549.08	$373.55	$13,409,536.22
Escambia, Santa Rosa, Okaloosa, Walton	Total	1	332,340	$35,733	$1,190,704,146
	Average	1	33,234	$3,573	$119,070,415
	10% Off Total	1	33,234	$3,573	$119,070,415
	10% Off Avg	1	3,323	$357	$11,907,041
Bay, Calhoun, Franklin, Gadsden, Gulf, Holmes, Jackson, Jefferson, Leon, Liberty, Madison, Taylor, Washington, Wakulla	Total	2	325,477	$25,049	$841,599,340
	Average	2	23,248	$1,789	$60,114,239
	10% Off Total	2	32,548	$2,505	$84,159,934
	10% Off Avg	2	2,325	$179	$6,011,424

Alachua, Bradford, Citrus, Columbia, Dixie, Gilchrist, Hamilton, Hernando, Lafayette, Lake, Levy, Marion, Putnam, Sumter, Suwannee, Union	Total	3	665,266	$77,328	$2,557,960,104
	Average	3	31,679	$3,682	$121,807,624
	10% Off Total	3	66,527	$7,733	$255,796,010
	10% Off Avg	3	3,168	$368	$12,180,762
Baker, Clay, Duval, Flagler, Nassau, St. Johns, Volusia	Total	4	853,380	$50,971	$2,364,054,179
	Average	4	42,669	$2,549	$118,202,709
	10% Off Total	4	85,338	$5,097	$236,405,418
	10% Off Avg	4	4,267	$255	$11,820,271
Pasco, Pinellas	Total	5	487,866	$86,955	$2,305,727,884
	Average	5	27,104	$4,831	$128,095,994
	10% Off Total	5	48,787	$8,696	$230,572,788
	10% Off Avg	5	2,710	$483	$12,809,599
Hillsborough, Highlands, Hardee, Polk, Manatee	Total	6	912,516	$84,430	$3,846,355,722
	Average	6	41,478	$3,838	$174,834,351
	10% Off Total	6	91,252	$8,443	$384,635,572
	10% Off Avg	6	4,148	$384	$17,483,435
Brevard, Orange, Osceola, Seminole	Total	7	968,635	$87,323	$3,923,015,675
	Average	7	44,029	$3,969	$178,318,894
	10% Off Total	7	96,864	$8,732	$392,301,568
	10% Off Avg	7	4,403	$397	$17,831,889
Sarasota, DeSoto, Charlotte, Lee, Hendry, Glades, Collier	Total	8	524,711	$67,990	$1,754,289,029
	Average	8	29,151	$3,777	$97,460,502
	10% Off Total	8	52,471	$6,799	$175,428,903
	10% Off Avg	8	2,915	$378	$9,746,050
Palm Beach, Martin, St. Lucie, Okeechobee, Indian River	Total	9	643,734	$84,204	$2,729,449,380
	Average	9	32,187	$4,210	$136,472,469
	10% Off Total	9	643,734	$84,204	$2,729,449,380
	10% Off Avg	9	3,219	$421	$13,647,247
Broward	Total	10	782,631	$59,882	$2,484,156,867
	Average	10	46,037	$3,522	$146,126,875
	10% Off Total	10	78,263	$5,988	$248,415,687
	10% Off Avg	10	4,604	$352	$14,612,687
Miami-Dade, Monroe	Total	11	885,537	$117,122	$3,894,523,012
	Average	11	34,059	$4,505	$149,789,347
	10% Off Total	11	88553.7	$11,712	$389,452,301.20
	10% Off Avg	11	3405.91	$450.47	$14,978,934.66

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60 American Telemedicine Association (2014) State Telemedicine Legislation Tracking (as of 2/3/2014). Retrieved from http://www.americantelemed.org/docs/default-source/policy/state-telemedicine-legislation-matrix.pdf. Washington D.C. and 20 states legislatively mandate private coverage of telemedicine: Arizona (beginning January 2015), California,

Colorado, Georgia, Hawaii, Kentucky, Louisiana, Maine, Maryland, Michigan, Mississippi, Missouri, Montana, New Hampshire, New Mexico, Oklahoma, Oregon, Texas, Vermont, and Virginia. The 10 states that have proposed legislation to mandate private coverage of telemedicine are: Florida, Illinois, Massachusetts, Nebraska, New York, Ohio, Pennsylvania, South Carolina, Tennessee, and Washington. See also National Conference of State Legislatures (2014). State Coverage for Telehealth Services. Retrieved from http://www.ncsl.org/research/health/state-coverage-for-telehealth-services.aspx.

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84 See generally: http://ctel.org/annotated_states/Florida_Annotated__%20%282579584_1%29.PDF (no reciprocity for physicians in Florida); http://www.americanbar.org/content/dam/aba/publications/solosez/unauthorized_2006_09.authcheckdam.pdf (no reciprocity for attorneys); http://www.naswfl.org/licensure.html (no reciprocity for social workers in Florida).

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86 See, e.g., McGrory, K. Tampa Bay Times (February 9, 2014). Florida lawmakers to explore telemedicine. Retrieved from http://www.tampabay.com/news/health/florida-lawmakers-to-explore-telemedicine/2164828. (Associated Industries of Florida advocates for free market rate negotiations and cautions the Florida Legislature against being too prescriptive.)

87 See, e.g., Kepler, T., & McGinty, C.L. (2009). Telemedicine: how to assess your risks and develop a program that works (discussing how to analyze telemedicine practice risks) [PDF document presented to the American Health Lawyers Association]. Retrieved from http://www.healthlawyers.org/Events/Programs/Materials/Documents/HHS09/kepler_mcginty.pdf

88 Agency for Health Care Administration (Dec. 20, 2013). Telemedicine Overview, Telemedicine Communication Requirements (telecommunication equipment must meet the requirements of 45 CFR 164.312 as applicable).

89 See, e.g., Kepler, T., & McGinty, C.L. (2009). Telemedicine: how to assess your risks and develop a program that works (discussing state reimbursement policies) [PDF document presented to the American Health Lawyers Association]. Retrieved from http://www.healthlawyers.org/Events/Programs/Materials/Documents/HHS09/kepler_mcginty.pdf

90 American Telemedicine Association (January 2014). State Medicaid Best Practice: Managed Care and Telehealth. Retrieved from http://www.americantelemed.org/docs/default-source/policy/state-medicaid-best-practice-managed-care-and-telehealth.pdf (nothing that Medicaid managed care plans provide care to over half of Medicaid beneficiaries nationwide, that the ACA offers financing and flexibility to expand Medicaid offerings or integrate Medicare and Medicaid coverage for dual-eligible, and that telehealth can provide a cost-effective delivery option to reduce healthcare costs).

91 See, e.g., Doarn, C.R., & Merrell, R.C. (Eds.). (2012). Opportunity costs of telemedicine. Telemedicine and e-Health, 18(5), 321-322.

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As an independent, nonpartisan, nonprofit taxpayer research institute and government watchdog, it is the mission of Florida TaxWatch to provide the citizens of Florida and public officials with high quality, independent research and analysis of issues related to state and local government taxation, expenditures, policies, and programs. Florida TaxWatch works to improve the productivity and accountability of Florida government. Its research recommends productivity enhancements and explains the statewide impact of fiscal and economic policies and practices on citizens and businesses. Florida TaxWatch is supported by voluntary, tax-deductible memberships and private grants, and does not accept government funding. Memberships provide a solid, lasting foundation that has enabled Florida TaxWatch to bring about a more effective, responsive government that is accountable to the citizens it serves for the last 34 years.

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The Florida TaxWatch Center for Health and Aging (CHA) conducts research and analysis that quantifies the fiscal and economic impacts of current and proposed policies across the health care and aging spectrum to help shape policy discussions. As a Florida TaxWatch Center of Excellence, the CHA identifies and promotes the appropriate, effective, efficient, and accountable delivery of taxpayer-funded health care and aging services and works with stakeholders and policymakers to drive improvements within the system.

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